

E. L. Hamm & Associates, Inc.

**School Efficiency Review:
Prince Edward County Public Schools Division
FINAL REPORT**

Prepared By:

***E.L. HAMM & ASSOCIATES, INC.
4801 Columbus Street, Suite 400
Virginia Beach, VA 23462-6751
(757) 497-5000
Fax: (757) 497-5707***

E-mail: elhamm@verizon.net

July 31, 2007

Table of Contents

Prince Edward County Public Schools Division

EXECUTIVE SUMMARY	E-1
INTRODUCTION	1
1. DIVISION LEADERSHIP, ORGANIZATION AND MANAGEMENT	1-1
1.A Division Management	
1.B Procedures	
1.C Campus Administration and Decision Making	
1.D Planning, Budgeting and Evaluation	
1.E Review and Evaluation of Contracting Process	
2. EDUCATIONAL SERVICE DELIVERY MANAGEMENT	2-1
2.A Organization and Management	
2.B Curriculum Policies and Procedures	
2.C Instructional and Administrative Technology	
2.D Staff Development	
2.E Special Programs	
3. HUMAN RESOURCES	3-1
3.A Organization and Management	
3.B Policies and Procedures	
3.C Recruitment, Hiring and Retention	
3.D Compensation and Classification Systems	
4. FACILITIES USE AND MANAGEMENT	4-1
4.A Organizational and Management	
4.B Policies and Procedures	
4.C Maintenance Operations	
4.D Custodial Operations	
4.E Energy Management	
5. FINANCIAL MANAGEMENT	5-1
5.A Organization, Management, and Staffing	
5.B Financial Performance	
5.C Planning and Budgeting	
5.D Administrative Technology	

6.	TRANSPORTATION	6-1
	6.A Organizational Staffing	
	6.B Policies and Procedures	
	6.C Routing and Scheduling	
	6.D State Reporting	
	6.E Training and Safety	
7.	COMPUTERS AND TECHNOLOGY	7-1
	7.A Organization and Staffing	
	7.B Staff Development	
	7.C Technology Planning and Management	
	7.D Technology Policies and Procedures	
	7.E Inventory and Control	
	7.F Systems Infrastructure and Web Development	
	7.G Technical Support and Help Desk Operations	
	7.H Technology Acquisition Practices	
8.	FOOD SERVICES	8-1
	8.A Organization and Staffing	
	8.B Policies and Procedures	
	8.C Planning and Budgeting	
	8.D Management and Operations	
	8.E Qualifying Students for Free and Reduced-Price Meals/Student Participation	
	8.F Nutrition and Nutrition Education Programs	
	8.G Purchasing and Warehousing Contracting	

Executive Summary

EXECUTIVE SUMMARY

As part of his Education for a Lifetime Initiative, Governor Warner initiated a comprehensive efficiency review of Virginia's school divisions to ensure that Virginia's education dollars are spent wisely and effectively. In Fiscal Year 2005, Virginia spent over \$13 billion in state, federal and local money for elementary and secondary education – approximately \$1,720 for every man, woman, and child in the Commonwealth. Governor Kaine, like his predecessor, is committed to directing as much of that funding as possible into the classroom.

The efficiency review consists of conducting intensive assessments of individual school systems, helping them realize greater efficiencies, and identifying good practices that can be shared with other school divisions. The individual school system reviews are modeled after successful programs in Texas and Arizona. Since its inception in 1991, the Texas program has conducted nearly 100 assessments of public school districts and recommended substantial net savings. The goal of the reviews is to identify administrative savings that can be gained through best practices in school division administration, education delivery, human resources, facilities, finance, transportation, technology management, and other non-instructional expenditures – thereby allowing divisions to put administrative savings back into the classroom for an even greater investment in our children. The emphasis of the Virginia efficiency reviews is to identify and generate savings through administrative and management best practices. By design, this review does not include an assessment of classroom instruction or student achievement.

Prince Edward County and its county seat of Farmville, known as “The Heart of Virginia”, is located at the crossroads of U. S. 460 and U. S. 15, two of Virginia's primary east-west and north-south transportation corridors, which provides direct access to four interstate highway systems: I-95, I-85, I-81 and I-64. It functions as the service hub for commercial, retail, medical and hospital facilities, as well as industries for an eight-county region. The County of Prince Edward was founded in 1754, with the Town of Farmville as the County seat. The 2006 U.S. Census reports that Prince Edward County had an estimated population of 20,530.

Prince Edward County is historically rural and agrarian in nature. It has a limited business tax base, with few retail businesses, a correctional facility, and two schools of higher learning located within the county. According to the last (2006) census, the county's racial makeup is 63 percent Caucasian, 36 percent African American, with the remaining one percent distributed among several race or ethnic categories. The county is 353 square miles and has a population density of 56 people per square mile. In 1999, the county's average per capita income was \$14,510. As of 2004, about 18.70% of the population lived below the poverty line, including 24.40% of those under age 18 and 15.90% of those aged 65 or over.

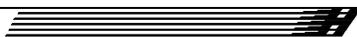
The study team has identified up to \$487,521.14 in potential net savings for PECPS in the first year (\$69,716.44 in investments and \$557,237.58 in savings). The exhibit found on page E-23 shows the potential investments and savings identified during the review. Over a five year period, total savings are estimated at \$1,914,269.70.



Demographic Overview of Prince Edward County

	Prince Edward County	Virginia
Population, 2006 estimate	20,530	7,642,884
White persons, percent, 2005 (a)	62.8%	73.6%
Black persons, percent, 2005 (a)	35.8%	19.9%
American Indian and Alaska Native persons, percent, 2005 (a)	0.2%	0.3%
Asian persons, percent, 2005 (a)	0.7%	4.6%
Native Hawaiian and Other Pacific Islander, percent, 2005 (a)	0.1%	0.1%
Persons reporting two or more races, percent, 2005	0.5%	1.6%
Persons of Hispanic or Latino origin, percent, 2005, 2005 (b)	1.2%	6.0%
White persons not Hispanic, percent, 2005	61.9%	68.2%
Language other than English spoken at home, pct age 5+, 2000	5.2%	11.1%
High school graduates, percent of persons age 25+, 2000	69.9%	81.5%
Bachelor's degree or higher, pct of persons age 25+, 2000	19.2%	29.5%
Persons with a disability, age 5+, 2000	3,849	1,155,083
Median value of owner-occupied housing units, 2000	\$93,000	\$125,400
Households, 2000	6,561	2,699,173
Persons per household, 2000	2.43%	2.54%
Median household income, 2004	\$30,719	\$51,103
Per capita money income, 1999	\$14,510	\$23,975
Persons below poverty, percent, 2004	18.7%	9.5%
Business Facts		
Private non-farm establishments, 2004	567	1,888,989
Private non-farm employment, 2004	7,010	3,054,816
Private non-farm employment, percent change 2000-2004	-11.1%	5.2%
Non-employer establishments, 2004	911	448,023
Total number of firms, 2002	1,272	529,520
Black-owned firms, percent, 2002	8.3%	7.8%
American Indian and Alaska Native owned firms, percent, 2002		0.5%
Asian-owned firms, percent 2002		5.8%
Native Hawaiian and Other Pacific Islander owned firms, percent, 2002		0.1%
Hispanic-owned firms, percent, 2000		3.6%
Women-owned firms, percent, 2002	16.4%	29.7%
Manufacturers shipments, 2000 (\$1,000)	\$68,209	\$83,952,547
Wholesale trade sales, 2002 (\$1,000)	\$37,024	\$69,267,547
Retail sales, 2002 (\$1,000)	\$300,454	\$80,509,062
Retail sales per capita, 2002	\$14,997	\$11,069
Federal spending, 2004, (\$1,000)	\$108,299	\$90,637,946
Geography Quick Facts		
Land area, 2000 (Square Miles)	352.76	39,594.07
Persons per square mile, 2000	55.9	178.8

Source: <http://quickfacts.census.gov/qfd/states/51/51147.html>



I. The Prince Edward County Public Schools Division (PECPS) ***Efficiency Review***

This study was initiated in late March 2007 and concluded in June 2007. This report identifies PECPS's exemplary operating practices and suggests concrete ways to further improve division management and operations to increase efficiencies in non-instructional areas. If fully implemented, the recommendations contained herein can result in net savings of more than \$509,383.

PECPS currently employs 457 full and part-time employees, including 101 full-time annual and 158 career instructional staff comprised of teachers, Title I, guidance, special education, media, and Title VIB. The student enrollment in September 2006 was 2,773 students. It operates and maintains three schools and 46 buses on a school year 2006-2007 budget of \$27,744,520. The average PECPS teacher salary is \$41,459.

II. Methodology

E.L. Hamm's methodology for conducting this review included the following components, which will be discussed later in detail:

- A. reviewing existing reports and data sources;
- B. conducting a diagnostic assessment, including interviews with school board members, central office administrators, department supervisors, principals and staff;
- C. conducting employee surveys;
- D. performing analyses with comparison school divisions;
- E. conducting the formal on-site study with a team of seven E.L. Hamm consultants, who visit all schools within the school division;
- F. presenting our preliminary findings and recommendations to the division's superintendent for feedback;
- G. preparing the draft and final report; and
- H. presenting the report to school board members.

A. Review of Existing Records and Data Sources

Initially, E.L. Hamm consultants collected existing reports and data sources that provided us with recent information related to the division's various administrative functions and operations.

Hundreds of documents were requested of PECPS administrators and staff. Data analyzed from each of these sources was used as a starting point for collecting additional data during our on-site visit. The following is a small portion of the documents collected:

1. school board policies and administrative procedures;
2. organizational charts;
3. state and federal review reports;
4. department goals and mission statements;
5. program and compliance reports;
6. technology plan;
7. meeting agendas;
8. annual performance reports;
9. independent financial audits;
10. school division strategic plans;
11. plans for curriculum and instruction;



12. lunch and breakfast menus;
13. annual budget and expenditure reports;
14. job descriptions;
15. administrator resumes;
16. salary schedules; and
17. personnel handbooks.

Data from these documents were analyzed and the information was used as the basis for both additional data collection and the recommendations and commendations contained in the report.

B. Diagnostic Review

A diagnostic review of PECPS was conducted during the months of March, April, and May 2007. Seven E.L. Hamm team members interviewed central office and school administrators, department faculty and staff, Board members, and community leaders, concerning the division's management and operations. Work sampling was also performed at this time to measure employee work performance efficiency.

C. Employee Surveys

To secure the involvement of administrators and teachers in the school efficiency reviews, a survey was prepared and disseminated electronically in April 2007, to administrators and teachers. Through the use of these anonymous surveys, administrators and teachers were given the opportunity to express their views about the management and operations of each division. These surveys were similar in format and content to provide a database for determining how the opinions and perceptions of administrators and teachers vary.

D. Comparison School Divisions

The Virginia Department of Education has developed a cluster code to identify similar school divisions for comparison purposes. Cluster identifiers were created by using data including, but not limited to, the cost per student for each major area, major drivers of costs, and ranking of costs. There are 44 other school divisions in the cluster to which PECPS belongs. The PECPS superintendent chose 5 of those districts ("peers") to be used as bases for comparison to determine PECPS' ranking. These 5 peer districts are as follows:

- Charlotte County Public Schools;
- Cumberland County Public Schools;
- Lunenburg County Public Schools;
- Nottoway County Public Schools; and
- Sussex County Public Schools.

E. On-Site Efficiency Study

A team of seven E.L. Hamm consultants conducted the formal on-site reviews and interviews of Prince Edward County Public Schools administrators and staff during April and May 2007. As part of our on-site review, we examined the following systems and operations in each division:

- Division Leadership;
- Educational Service Delivery and Management;
- Human Resource Management;
- Facilities Use and Management;
- Financial Management;
- Transportation;



- Computers and Technology; and
- Food Services.

Prior to conducting the on-site reviews, each team member was provided with introductory information about Prince Edward County and its school division's operating procedures. During the on-site visits, team members conducted detailed reviews of the structure and operations of each department within the division. All PECPS public schools and administrative buildings were visited numerous times.

F. Presentation of Preliminary Findings

In early May, select members of the review team presented Hamm's preliminary findings and recommendations to the superintendent. At that time, requests for additional information and feedback were made by both parties to ensure that the final report addressed all major management and administration concerns of the PECPS school board, superintendent, and various administrators.

G. Preparing the Draft and Final Report

During the preparation of the draft documents, discrepancies in reported information were discovered, which required further analysis of preliminary findings. Our team of analysts devoted many hours during this process to ensure that the final draft was clearly and concisely written; and addressed the areas of major concern raised by the division superintendent.

H. Presentation to the School Board

In August, the review team will present their findings and recommendations to the PECPS school board. This meeting will provide school board members an opportunity to ask questions of the team and seek further clarity.

III. Major Commendations And Recommendations

Like the surrounding divisions, PECPS is a small school division. It cannot achieve certain economies of scale on its own. It has found ways to better utilize its faculty and staff by multi-tasking required functions. Enhancing the educational opportunities for their students is a priority shared by the PECPS administration and staff. Without the dedication and commitment from the division's staff, many of the functions performed at PECPS would not be effectively accomplished.

As is reflected by their division motto "Going from Good to Great", PECPS' Board, administration, and staff are in the pursuit of excellence. The division's superintendent is new to the county, yet is an experienced superintendent. She brings with her a number of ideas and approaches to administration that have served her well in the past, yet she respects the importance of tradition and the feeling of family that one experiences while residing, working or matriculating in a smaller community. The PECPS board is commended for bringing a superintendent to the division who has a drive for excellence that matches their own.

The following is an overview of all commendations and recommendations the review team has identified. Each commendation and recommendation includes the chapter number and section associated with its specific location within this report.

Exhibit E-1
PECPS COMMENDATIONS AND RECOMMENDATIONS
Chapter 1-Division Leadership, Organization and Management

Ch.	Sec.	Number	Commendation/Recommendation
1	1.A	1-1	Commendation: The School Board recognizes the need for leadership and governance skills and plans to ensure training for all members.
		1-1	Recommendation: Plan an orientation or training session for team building and operations acclimation.
		1-2	Recommendation: Reassign and refine responsibilities within the PECPS organizational structure.
		1-3	Recommendation: Establish a position responsible for accountability, assessment, and data analysis.
		1-4	Commendation: The division's and Board of Supervisors' plan for continued construction meets the needs of their students.
	1.B	1-5	Recommendation: Develop a comprehensive administrative procedures and regulations manual that contains administrative procedures for use by school and central office administrators.
	1.C	1-6	Recommendation: Develop a communication system to notify administrators of the beginning annual fund balance for each school/department and update on a quarterly basis.
		1-7	Commendation: Teachers, parents and citizens are involved in the division's activities and decision-making processes.
		1-8	Recommendation: Reduce the assistant principal allocations at all three schools by .5 positions per school.
		1-9	Recommendation: Organize an annual calendar with due dates for reports and activities.
		1-10	Recommendation: Organize periodic visits by central office personnel to the three school sites and career and technical center (to observe students and teachers) and interact at the building level.
	1.D	1-11	Commendation: PECPS has a thorough and comprehensive strategic plan, and involves all aspects of the school and community in its development.

1 Cont'd		1-12	Commendation: PECPS has developed aggressive plans for enhancing the educational program through benchmark testing, PSAT, and advanced placement courses.
		1-13	Commendation: PECPS has extensive external communication with the community.
		1-14	Recommendation: Maintain open lines of communication to the building level administrators and faculty.
		1-15	Recommendation: Establish cross training for central office personnel on the various programs used to access information on students, programs, and other information needed for reports.
		1-16	Commendation: PECPS has developed good evaluation instruments for teachers and administrators
		1-16	Recommendation: Train school board members on the evaluation instruments to ensure an understanding of their implications in case a recommendation for dismissal is presented based on its findings.
	1.E	1-17	Recommendation: Designate an individual within the division to negotiate for materials and services for the division. This should result in an annual contract for office supplies.
		1-18	Commendation: PECPS has coordination with, and is consolidating with surrounding school divisions for services.

Exhibit E-2
PECPS COMMENDATIONS AND RECOMMENDATIONS
Chapter 2 Education Service Delivery Management

Ch.	Sec.	Number	Commendation/Recommendation
2	2.A	2-1	Recommendation: Realign the special education department to report directly to the department of curriculum and instruction.
		2-2	Recommendation: Carefully interview prospective applicants for the position of administrator of Prince Edward County Middle School.
		2-3	Recommendation: Provide contracts for instructional personnel as soon as the budget is approved to secure the best teachers for new positions.
	2.B	2-4	Recommendation: Organizational evaluation and analysis of testing data should be performed systematically at the division level.
		2-5	Commendation: Prince Edward County Middle School has implemented a team approach to instruction for its students.
		2-6	Recommendation: Identify system-wide required training for teachers that will prepare them to use data for instructional decisions, improve instructional strategies, infuse technology into the instructional program, and focus on instruction.
		2-7	Commendation: PECPS has instituted an evaluation system directly tied to student achievement with regular guidelines for observation and conferences with the teachers.
		2-8	Commendation: PECPS has allocated resources to the instructional program to meet students' needs.
	2.C	2-9	Recommendation: Continue to provide weekly instruction to teachers and establish a minimum standard requirement for teachers to integrate technology into their classrooms.
	2.D	2-10	Recommendation: Continue to emphasize professional development as a high priority with a focused approach to planned improvements for teaching and learning.
		2-10	Commendation: PECPS has recognized the need to provide focused staff development for the instructors and for establishing a calendar and activities that support continuous education.
	2.E	2-11	Recommendation: Modify the current organizational structure to better align positions with similar related responsibilities and reporting relationships.

2 Cont'd		2-12	Recommendation: Undertake a formal program to strengthen the retention and induction of special educators.
		2-13	Commendation: The PECPS special education department has expended effort in meeting the requirements for compliance with the Department of Education's Office of Federal Program Monitoring and Student Services
		2-14	Recommendation: Continue with the goal of reducing the percentage of special education students by three percent per year, using research-based methods and strategies
		2-15	Recommendation: Search for innovative ways to reduce the number of students in the special education program to cut costs.
		2-16	Recommendation: Adopt a district-wide, full inclusion model for special education to maximize financial efficiency in instruction.
		2-17	Recommendation: Use the division special education handbook for building administrators and special education teachers to give the division a consistent process for addressing special education procedures.
		2-18	Recommendation: Maximize revenues from the Medicaid Administrative Outreach Program to support and expand its special education service provision as appropriate.
		2-19	Recommendation: Fund a portion of the ECSEP program using grant funds along with other available monies to build this program into an even stronger and better program.
		2-20	Recommendation: Use the strategies that have been developed to revise the special education curriculum to meet the standards of learning.
		2-21	Recommendation: Create the position of a middle school literacy coach for maximum flexibility in the administration of literacy interventions.
	2.E.a	2-22	Recommendation: Formulate a procedure to identify a student as needing ESL services more quickly to eliminate lost time that the student could be receiving these services.
	2.E.b	2-23	Recommendation: Search for other methods to successfully identify gifted students who represent all economic and ethnic groups.

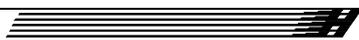


Exhibit E-3 **PECPS COMMENDATIONS AND RECOMMENDATIONS** **Chapter 3 Human Resources Management**

Ch.	Sec.	Number	Commendation/Recommendation
3	3.A	3-1	Commendation: The human resources director understands the importance of delegation and has delegated some departmental functions to other individuals within the PECPS administration.
		3-1	Recommendation: The Human Resources Director should re-evaluate current and projected assignment of workload to determine which routine functions can best be performed by either the secretary or other PECPS administrators.
	3.B	3-2	Recommendation: All documented employee records and correspondence should be kept under the control of the division’s human resource department.
		3-3	Recommendation: PECPS should utilize human resources software that generates reports and creates databases from existing employee information.
		3-4	Recommendation: Post all school and department policies electronically.
		3-5	Recommendation: Assign each department head the responsibility of creating an HR approved evaluation form. Evaluation handbook information for non-teaching positions needs to be developed and posted on a human resources intranet web page.
	3.C	3-6	Recommendation: Establish on-going and structured “Teacher-Scholar Partnership” programs with several nearby liberal arts colleges.
		3-7	Recommendation: Ensure that adequate compensation is provided to teachers, particularly those who provide special education instruction.
		3-8	Commendation: PECPS has utilized avenues available to ensure that children are provided the opportunity to learn from a very diverse faculty.
		3-8	Recommendation: Utilize the Green Life Care organization to procure their international faculty.
		3-9	Commendation: The HR department has utilized a cost effective means of marketing the division’s job openings throughout the state and country.
		3-9	Recommendation: Add a section to the job application forms for prospective employees to indicate how they found out about the job opening to determine the best means of marketing openings.

3 Cont'd		3-10	Recommendation: Provide mentoring programs to all new teachers and teacher support staff, follow up with mentors to ensure that they remain in sufficient contact with new teachers throughout the entire school year; and send campus administrators and HR staff to the campuses to make routine bi-monthly contact with all new hires.
		3-11	Recommendation: Provide the middle school principal the additional central office divisional support, backing, and resources needed to initiate policies and procedures to bring about disciplinary and academic change.
	3.D	3-12	Commendation: PECPS has provided a competitive salary to all employees throughout the division, in general.
		3-12	Recommendation: Consider offering signing bonuses to attract and recruit qualified teachers for hard-to-fill subjects.
		3-13	Recommendation: Continue to monetarily reward those who devote extra time after normal school hours toward sports and other school-sponsored activities.
		3-14	Recommendation: Request that all administrators review their department's employee job descriptions for accuracy and completeness.
		3-15	Recommendation: Continue with the worker's compensation feasibility study, which may lead to lower health care premiums.
		3-16	Recommendation: Perform annual employee satisfaction surveys of instructional staff, non-instructional staff, and other employees as needed.

Exhibit E-4 PECPS COMMENDATIONS AND RECOMMENDATIONS Chapter 4 Facilities Management

Ch.	Sec.	Number	Commendation/Recommendation
4	4.A	4-1	Commendation: PECPS has organized all facilities functions under a single, prominent school district administrator.
		4-2	Commendation: PECPS has a best practice organization of its maintenance and custodial staff.
	4.B	4-3	Recommendation: Create both maintenance and custodial procedures manual.
		4-4	Recommendation: In future capital and planning projects and construction efforts, standardize the variety of equipment and materials.
		4-5	Recommendation: Develop a strong, yet fair, key control plan.
		4-6	Recommendation: Implement an inventory system to be used by the maintenance department.
		4-7	Recommendation: Adopt a board policy that governs the rental of school facilities.
	4.C	4-8	Recommendation: Advertise for and hire a maintenance staff member who is certified in HVAC maintenance and repair.
		4-9	Recommendation: Utilizing Track-IT as the work order tracking system, but institute a periodic process for reviewing and analyzing the historical workload data in order to identify any trends.
	4.D	4-10	Recommendation: Reduce the cost of custodial support.
		4-11	Recommendation: Discontinue the practice of using individuals who already work in a full-time position for PECPS to also work in a recurring or regular part-time position as custodial staff.
		4-12	Recommendation: Develop standards for custodial services that are consistent with APPA or other similar standards.

4 Cont'd		4-13	Recommendation: Implement an ongoing custodial staff development program.
	4.E	4-14	Recommendation: Develop an energy awareness program specific to PECPS.
		4-15	Recommendation: Purchase and install energy control devices on vending machines.
		4-16	Recommendation: Implement practices that conserve energy and reduce costs.
		4-17	Recommendation: Evaluate the need for an educational suitability assessment of all buildings.



Exhibit E-5 PECPS COMMENDATIONS AND RECOMMENDATIONS Chapter 5 Finance Management

Ch.	Sec.	Number	Commendation/Recommendation
5	5A	5-1	Recommendation: Ensure that external auditors make the superintendent and the school board aware of internal control weaknesses; and that action is taken to strengthen internal controls.
		5-2	Recommendation: Develop standard operating procedures for all operations performed by the finance department.
		5-3	Recommendation: Create and implement a standardized form for authorizing the hiring/termination of personnel.
		5-4	Recommendation: Cross train the finance department staff members using the standard operating procedures (recommended in 5-2).
		5-5	Recommendation: Revise the director of finance position description to reflect that the director hold a Master’s degree in finance, accounting or an MBA from an accredited institution of higher learning.
	5.B	5-6	Recommendation: Update or replace the current accounting system.
	5.C	5-7	Recommendation: Develop and implement a comprehensive fixed asset management plan.
		5-8	Recommendation: Analyze the current agreement with the insurance consulting firm and review its contents.
		5-9	Recommendation: Ensure that the comprehensive crisis management plan is reviewed and updated as policies/procedures change.
		5-10	Recommendation: Organize the budget by categories that are more easily identifiable to stakeholders while continuing to meet Virginia Administrative Code requirements.
		5-11	Recommendation: Develop a calendar that shows each step in the budget process, its due date, and who is responsible.
		5-12	Recommendation: Continue to allow supervisors to participate in the budgeting process.

5 Cont'd		5-13	Recommendation: Establish a detailed purchasing policy and develop a purchasing manual
		5-14	Commendation: PECPS has followed a self-established protocol for all technology purchases.
	5.D	5-15	Recommendation: Either update or replace the division's financial software.



Exhibit E-6 PECPS COMMENDATIONS AND RECOMMENDATIONS Chapter 6 Transportation

Ch.	Sec.	Number	Commendation/Recommendation
6	6.A	6-1	Recommendation: Seek individuals willing to accept the responsibility of twice daily transportation of students.
		6-2	Commendation: PECPS has experienced routine on-time performance.
		6-3	Recommendation: Share the transportation department’s cost information with its supervisor.
		6-4	Commendation: PECPS has exhibited excellent cooperation between bus drivers and school and building staff.
	6.B	6-5	Recommendation: Develop a comprehensive transportation procedure manual.
		6-6	Recommendation: Implement a system for measuring overall transportation performance in the department.
		6-7	Recommendation: The human resources director and the transportation supervisor should work together to prepare a draft handbook for bus drivers.
		6-8	Recommendation: Keep all information related to transportation personnel in the division’s human resources department.
	6.C	6-9	Recommendation: Utilize the Transfinder Pro software.
		6-10	Recommendation: Re-evaluate policies governing the transportation of its students.
	6.D	6-11	Commendation: PECPS has showed good cost controls and maintained a lower cost per pupil when compared to peer school divisions.
	6.E	6-12	Recommendation: Prepare and place on each bus emergency information sheets.

6 Cont'd	6.F	6-13	Recommendation: Develop electronic copies of recurring maintenance forms, and prepare and follow a schedule of recurring maintenance needs.
		6-14	Recommendation: Revise bus maintenance operations by; eliminating one bus garage supervisor, eliminating the practice of using full-time bus maintenance staff to perform custodial work after hours, and stopping the practice of using bus mechanics to fuel buses.
		6-15	Recommendation: Require the bus transportation maintenance shop to use the inventory forms provided in the DOE preventive maintenance manual.
		6-16	Recommendation: Use the existing office area in the building for the storage of transportation records.
		6-17	Recommendation: Annually rotate the active school buses among bus routes to balance the amount of miles put on each bus.



Exhibit E-7
PECPS COMMENDATIONS AND RECOMMENDATIONS
Chapter 7 Technology Management

Ch.	Sec.	Number	Commendation/Recommendation
7	7.A	7-1	Recommendation: Evaluate the total technology staffing requirements once the network stabilizes.
	7.B	7-2	Recommendation: Develop rigorous technology expectations for PECPS teachers and staff.
		7-3	Recommendation: Create and implement a system to track staff development as it relates to technology.
	7.C	7-4	Commendation: PECPS has developed a detailed technology plan aligned with Virginia's Educational Technology Plan to guide technology development.
		7-5	Recommendation: Develop a formal system(s) for evaluating accomplishments and implementation of actions.
		7-6	Recommendation: Adopt a formal computer replacement policy for PECPS.
	7.D	7-7	Recommendation: Develop procedures to assess technology usage, satisfaction, and instructional integration.
		7-8	Recommendation: Begin developing written procedures for all functions within the department of technology.
	7.E	7-9	Recommendation: Automate and standardize the inventory process with current retail software, and inventory a certain percentage of equipment in common areas each month.
	7.F	7-10	Recommendation: Modify and update the web pages on a continuing basis.
	7.G	7-11	Recommendation: Automate administrative forms and make them available through the network.
		7-12	Recommendation: Increase the use of technology for communication and other daily operations by division and school administration and instructional staff.

7 Cont'd		7-13	Recommendation: Create and test a written disaster recovery plan and coordinate routine tape backups for off-site storage.
	7.H	7-14	Recommendation: Require that the director of technology approve all software and hardware purchases by schools and departments prior to the issue of a purchase order.

Exhibit E-8
PECPS COMMENDATIONS AND RECOMMENDATIONS
Chapter 8 Food Services

Ch.	Sec.	Number	Commendation/Recommendation
8	8.A	8-1	Recommendation: Limit food services finance functions to bookkeeping and cash collection.
		8-2	Recommendation: Keep all personnel records in the human resources department files.
		8-3	Commendation: PECPS has promoted employee loyalty and a positive work environment within the food services department.
	8.B	8-4	Recommendation: Create food services departmental procedures manuals to be kept in a central location.
		8-5	Recommendation: Identify the individuals who have a need to access the cafeteria kitchens; provide those individuals with keys and provide them with related policies.
	8.C	8-6	Recommendation: Create a goal to maintain food services departmental labor costs at 40 percent of revenue.
		8-7	Recommendation: Once student breakfast participation increases, increase the prices of elementary and middle school breakfasts by 10 cents per meal served.
	8.D	8-8	Recommendation: Evaluate the duties performed by the elementary school cafeteria assistant manager and the middle and high school cafeterias co-managers, and create one job description applicable to all three positions.
		8-9	Recommendation: Allocate utilities costs incurred by the food services department for payment.
		8-10	Recommendation: Review the meals-per-labor-hour rate at each campus to ensure each is meeting (or exceeding) the industry standard of 14 meals per labor hour.
		8-11	Recommendation: Assign cafeteria monitors to assist the cafeteria workers with controlling the flow of the serving lines and to monitor the student behavior during the lunch periods at all schools.
		8-12	Commendation: PECPS has implemented point of service technology that improves food service fiscal controls.
	8.E	8-13	Recommendation: Look for ways to increase student and faculty meal participation, especially during breakfasts.

8 Cont'd		8-14	Recommendation: Create a goal of increasing free breakfast participation by 64% to increase the amount of Government reimbursements.
	8.F	8-15	Commendation: PECPS has maintained clean facilities and provided tasty and nutritious meals and snacks to the division's students.
	8.G	8-16	Commendation: PECPS has competitively solicited food and supply needs from multiple companies to ensure the procurement of the best quality food and non-food items for the best price.
		8-16	Recommendation: Evaluate the utilization of the Virginia Distribution Center to procure needed food and non-food items.
		8-17	Recommendation: Share the space currently allocated for the sports concessions.
		8-18	Commendation: PECPS has utilized the skills of its employees to reduce repair costs.
		8-18	Recommendation: Ensure that equipment part purchases are made cost effectively by contacting two or more vendors for quotes.



IV. Summary Of Potential Investments And Savings

The study team has identified up to \$487,521.14 in potential net savings for PECPS in the first year (\$69,716.44 in investments and \$557,237.58 in savings). The table, below, shows the potential investments and savings identified. Each item listed is explored in depth in the body of this report. Over a five year period, total savings are estimated at \$1,914,269.70.

Summary of PECPS' Investments and Savings Opportunities

Proposed Recommendation	Investments	Savings	Frequency
1-3, Establish a position for accountability, assessment, and data analysis.	\$69,716.44		Recurring
1-8, Reduce the number of assistant principals.		\$98,469.00	Recurring
3-8, Utilize Green Life Organization (vice VIF) to procure international faculty.		\$12,000.00	Recurring
4-10, Reduce custodial staff.		\$41,685.84 (\$22,569.84 plus \$19,116.00)	Recurring
4-11, Discontinue practice of using full-time PECPS for part-time work.		\$3,170.88	Recurring
4-14, Implement an Energy Awareness program specific to PECPS and avoid late charges on utility bills.		\$57,607.36 (\$56,047.00 plus \$1,560.36)	Recurring
6-10, Revise bus routing and establish bus stops.		\$161,010.72 (\$130,834.00 for buses and \$30,176.72 for drivers)	One-time savings for buses, recurring savings for drivers
6-14, Eliminate one Bus Maintenance Supervisor and part-time custodial shift.		\$36,176.00 and \$9,489.00	Recurring
8-10, Reduce Food Services staff.		\$59,424.87	Recurring
8-14, Increase Free/Reduced meals served.		\$78,203.91	Recurring
Total Investments/Savings	\$69,716.44	\$557,237.58	

Introduction

INTRODUCTION

The Department of Planning and Budget of the Commonwealth of Virginia contracted with E.L. Hamm & Associates, Inc. to conduct a school efficiency review of Prince Edward County Public Schools (PECPS), a school division consisting of approximately 2,773 students. This review focused on the financial, organizational, and operational effectiveness of the division.

Methodology

E.L. Hamm's methodology for conducting this review included the following components:

- Reviewing existing reports and data sources.
- Conducting a diagnostic assessment, including interviews with School Board members, central office administrators, principals, association leaders, and community/business leaders.
- Conducting employee surveys.
- Making analyses with comparison school divisions.
- Visiting all schools in each division.
- Conducting the formal on-site review with E.L. Hamm staff.
- Preparing the draft and final reports.

Review Of Existing Records And Data Sources

Initially, E.L. Hamm collected existing reports and data sources that provided recent information related to the various administrative functions and operations necessary for the review. More than 100 documents were requested. Examples of materials E.L. Hamm requested include:

- School board policies and administrative procedures.
- Organizational charts.
- Program and compliance reports.
- Technology plan.
- Annual performance reports.
- Independent financial audits.
- Curriculum and instruction plans.
- Annual budget and expenditure reports.
- Job descriptions.
- Salary schedules.
- Employee handbooks.

Data were analyzed from each of these sources and this information was useful in directing additional data collection efforts during on-site visits.

Employee Surveys

To secure the involvement of administrators and teachers in the school efficiency review, a survey was prepared and disseminated in April/May 2007. Through the use of anonymous surveys, the staff was given the opportunity to express their views about the management and operations of each division.

E.L. Hamm conducted a diagnostic review of the district during the review. During the diagnostic, central office and school-based administrators were interviewed regarding the

efficiency and effectiveness of division operations, and to determine their perceptions of the issues being faced by the division.

On-Site Efficiency Review

E.L. Hamm's staff conducted formal on-site reviews of Prince Edward County Public Schools over several weeks during the months of March, April, and May 2007. As part of our on-site review process, we examined the following systems and operations in each division.

- Division Leadership
- Educational Service Delivery
- Human Resource Management
- Facilities Use and Management
- Transportation
- Computers/Technology
- Food Services

Prior to conducting the on-site reviews, the review team was provided with an extensive set of information about PECPS operations. During the on-site work, team members conducted detailed reviews of the structure and operations of each division in their assigned functional areas. All public schools in PECPS were visited at least once.

Comparison To Other School Divisions

The Virginia Department of Education has developed a cluster code to identify similar school divisions for comparison purposes. Cluster identifiers were created by using data including, but not limited to, the cost per student for each major area, major drivers of costs, and ranking of costs. Prince Edward County Public School is identified in Cluster 4. The Virginia public school divisions chosen for comparison to Prince Edward County Public Schools are:

- Charlotte County Public Schools
- Cumberland County Public Schools
- Lunenburg County Public Schools
- Nottoway County Public Schools
- Sussex County Public Schools

Instruction and Administration

Exhibits 1 and 2 below represent 2005-2006 peer comparisons, which are the most complete comparison data available at the time of this study. The data shows PECPS ranking third highest (two other school divisions are higher) in its peer group in per pupil spending for instruction at \$6,659.38 per pupil. This figure amounts to 84 percent of its total expenditures. It also ranks third highest in its peer group in per pupil spending for administration at \$370.99 per pupil. This figure amounts to five percent of total expenditures.



Exhibit 1
2005-2006 Peer Group per Pupil Expenditure for Instruction and Administration

School Division	Instruction	Administration	ADM	Per Pupil Instruction	Per Pupil Administration
Charlotte	\$12,663,131	\$ 634,894	2,297.66	\$5,511.32	\$276.32
Cumberland	\$ 9,035,830	\$ 954,216	1,499.22	\$6,027.02	\$636.47
Lunenburg	\$12,103,342	\$ 477,300	1,774.26	\$6,821.62	\$269.01
Nottoway	\$13,494,785	\$ 580,578	2,369.02	\$5,696.36	\$245.07
Prince Edward	\$18,172,123	\$1,012,370	2,728.80	\$6,659.38	\$370.99
Sussex	\$12,409,989	\$ 617,287	1,399.63	\$8,866.62	\$441.04

As reported in the Virginia Department of Education Superintendent's Annual Report

Exhibit 2
2005-2006 Percentage of Total Operation Expenditures

School Division	Total Cost of Operation	% Instruction	% Administration
Charlotte	\$16,772,705	75%	4%
Cumberland	\$12,418,556	73%	8%
Lunenburg	\$14,296,926	85%	3%
Nottoway	\$18,266,477	74%	3%
Prince Edward	\$21,546,830	84%	5%
Sussex	\$15,612,801	79%	4%

As reported in the Virginia Department of Education Superintendent's Annual Report

Transportation; Operations and Maintenance, and Debt Service and Transfer

In other categories, PECPS ranks fifth (only one other school division was lower) in transportation expenditures per pupil, fifth in operations and maintenance, and fifth in expenditures per pupil for debt service and transfer, as shown in Exhibit 3 below.

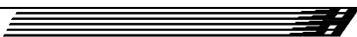
Exhibit 3
2005-2006 Peer Group per Pupil Expenditure for Transportation, Operations and Maintenance and Debt Service and Transfer

School Division	ADM	Transportation	Operations and Maintenance	Debt Service and Transfer	Transportation Per Pupil	Operations and Maintenance Per Pupil	Debt Service and Transfer Per Pupil
Charlotte	2,297.66	\$1,651,941	\$2,503,611	\$ 478,809	\$ 718.97	\$1,089.64	\$208.39
Cumberland	1,499.22	\$1,273,337	\$2,083,162	\$ 741,272	\$ 849.36	\$1,389.50	\$494.44
Lunenburg	1,774.26	\$1,118,044	\$1,206,377	\$1,274,704	\$ 952.13	\$ 679.93	\$718.44
Nottoway	2,369.02	\$1,174,676	\$4,617,946	\$ 812,235	\$ 495.85	\$1,949.31	\$342.86
Prince Edward	2,728.80	\$1,827,085	\$1,861,183	\$ 866,734	\$ 669.59	\$ 682.05	\$317.62
Sussex	1,399.63	\$1,487,248	\$1,846,771	\$ 222,659	\$1,062.60	\$1,319.47	\$159.08

As reported in the Virginia Department of Education Superintendent's Annual Report

Receipts

Exhibit 4 on the following page ranks PECPS as the second highest in its peer group in percentage of local revenues to total revenues received by the school division, and it is driven by the composite index of local ability-to-pay that is calculated for Prince Edward County. The composite index was developed for the Commonwealth of Virginia to measure a locality's ability to pay for education based on a calculation that involves variables of population, adjusted gross income, and taxable retail sales on both local and state levels. PECPS has a composite index of .2776, as shown in Exhibit 5, on the following page. This means that 27.76 percent of the school division's responsibility required for school funding comes from local sources and 72.24 percent comes from the state. This low index is very much influenced by the presence of very few commercial businesses on its tax rolls.



**Exhibit 4
2005-2006 Receipts by Division in Dollars**

School Division	From State Sales and Use Tax	From State Funds	From Federal Funds	From City, Town and County Funds	From Other Funds	From Loans, Bonds, etc.	Total Receipts	Balances at Beginning of Year	Total Receipts and Balances
Charlotte	\$1,792,019.12	\$11,323,343.42	\$2,070,181.70	\$3,874,529.84	\$562,359.87	\$ 0.00	\$19,622,433.95	\$648,281.12	\$20,270,715.07
Cumberland	\$1,438,458.80	\$6,593,865.25	\$2,742,725.94	\$5,190,043.24	\$203,076.15	\$ 0.00	\$16,168,169.38	\$ 0.00	\$16,168,169.38
Lunenburg	\$1,693,890.42	\$8,666,578.19	\$2,590,077.80	\$4,174,395.00	\$380,858.77	\$ 0.00	\$17,505,800.18	\$306,044.67	\$17,811,844.85
Nottoway	\$2,187,602.50	\$11,923,585.11	\$3,100,950.17	\$5,657,645.00	\$560,093.55	\$710.74	\$23,430,587.07	\$1,907,303.01	\$25,337,890.08
Prince Edward	\$2,792,520.00	\$12,396,026.96	\$3,220,594.97	\$6,895,168.74	\$323,118.28	\$58,437.94	\$25,685,866.89	\$174,575.95	\$25,860,442.84
Sussex	\$1,195,529.38	\$6,839,551.94	\$1,860,396.78	\$8,293,907.31	\$111,941.12	\$ 0.00	\$18,301,326.53	\$208,568.98	\$18,509,895.51
STATE TOTAL	\$1,097,577.684	\$4,014,741.482	\$866,968.195	\$6,256,860.793	\$685,733.359	\$1,027,801.741	\$13,949,683.256	\$1,030,474.230	\$149,801,157.483

As reported in the Virginia Department of Education Superintendent's Annual Report

**Exhibit 5
Peer Group Composite Indices by Division**

School Division	2006-2008 Composite Index Used for Funding
Charlotte County	.2234
Cumberland County	.2859
Lunenburg County	.2399
Nottoway County	.2429
Prince Edward County	.2776
Sussex County	.2912

As reported in the Virginia Department of Education Superintendent's Annual Report

Overview of the Report

The final report for this study consists of the following 8 chapters:

- Chapter 1. Division Leadership
- Chapter 2. Educational Service Delivery and Management
- Chapter 3. Human Resources Management
- Chapter 4. Facilities Use and Management
- Chapter 5. Financial Management
- Chapter 6. Transportation Management
- Chapter 7. Computers and Technology
- Chapter 8. Food Services Management

Chapters 1 through 8 contain findings, conclusions, and commendations or recommendations of the operational areas of each department contained within the division's existing organizational structure.

1. Division Leadership, Organization and Management

1. DIVISION LEADERSHIP, ORGANIZATION AND MANAGEMENT

This chapter reviews the staffing, organization, and management of the Prince Edward County Public Schools (PECPS) and includes five major sections:

- 1.A Division Management
- 1.B Procedures
- 1.C Campus Administration and Decision-Making
- 1.D Planning, Budgeting and Evaluation
- 1.E Review and Evaluation of Contracting Process

Prince Edward County Public Schools is committed to improving student achievement and data-driven decision-making. The school board and superintendent function as a team to meet student needs. The superintendent and her leadership team of directors and building administrators have focused on the development of a long-range strategic plan and an efficient budgeting process to align the goals of the division with the budgetary funding to realize the best practices for school improvement. In the eight months the superintendent has led the division, she has established a culture for accountability and responsiveness to the community, which will lead to continued improvement.

Every organization has room for improvement and continually seeks ways to identify and implement best practices for improvement. Prince Edward County Public Schools embarked on its quest for an efficiency review to find ways to improve the management of the division and support the instruction of its students.

INTRODUCTION

Prince Edward County Public Schools is dedicated to improving the educational program offered to its students. The superintendent has established a focus on student achievement through planning, evaluation, assessment, and making data based decisions. With the involvement of the school board, the leadership team, staff, and the community, their *Strategic Plan 2006-2011* has been developed for the division complemented by and reflected in PECPS' *School Improvement Plan* at each level. Benchmark assessments were instituted to assess student learning for remediation and enrichment. These assessments allow teachers to focus instruction based on students' individual needs. A new evaluation instrument for teachers and administrators is under development to be used this year that will provide accountability and direction for teacher development and improvement.

The schools receive the major impact of the funding allocated to the division. Using these funds, the schools have implemented programs that enhance the potential for increased student achievement. For example, Spanish was recently introduced at the elementary level to meet the needs of the migrant workers' children, while on-line Latin has been instituted at the high school level to provide additional opportunities for student enrichment. Since most of the money allocated to the division is filtered to the schools, the central office staff has remained small and dependent on the individual schools for additional information and data.

Like most effective organizations, PECPS welcomes review and recommendations for ways to improve its division leadership, organization and management. The following findings, conclusions, and recommendations are offered for consideration.

1.A DIVISION MANAGEMENT

While the school board sets policy for a school division, the superintendent is responsible for carrying out that policy and managing the division in the most cost effective and efficient manner possible. The primary goal of school division's management is to facilitate and support the instruction of the division's students.

Section 22.1-25 of the Code of Virginia requires the Board of Education to divide the Commonwealth into school divisions and that the school divisions in existence as of July 1, 1978 remain so divided until further action of the Board of Education. Prince Edward county, an operating school division at that time, has continued as an independent school division governed by an eight-member school board.

The powers and duties of the school board are delineated in Section 22.1 of the Code and include the adoption of policies; approval of personnel actions; adoption of budgets; entering into contractual agreements; and the appointment and evaluation of the division superintendent.

Finding 1-1:

The Prince Edward County School Board is comprised of eight members appointed by the county's board of supervisors. Exhibit 1-1 contains the current school board members, their title, date that their term expires, and years served to date. The current average tenure of a school board member is 5.5 years.

**Exhibit 1-1
Prince Edward County Public Schools
School Board Members
2006-2007 School Year**

Name	Title	Term Expires	Years Served
Herbert N. Doswell	Member	2008	4
Russell L. Dove	Chair	2008	4
Susan Lawman	Vice-Chair	2007	2
Linda Leatherwood	Member	2010	5
Patsy G. Pelland	Member	2009	10
Dr. Ellery Sedgwick	Member	2009	2
Thomas M. Tillerson	Member	2007	12
Dr. Lawrence Varner	Member	2010	5

Regular meetings are held once a month at 1:30 pm on the second Wednesday of each month with the exception of two designated months when the school board convenes at 6:00 pm. The meetings generally last from four to five hours. The central office directors and coordinators attend the meetings on a regular basis, and school principals attend when their schedules permit. The public is welcome to attend, and the two meetings beginning at 6:00 pm are specifically designed to encourage attendance by those who could not attend during the afternoon meetings.

The Prince Edward County School Board meets in closed session as allowed by Section 2.2-3711 of the Code of Virginia at the end of regular meetings as needed to discuss personnel issues, student matters, consultation with legal council and evaluation of the superintendent.

The school board members recognized the need to operate on the policy level as a team for the improvement of the school division and worked with a facilitator during May 2007 to develop leadership and governance skills.

Conclusion 1-1:

There is the possibility of new members on the Prince Edward County School Board every year due to the current expiration and reappointment process. Shown above in Exhibit 1-1, there are two terms expiring each year, with reappointment made by the county Supervisors.

Commendation 1-1:

The Prince Edward County School Board is commended for recognizing the need for leadership and governance skills and proceeding with the plans and arrangements to ensure the training for all members.

Recommendation 1-1:

It is recommended that PECPS plan an orientation or training session for team building and acclimation to the operations of the school board for new members on an annual basis. This would provide new members parameters for their duties and responsibilities.

Finding 1-2:

The current Prince Edward County Public Schools organizational chart, shown in Exhibit 1-2, is one in which all the directors report directly to the division superintendent. Currently there are nine people reporting directly to the superintendent, which includes three principals, the director of instruction, the director of human resources, the director of support services, the director of finance, the director of technology, and the director of special education.

The directors of human resources, support services, finance, technology and special education have no administrative positions indicated as reporting directly to them. The coordinator of special services reports directly to the director of instruction and the coordinator of adult/vocational education reports directly to the high school principal. Assistant principals report directly to their respective principals at the elementary, middle and high schools.

Although handbooks referred to an administrative assistant to the superintendent, it was indicated that the position is no longer filled.

There is no formal contact between the superintendent and the food services operations in the district. Although the food services report is presented at the Prince Edward County School Board meeting, the oversight for the operation is not within the superintendent's organizational structure.

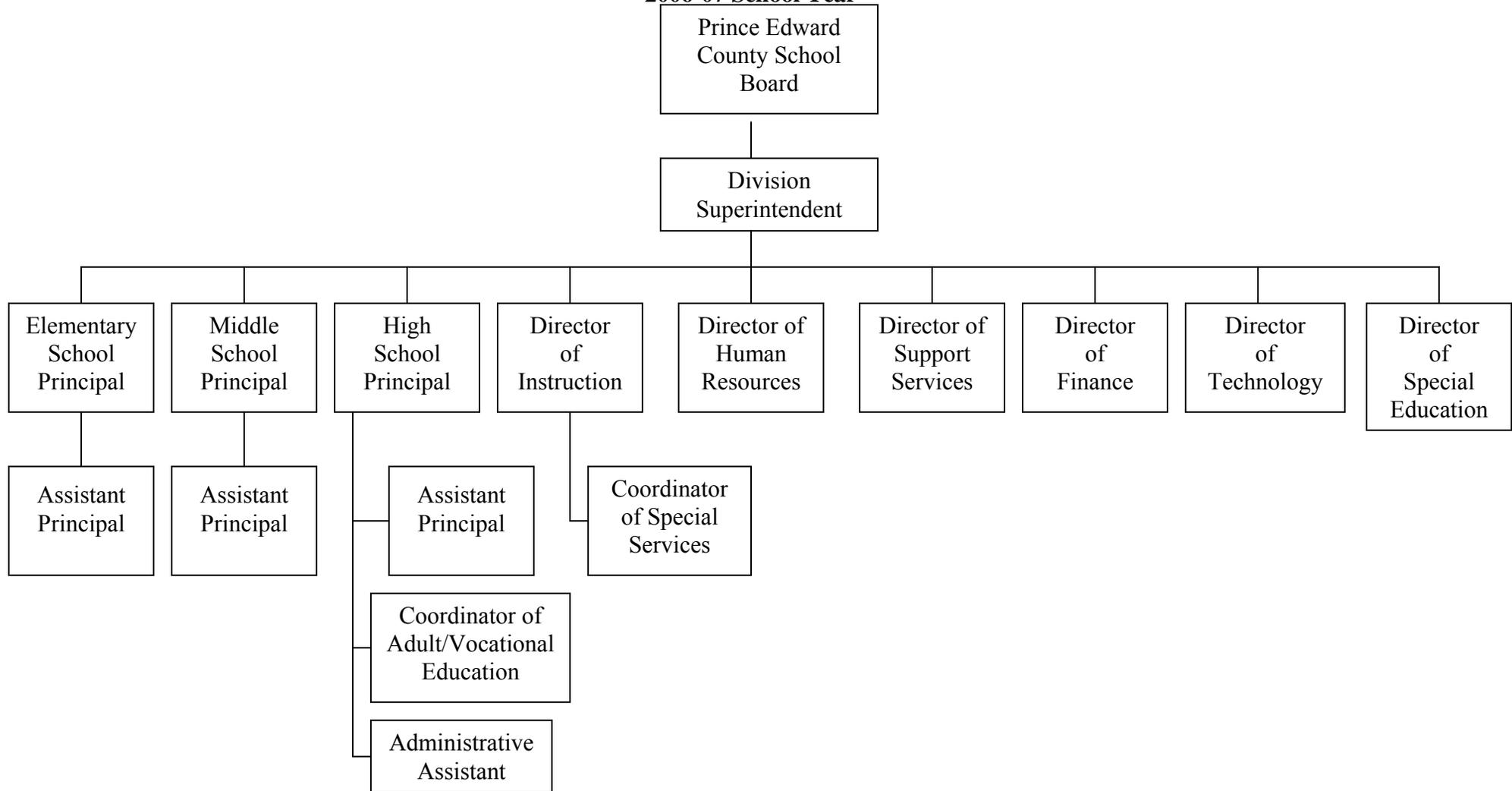
Other changes from the handbook were:

- The position entitled *Administrative Director for Financial and Assessment Services* was changed to *Director of Finance* thereby limiting the scope of the job description.
- The position entitled *Administrative Director of Compensatory Education and Personnel Services* was changed to *Director of Human Services*, which had the impact of expanding the job responsibilities.

Conclusion 1-2:

Given the overall responsibilities and duties of the superintendent, nine individuals representing major functional areas of PECPS reporting directly to the superintendent is too many. This number of reporting staff may take time away from the superintendent that is better spent

**Exhibit 1-2
Prince Edward County Public Schools
Organizational Chart
2006-07 School Year**



Source: Prince Edward County Public Schools 2007.

focusing on the more critical issues and important long-term initiatives for the school division. Likewise, some departments should have better defined functional areas and expansion of their departments to increase efficiency within operations.

Recommendation 1-2:

It is recommended that PECPS reassign and redefine duties and responsibilities within the PECPS organizational structure.

The following actions are recommended:

- Divide the division responsibilities into two main areas, one for instruction and one for operations—with the directors reporting directly to the superintendent.
- Maintain direct reporting to the superintendent by the building principals, director of human resources and director of finance.
- Establish a coordinator for assessment and data analysis position who would report to the superintendent.
- Establish a contact person from the food services department who would report to the director of support services on programs within that area.

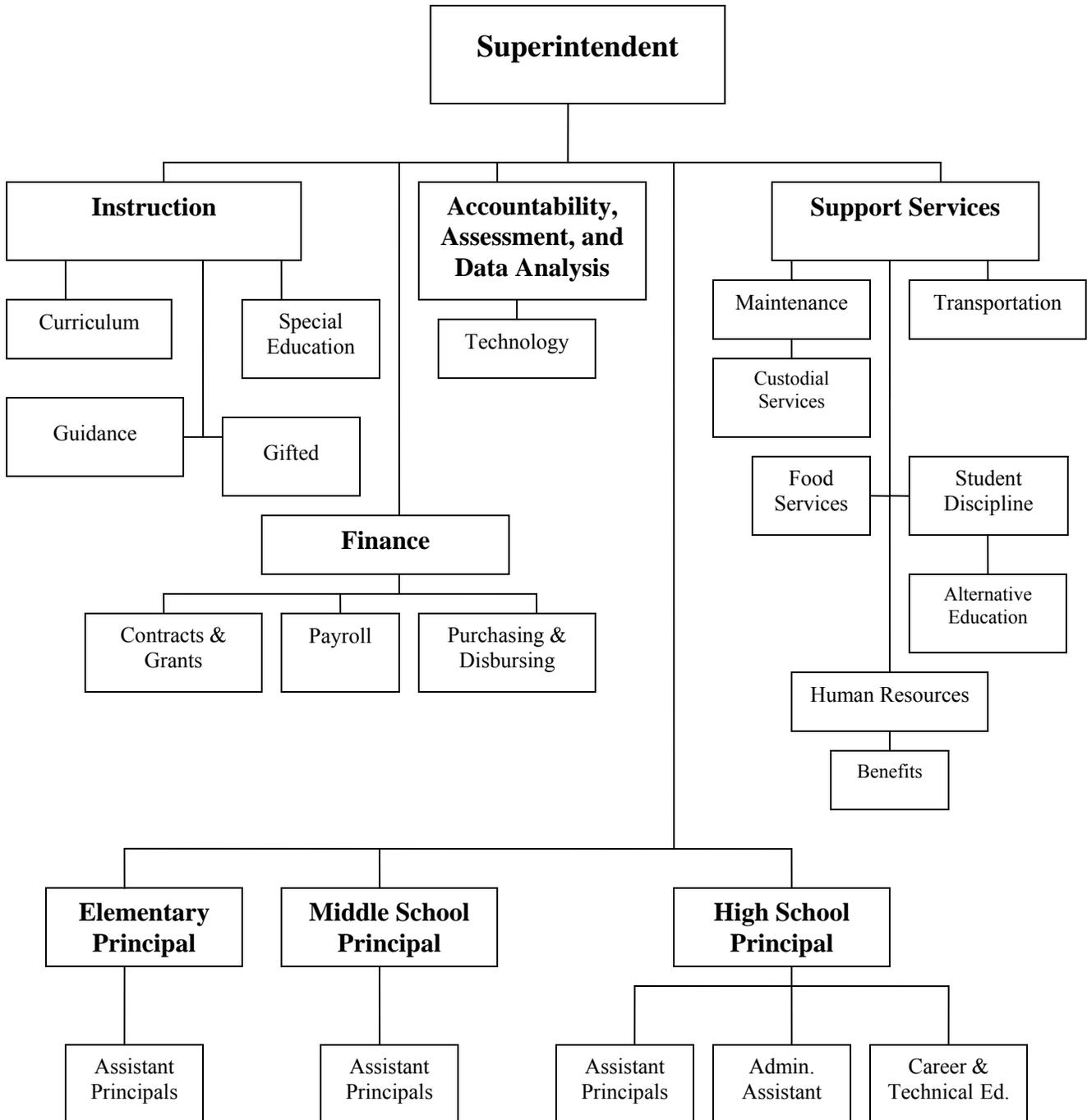
Realigning these functions would promote the emphasis on instruction and provide the superintendent with direct reporting contact with seven key leaders in the system, thereby expanding their job responsibilities.

Exhibit 1-3 presents a proposed organizational chart with the realignment of some job functions and responsibilities.

In order to maintain accountability for the operations of the cafeteria and lunch/breakfast programs, the manager of the food services department would report to the director of support services in the proposed organizational structure. Should the superintendent and school board move to this organizational structure, there would be a need to realign and adjust salaries dependent on the increased/decreased job descriptions of the personnel impacted by re-organization.



**Exhibit 1-3
Prince Edward County Public Schools
Proposed Administrative Organizational Chart
By Department**



Finding 1-3:

PECPS implemented benchmark assessments in grades two through 11 in English and math to monitor student growth and performance relative to statewide achievement expectations in September 2007. Benchmark assessments are used to guide classroom instruction and can be used to provide evaluation of program effectiveness and guide professional development.

Conclusion 1-3:

A Prince Edward County Public Schools data focus team in each school is essential in assessing the information provided by the benchmark assessments. Data analysis of achievement progress is the foundation for constructive decisions for goals, unit plans and planning for prevention and intervention strategies.

Currently, there is no central office person assigned the responsibility for assessment, benchmarking recommendations, data collection, and monitoring the progress on the division's six-year strategic plan. With the increased demands for testing and accountability in today's public schools, the need to analyze data across the division and use the information to improve instruction is essential. This would determine the extent to which goals in the strategic plan are met as well as to the extent to which various groups and subgroups are achieving specific objectives. Data analysis is essential in determining where the division is realizing success and where improvements need to be made. The state testing program is extensive and changes annually. There needs to be a person directly responsible maintaining the data for the division that crosses school boundaries. The person would also be in charge of monitoring the strategic plan and the school improvement plan.

Recommendation 1-3:

It is recommended that PECPS establish a position responsible for accountability, assessment, and data analysis. This position, as shown in Exhibit 1-3, would report directly to the superintendent.

Fiscal Impact: The total cost for adding this position is estimated at \$69,716.44 (based on an annual salary of approximately \$56,460 for Level 2 of the Administrative Salary Scale *plus* benefits estimated at 16.27 percent *plus* \$339.20 per month for health insurance). This cost would be an ongoing expense.

Finding 1-4:

Prince Edward County Public Schools students are housed in three buildings, an elementary school serving pre-K through fourth grade, a middle school serving grades five through eight, and a high school with grades nine through 12. All school buildings are located on adjacent properties along with PECPS' administration building. The county owns another property adjacent to Prince Edward County High School available for possible future expansion.

Student enrollment in PECPS, as shown in Exhibit 1-4, has been stable during the past five years with slight variations from year to year at the different schools. Following three years of declining enrollment, the elementary school enrollment increased in the past two years by 43 students. The middle school has declined by 134 students in the past three years, while the high school enrollment has increased over the four years by 96 students. The high school graduation class for 2007 will number 230, the largest in many years.

The elementary school received building additions to accommodate students as the enrollment needs changed, but the space for expansion has been exhausted. The county owns property in the vicinity which would be made available to the school system should the need arise.

Conclusion 1-4:

Long-range plans have been formulated for the future using land adjacent to the high school with realignment of the grade levels to incorporate primary, elementary, middle and high school levels.

Exhibit 1-4
Prince Edward County Public Schools
September 30th Student Enrollment
2001-02 through 2005-2006

Level	2002-03	2003-04	2004-05	2005-06	2006-07
Elementary	1,078	1,061	1,042	1,048	1,085
Middle	916	918	858	835	784
High	808	877	892	858	904
Total	2,802	2,856	2,792	2,741	2,773

Source: Virginia Department of Education web site, 2007.

Commendation 1-4:

Prince Edward County Public Schools and the school board are commended for their foresight; planning for continued construction to meet the needs of their students; and the acquisition of adjacent land for future construction needs.

1.B PROCEDURES

Effective school management is built on sound, clearly written and legally valid policies. The Virginia Department of Education mandates that each school board adopts policies governing the operation of its schools and make them assessable to all school division employees and the public. Procedures show division employees how to carry out the policies in their various organizational units.

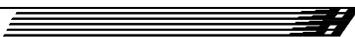
Well-written and organized procedures:

- Implement and assure compliance with school board policies as well as document the intent of those policies.
- Protect the institutional knowledge of an organization so that as experienced employees leave, new employees have the benefit of their years of experience.
- Provide the basis for training new employees.
- Offer a tool for evaluating employees based on their adherence to procedures.

Administrative procedures should be formally documented, with each administrator held responsible for creating and maintaining understandable, cross-referenced procedures.

Finding 1-5:

The Prince Edward County School Board conducts an annual review of the division policies and revises the policies as needed. A review of the school board minutes posted on the division's web site reveals discussions and revisions to policies on the agenda for information one month, with discussion, amendments, and a vote the following month.



Conclusion 1-5:

The Prince Edward County Public Schools' *Policy Manual* contains policies that require consistent standards for the implementation of a policy. Many of the implementation procedures or regulations by which the policy is carried out have been developed within a department or work area, and may vary across the district. For example, there needs to be consistent guidelines for acquiring funds from the Finance Office with guidelines to maintain budget integrity among departments. The policy manual is lacking a detailed definition and dissemination of the procedures required to implement the policies. This is needed to ensure the correct execution of the school board's policies.

Recommendation 1-5:

It is recommended that PECPS develop a comprehensive administrative procedures and regulations manual that contains administrative procedures for use by school and central office administrators to ensure consistency among staff.

This manual should include information on the appropriate procedures necessary to maintain the integrity of the school board's policies. It should be accessible to all administrators and include the following sections:

- General Information;
- Instruction;
- Records Management;
- Student Services;
- Special Education;
- Financial Procedures;
- Technology and Data Collection;
- Transportation;
- Food Services; and
- Maintenance.

1.C CAMPUS ADMINISTRATION AND DECISION-MAKING

Within a school division, the school is the core of the educational process where the instruction takes place. Principals and teachers are the key to an effective instructional system. Principals must efficiently and effectively manage budgets, personnel, and instructional programs. Their management decisions involve scheduling, safety and security, discipline, employee retention and evaluation, school climate and school improvement measures.

Each school division utilizes division and school-level planning and decision-making processes. These processes involve the school division's professional, parents, and community members. These individuals establish and review the division's (and each school's) educational plans, performance objectives and major classroom instructional programs.

Finding 1-6:

Although staffing and salaries are established by the school board, the building principals provide input to the division budget through grade level/department budget requests. These requests are submitted to the superintendent and directors for approval and inclusion into the

division budget. Once suggestions are discussed and reviewed, decisions are made as to which items are included in the superintendent's proposed budget presented to the school board.

The school's principals have autonomy over the school-based budget and have flexibility to change funds in various accounts. They use vouchers to request funds from the director of finance when additional monies are needed. Once the vouchers are approved, requests for payment are submitted to the finance department.

Conclusion 1-6:

Many directors and principals were unsure of the amount of funds in their respective budgets for the current year. They did not know the amounts spent by their respective departments during the previous year or their department's current year remaining balance. They periodically sent vouchers to the finance department for payment. The director of finance subsequently had to inquire about detailed information regarding the purchase and its authorization.

Recommendation 1-6:

It is recommended that PECPS develop a communication system that notifies administrators of their school's, or department's, beginning fund balance. Quarterly updates should be provided to disclose the funds expended and encumbered monies to date to avoid over-spending within an account or failing to spend allocated funds.

Finding 1-7:

The school board and superintendent work collaboratively to ensure that the community and stakeholders are informed and involved in the school division's actions. The school board chairman maintains an open door policy with the community, and the superintendent holds a community forum each quarter to receive information and to inform citizens of the happenings in the division.

The superintendent maintains a high profile by attending school faculty meetings on a rotating basis, meeting with several committees for school improvement including a staff development committee; citizenship and character education committee; alternative education committee; and a code of student conduct committee. The superintendent also meets monthly with the division's directors; an advisory committee comprised of instructional and classified personnel; a teachers advisory committee; and the gifted and talented parents advisory committee.

In October, a discipline committee was formed to look at the issue of discipline in the division and research strategies that could be implemented to handle this concern. Committee membership consists of administrators, teachers, parents and students. A recognition committee has been designed to generate ways to highlight and celebrate the successes and accomplishments of all employees, and a public relations and community engagement committee seeks ways to revise and improve communication between the school and community.

Conclusion 1-7:

Each principal is in charge of his building, with the superintendent acting as a sounding board for innovative ideas and providing feedback. Building administrators attend school board meetings, participating in the discussions. They maintain standing committees at the school level for input into building decisions. Departments and grade level personnel provide input into the budgeting process and into the planning for all levels of instruction. Teachers, assistants, and classified personnel are included on various committees. For example, teachers have just completed

revisions on the citizenship and character education program and are in the process of revising PECPS' *Code of Student Conduct* with attention to behavior management.

Teachers, administrators, and the superintendent worked together to develop the new PECPS *Staff Development Plan*. The previous plan was unfocused and lacking in time and resources. PECPS' *Staff Development Plan* is a plan in progress, whereby two instructional days were exchanged for staff development days with an additional eight sessions per month conducted after school hours. A staff development committee continues to work on the future finalized plan.

Commendation 1-7:

PECPS is commended on the involvement of teachers, parents, and citizens in the activities and decision-making processes of the division through meetings, information dissemination, and the use of an open-door policy.

Finding 1-8:

There are three schools in the Prince Edward County Public Schools division: Prince Edward County High School serving grades nine through 12, Prince Edward County Middle School serving grades five through eight, and Prince Edward County Elementary School serving Pre-K through fourth grade. Each school has a building administrator and two assistant principals. The Virginia Standards of Quality (SOQ) provide the following guidelines for principal/assistant principal allocations:

- Elementary school: One half time principal to 299 students; one full-time principal at 300 students; one half-time assistant principal at 600 students; and, one full-time assistant principal at 900 students.
- Middle school: One full-time principal employed on a 12-month basis and one full-time assistant principal for each 600 students.
- High school: One full-time principal employed on a 12-month basis and one full-time assistant principal for each 600 students.

Exhibit 1-5 shows the current assignment of administrative positions in the PECPS indicating staffing above the SOQ level.

Exhibit 1-5 Prince Edward County Public Schools Administrative Staffing 2006-2007 School Year

School	Level	Student Population	Principals	Assistant Principals	VA SOQ Standard
Prince Edward Co. Elementary School	PreK-4	1,085	1	2	1 Principal @ 300 1 Asst. Principal @ 900
Prince Edward Co. Middle School	5-8	784	1	2	1 Principal 1 Asst. Principal per 600
Prince Edward Co. High School	9-12	904	1	2	1 Principal 1 Asst. Principal per 600

General guidelines for administrators is for one assistant principal once enrollment reaches 500 students, 1.5 at 750 students, and two at 1,000 students for high school and middle schools. At elementary schools, the recommendation is for a half time assistant principal at 500 students, one at 750 students, and 1.5 at 1,000 students as shown in Exhibit 1-6.



Exhibit 1-6
Recommended School Administrative Staffing Guidelines

Staff Category	Student Enrollment	1-249	250-499	500-749	750-999	1000-1249	1250-1499
Principal	Middle/High & Elementary	1	1	1	1	1	1
Assistant Principal	Middle & High	0	0.5	1	1.5	2	2.5
	Elementary	0	0	0.5	1	1.5	2

Source: Southern Association of Colleges and Schools, Accreditation Standards 2005.

Conclusion 1-8:

Prince Edward County Public Schools has been able to staff building administrators above the recommended SOQ levels. When compared with the division's peer group (see Exhibit 1-7 below), the number of administrators per 1,000 students is the lowest even when compared with divisions with a greater number of schools.

Exhibit 1-7
Administrative Staffing Per 1,000 Students
2005-06 School Year

School Division	Number of schools	Total Student Enrollment	Total Principals and Assistant Principals per 1,000 students
Charlotte County	6	2,196	3.55
Cumberland County	3	1,557	4.08
Lunenburg County	4	1,753	3.41
Nottoway County	6	2,338	3.83
Prince Edward County	3	2,773	3.33
Sussex County	5	1,380	5.08
Peer Division Average			3.88
State Average			3.58

Source: Virginia Department of Education web site, 2007.

Although the cost of the administrative disbursements for Prince Edward County Public Schools was the highest when compared with peer school divisions, it ranked third in per pupil costs. As indicated in Exhibit 1-8, PECPS spends \$371 per pupil in administrative expenditures while the average for the peer group is \$373. When ranked by per pupil cost, two divisions spent more on administrative services while three spent less. Most of the administrative spending occurs at the building level where staffing is above the SOQ recommended level.

Exhibit 1-8
Administration Disbursements in Peer School Divisions
School Year 2006

School Division	Administration	Per Pupil Cost
Charlotte County	\$634,894	\$276
Cumberland County	\$954,216	\$636
Lunenburg County	\$477,300	\$269
Nottoway County	\$580,578	\$245
Prince Edward County	\$1,012,370	\$371
Sussex County	\$617,287	\$441
Peer Division Average	\$796,108	\$373

Source: Virginia Department of Education web site, 2007.

Most of the administrative costs for PECPS were located in the school buildings dealing with administration of the individual schools rather than division-wide responsibilities such as assessment and data analysis needed by the division for instructional decisions.

Recommendation 1-8:

It is recommended that PECPS reduce the allocation for assistant principals at the elementary school by 0.5 as recommended by guidelines, as well as reduce the allocation for assistant principals at the middle and high schools by .5 to align staffing with SOQ and other guidelines and recommendations.

Fiscal Impact: The reduction of the elementary assistant principal to 0.5 would realize a minimum savings of \$28,230 annually. The reduction of both high school and middle school assistant principals by 0.5 would be a savings of \$56,460, or \$28,230 each. Unless the division used a job-share position for the high school and middle half time positions, savings for the benefit package would not be realized. The minimum savings for the division would be \$84,690 (\$28,230 + \$56,460) annually *plus* fringe benefits at \$13,779, for a total of \$98,469.

Finding 1-9:

Prince Edward County Elementary School serves grades pre-K through four with a student population of 1,085. The school has had several additions to provide for enrollment and program increments. The free and reduced lunch enrollment is 65 percent, and staffing for classrooms is at a ratio of 18 students per teacher. The elementary school achieved and maintains SOL accreditation and AYP achievement. The division provides a four-year old program for at-risk students based on income. The county's department of social services provides a Head Start program based on multiple criteria for at-risk students.

Prince Edward County Middle School serves 784 students in grades five through eight. The middle school principal is serving his first year as the building administrator. He was preceded for one year by a "Turn-Around Specialist" and two previous building principals, each serving only one year. The middle school concept replaced the junior high departmentalized system of scheduling classes. The core team of four teachers works with the same students with common planning time.

Prince Edward County High School has achieved SOL accreditation and AYP achievement. The principal, two assistant principals, and an administrative assistant serve as the administrative team. The coordinator of the career and technical center reports to the high school principal in order to align the opportunities for the students.

PECPS' *Strategic Plan* and *School Improvement Plan* have brought focus to the instructional program. The benchmark tests and data analysis are indicating a deficiency in certain areas of concern.

Conclusion 1-9:

Each of the three schools in the division publish a handbook for teachers, publish a handbook for students, maintain a web site for current activities and contact information, and publish letters to the parents on a regular basis to maintain contact with the parents and community. The student handbooks contain common elements, which should be uniform among the three schools.

Similar to publishing the student handbooks, other activities have deadlines that need to be followed. Summer maintenance requests, departmental budget requests to be considered for the



superintendent's recommended annual budget, and information for the superintendent's *Annual Report* are examples of annual information needed by central office personnel to fulfill their responsibilities. Receiving the requests at the last minute interrupts the instructional duties at the school level.

Recommendation 1-9:

It is recommended that PECPS develop and organize an annual calendar showing due dates for reports and activities which must be prepared on a periodic basis, in order to avoid last minute deadlines. Also show events such as the budget requests, student handbook and specific reports for the school board or central office administrators. This can be accomplished using the current personnel and resources and would provide advance notice when items are due.

Finding 1-10:

The superintendent has been available for faculty meetings, committee meetings, and other division and community activities. The director for curriculum and instruction will be administering an AP exam during SOL testing.

Conclusion 1-10:

Other directors of the division are not perceived as being as involved or visible in the activities at the school level.

Recommendation 1-10:

It is recommended that PECPS organize periodic visits to the three school sites and the career and technical center by central office personnel to observe students, teachers, and the interaction at the building level. These personnel should provide public feedback on the positive activities that are happening and private suggestions on recommendations for improvement. This will require time and planning on the part of the directors to get into the buildings, but would be important to the moral and support of the staff.

1.D PLANNING, BUDGETING AND EVALUATION

The purpose of the division improvement plan is to guide the division and schools in the improvement of student performance for all student groups and to attain state standards for the state academic excellence indicators.

The division improvement plan must be supportive of the objectives of the school improvement plan and must support the state goals and objectives for education as identified in the Code of Virginia.

Each school year, the building principal of each school (with the assistance of the school-level committee) must develop, review and revise the school improvement plan. At least every two years, each division must evaluate the effectiveness of the division's decision-making, planning policies, and staff development activities to ensure that they are structured effectively to positively impact student performance.

A strong strategic plan includes the following components:

- a mission statement;
- a vision statement;
- a set of goals with specific strategies to reach the goals;

- an action plan with timelines and responsibilities; and
- an evaluation plan with measurable outcomes for the goals.

A division's strategic plan that has received input from community, parents and instructional personnel and has well defined goals will be better able to attain state standards for academic excellence indicators. Evaluation of a division's programs allows the school board and administrators to determine the success of each program and whether the results obtained justified the cost. Planned programmatic changes can then be made based on those results.

State law mandates that the superintendent prepare the school budget and present the preliminary budget to the school board. The school board's role in approving the budget is to ensure that the school board's priorities are funded. Planning and budgeting must be aligned if plans are to be implemented and division goals realized.

Finding 1-11:

At a retreat, the Prince Edward County School Board developed a plan of work for the division for 2005-2011, which identified three main goals:

1. All schools are fully accredited;
2. Every child is reading on or above grade no later than the end of third grade; and
3. All seniors graduate from high school.

The goals are followed by plans and strategies in the areas of student achievement, curriculum and instruction, school facilities, and technology. The plan was posted on the web site. The division requested the community to provide their input to the school board prior to the school board meeting or to present it at the public hearing.

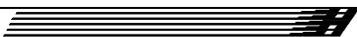
The plan of work for the division was well articulated as to programs to be used, but in many cases it did not contain specific guidelines for accomplishing the tasks that were established, the timelines for completion of the task, or the personnel responsible for the implementation and evaluation of the strategy. Budget funds were not tied directly to the strategies.

The superintendent initiated the development of a comprehensive strategic plan for 2006-2011 when she assumed office in August 2006. This document, *Strategic Plan 2006-2011*, represents input from community, staff, administrators, and the school board and contains the elements essential to success in strategic planning. The six strategic goals for the division are:

- Improve academic achievement for all students while closing the achievement gap.
- Provide strong home, school business and community engagement that are supportive of student achievement.
- Establish and maintain schools that are safe, orderly, nurturing, and supportive of quality teaching.
- Build capacity of school division through infrastructure of support for teaching and learning.
- Hire, support, and retain highly quality teachers and staff.
- Establish a positive, healthy, and inviting school culture conducive to learning.

Conclusion 1-11:

Following each of the goals are the objectives and strategies for attaining the goals. Each of the objectives indicates where the division is at the current time and the vision for the future.



Identified for each strategy are the steps to be taken, the persons who will be responsible, administrative leadership, resources needed, professional development, period for completion, evidence for results, and the expected results/outcomes/dates. The plan further states that there will be a review of the plan annually to assess progress and make necessary revisions.

Commendation 1-11:

Prince Edward County Public Schools division is commended on its thorough and comprehensive *Strategic Plan 2006-2011*, involving all aspects of the school and community in its development.

Finding 1-12:

English and math benchmark assessments were initiated at the beginning of the 2006-2007 school year for grades two through 11. This will provide valuable information for pacing, acceleration, and remediation of instruction to ensure student achievement.

Conclusion 1-12:

Prince Edward County High School required all sophomores take the PSAT in 2006-2007. The data gleaned from the results of the PSAT will be used for the initiation and development of advanced placement (AP) courses at the high school level. Three are planned for 2007-2008 with one additional course planned each year for three years thereafter. Also planned for initiation in 2007-2008 is a ninth grade academy to assist with the transition to high school and lower the drop out rate.

Commendation 1-12:

Prince Edward County Public Schools is commended on the development of aggressive plans for enhancing the educational program for the division through benchmark testing, required PSAT testing, and advanced placement courses.

Finding 1-13:

The division notifies parents of student achievement throughout the school year via postings on the web site, including a Parent and Community Information Center link, six-week report cards, parent conferences, community forums with question and answer sessions for community members, and *The Edwardian*, a newsletter mailed to citizens.

Conclusion 1-13:

PECPS' Public Relations and Community Engagement Committee seeks ways to revise and improve communication between the school and community. Members of the committee include school personnel and community members.

To report the division's achievements, PECPS uses the web site to post the division and individual school report cards from VDOE. PECPS is working with the University of Virginia to develop a balanced score card that will report the division's progress and other accomplishments to the community.

Commendation 1-13:

PECPS is commended on the extensive external communication efforts with the community.



Finding 1-14:

PE In Focus is a biweekly publication for faculty and staff to maintain communication and keep all employees informed of happenings in the division. Other communications are performed informally through memo, computer, and phone messages. Central office communications are directed to the administrators with requests for information or reports. Communication within each school is well organized through grade level and department chairs, as well as communication with the superintendent with various committee organizations and activities.

Conclusion 1-14:

The central office personnel should be more involved in the communication chain through direct involvement with the school level personnel.

Recommendation 1-14:

It is recommended that PECPS maintain open lines of communication to the building levels through visits and personal contact with administrators and staff for discussion and feedback concerning ideas and requests. This could be accomplished with existing resources.

Finding 1-15:

SASI is the division's student information database. This program can be accessed at either the individual school or at the division level. Frequently, schools are asked for information from SASI that could be acquired by central office personnel without interruption to the instructional day.

Conclusion 1-15:

On a day-to-day basis, with a small central office staff, it is important that all employees within a department can access information and can operate all programs to prevent loss of information in case of retirement or long-term illness.

Recommendation 1-15:

It is recommended that PECPS cross train central office personnel on the various programs used to access information on students, programs, and other information needed for reports. All employees in a department should be familiar with all programs utilized in the department. This training could be performed by existing staff personnel for those in need of training.

Finding 1-16:

PECPS is currently revising its process for assessing the performance of teachers and administrators. The instructional staff is working with The College of William and Mary to design an evaluation instrument based on data containing performance indicators linked to instructional outcomes. The evaluation instrument will be used during 2007 to evaluate tenured teachers and administrators.

Conclusion 1-16:

Expectations for public education have changed in the past 20 years and school personnel at all levels must address rigorous academic expectations for all students. The purpose of the evaluation system is to support and develop effective teachers and administrators, and to provide guidance in improving instructional practices.

The Education Accountability and Quality Enhancement Act of 1999 (HB 2710, SB 1145) passed by the General Assembly mandates the development of evaluation procedures that recognize the responsibilities of educators. The mandate addresses the evaluation of teachers, assistant principals, principals, central office personnel, and superintendents with the primary focus on student achievement and safety.

The Virginia Department of Education enlisted consultants from the College of William and Mary and the University of Virginia to provide research and assistance in developing evaluation criteria to be used in Virginia. The Virginia Board of Education adopted the Performance Standards and Evaluation criteria for teachers, administrators, and superintendents on January 6, 2000.

Commendation 1-16:

PECPS is commended for developing teacher and administrator evaluation instruments designed to improve instruction, which are linked to instructional outcomes.

Recommendation 1-16:

It is recommended that the school board members be trained on the evaluation instrument to understand the implications in case a recommendation for dismissal is presented to the school board based on the evidence from the evaluation.

1.E REVIEW AND EVALUATION OF CONTRACTING PROCESS

Division management functions such as staff development and legal services can be purchased or contracted through private companies, local and/or interdivisional agreements with neighboring school divisions, or other governmental agencies. It is necessary to regularly evaluate and determine whether the goods and services are being obtained at a lower cost and are of higher quality than the division could provide.

In Virginia School Laws, Section 11-39, contractual agreements should be reviewed regularly for delivery of services and best value possible from the provider. Competitive negotiations for goods and/or services which include a request for proposal (RFP) should indicate in general terms the materials for selection, factors which will be used in evaluating the proposal and any unique qualifications required of the contractor.

When procuring professional services, the contracting body or designee, shall entertain discussions with two or more individuals or organizations qualified, responsible, and suitable for rendering the service, unless there is only one offeror who is more highly qualified than others under consideration.

Finding 1-17:

The directors of designated areas are responsible for negotiating and securing any service the division cannot provide internally. For example, Prince Edward County Public Schools uses contracted services for its occupational therapy (OT) and physical therapy (PT) services as required by special education individual educational plans. These services are contracted for annually by the special education director, on an as needed basis. The finance department pays for the services as invoiced from the provider.

Materials and supplies are purchased as needed from a local provider and the school system is given a discount from the advertised price. Printing services are also purchased on an individual basis from a print shop in Farmville.

The fuel oil for heating is purchased by competitive bidding negotiated by the director of support services.

Conclusion 1-17:

There should be financial gains available through centralized, negotiated contracts for office supplies, printing, and other services.

Recommendation 1-17:

It is recommended that PECPS designate an individual within the division to negotiate for materials and services for the division. This could result in an annual contract for office supplies at an established price for the year. It would also delineate the hours and labor rates/prices for professionals providing purchased or contracted services. The contracts should be available to the finance department for review and payment when invoices are presented. This individual should be familiar with and also coordinate the use of any state contracts to be used by PECPS. If the expertise is not available within the organization, this could be accomplished with training and class work in contract negotiation.

Finding 1-18:

The Prince Edward County Public Schools division is in alliance with several surrounding school divisions for services. Currently, alternative education services are provided by Amelia County Public Schools. Due to the students' less than satisfactory SOL performance, these services will be provided within the system for the 2007-2008 school year.

Charlotte County schools provide the distance learning for Latin to PECPS high school students, and Keysville is the home division for the Governor's School. PECPS is awarded eight spots per grade but can request and pay for more spots if there are unused spaces available. The budget and fees per student are established by the Governor's School Board, comprised of a school board member and superintendent from each division.

Conclusion 1-18:

Compiling education opportunities and resources with area school divisions enables smaller divisions and their students the ability to participate in programs and receive beneficial services that would normally be too expensive.

Commendation 1-18:

PECPS is commended for consolidating with surrounding school divisions for services, which can be provided at lower cost through unity, and for analyzing the results to increase or decrease the participation as needed.

2. Educational Service Delivery



2. EDUCATIONAL SERVICE DELIVERY

Above all else, school divisions must provide high quality educational services. Having adequate processes in place to identify student educational needs, providing for those needs, and measuring performance as a result of these programs represents the most vital mission for every school division. Educational service delivery includes the provision of programs for students with special needs as well as careful adherence to other state and federal mandates concerning curriculum.

This chapter reviews the educational service delivery of Prince Edward County Public Schools (PECPS) and includes five major sections:

- 2.A Organization and Management
- 2.B Curriculum Policies and Management
- 2.C Instructional and Administrative Technology
- 2.D Staff Development
- 2.E Special Programs

Prince Edward County Public Schools is committed to providing high quality educational services to the students of the division. Effective delivery of services across all grade levels to students with varied needs requires proper alignment and sufficient staffing. Procedures must be in place and monitored to assure consistency in instruction and assessment across the division. The division recognizes the need for support services for the instructional staff in the form of staff development, technical support, and resources for specific courses and programs.

INTRODUCTION

PECPS is staffed by personnel who are well suited to their particular responsibilities and are enthusiastically committed to continue improvement of services to the students and staff of the school division. Division leadership has a vision of critical priorities it must address and the impact they will make on student performance and employee knowledge and skills. They have established sound practices that serve as a foundation for using data to inform instruction and strengthen curriculum and specific content programs.

Recommendations contained in this chapter relate to refining and expanding current procedures, structures, and functions in order to contribute to more effective coordination and planning of tasks that should provide a more cohesive support system for the curricular and instructional functions of the division's operations. Key recommendations should assist the division in achieving an even stronger instructional program for every student.

2.A ORGANIZATION AND MANAGEMENT

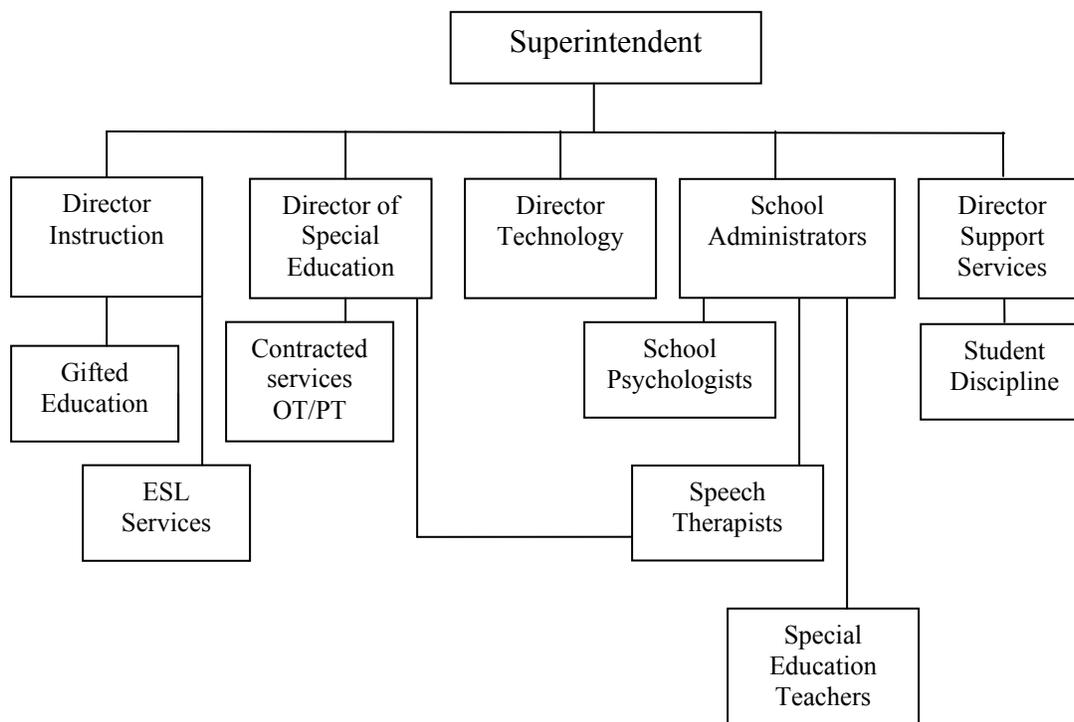
For curriculum to be successfully delivered across all grade levels and to children with varied needs, the organization must be appropriately aligned. Staffing must be sufficient to provide services to the children at each grade level and area of need, but staffing must expand and contract based on student enrollments not only at the division level, but also within each grade and program. The system must recognize the need for support services for instructional staff, such as teacher training and technical support for technology used in the classrooms, as well as provide additional resources for specific courses and programs.



Central office administrators and staff serve as a support system for the education provided in schools of any school division. A well-balanced relationship between the school's needs, central office support, and coordination helps ensure that financial and human resources are targeted toward increased student achievement for all students. Clearly articulated, measurable goals that are regularly monitored guide decisions and actions at all levels of the system. Effective two-way communication, explicit guidelines and expectations, processes that reinforce division goals, and monitoring division priorities are essential responsibilities of the central office.

The PECPS departments of instruction and student services' organizational chart are shown in Exhibit 2-1.

Exhibit 2-1
Current Organization of the Instructional and Student Services Department



Source: Prince Edward County Public Schools, 2007.

Finding 2-1:

The director of instruction oversees Title I allocations, gifted education, English for Speakers of Other Languages (ESOL), and works with the superintendent on curricular, pacing guides, and textbook adoption. She is responsible for PALS testing, and benchmark assessment. She works with the director of human resources for mentoring new teachers and planning relevant staff development.

The director of special education is responsible for collaborating with the building administrators and the special education teachers, speech teachers, and psychologists to provide the wide range



of services for disabled students from ages three through 21 as required by the Individuals with Disabilities Education Act (IDEA).

The two school psychologists for the division are housed in the elementary and high schools where they are in direct contact with and report to the building administrator for assessment and counseling as needed. The two school psychologists share time at the middle school for services. Occupational and physical therapists (OT/PT) are contracted for services as needed rather than staffed positions. The director of special education is responsible for negotiating these contracts and authorizing payment for services.

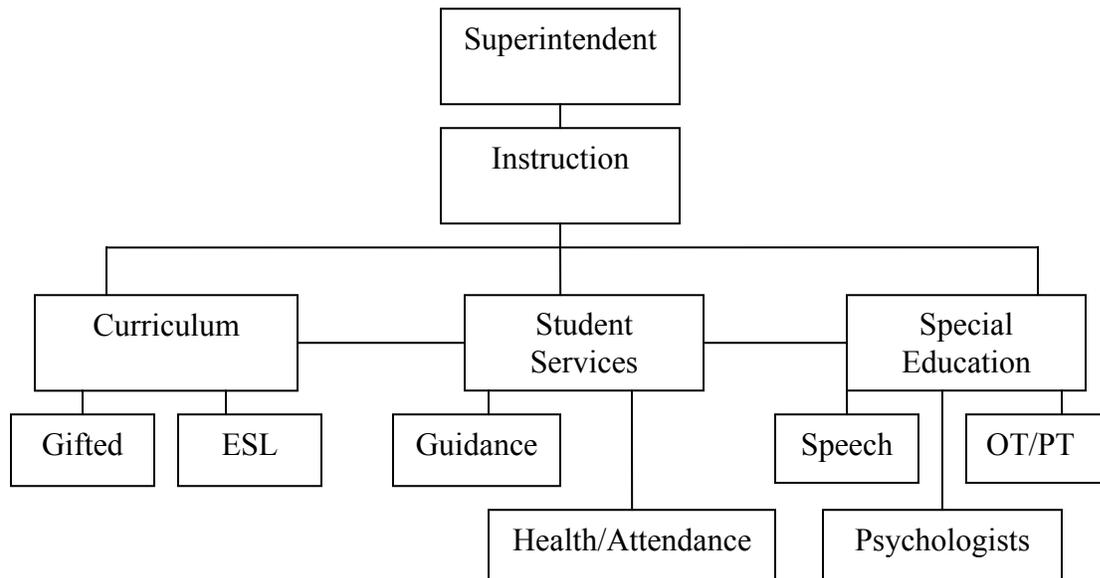
Conclusion 2-1:

Better communication with the special education and curriculum offices of the division would be achieved by establishing an office for student services within the department of instruction. It would provide coordination of services and critical support for all identified populations within the school enrollment.

Recommendation 2-1:

It is recommended that PECPS realign the department of special education to report directly to the department of curriculum and instruction to facilitate the integration of the regular education curriculum with the program for special needs students and have persons directly involved in the special education identification process report to the director. See Exhibit 2-2 for suggested alignment.

**Exhibit 2-2
Proposed Instructional Realignment
Prince Edward County Public Schools**



Finding 2-2:

The schools are committed to providing all students with varied learning experiences and activities to make them productive members of society. The elementary school includes grades pre-K through fourth grades and provides self-contained classes with instruction in English, math, social studies, science and health. Classes in art, music, Spanish and physical education enhance the basic curriculum. Three computer labs and the library media center contribute to the well-balanced program of instruction. There is a complete continuum of educational services for students with disabilities including collaborative classrooms and inclusion services. The middle school serves students from grades five through eight and has moved from the departmentalized concept of instruction to the team approach for core classes. Three computer labs and a media center are available to augment the classroom instruction. Exploratory classes are available at the seventh grade level and language instruction for credit is offered at eighth grade. Since Spanish is offered in the elementary school and not at the middle school, a gap exists in the language instruction continuum for those students interested in continuing Spanish classes. The high school offers a full range of electives and core classes. Language classes are augmented by distance learning Latin classes and multi-level classes for fourth and fifth year language students. Students have the opportunity to participate in the Governor's School with eight spaces available each year and with other spaces available on a per-student-cost if other divisions do not avail themselves of all allotted slots.

Conclusion 2-2:

The elementary and high schools are fully SOL accredited and both made AYP for all categories. The middle school has not reached SOL accreditation and worked with a turn-around specialist for the 2006-07 school year. The administrator is in his first year as principal and will return to the high school next year as an assistant principal. There have been several administrators in the position during the past five years indicating the stress and tension inherent in the position. Several instructional innovations have been initiated this year with core teams for instruction, benchmark testing for English and math, a school improvement plan focused on instruction, and data analysis.

Recommendation 2-2:

It is recommended that PECPS carefully interview prospective applicants for the position of administrator of Prince Edward County Middle School in order to select an instructional leader who will continue directing the progress of the school towards the changes and academic focus initiated this year.

Finding 2-3:

The administrators at the elementary and high school levels are able to staff the regular education program with the applicant pool available. Middle school staffing has been more of a difficult situation with some classes working with temporary and substitute teachers for most of the school year. This is especially evident in the difficult to staff positions such as science and math. Qualified special education teachers are difficult to secure and maintain at all levels.

Conclusion 2-3:

Some qualified applicants are lost to nearby school divisions due to contracts being offered later in the school year.



Recommendation 2-3:

It is recommended that PECPS provide contracts for instructional personnel as soon as the budget is approved to secure the best teachers for new positions and as early as possible for vacancies created by retirement and resignation.

2.B CURRICULUM POLICIES AND MANAGEMENT

Successful school systems have established guidelines and expectations that underlie a sound, challenging curriculum designed to foster the success of every student. They extend beyond the state standards and provide enrichment and remediation opportunities for students based on individual student needs. Regularly collected and analyzed data guide ongoing instructional and programmatic decisions. Grounded in research-based strategies, curricular documents and processes define clear learning goals. The curriculum encompasses relationships between goals, specific learning objectives, instructional activities and student assessments. The curriculum also identifies a scope and sequence in which information, skills, and concepts are taught and reinforced throughout the years.

For instructional systems to achieve their stated goals, the written, taught, and tested curricula must be closely aligned. Designing curricula, guiding teaching, and maximizing student achievement is a challenge facing principals, curriculum directors, and classroom teachers. The quality of basic course design and alignment can significantly impact student achievement.

Effective curricular documents build in assessments and periodic monitoring of both student achievement and the effectiveness of the documents themselves. Materials can then be purchased that assist in teaching concepts and knowledge not otherwise addressed in division resources, and can provide for remediation and enrichment.

Central office administrators and staff must have expertise in their area of responsibility, and the time and processes in place to allow them to direct that knowledge toward improved student achievement. Clear and frequent communication between schools and the central office is essential to understand the scope and implementation of the division standards and policies. Ongoing communication enables the division to focus on core activities identified as critical for high levels of student achievement.

Finding 2-4:

PECPS has current curriculum guides for the courses offered in its schools. The teachers are responsible for development and revision of the guides to align with the Standards of Learning and other state policies and guidelines. Vertical alignment prepares students for entry into the next level of study. Teachers meet according to grade level content taught, creating teams to ensure standards are implemented both vertically and horizontally within their individual schools.

The division initiated benchmark testing in reading and math for data analysis and confirmation of student learning on an ongoing basis. At each school, teams of teachers work with their building's instructional technologist to evaluate and analyze the test data, as well as augment the instructional program and delivery as needed.

Conclusion 2-4:

There is no single organizational element responsible for the evaluation and analysis of testing



data. Without this single focus, each school must develop their own method of evaluation and analysis, which can lead to duplication in work, inconsistencies in evaluations, and/or incorrect conclusions resulting from the data.

Recommendation 2-4:

It is recommended that the practice of evaluation and analysis of testing data be systematically extended to the division level via the creation of a department of accountability, assessment, and data analysis as recommended in Chapter 1.

Finding 2-5:

The middle school instructional staff has moved to a core team approach to work with students on a total instructional program rather than as a departmental approach, with each teacher working individually with the students.

Conclusion 2-5:

The interdisciplinary approach to learning will allow for transfer of skills and abilities from one area to another. The four teachers working together to provide for the individual needs of the students will promote cooperation and foster increased achievement.

Commendation 2-5:

Prince Edward County Middle School is commended for implementing a team approach to instruction for its students.

Finding 2-6:

Prince Edward County Public Schools provides formal staff development time for all instructional personnel with two days during the contracted school year and two-hour sessions in the afternoons on Mondays and Wednesdays for training teachers certain techniques, strategies, and activities that may extend, enrich, remediate, and enhance the instructional program for students. This training is provided both within the system by the instructional technology resource teachers (ITRTs) and other trainers, as well as from outside the system working with William and Mary, the University of Virginia and other providers. Part of the training is optional and part is required. (The ITRTs provide optional weekly sessions for teachers on the use of technology in the classrooms.)

Conclusion 2.6:

A clearly defined staff development program will provide teachers with the skills and techniques to evaluate their instruction and provide for the individual needs of students. A program that provides instruction, allows time to initiate the changes in an instructional setting, and provides discussion and feedback on the success and changes that are needed to be made provides the most impact on student achievement rather than a one-time class without implementation and follow-up.

Recommendation 2-6:

It is recommended that PECPS identify system-wide, required training for teachers that will prepare them to use data for instructional decisions, improve instructional strategies, infuse technology into the instructional program, and focus on interdisciplinary instruction to improve instruction for all students.



Finding 2-7:

Prince Edward County Public Schools has adopted a number of positive processes designed to improve student achievement including a new evaluation system that connects instruction to student learning. An observation schedule has been formalized that requires administrators to make scheduled visits to the classroom for observation and evaluation.

Conclusion 2-7:

Feedback to the teachers provides suggestions for improvement to the instructional delivery.

Commendation 2-7:

Prince Edward County Public Schools is commended for instituting an evaluation system directly tied to student achievement that includes regular guidelines for observation and conferences with the teachers.

Finding 2-8:

Comparative analyses of expenditures and staffing for instruction for Prince Edward County Public Schools with peer divisions, as shown in Exhibit 2-3, revealed that the cost per pupil for the division was lower than two divisions, but higher than three within the comparative group. The cost per pupil for PECPS was lower than the state average by \$529.81 per pupil. The peer division cost per pupil average was lower than the state average by \$592.13 per pupil.

**Exhibit 2-3
Instructional Disbursements
FY 2006**

School Division	ADM	Instruction	Cost Per Pupil
Charlotte County	2,297.66	\$12,663,131	\$5,511.32
Cumberland County	1,499.22	\$9,035,830	\$6,027.02
Lunenburg County	1,774.26	\$12,103,340	\$6,821.63
Nottoway County	2,369.02	\$13,494,785	\$5,696.36
Prince Edward County	2,728.80	\$18,172,123	\$6,659.38
Sussex County	1,399.63	\$12,409,989	\$8,866.62
Peer Division Average	2,011.43	\$12,979,866	\$6,597.06
State Totals/Average	1,205,241.40	\$8,664,714,483	\$7,189.19

Source: Virginia Department of Education web site, 2007.

Examination of the staffing for Prince Edward County Public Schools in comparison with the peer division schools, as illustrated in Exhibit 2-4, indicated that the number of teachers per 1,000 students at PECPS was the highest among the peer divisions and was higher than the state average. The number of teacher assistants per 1,000 students at PECPS was lower than the peer division average, but higher than the state average. Guidance counselors/librarians numbers were lower than both the peer division average and the state average.



Exhibit 2-4
Instructional Staffing Levels per 1,000 Students
FY 2006

School Division	Total Student Population	Total Teachers Per 1,000 Students	Total Teacher Assistants Per 1,000 Students	Total Guidance Counselors / Librarians Per 1,000 Students
Charlotte County	2,279.66	69.70	14.40	3.95
Cumberland County	1,479.52	82.03	30.60	2.03
Lunenburg County	1,760.22	83.23	25.00	6.20
Nottoway County	2,348.95	76.06	12.95	4.82
Prince Edward County	2,703.39	83.32	17.20	3.33
Sussex County	1,378.90	81.91	17.41	6.16
Peer Division Average	1,825.11	79.38	19.59	4.42
State Average		78.88	14.79	4.79

Source: Virginia Department of Education web site, 2007.

Conclusion 2-8:

The configuration and alignment of the schools within the division dictates staffing requirements as well as the number of identified special needs students.

Commendation 2-8:

Prince Edward County Public Schools is commended for the allocation of resources to the instructional program to meet the needs of students.

2.C INSTRUCTIONAL AND ADMINISTRATIVE TECHNOLOGY

Technology within the division is primarily discussed in Chapter 7 of this report. Instructional and administrative technologies have become a critical part of the division's educational program and general operations. Computers in the classroom and in labs, and automated reporting systems are no longer the exception, but the norm for public education and accountability. When used appropriately, instructional technology serves to deliver the instructional message rather than taught as a separate subject, although some instruction is needed and should be designed on a continuum based on the maturity and ability of the students.

The Commonwealth of Virginia recognizes the power of technology to enrich educational experiences and in the Standards of Quality requires that divisions provide one technology resource teacher for each 1,000 students. Those positions are provided to enhance technology skills of the classroom teachers through professional development and classroom instruction and to enhance student use of technology.

Finding 2-9:

The students in Prince Edward County Public Schools have access to computers in both classrooms and labs at all three schools. There are information technology resource teachers (ITRTs) in the three schools. The ITRTs work with the students, maintain equipment, order software, and offer staff development for teachers on a regular basis. Teachers integrate technology into the instructional program as the teachers become comfortable with the hardware and software available to each school.



Exhibit 2-5
Instructional/Administrative Staffing for Technology
FY 2006

School Division	Technology Resource Teachers	Administrative Support	Technical and Clerical	Instructional Support
Charlotte County	6.00	0.00	9.00	0.00
Cumberland County	0.00	5.50	1.50	1.50
Lunenburg County	1.00	0.70	2.00	1.00
Nottoway County	0.00	0.50	2.00	1.00
Prince Edward County	5.00	0.50	7.15	0.00
Sussex County	1.40	0.00	2.60	0.00
Peer Division Average	2.23	1.20	4.04	0.58

Source: Virginia Department of Education web site, 2007.

Conclusion 2-9:

Although some teachers are quick to embrace the opportunities to use technology in the daily instructional program, some are reluctant and need additional work with the ITRT on applications and the capabilities of the resources available. The information technology resource teachers do not feel the majority of the teachers fully use technology or take advantage of the after-school instruction that is offered.

Recommendation 2-9:

It is recommended that PECPS continue to provide weekly instruction to teachers and establish a minimum standard for teachers to integrate technology into their classrooms using the skills they acquired through the TSIP certification required by the Department of Education and weekly instruction by the ITRTs.

A program of teacher mentoring through a partnership arrangement may make teachers who are fearful of the new technology more comfortable with using it on a daily basis. This would also demonstrate capabilities for integration into the curriculum that may not have been conceived if alone with the resource.

2.D STAFF DEVELOPMENT

Professional staff development is essential to implementing new programs and initiatives designed to promote high academic success for every student. Teachers need systematic and well-designed training to implement new programs, to initiate new strategies, and to become more effective providers of knowledge to the students with whom they work. A well-designed staff development program allows time for introduction to new material, provides modeling of the behaviors to be learned, allows time to practice and implement, and follows up with discussion and sharing of successes and areas for improvement. Staff development is the difference between system-wide change and the success or failure of an initiative.

Finding 2-10:

The contract for PECPS instructional personnel contains sixteen non-instructional teacher workdays with no days designated specifically for professional development. Previously, the school calendar did not support staff development by designating days for training, classes or consultants. There was no written plan and no focus to staff development for the division. This



school year, the superintendent established a staff development committee to negotiate an organized plan for ongoing staff development for the instructional and administrative staff. Two days were designated for system-wide staff development at the beginning of the school year. During the year, two one-hour sessions were provided on Monday and Wednesday afternoons to provide on-going training on a regular basis. Initially the training was to develop an evaluation instrument that reflected the competencies necessary for instructional improvement and tied to student achievement. Working with consultants from William and Mary and the University of Virginia, an evaluation instrument was developed.

Currently, PECPS' Staff Development Committee is planning the program for next year using representatives from the staff, as well as outside consultants, to provide training for the instructional staff.

Conclusion 2-10:

Providing organized and thorough professional development opportunities to the school division faculty and staff supports their ability to offer the most current and effective means of instruction to the division's students.

Recommendation 2-10:

It is recommended that PECPS continue to emphasize professional development as a high priority with a focused approach to planned improvements in teaching and learning.

Commendation 2-10:

Prince Edward County Public Schools is commended for recognizing the need to provide focused staff development for its instructors and for establishing a calendar and activities that support continuous learning.

2.E SPECIAL PROGRAMS

Special education is intended to provide adequate support, to ensure the academic success of students with disabilities. Special education provides supplemental or extended support for students to enhance student performance and academic achievement.

The Individuals with Disabilities Education Act (IDEA) is a law ensuring the provision of special education services to children with disabilities. IDEA gives guidance and direction for providing these services to students with disabilities (ages three through 21) in the general education setting to the greatest extent possible. To be eligible for special education and related services, a student must have a disability as identified by IDEA and due to the disability, needs specially designed instruction. IDEA establishes six principles that govern the education of students with disabilities as summarized in Exhibit 2-6.



Exhibit 2-6
Six Principles Governing the Education
of Students with Disabilities

- **Zero reject:** A rule against excluding any student
- **Nondiscriminatory evaluation:** A rule requiring schools to evaluate students fairly to determine if they have a disability and, if so, what and how extensive.
- **Appropriate education:** A rule requiring schools to provide individually tailored education for each student based on the evaluation and augmented by related services and supplementary aids and services.
- **Least restrictive environment:** A rule requiring schools to educate students with disabilities with students without disabilities to the maximum extent appropriate for the students with disabilities.
- **Procedural due process:** A rule providing safeguards for students against schools' actions, including a right to sue in court.
- **Parental and student participation:** A rule requiring schools to collaborate with parents and adolescent students in designing and carrying out special education programs.

PECPS' new Alternative Special Education Program, held after regular school hours, is provided for special education students in grades four through 10 who do not attend school during the regular school day. The special education coordinator oversees this program with assistance from two teachers and a resource officer. A counselor is available on an as-needed basis. The number of students attending at any given time may vary between four and 10. Expenditures from November through March 2007 amounted to a total of \$7,642.02. The largest portion of these expenditures, \$5,000.00, is for teacher salaries. This program has been received favorably for the benefits it provides these students in keeping abreast of the work they miss when not attending school during regular hours.

The special education department also oversees a program for special education students who are incarcerated in the local regional jail. PECPS is mandated to serve these students, through 21 years of age, since the jail is located within the school division. PECPS is responsible for providing a coordinator/teacher and materials. Students who are under 18 are required to participate in the program. Those 18 to 21 may opt not to attend. This program serves to continue the educational process for students during the time they are incarcerated in a regional jail. The state reimburses the school system 100 percent for expenses incurred to run this program.

Finding 2-11:

The organizational structure of Prince Edward County Public Schools, with respect to special education, includes one (1) special education director and one (1) special education coordinator. The special education director currently reports to the division superintendent.

Conclusion 2-11:

Overall, too many personnel are reporting directly to the superintendent. Many of these administrators have responsibilities and reporting relationships that would be better placed



elsewhere. The responsibilities of the special education director are more directly related to instruction.

Recommendation 2-11:

It is recommended that PECPS modify the current organizational structure to better align positions with similar related responsibilities and reporting relationships. This change in organization structure is addressed in Chapter 1 of this report.

Finding 2-12:

Planning and coordinating the special education programs administration is the responsibility of the PECPS special education director with assistance from the special education coordinator. Performance responsibilities include:

1. Monitors the implementation of the local plans and ensures compliance with state and federal regulations.
2. Prepares revisions of the local program plan to maintain compliance with state and federal regulations.
3. Compiles budget needs for the program.
4. Coordinates the 504 plan and ensures compliance with state and federal regulations.
5. Acts as a resource person to the community to acquaint and disseminate information about students with disabilities and the program.

When students are suspected of having a disability, the special education coordinator assists the director by receiving and processing Special Education/504 referrals for child study, parents, and community agency personnel. Chairing Special Education/504 eligibility meetings and assisting with the IEP process are also included in the duties of the coordinator.

Special education teachers are categorized into seven different types of service, which include:

- ECSE (early childhood special education);
- Inclusion SLD/ED (specific learning disability/emotionally disturbed);
- Resource SLD/ED;
- SLD/ED self-contained;
- MR (mentally retarded) self-contained;
- Severe disabilities; and
- Speech/Language Pathologist.

According to the data in Exhibit 2-7, during the 2004-2005 school year there were a total of 39 special education teachers at PECPS. In the school year 2005-2006, the number of special education teacher increased to 45 and remained at that number for the school year 2006-2007. The largest number of teachers is assigned to SLD/ED and MR classes. Speech/language pathologists are part-time with the exception of the two teachers who are assigned to the elementary school. Special education teachers are assisted by 24 paraprofessionals with the greatest number serving in MR classrooms. The average number of students per teacher is 12.6. In some cases the proportionate number of students per teacher could be more or less depending on the number of students with a particular qualification.



Exhibit 2-7
Prince Edward County Public Schools
Special Education Teachers – Number by Type of Service

School Year 2004-2005								
School	ECSE	Inclusion SLD/ED	Resource SLD/ED	SLD/ED Self-Contained	MR Self Contained	Severe Disabilities	Speech/Language Pathologist	Total
Elementary School	3	2	1	2	3	1	2.0	14.0
Middle School	0	1	3	7	4	0	.5	15.5
High School	0	0	3	3	2	1	.5	9.5
Total	3	3	7	12	9	2	3.0	39.0

School Year 2005-2006								
School	ECSE	Inclusion SLD/ED	Resource SLD/ED	SLD/ED Self-Contained	MR Self Contained	Severe Disabilities	Speech/Language Pathologist	Total
Elementary School	4	4	1	1	4	1	2.0	17.0
Middle School	0	2	2	6	4	0	.5	14.5
High School	0	0	3	5	4	1	.5	13.5
Total	4	6	6	12	12	2	3.0	45.0

School Year 2006-2007								
School	ECSE	Inclusion SLD/ED	Resource SLD/ED	SLD/ED Self-Contained	MR Self Contained	Severe Disabilities	Speech/Language Pathologist	Total
Elementary School	4	4	1	1	4	1	2.0	17.0
Middle School	0	3	2	5	4	0	.5	14.5
High School	0	0	3	5	4	1	.5	13.5
Total	4	7	6	11	12	2	3.0	45.0

Source: PECPS Special Education Department, 2007.

The turnover of special education teachers at PECPS, as shown in Exhibit 2-8, is a concern of the administration. A number of teachers have not met the qualifications to teach in the special education department. These teachers have a provisional license and are working to become certified in the field of special education.

Exhibit 2-8
Prince Edward County Public Schools
Special Education Teacher Separations/Percentage

School	2004-05	2005-06	2006-07
Elementary School	2 (N/A)	0 (0%)	8 (47%)
Middle School	6 (N/A)	5 (32%)	7 (48%)
High School	3 (N/A)	7 (74%)	6 (44%)
Total	11 (N/A)	12 (31%)	21 (47%)
The above figures represent the number of special education teacher separations (for any reason) and separations expressed as a percentage of the prior year special education teacher count.			

Source: PECPS Special Education Department, 2007.

Conclusion 2-12:

High turnover of special education personnel in PECPS is typical of the national crisis in the induction and retention of special education personnel. There are fewer certified special education teachers than open positions in the Commonwealth of Virginia, and a majority of special education teachers leave the field within five years. Analysis of the circumstances of individual separations reveals no idiosyncratic feature of PECPS' special education administration that would suggest reasons for high turnover beyond those typical of other districts.

As gathered from interviewees, and sources from other school systems, the amount of paperwork or the workload that is required of special education teachers can present a problem. This is especially true for some first year teachers regarding the IEP process. Discipline can also become a problem for middle and high school teachers. This may account for attrition of teachers who move to other fields in education. New and experienced teachers may move elsewhere for a higher salary or for other personal reasons.

Recommendation 2-12:

It is recommended that PECPS undertake a formal program to strengthen its retention and induction of special educators. PECPS must recruit better candidates for positions and, if possible, no candidates with provisional licenses should be hired. To broaden its candidate pool, PECPS should strengthen its relationship with Longwood University (such as internships, joint grant-funded research, or professional development) to promote awareness among students of PECPS as a potential employer. Additionally, PECPS must examine its salary structure to ensure it is competitive with surrounding divisions. It is also advised that the special education director take part in the hiring process. The division should advertise widely and perhaps offer incentives when looking for well-qualified, experienced special education teachers to fill vacancies.



It is recommended that PECPS give more support to special education teachers, especially new teachers, to help relieve their frustrations in the area of paper work. This could be achieved through the formation of small group discussions, peer mentoring and closer day-to-day contact with the director. A survey of special education teachers may reveal further information concerning teacher retention.

Once these candidates are hired, a comprehensive induction program should be instituted to ensure their tenure. Successful induction programs typically feature several components including:

- one- or two-year formal mentorships (in which the mentor receives training and a stipend);
- first-year orientation to acculturate new teachers through an initial one- or two-day training followed by one- or two-hour seminars throughout the year (on topics such as PECPS expectations for IEPs, policies and procedures for specific disability subtypes, etc.); and
- ongoing professional development (on topics such as specific strategies for inclusion, instruction, or behavior management).

Staff turnover costs the division in terms of administrative and instructional time lost to advertising, checking references, and interviewing as well as in training new staff and acclimating them to the division's practices and beliefs. In the short-term, however, PECPS's high natural attrition may actually assist in the implementation of a comprehensive inclusion program, as positions are more easily rationalized when unfilled.

Special education administrators should continue to review special education areas identified by the monitoring program as not having been recognized by the division's self-assessment committee. These items were in the areas of individualized education programs (IEPs) and discipline. It was determined by VDOE that all deficiencies identified in the self-assessment had been corrected. Monitoring the division's self-study continually is a necessity in order to keep PECPS in compliance with the Department of Education's Office of Federal Program Monitoring and Student Services and to meet the objectives set by PECPS' Academic Achievement Committee.

Finding 2-13:

In 1994 PECPS was selected as one of 22 schools to be monitored. PECPS' Academic Achievement Committee was formed to develop goals and objectives to bring the school system in compliance as required by this department. The case was considered closed in 2006 as having fulfilled all requirements to address each deficiency.

Conclusion 2-13:

The special education department of PECPS is continuing to work on four objectives to meet their goal, to improve the achievement for all students while closing the achievement gap, as set up by PECPS' Academic Achievement Committee.

Commendation 2-13:

The PECPS' special education department is commended for its efforts in meeting the requirements for compliance with the Department of Education's Office of Federal Program Monitoring and Student Services.



Finding 2-14:

The percent of students identified with special needs in PECPS is estimated at 23.6 percent, as shown in Exhibit 2-9. This is somewhat higher than that of other divisions selected for their comparability to Prince Edward County. Using fall 2005 student membership numbers, an estimated 14 percent of the population in Virginia's public schools is enrolled in special education.

Exhibit 2-9
Special Needs Students in Peer Divisions
2005-2006 School Year

School Division	Average Daily Students	Number of Limited English Proficiency Students	Percent Limited English Proficiency	Number of Special Education Students	Percent Special Education Students*
Charlotte County	2,297.66	20.0	.87	375	16.9
Cumberland County	1,499.22	13.0	.87	204	14.6
Lunenburg County	1,774.26	36.0	2.03	323	19.0
Nottoway County	2,369.02	16.0	.68	393	17.2
Prince Edward County	2,728.80	19.0	.70	612	23.6
Sussex County	1,399.63	13.0	.93	201	14.3
Peer Division Average	2,011.43	19.5	1.01	351	17.6

Source: Virginia Department of Education web site, 2007.

Since the incidence rates for special needs may vary with ethnicity, gender, and geography, comparing Prince Edward with its local peers is the most reasonable way to gauge its performance. In December 2005, PECPS had the highest percentage of students receiving special education services under an IEP. (Counts that include students with 504 plans are not available from the Virginia Department of Education, since the implementation of the Rehabilitation Act, unlike the Individuals with Disabilities Education Act, is administrated entirely at the federal level.) December 2005 membership rates are used as the most recent data available. However, analysis of incidences within Prince Edward County over the past three years reveals significant variation.

Conclusion 2-14:

Prince Edward County has 9.6 percent more students in special education than the estimated percentage for the population in Virginia's schools. It would be advantageous for PECPS to reduce this percentage. Though the proportion of students receiving special education services in PECPS may be unusually high, there could be several legitimate and/or illegitimate factors besides mere random variation contributing to the unusual incidence rate.

Given that some variation is expected in the incidence of students with special needs as with any medical diagnosis, the statistical likelihood of PECPS's proportion of students receiving special education was examined. Even though the sample includes too few members to draw meaningful statistical inferences about the population generally, the analysis does provide a basis for comparison of the counties without further statistical control. Including more counties in the sample would almost certainly necessitate the control of variables that have been shown to have a main effect on incidence rates in larger studies.

Even given the variation in incidence levels over the past three years, based on the statistical test, PECPS may be identifying an unusually high proportion of its student population as special



needs. However, due to the small number of peers and the influence of factors that may not be reflected in the model, no reasonable level of statistical certainty can be ascribed to this idea at this time.

If the unusually high proportion of students receiving special education services is not due simply to random variation, the following factors, over which the division has no direct control, may contribute to the anomaly:

- The epidemiology of certain disabilities may indicate higher prevalence in Prince Edward County than its neighbors due to specific characteristics of its population.
- Families of students with special needs may favor and move to Prince Edward county due to better reputation or higher quality services than surrounding localities.

Some parents view special education placement as a safe harbor for their child. Their feeling is that their child is receiving extra support by being in special education. If this is taken away, parents are afraid the child will not get this support in a regular classroom setting. Therefore these parents are reluctant to sign for their child to exit the program.

However, the following factors over which the division has direct control may also contribute to the unusually high proportion:

- Surrounding counties meet the needs of students with special needs in the mainstream prior to identification more often than PECPS.
- The eligibility guidelines in PECPS for special education services may result in more students receiving IEPs than in surrounding counties.
- The school psychologist may be interpreting the eligibility guidelines in such a fashion that more students receive special education services than in surrounding counties.

Other divisions in Virginia have aggressively worked to address student needs within regular classrooms before initiating referral procedures to test for placement in special education classes. Some preventive methods used successfully to reduce the percentages of identified special education students include:

- Question whether the disability is what negatively impacts the student's educational performance and promote alternative strategies within the student's classroom.
- All pupil personnel staff provides service to non-identified students who need interventions for success.
- Reading specialists in schools enhance and intensify success in reading for all students.
- All teachers and paraprofessionals participate annually in training regarding differentiating instruction within the regular classroom prior to referral for testing.
- Child Study Committee discussions focus on instructional, staffing, staff development, and classroom strategies that might be employed rather than student "disabilities" (thus, around a child's needs rather than deficiencies).
- Teaching candidate interviews probe for congruence with the division's philosophy of accommodating each student's various learning needs.
- Team teaching is extensive, allowing all students to benefit from the strengths of regular and special education students, and teachers to share and learn from each other.



- Individualization and differentiation of instruction address student differences and learning styles.
- Regular education teachers receive a copy of accommodations required for students in their classes, and sign and return them to the school's special education lead teacher.
- Students are taught how to advocate for themselves and, at the high school level, taught study skills with a special educator to reinforce those skills.
- Support is provided students after dismissal from special education services.
- Instructional support teams at PECPS devise approaches using programming and intervention within regular education classes.

The instructional support teams (ISTs) pro-actively identify individual students' learning needs and styles. The ISTs then devise strategies within the school as a whole and within the regular classroom to support student success outside a special education environment. This collaborative approach to meeting student needs helps educators focus on curriculum and teaching styles, rather than purported student deficiencies. As teams continue to meet and problem-solve together, additional personnel and strategies are employed as attempts are made to develop a process that provides appropriate support for student learning throughout the year. Only when IST actions have not proven effective in meeting student needs are students then referred to child study teams for consideration of special education interventions.

Recommendation 2-14:

It is recommended that PECPS continue with the goal of reducing the percentage of special education students by three percent per year, using research-based methods and strategies to accomplish this goal as outlined in the PECPS Academic Achievement Committee guide, as well as other sources.

PECPS should implement a program to monitor those factors contributing to the proportion of the student population identified as special needs over which it has direct control. Though PECPS can plan for variation due to chance, epidemiology, or strong reputation, there is nothing positive the county can do to eliminate this variation. On the other hand, a program consisting of the following elements can help ensure the school system itself contributes as little to the variation as possible:

- Conduct analysis for the division and cross-sectional analysis to detect unusual variation annually.
- Review special education eligibility procedures, guidelines, and forms at least triennially or whenever the state or federal government issues new directives pertaining to eligibility.
- Engage an external auditor to review a statistically significant number of determination cases biennially.
- Make early intervention to prevent referral for eligibility determination a main goal of the inclusion program (see prior recommendation).

PECPS should adapt other strategies proven effective in other Virginia divisions to address student needs in regular classes before referral to special education.

Implementing this recommendation would, along with other recommendations, strengthen the ability of special needs students to be served in regular classes and likely prevent a number of them from being referred for special education. The school division should also continue to



follow through with the IST program and, if not already in place, a PECPS special education teacher or a guidance counselor could be trained to serve as the IST leader.

Recommending to the parent that a child be placed in regular education in an inclusion classroom, where co-teaching is taking place, when they are ready to exit the special education program may encourage the parent to more readily sign to exit the child. An explanation as to the make-up of an inclusion setting needs to be conveyed to the parent. The parent may feel that the child would continue to be exposed to the strategies used in a special education setting. Therefore, they could feel more secure about signing for the child to make this transition.

Finding 2-15:

In Exhibits 2-10 through 2-12 below, according to VDOE data, in the FY 2005 PECPS disbursement for instruction was \$6,206 per pupil. This was \$65 less than the school division average of divisions chosen for comparability. For FY 2006, PECPS' disbursement for instruction was \$6,659 per pupil. This was \$62 more than the average of the school divisions chosen for comparability.

**Exhibit 2-10
Instructional Disbursements
FY 2005**

School Division	Instruction	Per Pupil Cost
Charlotte County	\$11,971,934	\$5,267
Cumberland County	\$ 8,602,789	\$5,847
Lunenburg County	\$10,994,931	\$6,204
Nottoway County	\$13,567,587	\$5,611
Prince Edward County	\$17,036,426	\$6,206
Sussex County	\$11,615,219	\$8,489
Peer Division Average	\$12,298,148	\$6,271

Source: Virginia Department of Education web site, 2007.

**Exhibit 2-11
Instructional Disbursements
FY 2006**

School Division	Instruction	Per Pupil Cost
Charlotte County	\$12,663,131	\$5,511
Cumberland County	\$ 9,035,830	\$6,027
Lunenburg County	\$12,106,642	\$6,822
Nottoway County	\$13,494,785	\$5,696
Prince Edward County	\$18,172,123	\$6,659
Sussex County	\$12,409,989	\$8,867
Peer Division Average	\$12,980,417	\$6,597

Source: Virginia Department of Education web site, 2007.

The data shown in Exhibit 2-12, which was furnished by the PECPS special education department, provides the average expenditure for elementary and secondary students with a disability and for students without a disability.



Exhibit 2-12
Per-Student Expenditures for Students with Disabilities

Year	Elementary	Secondary
2002-2003	\$7,207	\$6,584
2003-2004	\$7,639	\$6,781
2004-2005	\$8,021	\$7,120

Per-Student Expenditures for Students Without Disabilities

Year	Elementary	Secondary
2002-2003	\$6,557	\$6,271
2003-2004	\$6,880	\$6,346
2004-2005	\$7,224	\$6,663

Conclusion 2-15:

PECPS spends more in total for instruction than divisions chosen for comparability, which is expected based on the larger number of students in attendance at PECPS. The data indicates, however, a large portion of these costs is for students with disabilities, which have increased each year. Since PECPS has such a large number of special education students, and since the per-student expenditures for special education students is substantially greater than for students without disabilities, PECPS can reduce the overall costs of instruction by reducing the number of students in special education.

Recommendation 2-15:

It is recommended that PECPS search for innovative ways to reduce the number of students in the special education program to cut costs. A part of this process should include the study of other special education programs used in the divisions shown in the exhibit for comparability. Objectives to reduce the number of special education students by three percent have already been established by the academic committee and are being acted upon. Suggestions are given in the special education portion of this report.

Finding 2-16:

Allocation of special education instructional personnel accounts for most of the variable per student difference between general and special education expenditure that PECPS can control. Special education spending consists of three major areas: personnel to provide instruction, overhead for administration, and special resources required. In PECPS, the vast majority of overhead for special education for administrative tasks such as eligibility determination and IEP coordination is fixed. For example, the division employs a single psychologist for eligibility determination; even if the number of referrals were significantly reduced, the psychologist would remain. Thus, the marginal savings in administrative costs of one fewer student is negligible. Additionally, special resources (such as Braille texts for visually-impaired students, tuition for residential treatment, etc.) cannot be avoided and are completely dependent on the nature of the disability. All remaining cost associated with special education arises from personnel with both higher salaries and lower student loads than mainstream teachers.

PECPS has implemented inclusion to varying degrees in the three schools by adding new inclusion positions. The number of inclusion teachers has increased over the past three years. However, there are no inclusion teachers at the high school level, and the number of resource and



self-contained teachers has remained almost constant, as the number of inclusion teachers in the elementary and middle schools has increased.

Due to the expected variation PECPS experiences each year in the number and composition of special education students, teaching loads of self-contained and resource teachers change annually depending on the certification of the teacher. As shown in Exhibit 2-13, PECPS experiences variation in the number and composition of special education students each year. (These figures may differ from the data in Exhibit 2-9 due to the timing that information was reported.) Though not shown, analysis of disability by age, grade, or school would demonstrate even more variability. Thus, teaching loads of self-contained and resource special education teachers vary yearly by the qualification of the teacher depending on the composition of the student body receiving special education services in the school.

Personnel interviewed stated that there are inclusion classes in all grades in the elementary school with the exception of Kindergarten, which will be included next year. The middle school will have inclusion in all grades by adding eighth grade to the program at the beginning of the 2007-08 school sessions. High school teachers are more reluctant to commit themselves to try inclusion. They are more subject matter oriented. However, the division plans to introduce inclusion for the rising 9th graders by 2008.

Inclusion has been very successful in the elementary school where co-teaching takes place. This seems to be especially true in situations where the teachers are compatible and the regular education and special education students are homogeneous.

Conclusion 2-16:

For PECPS, the inclusion model offers the most financially efficient allocation of special education instructional personnel. Since the marginal cost of administrating additional special education students is negligible and the division is obligated to provide those resources mandated by student IEPs and 504 plans, the only opportunities for active cost savings arise from decreasing personnel requirements by lowering the number of students receiving special education services or allocating personnel more efficiently.

In large school districts that employ large numbers of special education teachers with various certifications, yearly variation in the composition of the special education population tends to wash out across all the available classrooms. However, in PECPS this variation poses a significant threat to financial efficiency given the legal requirements for student-teacher ratios and teacher certification in self-contained classrooms and resource rooms.

Though inclusion can mitigate the risks of this variation by spreading it across all classrooms rather than just those designated for special education, PECPS may not be reaping the financial savings of efficiency. If the division as a whole were moving toward inclusion, Exhibit 2-7 would indicate a shift in these counts as self-contained teachers were reallocated to resource and inclusion, and as resource teachers were reallocated to inclusion.

Additionally, serving students by mainstreaming/inclusion is more effective at helping students to develop socially, emotionally and academically. Observation of co-teaching practices proves the merits of co-teaching and its expansion if the proper procedures are in place.

Benefits identified by teachers who use inclusion in their classroom are included in Exhibit 2-14.



Exhibit 2-13
Prince Edward County Public Schools
Special Education Breakdown by Race and Primary Disability 2004-2006

2004	SLD	MR	OHI	SLI	MD	SD	VI	HI	AUT	ED	TBI	DD	OI	Total
AI	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	1	0	0	2	0	0	0	0	0	0	0	0	0	3
Black	94	88	29	74	0	2	0	0	4	19	0	36	0	346
Hispanic	2	0	1	5	0	0	0	0	0	0	0	0	0	8
White	92	5	26	54	2	3	0	0	2	0	0	11	0	195
Hawaiian	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	189	93	56	135	2	5	0	0	6	19	0	47	0	552

2005	SLD	MR	OHI	SLI	MD	SD	VI	HI	AUT	ED	TBI	DD	OI	Total
AI	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	1	0	0	2	0	0	0	0	0	0	0	0	0	3
Black	99	85	33	94	0	2	0	0	5	21	0	43	0	382
Hispanic	1	0	1	4	0	0	0	0	0	0	0	0	0	6
White	93	7	34	62	0	3	0	0	4	10	0	22	0	235
Hawaiian	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	194	92	68	162	0	5	0	0	9	31	0	65	0	626

2006	SLD	MR	OHI	SLI	MD	SD	VI	HI	AUT	ED	TBI	DD	OI	Total
AI	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Black	80	58	53	98	0	1	0	1	4	17	0	39	0	351
Hispanic	1	0	2	2	0	0	0	0	0	0	0	1	0	6
White	66	8	32	65	2	2	0	0	6	7	0	20	0	208
Hawaiian	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	147	66	87	167	2	3	0	1	10	24	0	60	0	567

Source: PECPS Special Education Department, 2007.

SLD= Specific Learning Disability
 MR= Mentally Retarded
 OHI= Other Health Impaired
 SLI= Speech/Language Impaired
 MD= Multi-Disabled
 D= Severe Disability
 VI=Visually Impaired

HI=Hearing Impaired
 AUT=Autistic
 ED=Emotionally Disturbed
 TBI=Traumatic Brian Injury
 DD=Developmentally Delayed
 OI=Orthopedically Impaired

Exhibit 2-14

Benefits Identified by Teachers Using Inclusion in Their Class

Benefits

- Students do not miss anything within the regular classroom from being “pulled out”.
- The self-esteem of special education students is always positive – they never felt isolated.
- All students receive the benefits of having two teachers.
- All students are able to receive an individualized service, rather than special education being thought of as a “place”.
- For those students who may get excited, it is a way to monitor their performance through increasingly difficult expectations.
- Inclusion may reduce the amount of students referred for services.
- Students actually receive “double” reading instruction.
- If started in lower grades, it will allow for a smaller gap in the higher grades.
- Speech/language children receive extra support for reading and writing, which are their problem areas.

Source: Johnston School Department, Winsor Hill School, 2004.

Recommendation 2-16:

It is recommended that PECPS adopt a division-wide, full inclusion model for special education to maximize financial efficiency in instruction, recognizing both the difficulty and investment associated. PECPS faces many difficulties in special education administration due to the relatively large effects on resource allocation from small, yet unpredictable and unsystematic, changes in disability subpopulations. The inclusion model, in which the classroom paradigm is changed from altering “standard” curriculum for students at the “top” and “bottom” to making curriculum and instruction equally accessible to all students as individuals, mitigates these resource problems of population variation for several reasons. First, because classroom instruction tends to generally become more universally accessible, novel disability issues tend to be handled more easily without specialized intervention. Second, inclusion tends to reduce personnel expenses at the margin as new students are absorbed into existing inclusive settings rather than possibly requiring new self-contained settings. Finally, inclusion promotes early intervention for students performing below expectations, often saving additional expenses that would be incurred later from more intense remediation.

Inclusion is very difficult. Though most districts in the country recognize its value for pedagogical and social justice reasons beyond the scope of this report, even the wealthiest and most progressive are experiencing difficulty with its implementation. While PECPS has made inroads toward the model, there are still far more resource and self-contained teachers than inclusion teachers in the division, and the high school utilizes no inclusion at all. Consequently, since implementing a full inclusion model is the strategy that best addresses both financial and programmatic concerns of the division for special education, PECPS should develop and deploy a comprehensive plan for institutionalizing inclusion that:

- garners the full support of the superintendent and school board, and demands compliance from all school general and special education personnel;



- uses as performance metrics the total ratio of special education teachers to students by school, the variance of teaching loads among special education teachers, and the proportion of students receiving special education services accounting for random variation in incidence rates;
- engages an expert in implementing inclusion models as a consultant for two or three years to effect and institutionalize a culture of inclusion at all levels; and
- recognizes that the director of special education is vital to the success of the plan by investing in her travel to visit exemplary districts and training in best practices.

Additional suggested actions for improvement include, but are not limited to:

- Identify special and regular education teachers who are willing to model and extend its benefits for students to other teachers.
- Regularly review the performance of students with disabilities in comparison to other students to identify gaps and their contributing dynamics and make needed adjustments.
- Solicit input from the director of special education and the director of instruction.
- Create color-coded flipcharts for regular education teachers that suggest accommodations for specific student learning needs and can be used as references in instructional planning, and provide related training to help them understand when and how to implement specific accommodations for students with specific learning needs.
- Use administrators who have experienced success and teachers effectively using inclusion for the benefit of regular and special education students to make presentations to others and direct support for other teachers.
- Develop procedures that create time for co-planning.
- Monitor and support teachers as they learn and apply new skills.
- Encourage sharing among teachers who are more reticent in trying new practices with those who have embraced them skillfully.
- Provide training for teachers in strategies to differentiate instruction for all students and in characteristics of special education criteria for eligibility and placement.
- Provide training for child study teams relative to student eligibility procedures.
- Examine exemplary models.
- Visit exemplary sites.
- Research essential components contributing to the success of effective programs.
- Aggressively seek out grant money from the state to model an inclusion system.

Finding 2-17:

The special education breakdown for PECPS, by grade level and year, indicates students with special needs increased in all grades with the exception of grades five, nine, and 11 in 2005. There were 552 students with special needs in 2004 and 626 in 2005. A decrease of 59 students was observed for 2006, with 567 in special education. (Counts of students can vary due to the time of the year in which data was collected and reported.)

A breakdown of special education students by race shows more black students than any other race with special needs for all reported years. A decrease of 31 black students was noticed in 2006 from 2005 when the numbers were the highest.



A December 2004 letter from the U.S. Department of Education, Office for Civil Rights (OCR) notified PECPS it had been selected for a compliance review regarding the issue of minority students in special education. Specifically, OCR noted a concern as to whether discrimination on the basis of race and or disability had occurred in the referral, evaluation and placement of students into special education programs. OCR identified 15 student cases to be reviewed to determine if these students, classified as mentally disabled, met the criteria for this classification. An agreement was made whereas PECPS needed to meet certain criteria in reporting back to OCR concerning the status of the 15 students.

Conclusion 2-17:

Exhibit 2-13 indicates that a majority of special education students classed as mentally retarded (MR) and with a specific learning disability (SLD) are black and located in the high school. Middle school students fall mostly in the categories of SLD and speech and language impaired (SLI). In the elementary school, black students make up the majority of students in SLI with white students the next largest number in this classification. In a letter to the superintendent in March 2007, OCR stated that it had determined the division had fulfilled its obligations under the agreement. The division reported to OCR that two of the 15 students had withdrawn from the division and three of the students were re-evaluated. As a result one student was exited from special education and the other two students were reclassified as other health impaired (OHI). The remaining 10 students were re-evaluated. The division reclassified one student as OHI and two as Learning Disabled. The remaining seven students were determined to be eligible for special education under the classification of multiple disabilities (MD). Therefore, OCR was closing its monitoring of the case as of the date of the letter.

Recommendation 2-17:

It is recommended that the special education handbook be used as a guide to give the division a consistent process for addressing special education procedures and help to more efficiently expedite the evaluation of students for special education in a timely manner. This instrument is needed in performing all functions of the special education department successfully in order to fulfill requirements for meeting compliance.

In the self-study conducted by the academic achievement committee, objective 1.15 states that there will be a revision of the special education referral, evaluation, and eligibility process, which will include associated forms. The revision, to be completed by August 2007, will be included in a division special education handbook for building administrators and special education teachers.

Finding 2-18:

PECPS' special education department seeks reimbursement from the Medicaid Administrative Outreach Program in a single category. Special education departments provide a number of services for students with special needs that are eligible for Medicaid reimbursement. PECPS' special education department has been billing for some, but not all eligible reimbursable Medicaid expenses since 2004. Data provided shows that the department has received reimbursements for administrative services in the amount of \$12,048.88, as shown in Exhibit 2-15. It does not yet bill for any other services.



Exhibit 2-15
Medicaid Reimbursement Receipts
April 2004 through March 2006

Quarter	Total Federal Financial Participation (FFP)
January – March 2006	\$1,727.04
October – December 2005	\$5,445.45
July – September 2005	\$4,285.32
April – June 2005	\$3,082.92
January – March 2005	\$5,026.53
October – December 2004	\$2,146.00
July – September 2004	\$1,416.51
April – June 2004	\$ 967.98
January – March 2004	
Total	\$24,097.75
Schools Share	\$12,048.88

Source: PECPS Special Education Department, 2007.

Medicaid is a federal entitlement program that finances medical services. An important focus of the Medicaid program is to improve the delivery and accessibility of health-care systems and resources. School systems and numerous public agencies provide an important link in improving child healthcare because of the regular contact with the child and the parent or guardian. The Medicaid Administrative Outreach Program allows Medicaid reimbursement to local education agencies. Payments to these agencies are based on the cost of providing eligible health-related outreach activities.

The reimbursable categories include:

- public awareness and information facilitating access;
- identification and referral;
- initial screening and evaluation;
- care planning and coordination;
- client assistance to access services;
- family notification; and
- education and training.

The reimbursement of administrative claims is based on the percentage of students in the total school population that are eligible for Medicaid.

Conclusion 2-18:

Through increased billing, PECPS may use Medicaid reimbursement to support and expand special education service provision. Though it has sought reimbursement solely for administrative services, as a division with many Title I students PECPS undoubtedly provides other services that could be expanded or supported through the Medicaid Administrative Outreach Program. While services in some categories may not be appropriate for the special education department to provide, others could allow PECPS to improve and broaden its special education service provision.



Recommendation 2-18:

It is recommended that PECPS maximize revenues from the Medicaid Administrative Outreach Program to support and expand its special education service provision as appropriate. To maximize revenues from the Medicaid Administrative Outreach Program, PECPS should

- identify all students eligible for Medicaid services;
- examine all categories to ascertain opportunities for the support, expansion, or initiation of relevant services;
- track the increased overhead and opportunity costs in the expanded administration of Medicaid services; and
- if necessary, engage a Medicaid billing provider to mitigate administrative costs of expanded billing.

The special education director should interview several Medicaid billing providers regarding the level of assistance they provide, as well as their fees for services, in the event paperwork becomes burdensome. Bidding on these services before contracting with an agency is advised. It is also possible that the IEP online service in use has a program that helps with these tasks.

Finding 2-19:

PECPS provides an early childhood special education program for children ages two to five years old. These children are eligible to receive services in the areas of cognition, fine motor, gross motor and social development. They also may receive related services in speech/language therapy, occupational therapy, physical therapy and vision. Some of the students receive instruction in an inclusive setting with preschool students in the Virginia Preschool Initiative Program. This program is partially funded by Early Childhood Special Education Project (IDEA, Part B, section 619) grant funds. Children from the school division that attend private schools or are home schooled are also eligible for the ECSEP. As of December 1, 2005, the number of eligible children, aged three to five, receiving services with disabilities in both private and public schools was 76. The amount of funds realized from this grant amounted to \$20,394. Set-aside funds for four children who were enrolled in private schools or home schooled totaled \$1,073.37. This provides \$268.34 for each child enrolled in ECSEP. A breakdown of the budget on the use of these funds shows the majority of the funds were designated for Personnel Services that include one ECS teacher, speech/language therapy, and transportation for private school students. The remainder of the funds was used for employee benefits for the personnel.

Conclusion 2-19:

The early childhood program was established based on research data indicating that early intervention is the best method to ensure academic success for children. This program provides students the opportunity for interaction and socialization skills, prior to their entry into kindergarten.

Recommendation 2-19:

It is recommended that PECPS continue to fund a portion of the ECSEP program using grant funds along with other available monies to build this program into an even stronger and better program.



Finding 2-20:

The Standards of Learning (SOL) emphasize the importance of instruction in five core subjects: English, mathematics, science, history and social science. The SOL's are an important part of Virginia's efforts to provide challenging educational programs in the public schools. The standards are minimum requirements in each grade level K through 12. These standards set reasonable targets and expectations for what teachers need to teach and students need to learn.

Students with disabilities are expected to participate in SOL testing based on each student's individualized program. The SOL testing of special education students must meet the requirements of the IEP of the student. The Virginia Alternate Assessment Program (VAAP) provides alternative testing if it is determined that a student's performance cannot be assessed appropriately using the SOL test. Exhibit 2-16 shows the percentages of PECPS special education students and state special education students performing at proficient and advanced proficient levels in reading.

Exhibit 2-16
Percentages of PECPS Students with Disabilities and State Students with Disabilities
Performing at Proficient and Advanced Proficient Levels in Reading
2003-04 through 2005-06 School Years

English/Reading All Special Education Students	2003 - 2004	2004 - 2005	2005 - 2006
	Grade 3		
Prince Edward	58	65	79
State	47	53	71
	Grade 5		
Prince Edward	38	42	45
State	62	65	72
	Grade 8		
Prince Edward	32	26	60
State	36	42	50

Percentages of all Students with Disabilities
2003-04 through 2005-06 School Years

	2003-2004			2004-2005			2005-2006		
	Passed	Tested	Not Tested	Passed	Tested	Not Tested	Passed	Tested	Not Tested
Prince Edward	49	94	6	51	100	0	59	100	0
State	51	97	3	56	98	2	64	100	0

Source: Virginia Department of Education, 2007.

Conclusion 2-20:

Data in the Virginia Report Card for PECPS show that third grade students scored above the state level for all three years and advanced their scores for the school years 2004-05 and 2005-06. Grade five showed advancement all years but scores were below the state level. Eighth grade student scores went down six percentage points in 2004-05. However, in the 2005-06 school year scores were up 34 percentage points, which was 10 percentage points higher than the



state. Third grade scores were the only ones that showed a consistent rise and were above the state level for all years shown. When looking at reading scores for all PECPS special education students, scores are consistently below the state level.

Recommendation 2-20:

It is recommended that PECPS continue to use the strategies that have been developed by the special education department to meet the standards of learning. These strategies include special education teachers participating in professional development activities that focus on the SOLs, aligning the pre-K through grade 12 special education curriculum to address the SOLs and ASOLs, providing additional researched-based curriculum, instructional strategies and resources, using individual student data to make decisions addressing a student's academic needs, and providing transition services to address academic and vocational needs. The use of these strategies should be very beneficial to the PECPS Special Education Department in increasing SOL scores and achieving proficiency on the tests.

Alleghany County public school teachers have compiled a guide for increasing math scores. It details program specifics and includes web resources, books, and games that offer students interaction, as well as an infusion of technology into their math learning activities. Development of a similar booklet by PECPS teachers for increasing math and/or reading scores would prove beneficial.

Using SOL data for individualization of instruction can provide a rich resource to examine practices, instructional methodologies, resources, curriculum articulation, and staff development needs for teachers. When patterns of high or low performance emerge, they serve as a resource for identifying and sharing best practices where success has been experienced, and for identifying priorities that should be addressed to ensure equity of instruction and educational experiences for all students.

Finding 2-21:

The effect of the subpopulation of students with disabilities jeopardizes the middle school's progress toward Adequate Yearly Progress (AYP). The middle school is the only school in PECPS not fully accredited. (As of the 2006-07 school year, only 9 percent of Virginia public schools were not fully accredited.) Additionally, the middle school, a Title I school, has not made AYP in accordance with the No Child Left Behind Act (NCLB) during the past three years and is in corrective action in both English and math. (The only other Title I school in Prince Edward county, Prince Edward County Elementary School, has made AYP during the each of the past three years.)

Though the middle school has made progress in English performance, it continues to underperform its peers within the county and the Commonwealth. Even though students perform at roughly the same level in the aggregate in each grade, special education students in grades five and six underperformed students in grades seven and eight during the 2005-06 school. Not only is this trend opposite of the general trend in the Commonwealth for students with disabilities, it is somewhat counterintuitive: research shows that students with reading difficulties tend to fall only farther behind over time.

Since the number of students with disabilities in each grade in PECPS is relatively small, discrepancies in individual aptitudes do not wash longitudinally. For example, if fifty students



with disabilities take the SOL test in a specific grade, a single student can lower or raise the pass rate by two points.

Conclusion 2-21:

Given this effect, the most cost-efficient interventions for students with disabilities will be those with maximum flexibility in grade and student focus throughout the school year. According to NCLB, in addition to the overall population, each significant subpopulation of students must make AYP for the school as a whole to make AYP. Unfortunately, the subpopulation of students with disabilities is just large enough to count toward AYP, but small enough that individual variation in aptitude significantly affects total passing rates. Additionally, for many special education students, reading skills strongly affect performance on math and content area tests. Therefore, to be cost efficient, any intervention aimed at improving the performance on SOL tests of special education students must be flexible enough to focus on the appropriate grade levels and students after first quarter benchmarking results are received on a yearly basis.

Recommendation 2-21:

It is recommended that PECPS consider creating the position of a middle school literacy coach for maximum flexibility in the administration of literacy interventions. Unlike a reading specialist, whose focus is the diagnosis and instruction of students, a literacy coach would help teachers devise strategies for language arts instruction for their students. Effective literacy coaches work across the curriculum as needed, helping even teachers in mathematics and the content areas devise instruction that supports reading goals when faculties make school-wide commitments to literacy. Though the role of a literacy coach has been moved to the center of early literacy programs through Reading First grants, this role is also vital at the middle school level as specific reading difficulties become more diverse encompassing decoding, fluency, comprehension, and issues associated with English Language Learners (ELL).

If PECPS implements a full inclusion model as earlier recommended, students with diverse language arts needs will be spread across many teachers. In this scenario, it is more efficient over time for an expert to build the language arts pedagogy skills of teachers than to devise and implement strategies for specific students. Additionally, in the inclusion model, guidance from a literacy coach will both optimize instruction for PECPS's growing population of ELL students and complement existing corrective action programs.

2.E.a ENGLISH AS A SECOND LANGUAGE

Finding 2-22:

PECPS English as a Second Language (ESL) enrollment is small. As of September 2006, there were only twenty-five (25) ESL students in the division. In the elementary school there were nine in the ESL program; the middle school had four; and the high school had the largest number with 12. Exhibit 2-17 shows the breakdown of Prince Edward County Elementary, Middle and High School LEP students during the 2005-2006 school year.



Exhibit 2-17
PEC Elementary School LEP Students 2005-2006

Grade	English Proficiency Description
KG	LEP Receiving Services-Level 2
01	LEP Receiving Services-Level 3
01	LEP Receiving Services-Level 4
02	LEP Receiving Services-Level 4
02	LEP on 1 st year Monitor Status
04	LEP on 1 st Year Monitor Status
04	LEP Receiving Services-Level 4

PEC Middle School LEP Students 2005-2006

Grade	English Proficiency Description
07	LEP Receiving Services Level 4
08	LEP on 2 nd Year Monitor Status
08	LEP Receiving Services Level 3

PEC High School LEP Students 2005-2006

Grade	English Proficiency Description	Home Language
9	LEP Receiving Services-Level 1	Spanish
9	LEP Receiving Services-Level 2	Gujarati
9	LEP on 2 nd Year Monitor Status	Chinese
10	LEP on 2 nd Year Monitor Status	Chinese
10	LEP Receiving Services-Level 4	Spanish
10	LEP Receiving Services	Spanish
11	LEP on 1st Year Monitor Status	Chinese
11	LEP Receiving Services	Chinese
12	LEP Receiving Services-Level 2	Spanish
12	LEP Receiving Services-Level 3	Slovak
12	LEP on 1 st Year Monitor Statu3	Urdu
12	LEP Receiving Services-Level 3	Portuguese

Source: PECPS ESL Department, 2007.

Due to the small number of students eligible for ESL in PECPS, one part-time ESL teacher provides educational services to all students, pre-K through grade 12. The PECPS English as a Second Language Program is administered by the director of instruction and supported by the ESL teacher.

Most students receive ESL services during content time (science and social studies) or remediation time in the elementary school. If the student will be missing content time, the regular classroom teacher is requested to inform the ESL teacher what they are studying in science or social studies. This request is made so that the ESL teacher may incorporate vocabulary and key concepts into the English lessons.

At the high school level, students that need content area English language support in English, social studies, math and science meet in a small group setting. Other high school ESL students meet together at another time. At the middle school level, as well as other levels, students may be taught in an individual or small group settings. It may vary depending on the number of students and the student's needs.

ESL students are tested with the Stanford English Language Proficiency Test to determine their level of English proficiency. Student's proficiency is measured in the following areas:



- Listening;
- Speaking;
- Reading;
- Total writing;
- Comprehension (listening and reading);
- Social (listening and reading);
- Academic (reading, writing and writing conventions); and
- Productive (speaking and writing).

Results are used to identify the ESL instructional level of the student and to help in determining placement for the student.

The department has not found it necessary in the past to focus on establishing a bilingual advisory committee. The SOL teacher meets with individual parents on a regular basis, which has proven to be a satisfactory process in meeting their needs. Other personnel in the schools act as interpreters as needed. Parents have been offered ESL classes or other services to allow them to help in their child's education, but it was not received positively.

Bilingual instructional materials are provided through textbook companies. A number of bilingual resources are available in the libraries, especially in the Spanish language. An effort has been made to try and increase the number of library resources using Title One Funds.

PECPS primarily uses advertising as a means of recruiting bilingual teachers as they are needed. Also, the division works closely with Longwood University in providing training for bilingual teachers.

A staff development program for teachers in bilingual and regular classes impacted by bilingual students is in place. Monetary assistance is available for personnel to attend professional workshops and conferences.

Conclusion 2-22:

Although the population of students that qualify for ESL services is small, it has been growing in recent years. Extension of the town through annexation, expansion of Longwood University, and construction of new homes and businesses attribute to this growth. These changes, which brought new and additional services to the area, created more opportunities for employment of people of other cultures.

As of April 30, 2007, two elementary students were eligible for both ESL and special education. Each was diagnosed as SLI. ESL support is provided as a part of the student's IEP. This places a student in the setting that is appropriate for their needs. Also, a student who receives ESL services may qualify for special education and the gifted program. Twenty-six ESL students were in this category. Exhibit 2-18 below shows the grade level and placement of these students. Teachers need to be keenly aware of these possibilities and work closely together to determine if the English language is the cause of the difficulty the student is experiencing, or could there be more than one reason, when determining the correct service for each student.



Exhibit 2-18
ESL Students in Special Education and Gifted

Grade	Instructional Setting	Number of Students
3	SLI	3
4	504	1
4	SLI	1
4	OHI	1
5	SLI	7
5	SLD	1
6	SLI	1
6	OHI	1
7	SLI	2
7	SLD	2
8	OHI	1
9	SLD	1
10	SLD	2
10	OHI	1
11	SLD	1
Total number of ESL students in Special Education and GIFTED		26

Source: PECPS ESL Department, 2007.

Recommendation 2-22:

It is recommended that PECPS formulate a procedure for identifying more quickly students needing ESL services to eliminate lost time in receiving these services. If this could be handled at the time of registration for the school the year, it could expedite the correct placement of the student when school begins. This procedure may require a separate questionnaire and extra personnel to interpret and communicate information due to a language bearer that may be present.

At the present time ESL students receive services two days a week. If the ESL teacher's schedule allows, it would be beneficial for students to have the opportunity to meet with the ESL teacher three days a week. Students could progress more quickly and perhaps exit the program sooner.

An inventory of all bilingual program instructional materials should be kept for ready reference and accountability. It would be helpful, when accessing needs for the program, to know exactly what materials are available and where they are located.

Linking with neighboring divisions with faster growing populations and additional community resources would extend the parent network of people with common cultures and backgrounds. It would help in developing their skills to become more effective parents for their children's education.

Establishing an ESL newsletter for parents is a good means to enhance the communication process between school and home, in their native language, when feasible.



2.E.b GIFTED AND TALENTED EDUCATION

Finding 2-23:

Prince Edward County Public Schools provides gifted services for identified students in K through 12. The division's office of gifted and differentiated education strives to identify and serve children from all ethnicities and social strata represented within the student population.

All PECPS students in grades K through 12 are eligible for gifted services and programs. Students must meet certain criteria in order to receive services through the school program. Students identified in the areas of general intellectual aptitude, specific academic aptitude, and/or visual arts are served in grades K through 12. Students identified in the area of practical arts are served in grades nine through 12.

At the elementary level, students identified as gifted in the areas of general intellectual aptitude or specific academic aptitude in K through 2 are cluster grouped in addition to receiving pull-out services. Students identified as gifted in the areas of general intellectual aptitude or specific academic aptitude in grades three through four are homogeneously/clustered grouped in addition to receiving pull-out services. A math enrichment pull-out program provides advanced math students a challenging environment to excel. Students identified as gifted in the area of visual arts in grades three through four receive pull-out services. Elementary school teachers are also requested to differentiate where possible to address the area of giftedness for a given child.

On the middle school level, students identified as gifted in the areas of general intellectual ability and specific academic aptitude in grades five through eight are clustered in language arts, science, and humanities classes, and are developmentally placed in mathematics classes. Students in grades five through eight who have been identified as gifted in the visual arts are homogeneously grouped in "TAG" art by grade level. Middle school teachers are also requested to differentiate where possible to address the area of giftedness for a given child.

At the high school level, students oftentimes self-direct through course enrollment to excel but are also given opportunities to use their talents in academic oriented programs, activities and clubs. Gifted students in the high school may attend the Governor's School of Southside Virginia. They may choose to take honors and/or dual enrollment courses, may attend one of the local institutions of higher learning for a part of the school day, and/or may participate in independent study experiences.

Referrals are accepted for pre-K through 12 students from educators, parent/guardian, or other school personnel in one or more cognitive areas. Eligibility meetings take place year-round in order to facilitate continuing appropriate educational placement for students. Teachers of gifted students K-12 are encouraged to earn the Virginia add-on endorsement in gifted education and to attend staff development opportunities.

Areas of giftedness and grade levels served by PECPS are shown in Exhibit 2-19 below:



Exhibit 2-19
Status of Gifted Education
Area(s) of Giftedness/Grade Levels Served in the Division

Area of Giftedness	Grades Served
General Intellectual Aptitude (GIA)	K-12
Specific Academic Aptitude (SAA)	Math, K-12 Humanities, K-12 Science, K-12
Practical/Technical Aptitude (PTA)	9-12
Visual/Performing Arts Aptitude (VPA)	Visual Arts, K-12

Students are evaluated according to:

- General intellectual aptitude;
- Specific aptitude in mathematics;
- Specific aptitude in language arts;
- Specific aptitude in the visual arts; and
- Specific aptitude in the practical arts.

Multiple areas are examined through testing, teacher and parent recommendation, grades and/or portfolios. Testing occurs through individual examination (aptitude and achievement) to determine aptitude in:

- Language arts and mathematics;
- Mathematics only; and
- Language arts only.

Students scoring in the 95th percentile on these tests along with high ratings in observations and grades become eligible for gifted services.

PECPS' Gifted Advisory Committee is comprised of teachers, administrators, parents, and community members who represent the ethnicities, social strata, and geographic areas served by PECPS. This committee meets regularly to discuss issues related to gifted programs and services within the division. All students eligible for gifted services and programs must be properly identified through this committee. The composition of the local advisory committee is included in Exhibit 2-20.

Exhibit 2-20
Composition of Local Advisory Committee (LAC)

Categories	Number Represented
Parents	9
Teachers	3
Administrators	3
Support Staff	1
Community <ul style="list-style-type: none"> • Representatives of business, industry, arts 	2
Community <ul style="list-style-type: none"> • Persons who are not parents of identified students 	2
Students (optional)	



Characteristics of PECPS' Gifted Program for the school years 2006-2007 and 2005-2006 is shown below:

- 11 percent, or 280 students, of a total division membership of 2,630 are gifted and talented according to the identification means of general intellectual, language arts, math, and /or visual arts.
- 35 percent, or 94 students, of the 280 gifted and talented students are gifted in visual arts.
- 52 percent of the total gifted and talented students are female; whereas, 48 percent are male.
- 27 teachers are identified in the division as teachers of gifted and talented students (ten in the elementary school and seventeen in the middle school).
- Some 20 teachers in the division have participated in coursework at the graduate level in the area of Gifted education.
- All teachers in the elementary and middle school have received training in "differentiation" through an in-service.
- The gifted program and services has an online presence with a web site through the main PECPS division web site under the heading Administrative Departments.
- 301 students were tested for gifted services, 180 of which were tested in the first grade using the NNAT or Naglieri test of nonverbal intelligence in 2006.
- In 2004-2005, seven new enrichment programs were added to the then-current list of two (Spelling Bee, OM-Middle School) in the division to bring the total to nine academic-oriented programs throughout the division. The new programs included: Model UN (attending overnight conferences), Virginia Junior Academy of Science, Online National Geometry Competition, FirstRobotics, National Geographic Bee, and Chess Program.
- Beginning in 2006-2007, thirteen additional programs were added: two Odyssey of the Mind teams in elementary and the high school, division-wide chess program, five Junior Lego teams in the elementary school, one First Lego League Robotics team in middle school, one VEX Robotic team in the middle/high school, Model General Assembly, We the People, and participation in the Jamestown Conference on Global Democracy.
- In 2004-2005, three students applied for the Foreign Language Summer Academy.
- In 2004-2005, the Longwood Summer TAG program at Longwood University had 25 students from PECPS.
- In 2004-2005, the Summer Residential Program at False Cape had six Prince Edward County High School students.
- In 2005-2005, five students applied for the Summer Residential Governor's Schools of which three were accepted to agriculture, art, and math, science, and technology.
- In 2004-2005, nineteen students applied to the Governor's School of Southside Virginia, and 10 students were accepted. A total of fourteen PECPS students currently attend.
- In 2004-2005, Prince Edward County High School had thirty-six Early College Scholars.
- In 2004-2005, PECPS' *2005-2010 Local Plan for the Education of the Gifted* received a final review and was accepted by the Virginia Department of Education.

Conclusion 2-23:

Components are in place, or procedures are being implemented, to enhance the gifted program in order to challenge each student to perform at their best. This is being carried out through teacher training, opportunity for parent involvement, providing information through the TAG Newsletter



and the gifted web site, and an efficient advisory committee. Implementing advanced placement courses, instituting plans for obtaining additional resources through the library, and the hiring of qualified teachers are elements found to be vital to adequately serve gifted students at PECPS. Success of the program can be measured by student participation in academic opportunities offered to them.

Recommendation 2-23:

It is recommended that PECPS continue to search for other methods to successfully identify gifted students who represent all economic and ethnic groups. This should remain a priority to enhance the services given to students in the gifted program.

The gifted program at PECPS recognizes that there is available room for improvement in order to make this program even more successful. Some areas have already been identified and plans are underway to make improvements as stated in the five-year plan accepted by the Virginia Department of Education.

Monies raised through The Prince Edward Public Schools Endowment, Inc. to support and enrich children's education is a valuable asset in providing "extras" for the gifted program. In the past they have awarded grants for the Model United Nations (\$500) and Virginia Junior Academy of Science (\$300).

Cluster grouping is a recognized model for serving gifted students, especially in the elementary school setting. Expanding cluster grouping in the gifted program to include more levels would be beneficial. This type of setting would enable students to interact with each other more readily.



3. Human Resources Management

3. HUMAN RESOURCES MANAGEMENT

Due to the labor-intensive nature of the education industry, the appropriate management of a school division's personnel is a critical function. To provide quality education to a significant student population efficiently and effectively, it is necessary to hire and retain the appropriate number of employees with the appropriate qualifications and credentials to meet the needs of both the faculty and students. In order to retain these individuals, a school division must provide their employees with adequate compensations, training and additional benefits and services.

This chapter provides observations regarding the operations of the human resources department for Prince Edward County Public Schools (PECPS). The major sections in this chapter are:

- 3.A Organization and Management
- 3.B Policies and Procedures
- 3.C Recruitment, Hiring and Retention
- 3.D Compensation and Classification Systems

INTRODUCTION

PECPS is a small to mid-size school division comprised of 457 employees, including 259 teachers and administrators, operating three schools serving a student population 2,773. Human resources functions are being performed by the director of human resources (HR) and the one secretary assigned to the department. The director works closely with PECPS administrators, superintendent and the school board to ensure that personnel-related issues are resolved in a timely manner and requisite HR functions are properly accomplished. Human resources management functions are performed by the director of human resources department, with the secretary performing daily and routine administrative tasks and functions. The superintendent provides oversight and management of HR functions and assures compliance with all federal and state laws and regulations and VDOE policies.

As with all divisions, the PECPS human resources department performs certain functions at a level or in a way, that is both efficient and beneficial to division employees. The department's director has displayed a dedication to the division and her duties that carries over into the way the department is managed as a whole. However, the following findings, conclusions and recommendations may improve the human resources department's efficiency, thereby aiding PECPS in achieving their transition, "*from good to great.*"

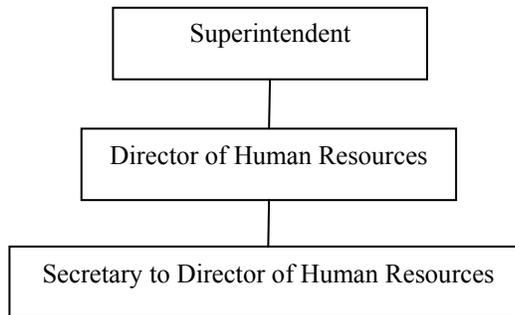
3.A ORGANIZATION AND MANAGEMENT

As a small school division with fewer personnel resources than most school divisions, the PECPS human resources director and secretary must multi-task to accomplish many of the required departmental functions. The majority of the division's human resources functions are performed exclusively by the director. The director of human resources chairs several employee committees, drafts various correspondence for the superintendent, performs all employment history checks, and creates and updates a number of HR databases that are also used for reporting purposes. Unlike larger Virginia school divisions, comprised of hundreds of teachers, administrators, and staff, generating a substantial quantity of daily human resources workload justifying a greater number of HR staff, PECPS must operate within the constraints of a small school budget. Due to PECPS's limited HR staff, certain functions, including sexual harassment dispute management, worker's compensation claim management, recruiting, interviewing, training, and grant-writing are shared tasks that are performed by other staff throughout the

division. It should be noted that many of the administrative staff are engaged in multi-tasking as a means to share in the overall accomplishment of certain administrative functions. Without this kind of dedication from the staff, much of what gets accomplished at PECPS simply could not be performed.

Exhibit 3-1 is the HR department's organizational chart depicting the job titles of those individuals who are assigned responsibility for performing human resource functions.

**Exhibit 3-1
Human Resources Office Organizational Chart**



Source: Prince Edward County Public Schools, 2007.

Finding 3-1:

Sexual harassment and worker's compensation claims are managed by the support services director and the clerk of the board respectively. It is not known whether the individuals who are handling these issues routinely communicate with the director regarding case status or claim culmination. It is also not known how often these individuals receive training. Although the human resources director is accountable to the school board and the superintendent for the outcome of all claims, she has very little involvement in the process.

Conclusion 3-1:

With only one secretary assigned, the human resources director is responsible for most PECPS HR functions. The director has allocated some very significant HR functions to other administrators and staff, yet has retained some duties that may be considered less significant HR functions or not HR-related at all. Regardless of who is performing these functions, the human resources director is held accountable for the result. In the area of worker's compensation, there appears to be a very significant amount of workload in terms of the number of claims on recent record. Refer to Exhibit 3-2, below showing the results of a recent *Workers Compensation Safety* study, prepared by BB&T Insurance Services, Inc, March 17, 2007.

**Exhibit 3-2
Worker's Compensation Safety**

\$ Incurred	Loss date	Description of Accident/injury
\$138	8/23/2004	Handling or carrying material - cut hand
-	8/31/2004	Handling or carrying material - injured wrist
\$202	9/2/2004	Slipped on floor
-	9/15/2004	Struck by foreign object - leg
-	9/29/2004	Struck by another employee
\$75	10/21/2004	Contacted or bumped knee

\$ Incurred	Loss date	Description of Accident/injury
\$27	2/4/2005	Slipped on ice
-	2/23/2005	Tripped
-	3/2/2005	Slipped on ice
\$62	3/8/2005	Struck by - NOC
-	4/11/2005	Slipped on floor - laceration head
-	5/23/2005	Auto accident
\$496	6/1/2005	Carrying or handling object
\$12,069	8/12/2005	Fell on floor
\$40	9/2/2005	Slipped on floor - knee
-	10/7/2005	Slipped on floor - knees
\$1,468	10/12/2006	Struck by - toe
\$113	10/25/2005	Struck by another employee
-	10/31/2005	Carrying or handling material sprain back
\$695	11/7/2005	Carrying or handling material laceration
\$3,922	11/9/2005	Lifted material and hurt back
\$1,288	2/20/2006	Slipped on floor
\$286	2/27/2006	Carrying or handling material - hand
\$90	3/7/2006	Caught in NOC
\$1,402	3/21/2006	Contacted, bumped NOC
\$270	3/24/2006	Tripped
-	3/28/2006	Struck by another employee
-	4/10/2006	Fell from ramp
\$140	5/4/2006	Struck by another employee
\$214	5/9/2006	Struck by material
\$11,811	5/12/2006	Bumped material -- fractured finger
\$752	7/17/2006	Carrying or handling object
\$78	8/17/2006	Employee struck by another employee
\$1,800	8/18/2006	Auto accident
\$130	8/23/2006	Carrying or handling object
-	8/31/2006	Slipped on floor
-	9/1/2006	Fell on floor
\$55	9/8/2006	Tripped on materials
\$75	10/3/2006	Struck by not otherwise classified
\$68	10/5/2006	Burns to chest
\$202	12/13/2006	Fell to floor
\$19,245	12/15/2006	Fell to floor
\$500	2/7/2007	Operated hand tool and sprained ankle
-	7/23/1998	Struck by another employee
\$54	8/18/1998	Spilled hot liquid, burn
-	9/10/1998	Fell on floor
\$855	10/6/1998	Fell on floor
\$65	10/22/1998	Employee pushed resulting in back strain
-	10/27/1998	Bumped knee
\$ 430	11/10/1998	Fell on floor
\$3,779	12/18/1998	Struck by another employee
-	1/8/1999	Slipped on Ice
\$70	3/15/1999	Struck by another employee
-	4/21/1999	Struck by another employee
-	4/27/1999	Struck by foreign object

\$ Incurred	Loss date	Description of Accident/injury
-	5/27/1999	Bee sting
\$12,674	8/17/1999	Handling material shoulder strain
\$290	1/21/2000	Lifted object
\$347	2/1/2000	Handling materials hand strain
\$16,052	3/14/2000	Handling materials back strain
\$923	7/17/2000	Lifted material
\$710	8/7/2000	Fell on floor
\$462	8/28/2000	Injured chest
\$109	10/9/2000	Fell on floor
\$1,603	11/1/2000	Slipped on material
\$60	11/15/2000	Exposed to chemicals - eyes inflamed
\$279	12/14/2000	Slipped on ice
\$353	12/18/2000	Struck by foreign object - hip
\$1,348	1/24/2001	Lifted material
\$251	5/8/2001	Tripped on foreign object
\$2,995	2/12/2002	Fell on floor
\$105	4/19/2002	Caught in - thumb
\$72	4/30/2002	Lifted material
\$38	5/10/2002	Tripped on platform
\$222	5/16/2002	Chemical burn to eye
\$311	5/24/2002	Bee sting
\$707	6/3/2002	Bumped leg
\$133	8/12/2002	Chemical burn to eye
\$166	8/28/2002	Struck by object hurt hand
\$509	11/5/2002	Lifting hurt back
\$16,100	12/7/2002	Slipped on ice
\$90	5/22/2003	Stepped on foreign object, punctured foot
\$19,771	7/17/2003	Slipped on floor
\$1,077	9/24/2003	Tripped on floor
\$1,013	11/12/2003	Slipped on floor
\$161	1/28/2004	Slipped on ice
\$502	3/16/2004	Slipped on floor
\$758	4/27/2004	Vehicle accident
\$831	5/3/2004	Struck by another employee
\$441	5/25/2004	Struck by foreign object - finger

Source: PECPS Human Resources Department, 2007.

Commendation 3-1:

Understanding the personnel resource limitations of the HR department, the director has delegated some HR functions to other individuals within PECPS departments who are believed to be competent to perform those duties.

Recommendation 3-1:

It is recommended that the director of HR re-evaluate current and projected workload to determine which routine functions can best be performed by either the secretary, the clerk of the board or other PECPS administrators in order to redirect more of the HR director's time and attention to some of the more critical functions including sexual harassment and worker's compensation.



Sexual harassment and worker's compensation are two areas of employment law that are often in flux and require a greater amount of knowledge and training. Furthermore, due to the sensitive nature of sexual harassment issues, it is imperative that the individuals handling these claims have a firm understanding of claimant rights and employer requirements. Those individuals, who are currently handling these issues, must be properly trained in each of the respective areas. These individuals must also routinely communicate with, update, and appraise the HR director regarding status, outcomes or culmination of claims.

It is recommended that the HR director manage these two HR functions, and delegate other less critical functions to others. However, if it is determined that these functions can be effectively and competently performed by others, it is imperative that these individuals receive training annually and establish and maintain close and regular communication with the director, who the school board ultimately holds accountable.

Since Recommendation 8-1 suggests moving the food services bookkeeper/secretary position to the finance department to perform the payroll function for the entire school division, the clerk of the board will have more time available to assist the human resources director with administrative functions performed by her department. It is recommended that the HR director utilize this individual's availability to perform more of the routine administrative HR functions required of her department. Such functions may include updating employee files/databases, preparing monthly reports, and reviewing and editing position descriptions.

3.B POLICIES AND PROCEDURES

PECPS has created a school board policy manual. The codification system used is that of the National School Boards Association and it is used with their permission. At the time of this review, the clerk of the board was in the process of updating this manual. PECPS' *School Board Policy Manual* is currently kept in hard copy with central office administrators. One additional copy of the manual is located at each of the three school campus libraries.

Within the PECPS web site, the human resources department maintains its own web page (<http://prince.va.schoolwebpages.com/education/dept/dept.php?sectionid=253>) on which it posts online job applications for professional, classified, substitute, and extra-curricular positions. It also provides links to health insurance information manuals from the current provider (Key Advantage 200 and 500 Plans, administered by Anthem under Virginia's Local Choice). Posted on the department's web page are copies of the teacher performance evaluation and administrative performance evaluation handbooks, as well as information and/or school policy on sexual harassment, family medical leave, the Virginia retirement system, and teacher education and licensure.

Finding 3-2:

Personnel files for all employees, excluding food service personnel, are kept in the human resources director's office. Some employee information (i.e., Transportation employee annual reviews and certifications, and food service personnel information) are not included in their HR personnel files.

Conclusion 3-2:

The PECPS human resources department is responsible for all personnel related functions for the entire school division. All documentation pertaining to each person employed by PECPS should be maintained and controlled in one centralized location. This assists the HR staff in ensuring



that all state and federal HR laws and certification requirements are met. Furthermore, keeping access to confidential employee information under the control of only those individuals trained to understand the importance of employee confidentiality and the repercussions of said confidentiality violations may protect PECPS from threat of potential litigation.

Recommendation 3-2:

It is recommended that PECPS keep all documented employee records, including correspondence, certifications, test results and documented disciplinary measures under the consolidated control of the human resources department.

Finding 3-3:

PECPS does not use any computer software programs for personnel management, including databases and reporting. All personnel reports and databases provided by or used by the human resources department are created by their staff.

Conclusion 3-3:

Communication between the human resources and the finance departments is sporadic, depending on the nature of the communications. Due to the lack of communication, especially as it pertains to employee time and payroll issues, there are many instances when both the human resources and the finance departments are creating and duplicating the same reports. Although acquiring software to produce certain employee data and forms will reduce the amount of time that the human resources director spends creating databases and generating reports and forms, it is also necessary to establish routine and structured communication between the two departments.

Recommendation 3-3:

PECPS should utilize human resources software that generates reports and creates databases from existing employee information, thereby reducing human resource personnel labor hours spent on such tedious tasks. It is further recommended that payroll and finance personnel communicate with human resources personnel prior to generating payroll and personnel-related reports, to determine whether these reports already exist.

Finding 3-4:

Each school campus has a copy of the faculty manual, as well as the administrative and teacher performance evaluation handbooks. These are posted on the school division web site and are also available to the staff electronically. During data collection, the review staff found that the individual non-instruction departments did not maintain nor compile written departmental policies and procedures manuals.

Conclusion 3-4:

The PECPS school board policy manual is kept in hard copy, at each of the school libraries. The faculty handbook is also kept in hard copy at each of the three schools. They are not, however, posted on the school web site. With the ease and availability of information through the use of the internet, it should be of little inconvenience to post each of these documents on an intranet site, where faculty and staff may have access to policy information without going through the lengthy and often difficult to navigate codification system found in the hard copy manuals.

As with the other non-instruction departments within the division, the human resources



department does not maintain any documented procedures. In the event of the director's sudden illness or departure, no other staff member has been trained to perform the director's functions. Should the department hire a replacement, that individual would spend a considerable amount of time "re-inventing the wheel" to create similar new procedures and processes to replace those undocumented procedures that are currently in place and being performed.

Recommendation 3-4:

It is recommended that PECPS post all school policies electronically to ensure that policy information may be easily accessed by all personnel. It is also recommended that the human resources staff initiate the documentation of all pertinent HR functions performed within the department. Furthermore, it is recommended that all departments within the PECPS do the same. This will facilitate more efficient turnover of jobs, whenever they might occur with short notice or in the event that a key member of a department suddenly leaves.

During the course of the interview process of this efficiency review, the review team was informed by the director of human resources that the school board's policy and procedures manual was under review. The superintendent intends to post the new manual on the PECPS web site no later than July 2007.

Finding 3-5:

Directors of non-instructional departments do not perform annual performance reviews and evaluations of their respective staff. Teacher performance evaluations and administrative performance evaluations are being accomplished and handbooks for these evaluations are clearly posted on the human resources page of the PECPS website. Annual evaluation forms for non-teaching staff and employees, including bus drivers, custodial staff, food service staff, maintenance, security and other staff (such as including psychologists, social workers and nurses) within its workforce have not been developed and evaluations are not being performed for these employees.

Conclusion 3-5:

Routine performance evaluations are beneficial in ensuring that every employee is performing to the standards set within their job description. The teacher evaluation process, in compliance with VDOE evaluation guidelines, accommodates the needs of probationary teachers, veteran teachers, and those teachers (veteran or new) requiring improvement. The process provides for teacher self-assessment and goal setting, collecting data to measure growth and improvement, and evaluation of teacher performance within VDOE's *Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers, Administrators, and Superintendents* in compliance with criteria found in sections 22.1-295 and 22.1-303 of the Code of Virginia.

Performance evaluations are a valuable management tool that should be utilized for all job positions to ensure that individual job performance (ranging from exceptional to less than satisfactory) is well-documented, any disciplinary measures taken by administrators are well-justified, and that all employees receive objectively structured feedback and adequate training on their job performance. Failure to execute performance reviews and complete annual evaluations on all employees diminishes the ability of the directors of individual departments to effectively manage staff and often leads to and fosters a complacent and inefficient work environment. It should be noted that results from a human resources survey completed as part of this review, indicate that there is no consensus among staff members as to whether the workloads are equitably distributed among teachers and among staff members at PECPS.



Recommendation 3-5:

It is recommended that human resources assign each department head the task of creating an HR approved evaluation form, weighing all duties performed according to significance. Sample evaluation forms may be easily obtained from some of the larger Virginia school division HR offices. Evaluation handbook information for these non-teaching positions needs to be developed and posted on the human resources web page.

3.C RECRUITMENT, HIRING AND RETENTION

Recruiting, hiring, and retaining highly qualified staff at all levels of the division's operations, particularly classroom teachers, is often a challenging task. Yet, highly qualified and experienced staff can positively impact productivity and student performance.

Finding 3-6:

The human resources director, principals, department directors, and food services supervisor are responsible for, or involved with, the recruiting and hiring of teaching and non-teaching staff, compensation, mentoring, and enforcing HR policies and laws such as the American With Disabilities Act (ADA) and Equal Employment Opportunity (EEO).

The recruitment process begins when one of the principals of a respective school or a director identifies or generates a requirement for a new hire position or replacement position, which is forwarded to the superintendent. The superintendent then must obtain approval from the school board. Once approval is received, the personnel/HR secretary generates teaching or non-teaching job advertisements that are then placed via the technology department on the school division web site. PECPS also advertises teaching jobs through the Virginia Press Association for hard to fill positions.

The human resources director also accesses such sites as the VDOE "Job Opportunities in Virginia Education" web site (<http://www.pen.k12.va.us/VDOE/JOVE/home.shtml>), the "Teachers-Teachers" web site (<http://www.teachers-teachers.com/>), and the Teachers@Work National Educators Employment Network web site (<http://www.teachersatwork.com/>). "Troops to Teacher" (<http://www.troopstoteacher.com/>) is also a useful recruitment site. Additional recruitment efforts are initiated via "local community word of mouth" and interaction with the nearby college campuses, including Longwood College, University of Virginia, University of Richmond and Virginia Commonwealth University.

Department heads, principals, and teaching staff participate in local, state, and national job and university recruitment fairs, many of which are announced on the Virginia Department of Education web site (<http://www.pen.k12.va.us/>). During the 2006-2007 school year PECPS administrators and faculty participated in seven different college/university teacher recruitment job fairs, shown in Exhibit 3-3, (four of which were Historically Black Colleges and Universities) and national and international recruitment trips.



Exhibit 3-3
PECPS College Campus Recruiting Visits (2006-2007)

College/University	Event	Date
Saint Paul's College Lawrenceville, VA	Career Day	November 9, 2006
Radford University Christiansburg, VA	Education Career Fair	January 25, 2007
N.C. A&T State University Greensboro, NC	Education Expo	February 1, 2007
Longwood University Farmville, VA	Education Recruit Day	March 16, 2007
Richmond Convention Center Richmond, VA	Great VA Teach-In	March 17, 2007
Elizabeth City State University Elizabeth City, NC	Teacher Job Fair	March 22, 2007
Virginia Union University Richmond, VA	Spring 2007 Career Fair	March 27, 2007

Source: PECPS Human Resources Department, 2007.

Upon receipt of job inquiries via personal contact, e-mail, telephone, or receipt of job application/ resume, the HR secretary reviews the candidate- resumes then forwards them to the principals/superintendent for preliminary interviews and selection. Once a candidate is selected, the HR secretary performs fingerprinting and processes/forwards background check/fingerprinting forms to FBI via the Virginia State Police for investigation.

Conclusion 3-6:

Most teacher recruitment is accomplished via the Virginia Department of Education web site or the Teacher-to-Teacher web site. Additional recruitment occurs on the campuses of Virginia institutions of higher education.

PECPS has several excellent recruiting partner prospects due to its close proximity to many universities with campuses located only minutes away. Included are Longwood University (located locally in Farmville), Virginia Commonwealth University (located in Richmond), Virginia Union University (located in Richmond), the University of Richmond, and Virginia State University (located in Petersburg). PECPS' unique location opens doors to several obvious opportunities to establish and sustain long-term "Teacher-Scholar" partnership programs with several of these campuses. The colleges, their students, and PECPS would benefit through promoting learning and sharing of resources among undergraduate teacher scholars, college faculty, PECPS K-12 teachers, and their students. Partnership activities, including mentoring programs, would help attract undergraduate students as prospective teachers, facilitate sharing of resources that could benefit both the college and the school division, and ultimately help perpetuate a long lasting partnering relationship.

A partnership program would most benefit the undergraduate teacher-scholar by providing the opportunity to gain first hand teaching experience and knowledge in a public school learning environment, thereby enabling undergraduate students, who are weighing several career options, to gain exposure to some of the personal rewards and positive benefits of a teaching career. One of the obvious goals of the program would be to establish a training pipeline to attract new entry-level teachers while possibly reducing the number of salaried teacher assistant positions needed within the school system. Undergraduate student teachers may discover their gift for teaching through a positive partnering experience and choose to pursue a teaching career.

Recommendation 3-6:

It is recommended that PECPS establish on-going and structured “Teacher-Scholar Partnership” programs with several of the nearby liberal arts colleges. These programs could promote civic engagement of local college students and graduates via community service, summer work-for-stipend, or semester work-for-college-credit programs. With a relatively small financial commitment, participating colleges/universities could provide hands-on leadership and learning opportunities for a few of its undergraduate students while significantly benefiting this relatively small school division through enhanced student learning opportunities by augmenting teacher assistants in each classroom. The school division could also leverage funds from other possible key local funding sources by developing partnerships for grant projects. Incentives for recruiting undergraduate teacher partners may include monetary stipends, independent-study academic credit, work-study allocation, or fulfillment of service-learning and/or community service college graduation requirements.

Finding 3-7:

PECPS experiences a significant number of job turnovers/resignations in any given year for teachers, administrative staff, and other classified personnel. In exit interviews with the teachers who left PECPS between 2004-2005, 2005-2006 and 2006-2007, salary was cited as one of the reasons for leaving. There are a substantial number of job turnovers due to relocation of a spouse and family/personal reasons, which appear to be more prevalent reasons for leaving.

Conclusion 3-7:

Even if salaries were increased to levels found in larger school divisions, PECPS would continue to experience a substantial turnover as a result of two categories (relocation and family/personal), which proved to be more prevalent reasons for leaving. The Prince Edward County School Board is aware of the complexity of salary issues and has made a conscious effort to keep salaries at a more competitive level with other Virginia school divisions including those in its neighboring area. Salary increases for teachers have averaged about four percent per year over the past three years.

Annual teacher recruitment costs are generally offset through the savings generated during the first year by hiring new teachers at lower (entry-level) starting salaries than they had been compensating the higher tenured teaching staff they replace.

Recommendation 3-7:

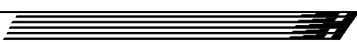
It is recommended that PECPS continue to ensure that they offer appropriate compensation to its teachers, helping to acquire, and keep qualified personnel. Caution should be used to ensure that the quality of teaching does not suffer. As previously stated, approximately 25 percent of the students attending PECPS require some form of special education. Providing highly qualified, experienced and committed instructors is an important element needed to transition children out of special education classrooms.

Finding 3-8:

While minorities comprise the large majority of the student population, in comparison, minorities comprise a disproportionately smaller percent of the instructional faculty.

Conclusion 3-8:

Although the total minority teacher-pupil ratio is very encouraging, the number of well-qualified



minority teachers recruited by PECPS' HR staff using conventional methods of recruitment (postings of position availability both online and in newspapers, attending college recruitment fairs, particularly at historically black colleges and universities, and city and state-wide job fairs) was relatively low.

A perceived lack of interest in a PECPS teaching career by perspective minority teachers may be the result of a large variety of reasons; however, it is the opinion of the HR director that PECPS' rural setting plays a large role in not being able to attract the interest of potential recruits (particularly in the hard-to-fill math, science and foreign language subject areas).

In an attempt to increase minority recruitment, especially in the hard-to-fill areas, the PECPS human resources department has started an initiative to recruit from outside of the country. There are currently two commonly used organizations for international teacher recruiting. They are Visiting International Faculty (VIF) and Green Life Care International (Green Life).

VIF is the United States' largest international exchange program for U.S. schools and teachers worldwide. It provides schools with qualified international teachers certified to teach a variety of subjects. Partnering with VIF gives schools access to the best international teachers, as well as a partner dedicated to providing thorough support. In addition to sharing their culture, VIF teachers teach the required curriculum and are expected to deliver results in the classroom. VIF recruits teachers from over 50 different nations. All teachers are thoroughly assessed during the application process and are required to be fluent in English and have the experience required to be certified in the U.S. under No Child Left Behind standards. Only one out of seven teachers who apply are accepted into the program as a result of VIF's highly selective criteria. There is an annual fee of \$12,000 that each school must pay to participate in the program.

Green Life, a Philippine based organization, is very similar to VIF, in that teachers from various nations are recruited to provide instruction in the United States. These instructors are qualified and certified to teach according to the No Child Left Behind standards. As with VIF, the school has an opportunity to interview an applicant by either web cam, telephone, or in person. Green Life pays all expenses incurred during the hiring process. Therefore, there is no cost to the recruiting school.

Commendation 3-8:

PECPS is commended for utilizing all avenues available to ensure that children are provided the opportunity to learn from a very diverse faculty.

Recommendation 3-8:

It is recommended that PECPS continue to utilize the Green Life organization to procure their international faculty. During interviews with the human resources director, it was made known that some students found it difficult to understand some of the teachers who were visiting faculty under the international programs. The administration should take particular care during the interview process to ensure that communication will not be an issue for the students and the teachers that it hires.

Fiscal Impact: By recruiting through Green Life, versus the VIF international exchange program, the school division saves \$12,000.00 annually.

Finding 3-9:

The PECPS human resources department posts job openings in the *Richmond Times-Dispatch*



and *The Farmville Herald*. For the *Richmond Times Dispatch*, (four lines, eight days for a cost of \$130.75). *The Farmville Herald* ads cost \$114 for the same number of days. For hard to fill positions, an ad is usually placed through the *Virginia Press Association*, which places the ad in 80 different newspapers across Virginia (25 words for \$250) or 118 news publications throughout the country (for a cost of \$300).

Conclusion 3-9:

The traditional recruiting method of placing classified employment ads in the local papers has provided a limited response. However, placing the ads through the *Virginia Press Association* has provided a greater venue to express the division's employment needs. Due to its use, employees from other states have been routinely interviewed and hired.

Commendation 3-9:

The PECPS human resources department is commended for finding a cost effective means of marketing their job openings throughout the state and the country. Additionally, PECPS should continue to advertise through the various teacher job sites and postings through college/university administrative offices.

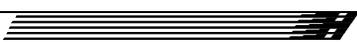
Recommendation 3-9:

It is recommended that PECPS add a section to the job application forms for prospective employees to indicate how they found out about the job opening at PECPS and what other newspapers, advertisements, web sites, etc. they look at or used to seek job opportunities. This information will assist in targeting recruitment expenses in those areas that are more successful.

Finding 3-10:

A mentoring program is offered to the instructors who are new to teaching (possessing zero to three years experience), as well as those experienced teachers who are new to the division. Understanding that a large number of the individuals leaving the division were new to the division, the division created a more extensive mentoring program based on the Path Wise model provided by the Virginia Department of Education. The mentoring program coordinator, which had been a part-time position, has become a full-time position. In the past three school years, two coordinators have been hired and have subsequently left. The most recent coordinator's departure occurred in February of the 2006-2007 school year. The director of instruction performed the coordinator's job functions during the remainder of the school year. An individual has recently been hired by the division to act as the coordinator of special programs. This position will be responsible for the coordination of the mentoring program during the 2007-2008 school year.

During the beginning of a school year, orientation materials and handbooks are provided to new teachers. Mentors selected for the program are experienced instructors who are preferably in the same field of instruction and located within the same building as the new hire. During the beginning of the school year, there are weekly formal meetings attended by all of the mentors and new hires. After several months into the school year, through the month of February, the meetings are held monthly. Various topics are discussed during these meetings to ensure that all new teachers are familiar with procedures and issues that are pressing. The new hire and his or her mentor often meet informally, as often as daily, to discuss issues that arise and ways to resolve them. Usually, an end-of-the-year meeting is held when the participants of the program provide feedback and identify areas of strengths and weaknesses. Refreshments are served to



celebrate the completion of the mentoring program. Although feedback was provided this year prior to the departure of the coordinator, a year-end celebration did not take place. There are no formal mentoring programs for other non-instructional or teacher support personnel.

Conclusion 3-10:

Teaching in a new school division, or in a public school classroom for the first time, is an exciting and extremely challenging time for teachers. Mentoring programs for new teachers and teachers new to a particular school division can help those individuals faced with that challenge. New teachers are able to rely on the expertise of knowledgeable veteran faculty to provide in-classroom and technical training. According to the Department of Education, research suggests school divisions that provide effective support are likely to develop teachers who remain on the job longer and improve student academic performance.

Nationally, 9.3 percent of public school teachers leave before they complete their first year and nearly 30 percent leave the profession within 5 years of entry. Rural communities, such as those divisions found in the PECPS peer group, generally experience higher rates of attrition. Mentoring new teachers is extremely important in order to retain highly qualified teachers in rural divisions, especially for those hard-to-fill areas of instruction.

In the 2005 Teacher's Conditions survey administered by the PECPS human resources department and the survey recently administered to PECPS by the review team, administrative support was not adequately provided at PECPS. In fact, many of those surveyed believed that PECPS' teaching staff does not receive adequate support from administration. Aside from assigning mentors to new faculty, division administrators and school administration should further assist new teachers with answering questions and addressing new concerns as they emerge. Administrators need to provide new teachers with the opportunity to express their concerns by making themselves available and easily accessible, such as through an open door policy.

Recommendation 3-10:

It is recommended that the division provide mentoring programs to all new teachers and their support staff. PECPS should consider adjusting the formal mentoring meeting times or frequency to ensure that adequate time is spent and the appropriate amount of information is disseminated. Furthermore, it is recommended that the mentoring process continue after February of each year. PECPS' administration should follow up with mentors to ensure that they remain in sufficient contact with their new teachers throughout the entire year. It is further recommended that the campus administration and the human resources department make routine bi-monthly contact with all new hires to ensure that they are adjusting to their jobs and are provided with adequate support from their mentors and others throughout the division community.

Finding 3-11:

The Prince Edward County Middle School is unable to retain its principal and physical science teachers. The school has had five principals in the last five years. Currently, the division is performing recruiting activities to find a replacement for the current principal. The starting salary for the Prince Edward County Middle School principal position is \$66,205. Within its comparative cluster group, starting salaries for a middle school principal are \$49,217 at Lunenburg, \$58,075 at Cumberland, \$59,239 at Charlotte, and \$64,428 at Nottoway.

According to the human resources director, there were no middle school physical science teachers during the beginning of the year. One of these positions was filled in March and the other position will be filled by the beginning of the 2007-2008 school year. Physical science questions are included in the Standards of Learning (SOL) examinations. The Prince Edward County Middle School is currently not accredited under due to its SOL performance. Additionally, there exist underlying student behavior and security issues impeding the capacity of teachers to teach and students to learn (refer to "Parent reviews of Prince Edward Middle School" posted online at <http://www.greatschools.net/modperl/parents/va/1330>).

Conclusion 3-11:

PECPS has experienced an excessively high middle school teacher turnover rate and cannot retain its principals, even by offering the highest starting salaries within its cluster group. This is a clear indicator of a failing school system that money alone will not solve. When questioned by the review team, many of the division administrators and faculty believe that the principal and teachers are burdened with an excessive amount of pressure toward improving the schools Standard of Learning test results. This is further exacerbated by the lack of discipline and their inability to control adverse behavior within the middle school and its classrooms. The middle school also is comprised of 5th graders due to overcrowding of the Elementary School. Existing problems will ultimately "snowball" as the 5th graders prematurely gain unwanted exposure to those types of adverse behavior issues seldom found in elementary schools.

Additionally, there is a consensus among those administrators interviewed/surveyed by review team members that they feel there is a general lack of support from the administration, both within the individual school campuses and at the division's central office as is evidenced by the limited ability of teachers within the three schools to make necessary purchases and provide much needed instructional technology that would enable them to perform their jobs successfully.

Typically, there are many factors that contribute to poor middle school performance. Middle-school students, especially, are at a crucial level in development. These students are in the midst of adolescence and are often consumed in dealing with social and developmental issues, along with school. In addressing these problems, the issue of accountability often becomes the center stage of focus and can slide into a blaming exercise, diverting attention from mapping a clear path to achieving a successful outcome. Teachers blame the lack of preparation by students, the apathy of parents, or their principal. Principals blame their teaching staff, lack of support from the central office staff, or even the superintendent. Superintendents may blame principals, teachers, parents, or higher levels of government (VDOE, Federal No Child Left Behind, etc.). These problems have clearly been in the eyes of the public for some time and need no excuses or rationalization for their continuation within PECPS. Ultimately there needs to be a solution involving specific actions to take and specific milestones to achieve and measure progress.

The middle school requires a high level of attention, central office focus, and a reallocation of a substantial amount of the division's resources to include, but not be limited to, management/leadership attention and central office administrative support, teachers and teacher assistant training, assignment of all seventh and eighth-grade students to student advisors responsible for continually reviewing and advising students on behavior and school performance issues, and providing additional and sufficient security staff on site to detain and process students exhibiting adverse and/or disruptive behavior.



Recommendation 3-11:

It is recommended that PECPS provide the middle school principal the additional central office divisional support, backing, and resources needed to initiate policies and procedures that will bring about positive changes. Revisions to student conduct and dress codes need to be made to strictly define and establish limits on acceptable language and behavior, and limit unwanted/provocative/group-associated attire including shirts with logos. It is recommended that administrators review the Norfolk Academy web site (http://www.norfolkacademy.org/documents/na_essential_info.pdf) for their online “Essential Information” student handbook which addresses dress codes, etc. as an example of how to define what is acceptable versus what is not acceptable. These dress and conduct codes should be posted on the schools’ web sites and included on school posters and parent newsletters. Then, PECPS needs to back the policies up with zero tolerance and 100 percent enforcement by security personnel, staff, and teachers—detaining student offenders, notifying parents, and seeking the help of and involvement of parents in finding solutions.

It is further recommended that the central office administration meet with each school’s administration and faculty to discuss those key issues that they feel are impeding the instructional process. After these issues are addressed and a plan of action is identified, it is suggested that a progress report be made by both the campus administrators and faculty to the director of instruction and discussed with the human resources director and superintendent.

3.D EMPLOYEE COMPENSATION AND CLASSIFICATION SYSTEMS**Finding 3-12:**

According to the Department of Education’s 2006-2007 Salary Survey, the statewide FY 2005 actual average teacher salary was \$45,377. The statewide FY 2006 actual average teacher salary was \$47,248. The FY 2007 budgeted average teacher salary average is \$49,252. PECPS’ and other peer division average teacher salaries are listed in Exhibit 3-4.

Exhibit 3-4**Teacher and School Administration Salaries****Excerpt Taken From the Department of Education 2006-2007 Salary Survey****(as reported by school divisions on the 2005-2006 Annual School Report to VDOE)**

School Division	FY 2005 Actual Average Teacher Salary	FY 2006 Actual Average Teacher Salary	Budgeted Average Teacher Salary	FY 2006 to FY 2007 Percent Increase/(Decrease)
Charlotte County	\$37,634	\$39,042	\$39,538	1.27
Cumberland County	\$38,477	\$39,380	\$41,661	5.79
Lunenburg County	\$38,331	\$40,309	\$43,592	8.14
Nottoway County	\$37,925	\$40,033	\$38,783	(3.22)
Prince Edward County	\$40,126	\$41,459	\$43,532	5.00
Sussex County	\$42,687	\$44,115	\$46,196	4.72

Source: Virginia Department of Education web site, 2007.

The statewide FY 2005 actual average principal salary was \$80,562. The statewide FY 2006 actual average principal salary was \$82,903. The FY 2007 budgeted average principal salary is \$86,409. The PECPS and other peer division average principal salaries are listed in Exhibit 3-5.



Exhibit 3-5
School Principal Salaries
Excerpt Taken From the Department of Education 2006-2007 Salary Survey
(As reported by school divisions on the 2005-2006 Annual School Report to VDOE)

School Division	FY 2005 Actual Average Principal Salaries	FY 2006 Actual Average Principal Salaries	Budgeted FY 2007 Average Principal Salaries	FY 2006 to FY 2007 Percent Increase/(Decrease)
Charlotte County	\$57,551	\$59,871	\$62,715	4.75
Cumberland County	\$37,319	\$68,070	\$69,664	2.34
Lunenburg County	\$62,393	\$65,417	\$70,650	8.00
Nottoway County	\$61,200	\$65,868	\$69,479	5.48
Prince Edward County	\$67,089	\$71,470	\$71,600	.018
Sussex County	\$73,171	\$78,262	\$82,269	5.12

Source: Virginia Department of Education web site, 2007.

The statewide FY 2005 actual average assistant principal salary was \$65,794. The statewide FY 2006 actual average assistant principal salary was \$67,984. The FY 2007 budgeted average assistant principal salary is \$71,680. The PECPS and peer division average assistant principal salaries are listed in Exhibit 3-6.

Exhibit 3-6
Assistant Principal Salaries
Excerpt Taken From the Department of Education 2006-2007 Salary Survey
(As reported by school divisions on the 2005-2006 Annual School Report to VDOE)

School Division	FY 2005 Actual Average Assistant Principal Salaries	FY 2006 Actual Average Assistant Principal Salaries	Budgeted FY 2007 Average Assistant Principal Salaries	FY 2006 to FY 2007 Percent Increase/(Decrease)
Charlotte County	\$48,510	\$47,529	\$50,469	6.19
Cumberland County	\$52,786	\$55,082	\$54,182	(1.66)
Lunenburg County	\$59,558	\$61,440	\$67,434	9.76
Nottoway County	\$57,208	\$63,145	\$65,504	3.74
Prince Edward County	\$56,287	\$58,400	\$60,610	3.78
Sussex County	\$68,510	\$73,442	\$73,748	0.42

Source: Virginia Department of Education web site, 2007.

Conclusion 3-12:

A large majority of the PECPS employees interviewed believed that they were receiving the appropriate rate of pay for their job position. This response was common throughout the division, and was voiced by instructional, non-instructional, administration and support staff, alike. Upon analysis of the peer salary scales, it was concluded that the Prince Edward County Public Schools division provides a competitive salary and benefits package to their full-time employees.

Commendation 3-12:

PECPS is commended for providing a competitive salary to employees throughout the division.



Recommendation 3-12:

It is recommended that PECPS consider offering signing bonuses in order to attract and recruit qualified teachers for hard to fill subjects, such as physical sciences.

Finding 3-13:

PECPS provides additional monetary compensation in the form of stipends for the additional time that some teachers devote beyond normal hours to school-sponsored sports programs and extracurricular activities. These sports programs and activities, and the dollar amount of the stipend associated with each are detailed in the Attachment 3-A located at the end of the chapter.

Conclusion 3-13:

PECPS paid out \$148,364 towards extra-curricular contracts/stipends during the 2006-2007 school year. This is a normal practice that is consistent with other Virginia school divisions.

Recommendation 3-13:

It is recommended that PECPS continue to monetarily reward those who devote extra time after normal school hours toward sports and other school-sponsored activities.

Finding 3-14:

The PECPS job descriptions manual is missing job descriptions for some of its positions, to include the current food service payroll/accounts payable staff, food service assistant manager, and substitute bus driver positions.

Conclusion 3-14:

When interviewed by the HR director, it was brought to the review staff's attention that the food service department is treated as a separate entity, managed and operating completely independent of PECPS' central office oversight. Although food service departments are typically treated as a self-supporting entity, all persons employed by PECPS are employees of the school division and must be held to the same standards and expectations. It is very difficult to measure any employee's performance when neither the employee nor the administration has a job description as a guide.

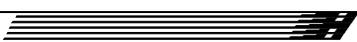
Although it is the PECPS human resources director's standard practice to review each job description annually and prior to posting an opening in that job classification, a complete re-evaluation of all job descriptions by department has not been routinely performed. This is a necessary procedure to ensure that the job descriptions manual is complete and accurate at all times.

Recommendation 3-14:

It is recommended that human resources request all administrators to review the job descriptions of all personnel assigned to their respective departments for accuracy and completeness, according to the Federal Fair Labor Standards Act (FLSA) every year.

Finding 3-15:

PECPS currently takes advantage of the Local Choice Health Plan to meet their employee health insurance needs. Local Choice is a program offered through the Virginia Department of Human Resource Management in which the state administers an optional health insurance program for local government employees. In this instance, PECPS employees have access to the same



provider network and provider discounts offered through the state employee health insurance plan. Many of Virginia's school divisions take advantage of Local Choice. The average premium cost for family coverage is \$1,150 per month for the "Key Advantage 200" plan and \$1,021 for the "Key Advantage 500" plan offered through Local Choice. PECPS's costs for the Local Choice health benefits are shown in Exhibit 3-8, below.

Exhibit 3-8
Local Choice Health Plan Rates 2007-2008

Type of Plan	Total Monthly Premium (x 12 Months)	School Board Pays Monthly (x 12 Months)	Employee Pays Monthly (x 12 Months)
Key Advantage 200 - Single	\$426.00	\$340.80	\$85.20
Key Advantage 200 - Dual	\$788.00	\$413.20	\$374.80
Key Advantage 200 - Family	\$1,150.00	\$485.60	\$664.40
Key Advantage 200 - Family (with husband & wife employed)	\$1,150.00	\$741.20	\$408.80
Key Advantage 500 - Single	\$378.00	\$302.40	\$75.60
Key Advantage 500 - Dual	\$699.00	\$366.60	\$332.40
Key Advantage 500 - Family	\$1,021.00	\$431.00	\$590.00
Key Advantage 500 - Family (with husband & wife employed)	\$1,021.00	\$657.80	\$363.20

Source: PECPS Human Resources Department, 2007.

Conclusion 3-15:

Unlike larger school divisions who employ a greater number of individuals participating in their health plans and pay a lower premium based on their number of participants, PECPS needs to explore ways to combine/leverage their health benefits plan with those of other neighboring counties/school divisions. Although it is difficult to compare health insurance plans with the many different variations among them, PECPS should investigate the possibility of achieving more favorable premiums through a consortium arrangement with other divisions within their region. A more favorable health insurance premium through a group coverage (versus coverage just for PECPS) is likely given the current premium resulting from the high number of injuries experienced by PECPS employees (refer to Exhibit 3-3 showing the results of a recent workers compensation safety study, prepared by BB&T Insurance Services, Inc, March 17, 2007) suggesting a higher than average health care utilization rate. Higher utilization rates translate into higher health care insurance premiums. The challenge in achieving a lower rate may be in finding a willing partner that may also realize cost savings.

Recommendation 3-15:

It is recommended that PECPS continue with the worker's compensation feasibility study, which may lead to lower health care insurance premiums through the leverage made available with a group purchase. If a group purchase in conjunction with other school divisions is not successful, PECPS should consider joining forces with the other Prince Edward county government health insurance plans to achieve any economies of scale that may be available. Finally, it is recommended that PECPS conduct annual reviews of its health care plan and premiums as a prudent measure given the significant impact of the cost of health plan premiums to both the division's operating budget and the individual employees.

Finding 3-16:

When questioned, PECPS administrative staff generally agreed that:

- there were adequate facilities in which to conduct their work;



- sufficient staff development opportunities are provided by the division for its teachers;
- work standards and expectations are equal to or above those of most other divisions; and
- PECPS employees receive annual personnel evaluations.

Conclusion 3-16:

The above finding does not correspond with the responses provided by non-administrative personnel. For example, in a 2005 teacher survey administered by the PECPS human resources department, a large number of teachers expressed a need for fewer meetings and demands placed on their time. Annual evaluations are not currently performed on non-instructional staff and there is a general dissatisfaction regarding the communication between the division administration and its employees.

Recommendation 3-16:

It is recommended that PECPS perform annual employee satisfaction surveys of instructional staff, non-instructional staff, and other employees as needed to identify employee concerns and areas needing improvement.



Attachment 3-A
Extra-Curricular Contracts/Stipends Paid during the 2006-2007 School Year

Academic/Sport Activity	Level	Amount
Activity Run	ACTRUN	\$3,312.00
Head Indoor Track	E3-29	\$2,970.00
Assistant Football	E3-26	\$2,970.00
Head Outdoor Track	E3-26	\$2,970.00
Lead Teacher	Technology	\$1,500.00
Assistant Volleyball	E2-2	\$1,655.00
Head Boy's Tennis	E2-8	\$1,975.00
Head Swimming	E3-0	\$2,125.00
Head Fall Cheerleading	E3-24	\$2,970.00
Head Winter Cheerleading	E3-24	\$2,970.00
Assistant Swimming	E2-1	\$1,655.00
Head Cross Country	E1-13	\$1,835.00
ACE Team/Challenge 23	E1-2	\$1,415.00
Public Relations	10MOE	\$5,700.00
165 hours	10MOE	\$3,178.00
Head Football Coach	E4-10	\$3,380.00
Assistant Boy's Basketball	E1-3	\$1,415.00
ACE Team/Challenge 23	E1-0	\$1,415.00
Assistant Football Coach	E3-16	\$2,745.00
Assistant Girl's Basketball	E1-3	\$1,415.00
Assistant Softball	E2-2	\$1,655.00
Assistant Baseball	E2-0	\$1,655.00
Activity Run	ACTRUN	\$3,312.00
Assistant Volleyball Coach	E2-2	\$1,655.00
Literary Magazine	E1-2	\$1,415.00
SCA	E1-0	\$1,415.00
Assistant Baseball	E2-1	\$1,655.00
Assistant Football Coach	E3-3	\$2,125.00
Assistant Baseball	E1-4	\$1,535.00
PECMS Band After School	E3-5	\$2,300.00
Assistant Football Coach	E3-7	\$2,300.00
Head Girl's Basketball	E3-8	\$2,540.00
Head Boy's Soccer	E3-17	\$2,970.00
Head Girl's Soccer	E3-7	\$2,300.00
Head Volleyball Coach	E3-17	\$2,970.00
Head Softball Coach	E3-8	\$2,540.00
Yearbook Advisor	E4-17	\$3,960.00
Creative Writing	E1-18	\$1,835.00
Band Director	E4-1	\$2,830.00

Academic/Sport Activity	Level	Amount
Assistant Softball Coach	E2-3	\$1,655.00
330 hours	10MOE	\$8,712.00
Head Forensics	E2-4	\$1,790.00
Drama - Fall	E1-4	\$1,535.00
Drama - Spring	E1-4	\$1,535.00
Head Boy's Basketball	E3-25	\$2,970.00
Head Girl's Tennis	E2-18	\$2,320.00
Assistant Girl's Soccer Coach	E2-1	\$1,655.00
Assistant Football Coach	E3-3	\$2,125.00
Competition Cheerleading	E3-4	\$2,300.00
Assistant Girl's Basketball	E1-0	\$1,415.00
Head Golf Coach	E2-1	\$1,655.00
Head Baseball Coach	E3-4	\$2,300.00
Assistant Football Coach	E3-2	\$2,125.00
Assistant Outdoor Track	E1-1	\$1,415.00
Assistant Fall Cheerleading	E2-0	\$1,655.00
Newspaper Advisor	E3-1	\$2,125.00
Assistant Indoor Track	E1-0	\$1,415.00
Assistant Outdoor Track	E1-0	\$1,415.00
Assistant Baseball Coach	E2-0	\$1,655.00
Assistant Winter Cheerleading	E2-6	\$1,790.00
Assistant Softball	E2-6	\$1,790.00
Head JV Softball	E3-0	\$2,125.00
330 hours	10MOE	\$6,350.00
TOTAL:		\$148,364.00

Source: PECPS Human Resources Department, 2007.

4. Facilities Use and Management



4. FACILITIES USE AND MANAGEMENT

This chapter presents the review of facilities use and management in Prince Edward County Public Schools (PECPS). The sub-sections in this chapter are:

- 4.A Management and Organization
- 4.B Plans, Policies and Procedures
- 4.C Maintenance Operations
- 4.D Custodial Operations
- 4.E Energy Management

Facility planning and management of construction and renovation projects are significant activities for most divisions. Planning for facilities based on student growth, programmatic needs, aging facilities, and legislative requirements are essential to provide for student needs without overcrowding, use of substandard facilities, or use of costly portable alternatives. Active management of construction and maintenance projects and procedures can provide cost control, ensure quality of workmanship, and help ensure timely completion and facility operations. Facilities also must be maintained and cleaned on a routine basis to ensure a safe and healthy environment for students, teachers, and staff.

INTRODUCTION

Facilities use and management for Prince Edward County Public Schools is the primary responsibility of the director of support services and the maintenance supervisor. The director reports to the superintendent, and the maintenance supervisor reports to the director. All school buildings and ancillary facilities are well maintained and clean. No neglect or deferred maintenance was in evidence on any of the facilities.

Exhibit 4-1 contains a listing of the school building current in use.

**Exhibit 4-1
School Facilities
Square Footage, Age of Buildings
2006-2007 School Year**

School	Square Footage	Age of Building
Prince Edward County Elementary School		
Building A	9,108	1969-70
Building B	9,108	1970-71
Building C	8,580	1972-73
Building D	8,580	1973-74
Building E	9,108	1973-74
Building F	9,108	1974-75
Building G & Renovations	16,137	1980-81
Additional Construction	49,000	1994-95
Building H	6,400	1978-79
Additional Restrooms (G-Building)	512	2007
Prince Edward County Middle School		
Phase I	20,000	1981-82
Phase II	19,000	1987-88
Phase III	36,000	1991-92
Phase IV	15,450	1994-95

Additional Construction	7,360	2000-01
Prince Edward County High School		
Original Building	71,600	1952-54
Greenhouse	1,120	Fall 1975
East Wing & Other	13,200	1977-78
Career Center	33,456	1977-78
Field House	1,800	1987-88
Library & Renovations	4,500	1997-98
Press Box	300	2006-07
Career Center Additional Construction	9,360	2006-07
Bus Garage	11,170	1994-95
Board of Education Building	5,160	1981-82
Maintenance Building	7,500	1998-99
Education Center	1,480	Pre 1970
Grand Total	384,097	

Source: Prince Edward County Public Schools, 2007.

A comparison of the disbursements for operation and maintenance and facilities among the peer school divisions for the past three school years is shown in Exhibit 4-2 through Exhibit 4-4. These figures for operation and maintenance represent expenditures incurred to keep grounds, buildings, and equipment safe for use and in effective working condition. The figures for facilities represents facilities-related expenditures including acquiring land and buildings, remodeling and constructing buildings, initially installing or extending service systems and other built-in equipment, and improving sites. For each school year, disbursements are shown on an average per student amount for operation and maintenance services, total disbursements per student, and the percentage that the operation and maintenance services comprise of the total disbursements for the entire school division.

As shown in these charts, Prince Edward County Public Schools consistently have the lowest or one of the lowest operation and maintenance services disbursements on a per student basis and as a percentage of total disbursements. These figures support the position that PECPS is doing a good job of keeping their costs down when it comes to maintaining and operating their facilities. This is a reflection of the management of these functions as well as the types of facilities, the ages of facilities, number of students, and centralized school locations.

**Exhibit 4-2
Disbursements by Division
FY 2006**

School Division	Avg. No. of Students	Operations and Maintenance Services	Avg. per Student	Facilities	Total Disbursements	Total Disbursements per Student	Percent Operations/Maintenance of Total Disbursements
Charlotte County	2,297.66	\$2,503,611	\$1,090	\$ 23,400	\$ 19,762,392	\$ 8,601	12.67%
Cumberland County	1,499.22	\$2,083,162	\$1,389	\$200,000	\$ 16,168,169	\$10,784	12.88%
Lunenburg County	1,774.26	\$1,206,377	\$ 680	\$ 13,428	\$ 17,521,761	\$ 9,876	6.89%
Nottoway County	2,369.02	\$4,617,946	\$1,949	\$ 590	\$ 23,660,031	\$ 9,987	19.52%
Prince Edward County	2,728.80	\$1,861,183	\$ 682	\$491,922	\$ 25,717,814	\$ 9,425	7.24%
Sussex County	1,399.63	\$1,846,771	\$1,319	\$ 2,775	\$ 18,045,367	\$12,893	10.23%
Peer Division Average	2,011.43	\$2,353,175	\$1,169	\$122,019	\$ 20,145,922	\$10,016	11.68%

Source: Virginia Department of Education web site, 2007.

**Exhibit 4-3
Disbursements by Division
FY 2005**

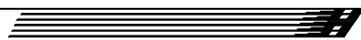
School Division	Avg. No. of Students	Operations and Maintenance Services	Avg. per Student	Facilities	Total Disbursements	Total Disbursements per Student	Percent Operations/Maintenance of Total Disbursements
Charlotte County	2,272.91	\$ 2,384,947	\$1,049	\$ 0	\$18,617,953	\$ 8,191	12.81%
Cumberland County	1,471.27	\$ 1,638,939	\$1,114	\$ 0	\$14,425,606	\$ 9,805	11.36%
Lunenburg County	1,772.12	\$ 1,292,326	\$ 729	\$172,626	\$16,166,634	\$ 9,123	7.99%
Nottoway County	2,418.11	\$ 2,637,898	\$1,091	\$ 34,906	\$22,287,837	\$ 9,217	11.84%
Prince Edward County	2,744.98	\$ 1,640,664	\$ 598	\$400,433	\$24,089,489	\$ 8,776	6.81%
Sussex County	1,368.25	\$ 1,814,412	\$1,326	\$342,943	\$17,035,562	\$12,451	10.65%
Peer Division Average	2,007.94	\$ 1,901,531	\$ 947	\$158,485	\$18,770,514	\$ 9,348	10.13%

Source: Virginia Department of Education web site, 2007.

Exhibit 4-4
Disbursements by Division
FY 2004

School Division	Avg. no. of Students	Operations and Maintenance Services	Avg. per Student	Facilities	Total Disbursements	Total Disbursements per Student	Percent Operations/Maintenance of Total Disbursements
Charlotte County	2,186.58	\$ 2,129,981	\$ 974	\$ 93	\$ 17,632,188	\$ 8,064	12.08%
Cumberland County	1,336.75	\$ 1,915,602	\$1,433	\$ 0	\$ 12,925,272	\$ 9,669	14.82%
Lunenburg County	1,697.84	\$ 1,090,025	\$ 642	\$ 110,113	\$ 14,835,360	\$ 8,738	7.35%
Nottoway County	2,313.49	\$ 1,641,921	\$ 710	\$1,788,917	\$ 20,120,215	\$ 8,697	8.16%
Prince Edward County	2,739.30	\$ 1,657,641	\$ 605	\$ 270,064	\$ 22,076,361	\$ 8,059	7.51%
Sussex County	1,354.02	\$ 1,705,094	\$1,259	\$ 282,875	\$ 15,453,905	\$11,413	11.03%
Peer Division Average	1,938.00	\$ 1,690,044	\$ 872	\$ 408,677	\$ 17,173,884	\$ 8,862	9.84%

Source: Virginia Department of Education web site, 2007.



We have compared in Exhibit 4-5 the number of positions reported as supporting/providing operations and maintenance services for the different peer divisions. PECPS has the largest number of total positions among the peer divisions, as well as the largest student body. When expressing the staffing for operations and maintenance services on a person student basis, PECPS has the second highest amount of staffing at 11.36 positions per 1,000 students, and is significantly higher (about 26 percent) than the peer division average.

Exhibit 4-5
Administrative, Service, and Support Personnel
Operations and Maintenance Services
Positions by Function
2005-2006 School Year

School Division	Avg. No. of Students	Administrative	Technical & Clerical	Other Professional	Trades, Operative & Service	Total Positions	No. of Positions per 1,000 Students
Charlotte County	2,297.66	0.00	1.00	0	9.00	10.00	4.35
Cumberland County	1,499.22	0.00	0.50	0	6.08	6.58	4.39
Lunenburg County	1,774.26	0.50	0.50	0	15.32	16.32	9.20
Nottoway County	2,369.02	0.08	1.00	0	23.49	24.57	10.37
Prince Edward County	2,728.80	2.00	0.00	0	29.00	31.00	11.36
Sussex County	1,399.63	0.35	0.58	0	19.00	19.93	14.24
Peer Division Average	2,011.43	0.49	0.60	0	16.98	18.07	8.98

Source: Virginia Department of Education web site, 2007.

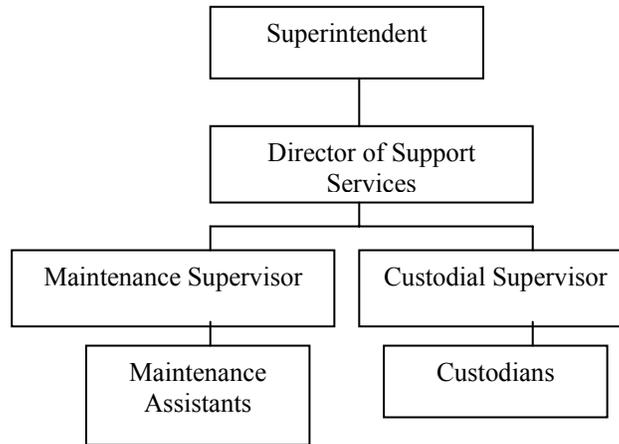
4.A MANAGEMENT AND ORGANIZATION

The facilities management program in the division should be assessed from a global perspective including both the management of construction and maintenance functions, which can be extremely different. Yet, despite the different skill sets and priorities within each area, construction and maintenance functions must be coordinated to ensure that facilities meet the needs of the staff and students who occupy those facilities. Facilities represent significant capital investments and proper management can preserve and enhance the value of the division's investments. Facilities management and construction can be extremely expensive and wasteful if not properly managed. The differences between facilities construction management and facilities maintenance management must be identified and distinguished.

As a best practice, all aspects of facilities planning, design, construction, maintenance, and custodial activities should be under one single supervisory position. Exhibit 4-6 shows this supervisory position in PECPS to be the director of support services, who reports directly to the superintendent.

The PECPS maintenance department is responsible for the operation and maintenance of the four schools (elementary, middle, high, and career tech), one administrative complex, one maintenance/bus shop, and several miscellaneous buildings. The total gross square footage is 384,097, as shown in Exhibit 4-1.

Exhibit 4-6
Facilities Organizational Structure for
Prince Edward County Public Schools



Source: Prince Edward County Public Schools, 2007.

The director of support services is responsible for the overall supervision of the following support services:

- Custodians;
- Food Service;
- Pupil Transportation; and
- Maintenance (to include grounds maintenance).

As a part of this role, he:

- Coordinates the use, care, and security of the buildings and campus.
- Recommends to the Board who applies to use the building.
- Coordinates Safety and Energy Conservation programs, to include:
 - Safety Audits;
 - Crisis Management plans;
 - Blood Borne Pathogens training; and
 - Schedules TB tests and flu shots.
- Is responsible for the capital improvement plan.

The maintenance supervisor provides daily, hands-on supervision for facilities maintenance, grounds maintenance, and energy management. He also is responsible for ordering/receiving supplies for his shop, third-party vendors performing work on the facilities, regulatory compliance, staff training, and related safety. The custodial supervisor provides daily hands-on supervision for custodial supplies and equipment, central office custodial services, management of the custodial staff, and management of the substitute custodian pool. The custodial supervisor also works part of the day in the maintenance shop.

Finding 4-1:

The current organizational structure for facilities within the PECPS shows a best practice organization. All of the following facilities-related functions are organizationally directly under

the director of support services:

- Capital improvement plan;
- Facilities maintenance;
- Grounds maintenance; and
- Custodial services.

We do not see any conflicting bottom line goals with this arrangement. The achievement of the lowest overall total cost of construction, utilities, maintenance, and cleaning over the life of all facilities owned and operated by the Prince Edward County Public Schools is a key objective. By focusing on the total life-cycle cost the overall financial health of the division benefits.

Conclusion 4-1:

Coordination of these related goals for both short- and long-term objectives is important to PECPS and to the county who will receive good value for their tax dollars.

Commendation 4-1:

Prince Edward County Public Schools is commended for its organization of all facilities functions under a single, prominent school district administrator to achieve optimum ownership and operational costs.

Finding 4-2:

PECPS has a best practice organization for both its maintenance and its custodial staff. Maintenance assistants/technicians are assigned work within their skill levels, their work is organized both by type of work and location (to reduce travel time), and they also perform the grounds maintenance work, allowing for optimal scheduling.

The full-time, day shift custodians are assigned to specific schools and develop a relationship directly with their respective principals. At the same time, the custodians report to the custodial supervisor who provides staff training, coordinates the distribution of custodial supplies and equipment, and arranges for the assignment of substitute custodians.

Conclusion 4-2:

It is important to understand and recognize the specific skill level and capabilities of the workforce. Likewise, when staffing levels and work levels permit, assignment of individuals to specific locations helps to develop a sense of ownership by that individual.

Commendation 4-2:

Prince Edward County Public Schools is commended for its best practice organization of its maintenance and custodial staff.

4.B PLANS, POLICIES, AND PROCEDURES

Effective management is built upon sound planning practices. The school board adopts policies governing the division's facility operations, as well as policies that are directed at other programs but have an indirect impact on the facilities operation. Procedures show division employees how to carry out the policies in their various functional areas. Taken together, planning is reinforced through well-documented policies and procedures.



Finding 4-3:

There is no written maintenance or custodial procedure manual. For several of the operations, individuals do know certain procedures that are to be followed. These are daily functions performed by all of the department employees; however, these procedures are either not written or if they are written, they are not assembled together in a single document.

Conclusion 4-3:

A well-developed policy and procedures manual ensures that all department employees understand and are held to the same requirements while performing job functions. When the maintenance or custodial supervisors are on extended leave, there is no one available who knows how to perform the duties required to continue the maintenance or custodial operations in an efficient manner. Furthermore, in the event of sudden turnover or key personnel incapacity, the department may cease to function efficiently because there are no written instructions to follow or procedures that are easily accessible.

The usefulness of such procedures would also apply to other staff members when they are required to substitute for or assist in areas different from their normal duties, such as a custodian temporarily working in a different building.

The development of policies and procedures constitutes the means by which an organization can communicate its expectations to others. In addition, adopting policies and establishing related procedures provide the mechanisms for:

- Establishing the school board's expectations and what may be expected from the board,
- Keeping the board and administration out of legal issues,
- Establishing an essential division between policy-making and administrative roles,
- Creating guidelines within which the staff operates,
- Providing reasonable assurances of consistency and continuity in decisions,
- Providing a legal basis for the allocation of funds, facilities, and other resources,
- Facilitating and guiding the orientation of school board members and employees, and
- Acquainting the public with and encouraging citizen involvement within structured guidelines.

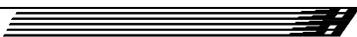
Policies and procedures, therefore, reveal the philosophy and position of a school board and should be stated clearly enough to provide for executive or staff direction.

Recommendation 4-3:

It is recommended that PECPS create both a maintenance and a custodial procedure manual. These manuals should be kept in a central location made easily accessible to those who may need them and posted on the school's web site for direct access. For custodians, a checklist and basic procedures can be posted in the appropriate custodial closets.

Finding 4-4:

PECPS, like many older school divisions, has a variety of buildings in its inventory that were constructed or renovated at different times. Typically, these buildings contain many different types of interior finish materials and equipment. This variety requires maintaining numerous different repair or replacement items, including, but not limited to:



- Floor and ceiling tiles;
- Light fixtures, light bulbs, and fluorescent tubes;
- Plumbing fixtures; and
- Mechanical equipment.

Conclusion 4-4:

In addition to the requirement for a varied inventory to address the many different types of repair and replacement items, two other factors associated with buildings that have different types of interior finish materials and equipment influence cost: (1) maintenance staff and custodians must spend extra time to learn to work with many different items, and (2) the school division cannot save money by buying many items in bulk.

Recommendation 4-4:

It is recommended that PECPS standardize the variety of equipment and materials in future capital planning projects and construction (new construction, additions, and renovations) efforts.

As new buildings are constructed and existing ones are renovated, PECPS should strive to ask its architects to create a narrow list of equipment and materials. This action should be taken especially in the following areas:

- Interior finish materials should be limited to a small number of types, patterns, and colors. Included are floor, wall and ceiling finishes, and perhaps door hardware and keying systems. This simplifies repairs, and keeps the number of replacement parts under control. In addition, it reduces the number of tools and chemicals needed to clean them.
- Light fixtures should be standardized to not more than four different types. This action makes it easier for electricians to know the various fixtures, requires fewer replacement lamp or bulb types to be kept on hand. In addition, preventive maintenance schedules can be simplified.
- Plumbing fixtures should be standardized as much as possible, preferably to one flush valve, one or two sets of faucets, etc. This action makes it easier for plumbers to know the various fixtures, and requires fewer types of replacement parts. In addition, preventive maintenance schedules can be simplified.
- Boilers, chillers, and other HVAC equipment should be standardized as much as possible so that maintenance mechanics can know the equipment more easily, and preventive maintenance schedules can be simplified.

This recommendation will not have a major fiscal impact. Rather, it will streamline operations. The savings impact achieved by this recommendation will be gradual, as greater uniformity is achieved.

Finding 4-5:

During discussions and interviews with numerous PECPS staff members, it was mentioned on several occasions that there are an extraordinary number of school keys that have either been issued or duplicated. It was even inferred that individuals not associated directly with the school possess keys to building on the campus.



Conclusion 4-5:

Excess key distribution or possession is very costly to PECPS. First, many individuals who use their key (obtained legitimately or not) to enter buildings after hours will make adjustments to the thermostats to make the space comfortable to them during their visit, often circumventing the pre-set temperature selected to conserve energy. When those individuals leave the building space, they forget to re-set the thermostats or often do not turn off the lights. This leads to an increase in utility costs. Second, with so many keys issued, re-keying becomes an expensive task. A controlled key plan would limit access to keys, and consequently, the number of keys required, reducing the costs of periodic re-keying. Third, an inordinate amount of outstanding keys creates a potential liability for the school where normally unauthorized individuals might injure themselves during access to the school. Fourth, the safety of authorized individuals is compromised when there is no control of keys. Keys could fall into the hands of persons who wish to cause harm to others. All in all, only authorized persons should have access to the school buildings. All others should plan ahead and request permission to be issued a key on an as-needed and temporary basis.

Recommendation 4-5:

It is recommended that PECPS develop a strong, yet fair, key control plan. Such a plan will instill a sense of protection for the facilities and reduce unauthorized access. Opportunities for improper use of facilities will be reduced and a decrease in energy costs will also be realized. Also, by limiting the number of keys available, it forces other persons desiring access to the school to contact an authorized individual, who can then determine whether access should be granted. That person can also be responsible for ensuring that thermostats are set back to their proper temperature and lights have been turned-off. The key control plan can also be a part of the risk management plan for PECPS. (For certain buildings, PECPS may want to consider an alarm system requiring users to use cipher locks and keypads to gain entrance. These systems provide good control plus an audit trail of which person's code was used to gain entrance.)

The following points should be emphasized, at a minimum, in any resulting key control plan:

What is key control?

Key control is an organized and formal security system that addresses control of keys within a building or facility. Key control prevents unauthorized access using documentation management and status reporting of critical elements in the master key system.

The critical elements of facilities security are:

- Physical keys (either issued keys or stored keys)
- Key holders
- Physical locations
- Information on the products used in a location

Important key control questions you should know the answers to:

- What is your keying system(s)?
- What keys do you have?
- What keys have you issued?
- What keys are not accounted for?
- Where are the keys?



- Who has them?
- Where did they go?
- Can I account for all my keys?

Developing a key control plan

Security starts with a key control plan. PECPS can use the outline below to develop and implement their own key control plan.

Developing a plan: Gain support and approval

- **Examine your facility's approach to key systems control:**
 - Is key control understood by all?
 - Senior administration must support the system.
 - Define policies on issue and collection of keys.
 - Define the current level of record keeping.
 - Who's responsible for key control?
 - Who's accountable?
- **Organize documentation and gather information:**
 - Document existing keying system(s) data.
 - Determine the accuracy of keys inventory.
 - Perform a site survey:
 - identify buildings, floors,
 - door/opening,
 - hardware, and
 - keying identity.
 - Identify current key holders and their keys.
- **Develop policies on controlling the keying systems:**
 - Who or what area will be responsible?
 - Formalize policies governing the key systems.
 - What level and amount of information is needed?
 - Signatures authorization procedures.
 - Issuing keys.
 - Collecting keys.

Finding 4-6:

The maintenance department has no inventory system. When asked how they know what equipment and tools the shop has, our staff was told that they keep the operators/owners manual together in a drawer of all equipment purchased. There was no single list including all of the equipment/tools that had been purchased or other items that should be on-hand for their shop. It was mentioned that in the past someone from finance would conduct a physical inventory of the larger valued items for insurance purposes.

Conclusion 4-6:

The lack of an inventory system is a consistent finding mentioned in many of the other areas of the review. It appears that the knowledge of what a shop has or is supposed to have rests with individual memory, and there is no written documentation or inventory. Equally important,

PECPS does not keep a list of capital assets that can be used to compare to any physical inventory counts that might be conducted periodically. Also, no one is specifically assigned responsibility for the assets that they have in their control or that are a part of their department or shop. Without such a system, there is no way of knowing in detail what equipment and tools the shop has at any given time, without assigning an individual(s) to do a physical count (taking them away from other duties) and trying to reconcile that list to what they think they should have. Inventory control is very important, especially when the dollar values of the assets are fairly large, such as in the maintenance department.

Recommendation 4-6:

It is recommended that PECPS implement an inventory system for the maintenance department. Such an inventory system should require periodic physical counts of the tools and equipment assigned to that shop. The physical counts should be reconciled to the list of capital assets provided by the finance department and to the purchase orders of other supplies purchased during the period. Ideally, the maintenance department should have in its possession a list of tools/equipment and supplies that it can refer to at any one time. An inventory system such as this can be analyzed and used to evaluate the usage of certain items for determining problems (e.g., an inordinate amount of fluorescent tubes being used during a certain period) and to identify theft. It also will reduce the possibility of a stock outage.

Finding 4-7:

PECPS does not have a board policy that governs the rental of facilities. There is a process in place for arranging for facility rentals, but it is not written (other than a standard form to request use of the facilities). These procedures are not contained in the present school board policy manual.

Conclusion 4-7:

School divisions have arrangements that permit community use of facilities to ensure that taxpayers and student support organizations are able to effectively and efficiently utilize those facilities. Schools typically adopt policies governing the use of facilities and approve fee schedules designed to recover direct costs such as custodial services and utilities.

Charging individuals or organizations for the use of school facilities is an opportunity for the division to offset the additional energy costs incurred for use during non-school hours. It is a reasonable expectation that those who wish to rent facilities help share the costs for using the facility.

Recommendation 4-7:

It is recommended that PECPS adopt a school board policy that governs the rental of school facilities. Minimally, such a policy should contain the following components:

- Specification of the types of groups that may use the facilities;
- Fees charged for use of the facilities;
- Liability requirements;
- Responsibilities of the organizations for the care and maintenance of the facilities during use, including clean up; and
- Applicable rules and policies governing the activities conducted in the facilities.

The implementation of this recommendation should result in a clearer communication of board and community expectations for facility-rental matters and create a policy that is protected from the political process.

This would also permit the division to re-examine the cost currently being charged for facility rental in light of actual expenditures. The school board needs to balance its desire to serve the community with the need to recover costs for facility rental.

Attachment 4-A at the end of this chapter shows an excerpt from Chesterfield County Public Schools' board policy with these and additional components. Some content has been modified to reflect its use for Prince Edward County Public Schools.

4.C MAINTENANCE OPERATIONS

Maintenance operations in Virginia school divisions generally include repair and renovation services, equipment installation, grounds care, custodial functions, and control and oversight of regulatory compliance issues. Efficient maintenance programs provide routine maintenance and preventive and emergency maintenance services for all school facilities along with maintaining regulator compliance programs and training. The range of services provided may vary from minor tasks such as hanging chalkboards to more skilled tasks such as replacement of plumbing or electrical fixtures. Staffing patterns may include skilled artisans as well as general and grounds maintenance personnel. Custodial services usually include cleaning services, minor maintenance functions, and performing special tasks as assigned by the building staff.

Maintenance protects the investment made in facilities. If the facilities were constructed with materials and systems that are easy and inexpensive to maintain, then true life-cycle costing was practiced. If a sufficient maintenance workforce has been hired to complete all work orders in a timely manner and with a minimal backlog, then the buildings can last and perform satisfactorily for decades.

Maintenance operations consist of service calls, preventive maintenance, and small projects. The workers in the maintenance department at PECPS maintain the facilities and the grounds and split their time accordingly.

A service call type system is currently being used for in-house operations. However all work is not captured into a useable system. Documentation is being created, using Track-IT. This does not capture the maintenance trade of the call or the man-hours and materials/supplies actually used to complete the call.

Preventive maintenance (PM) is also being performed on a routine basis. There is no formal documentation, however, of the in-house PM being performed. PM includes tasks such as changing filters, oiling motors, etc.

The in-house workforce also performs many small projects. Some examples are: painting, constructing handicap ramps, roofing of storage buildings, and grounds improvement projects. Examples of the in-house maintenance work consists of the following:

Routine Maintenance Tasks

- Check HVAC filters;
- Oil electric motors and pumps;
- Check all mechanical HVAC equipment;

- Clean and check gas burners;
- Transmit maintenance request forms to the maintenance supervisor and perform necessary work (includes lights, plumbing, minor electrical, carpentry, and safety repairs);
- Maintain landscape daily by cutting grass and picking up leaves based on the seasons; and
- Central office tasks.

Non-routine Maintenance Tasks

- Repair roofing and shingles;
- Form and finish concrete driveways and sidewalks;
- Hang and finish interior sheet rock;
- Repair lawnmower;
- Landscape grounds (trenches, drain pipe, topsoil);
- Perform minor tractor repairs;
- Perform snow removal;
- Report emergencies and facility damage (water leaks, carpet extractor, parking lots etc.); and
- Conduct general pest control and turf pest control (routine pest control services is contracted-out).

Summer Maintenance Tasks

- Paint classrooms, hallways, cafeterias, offices, gyms, playground equipment etc.;
- Test and check water outlets for leaks and/or damage;
- Check light fixtures and electrical outlets;
- Clean HVAC equipment and change filters;
- Sow grass seed and maintain athletic facilities;
- Clean rooftops;
- Obtain maintenance list from principals;
- Replace playground mulch; and
- Perform daily grass cutting.

The above information constitutes the beginning of an annual maintenance plan, but no historical quantities are available in sufficient detail for creating a detailed annual plan that can be based on. It has been said “If you can’t measure it, you can’t improve it.”

Ideally, the maintenance management system should capture historical workload data (with equipment costs and labor hours expended), maintain equipment history, provide PM work schedules, provide service call work schedules, provide and maintain project work orders (if applicable), and include a mechanism that allows for efficient scheduling of the workload.

In addition to the work that is performed by the in-house staff, an analysis of services purchased from outside vendors (contracts and services) was performed. Expenditures for the school years 2005-2006 and 2006-2007 (to May 2007) are shown in Exhibit 4-7:

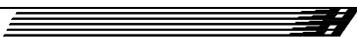


Exhibit 4-7
Expenditures for Maintenance Contracts and Services

Vendor	2005-2006	2006-2007 (to May 2007)
Dodson Brothers Exterminating	\$ 3,690.00	\$ 2,966.00
Arena Trucking Co.	\$ 12,290.00	\$ 10,000.00
GCS Service		\$ 1,410.33
Power and Heat Systems	\$ 170.00	\$ 2,288.00
Phelps Locksmith Service	\$ 257.75	\$ 3,477.24
Facility Partners of VA, LLC		\$ 200.00
Wallace-Day		\$ 2,760.00
Stiff Septic Service		\$ 1,070.00
Hudson-Payne Electronics	\$ 3,952.88	\$ 3,503.56
Otis Elevator	\$ 1,398.98	
RJA Fire Extinguisher	\$ 222.00	\$ 983.00
Thompson's Fire Extinguisher	\$ 395.00	\$ 516.06
J. King Deshozo	\$ 10,702.89	
Pearson Equipment	\$ 55.00	
Orkin Pest Control	\$ 408.40	\$ 267.28
Arcet Equipment Company	\$ 110.00	
Amelia Overhead Doors		\$ 548.60
Creative Electrical Contractors	\$ 540.00	
Andrews, Large and Whidden	\$ 405.00	
McQuay International	\$ 33,097.00	
Thompson's Electric Motor Service	\$ 90.00	
Suburban Propane	\$ 59.59	
Doli/Boiler Safety-Powers-Taylor Building	\$ 40.00	
Sprint, Inc./Embarq	\$ 6,751.50	
Total	\$ 74,635.99	\$ 31,995.15

As a part of the data collection, it was requested that the PECPS staff complete a survey that was designed to solicit input regarding several areas addressed by this review. When responding to the following statement, "Schools are well-maintained," all respondents *agree* or *strongly agree*. In responses to "Repairs are made in a timely manner," 82 percent *agree* or *strongly agree* and 18 percent *disagree*. All respondents indicated that they felt "Emergency maintenance is handled promptly." Exhibit 4-8 shows the responses of the survey related to maintenance operations.

Exhibit 4-8
Administrators and Teachers Survey Results on Maintenance Issues

Survey Question	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Schools have adequate safety equipment		100%			
Schools have sufficient space and facilities to support instructional programs		64%		36%	
Schools are structurally well-maintained	18%	82%			
Repairs are made in a timely manner	9%	73%		18%	
Emergency maintenance is handled promptly.	18%	82%			

An efficient and effective maintenance operation for a school district requires well-defined structures and processes, which include:

- Adequate information to plan and manage daily maintenance operations;
- An efficient work order system that enables maintenance staff to respond to repair requests from schools and district facilities;
- A proactive preventive maintenance system that ensures maintenance staff regularly services equipment to minimize down time; and
- Mechanisms to monitor maintenance service levels and obtain periodic feedback regarding maintenance functions that need improvement.

Finding 4-8:

Although the crew of maintenance assistants at PECPS is composed of highly dedicated troubleshooters, they lack certain skill sets particularly in the area of HVAC. The maintenance supervisor possesses detailed knowledge and experience in various areas, including HVAC.

Conclusion 4-8:

Currently, five maintenance staff members (not including the supervisor) are assigned to facilities with a gross square footage of 384,097, a ratio of one mechanic per 76,819 square feet. This approximates the APPA standard of 85,000 square feet per mechanic. Recently, one of these five positions was vacated. The individuals filling the positions are not journeyman level maintenance mechanics. Rather, they have various levels of general knowledge in different areas of maintenance. Currently, there is no staff member who has a strong background in heating, air conditioning, and ventilation (HVAC), except for the supervisor. As a result, the supervisor is required to review each HVAC-type work order, start the staff on the job, and periodically check on the status during the day. This can be very inefficient and disruptive for the supervisor. (Also, there are certain HVAC functions [related to the handling and use of refrigerant] that only the supervisor can perform by law.) By filling one of the five maintenance positions with a certified HVAC person, the supervisor can delegate work orders to that person and can focus on other issues of a managerial nature.

Recommendation 4-8:

PECPS should advertise for and hire a maintenance staff member certified in HVAC to fill the vacant position. Human resources should develop an appropriate position description and salary range, with input from the maintenance supervisor. An additional benefit of filling the vacant position is that costs associated with potential overtime (associated with a reduced staff) would be minimized or avoided.

An alternative to hiring an individual who already possesses this knowledge and/or experience would be to train one of the existing staff members. Human resources would need to assist with the development of the training requirements, methods of obtaining such training, and a suitable time frame to acquire this knowledge. Additional consideration should also be given to the long-term obligations that an individual would have to PECPS once the training is completed.

Finding 4-9:

PECPS has recently purchased and installed Track-IT to serve as the automated work order processing software. In the several months that Track-IT has been used as a work order system for the maintenance department, users and “customers” have commented about the ease of use of the system and the confirmation it provides that work orders have been received and completed. However, since the software has been put to use, its capabilities have not been fully explored. For example, historical information is not analyzed and detailed data related to the completion of the work order is not annotated (material costs, labor hours).

Exhibit 4-9 shows the number of work orders for facilities maintenance that have been issued through the Track-IT work order system. As illustrated by the exhibit information, the number of work orders issued through the system has increased since the system was first used in November 2006.

Exhibit 4-9
Work Orders for Maintenance Shop

Month	No. of Work Orders
November 2006	1
December 2006	11
January 2007	44
February 2007	52
March 2007	103
April 2007	42

Conclusion 4-9:

The use of automated work order software is an appropriate management tool at PECPS. Without the software, the identification of work would be more cumbersome and the compilation of data would be very difficult to obtain, resulting in little or no analysis of available data to evaluate in improving operations. With the software, each person has become significantly more capable to handle the tasks as they arise.

An automated work order management program offers significant advantages, including:

- Superior record-keeping for the scheduling of personnel for maintenance calls, the timely ordering of required parts and tools, and the coordination with outside maintenance contractors, as may be required.(Other items that can be monitored include work order cost and the speed of work order fulfillment.)
- Analysis of work order history, to determine the nature of the most frequent work orders, and the identification – and possible removal – of “weak spots” in the school facilities.
- Analysis of work order history, to forecast the types of maintenance jobs likely to arise. This information can be used to pre-order parts, or to develop a preventive maintenance schedule.

A sample preventive maintenance schedule from an automated work order management program is shown in Exhibit 4-10.

Exhibit 4-10
Sample Preventive Maintenance Schedule

Area	Component	Inspection and Repair 3-6 Month Intervals	Inspection and Repair Annually	Inspection and Repair 2-5 Year Intervals	Inspection and Replacement 7-10 Year Intervals	Inspection and Replacement 12-15 Years
Exterior	Roof					
	Roof Damage					
	Windows and Glass					
	Masonry					
	Foundations					
	Joints and Sealants					
Equipment	Belts and Filers					
	Motors and Fans					
	Pipes and Fittings					
	Ductwork					
	Electrical Controls					
	Heating Equipment					
	Air-Conditioning Equipment					
Interior	Doors and Hardware					
	Wall Finishes					
	Floor Finishes					
Site	Parking and Walks					
	Drainage					
	Landscaping					
	Play Equipment					

Use of the maintenance software in conjunction with a routine of scheduled maintenance would have the cumulative effect of reducing the number of work orders.

Recommendation 4-9:

It is recommended that PECPS continue with the use of Track-IT as the work order system, but should also institute a periodic process for reviewing and analyzing the historical workload in order to identify any possible trends that would require attention and/or correction. Additional data such as equipment, material costs, and labor hours/dollars should also be recorded to develop a more complete picture of the work effort performed.

4.D CUSTODIAL OPERATIONS

Safe, clean, and sanitary facilities are essential elements in today's educational environment. However, school systems can vary in how these functions are delivered. Typically, schools either outsource custodial and other services, or organize a comprehensive in-house system of services. Then, personnel may be employed by either the school or the outsource company. Management responsibility, if the program is totally in-house, may reside either partially or wholly with the central office or the individual school. The decision to determine the desired structure is usually based on a number of criteria, including minimizing costs to the school district, improving services to schools, and reducing the span of control of district or school administrators.

The buildings of any school division represent a substantial investment by the community and should be maintained in an orderly and sanitary condition. To this end, facilities should be staffed by a sufficient number of custodians with adequate supplies and be provided with modern equipment to keep the buildings in a clean and attractive state and achieve a high standard of cleanliness. Workloads should be reasonably balanced, and custodian responsibilities should be clearly outlined in both job descriptions and a list of daily, weekly, and monthly tasks, using established cleaning standards.

The age and condition of the buildings can make cleaning tasks more challenging for the custodial staff. Some custodial crews appear to be more knowledgeable in how to use the different chemicals and cleaning processes.

In response to the survey statement "Schools are clean," all responding administrators and teachers *strongly agree* or *agree*.

There are several suggestions for the amount of square feet to be assigned to a custodian, although there is no one single accepted standard. The following definition from the *Planning Guide for Maintaining School Facilities* (Association of School Business Officials, February 2003) describes several levels of support:

ESTABLISHING EXPECTATIONS FOR CUSTODIAL EFFORTS

Planners, administrators, and community members must agree on what constitutes "cleanliness." While there is not a nationwide standard for describing standards of cleanliness, a five-tiered system of expectations is emerging to help guide decision making:

Level 1 *cleaning results in a "spotless" building, as might normally be found in a hospital environment or corporate suite. At this level, a custodian with proper supplies and tools can clean approximately 10,000 to 11,000 square feet in an eight-hour period.*

Level 2 *cleaning is the uppermost standard for most school cleaning, and is generally reserved for restrooms, special education areas, kindergarten areas, or food service areas. A custodian can clean approximately 18,000 to 20,000 square feet in an eight-hour shift.*

Level 3 *cleaning is the norm for most school facilities. It is acceptable to most stakeholders and does not pose any health issues. A custodian can clean approximately 28,000 to 31,000 square feet in eight hours.*

Level 4 cleaning is not normally acceptable in a school environment. Classrooms would be cleaned every other day, carpets would be vacuumed every third day, and dusting would occur once a month. At this level, a custodian can clean 45,000 to 50,000 square feet in eight hours.

Level 5 cleaning can very rapidly lead to an unhealthy situation. Trash cans may be emptied and carpets vacuumed on a weekly basis. One custodian can clean 85,000 to 90,000 square feet in an eight-hour period.

The figures above are estimates. The actual number of square feet per shift a custodian can clean will depend on additional variables, including the type of flooring and wall covers.

In summary, there are several custodial standards that exist, a few of which are shown below:

Association of School Business Officials	28,000-31,000 square feet in eight hours (for normal service)
American School & University	25,173 square feet in eight hours
APPA	20,000 square feet in eight hours
Collaborative for High Performance Schools	20,000 square feet in eight hours

Finding 4-10:

A total of nine full-time and 21 part-time custodians (working three- or four-hour shifts) serve a gross square foot area in the schools of 358,787, for a ratio of approximately 18,399 square feet per custodian. This ratio is about eight percent below a commonly accepted standard of 20,000 square feet per FTE (see above). The approximate square feet per FTE assigned to custodians for the different schools is shown in Exhibit 4-11.

Exhibit 4-11 Existing Cleaning Requirements Summary 2006-07 School Year

School	Square Feet to Be Cleaned	Full-time Staff	Part-time Staff	Approximate Square Feet Per FTE
Elementary School	125,641	3	7	19,329
Middle School	97,810	3	7	15,048
High School	135,336	3	7	20,821

Source: Prince Edward County Public School, Office of Administrative Services, 2007

E.L. Hamm also conducted high intensity work sampling of several of the part-time custodial staff during our visit. The work sampling methodology consisted of making observations of workers performing their normal routine every two minutes. These individual observations were organized into three basic categories, which include:

- Direct Productive—work that is directly applicable to altering the composition, condition, or construction of the item or area being repaired or altered. Direct productive work varies from function to function.
- Indirect Productive—work which is necessary and renders service to the productive portion of the job, but does not alter the composition, condition, conformation, or construction of the product.

- Non-Productive—idle or personal time spent by the worker which does not contribute directly or indirectly to altering the composition, condition, conformation, or construction of the item or area being repaired or altered.

The work sampling methodology used is based on the binomial distribution—an individual is either directly productive or not directly productive. When the sample size becomes large, the bi-normal distribution approaches and eventually becomes the normal distribution. This provides a statistical method for the sample mean to be utilized for estimating the population mean. The overall results of the work sampling efforts for the part-time custodial staff are shown below:

- Direct Productive 74 percent (or 446 observations)
- Indirect Productive 1 percent (or 6 observations)
- Non-Productive 25 percent (or 148 observations)

As can be seen from the above figures, the productivity of the part-time custodial staff (74 percent) is below acceptable limits of 90 percent. There were several examples illustrating the reason for this, as discussed below:

- One part-time custodian was assigned an area in the middle school with a 4-hour timeframe for accomplishing their work. After approximately 2 hours and 15 minutes, having worked at a normal pace, that person turned to the observer and commented that all they do now is wait until their 4-hour shift is up so they can clock out. This meant that out of one 4-hour shift, over 40 percent of their time was spent not working.
- A custodian working in another building recorded a three hour shift for work that actually only took them one hour to complete.

We routinely observed staff performing custodial work during set shifts finishing in less time than the assigned amount of the shift, and then doing nothing while they waited for their shift to end so they could clock out through the computer. This waiting, or non-productive time, typically accounted for approximately 25 percent, or 45 minutes to one hour, of their total shift time.

Conclusion 4-10:

Prince Edward County Public Schools is staffing buildings above the recommended custodial staffing levels. The 35th *Annual Maintenance and Operations Report* from the April 2006 issue of the *American School & University* reports that the median amount of square feet maintained per custodian was 25,173. It should also be noted that certain buildings might have conditions that warrant a variance to this guideline.

Exhibit 4-11 depicts the number of custodians assigned to the buildings of Prince Edward County Public Schools and the square footage assigned for cleaning. The number of custodians is the same for each building as a result of past practices rather than through an application of a custodial staffing formula.

The fact that custodians can work unobserved creates an environment where they can be paid for time that is not spent working. It was fairly clear to our staff that workers felt entitled to the total amount of time of their shift even if they did not have work to do. The non-productive time for this type of work should be about 10 percent of the total shift (not the current 25 percent of the shift).

What is not clear is whether the level of cleanliness currently experienced by the schools is truly adequate. During our observations, our staff felt that the work performed by the custodians was acceptable. (We know too that certain functions, such as waxing the hallways, are only performed periodically and would require more time during a given shift.)

Recommendation 4-10:

The cost of custodial support can be reduced through any number of initiatives. First, these services could be contracted to a private firm. Assuming there are qualified, capable firms in the area interested in providing this type of support, all or a portion of the custodial effort could be solicited for bids. Contracting out would eliminate the work of hiring, paying, and managing the custodial staff, though the contracted work would still be administered and quality inspections performed. This could be a viable option if enough savings (10 percent or more) would be realized versus continuing performance with the in-house staff.

A second option for procuring custodial services would be to investigate contracting out the part-time afternoon/evening custodian staff. This would allow the school division to keep its full-time custodians (the ones assigned for day time custodial support to the individual schools). This option would also eliminate the need for a supervisor to be at the schools in the late afternoon/evening.

Another option is to reduce the size of the part-time custodial workforce. Based on our analysis, the entire staffing associated with the custodian effort needs to be reviewed. First, the assignment of space to be cleaned should be updated to reflect the standards of cleaning that are desired by PECPS. Balancing among the staff should result in a different number of custodians in the schools based upon the square footage. Next, specific checklists of work to be done, and their frequency, need to be provided to the worker. This list should be completed each day as work is performed. The supervisor can then spot check areas to ensure the work is satisfactory. Detailed standards or expectations in the amount of time to clean an area should be made clear to each custodian. These standards should be aggressive, but fair, in reflecting the level of service required. Lastly, based on these standards associated with the desired service level, the overall staffing needs to be adjusted.

Because the part-time custodians work a three- or four-hour shift, and given the fact they work in a specifically designated area (i.e., they do not travel among buildings currently), we suggest the part-time custodian staff be reduced so that direct productive time is approximately 90 percent. This would be accomplished by reducing non-productive time by 15 percent, or approximately three part-time custodians (15 percent of 21 part-time custodians *equals* 3.15 part-time custodians). Based on an estimated annual pay for a part-time custodian with four years of service of \$6,966, saving associated with a reduction in three part-time custodians would be approximately \$20,898 (\$6,966 *times* three). Because part-time custodians do not receive benefits, additional savings would extend only to PECPS' contribution for FICA, worker's compensation, and unemployment taxes, which is estimated at about 8 percent, for a total estimated savings of \$22,569.84 (\$20,898 *plus* eight percent). We also recommend that the total custodial staffing be reduced by one full-time staff to bring total staffing more in line with a standard of at least 20,000 square feet per FTE. The amount of savings realized by such a reduction is approximately \$ 19,116 (based on a salary of \$ 16,441 and fringe benefits of 16.27 percent).

Finding 4-11:

There are several workers who are full-time staff in one designated area (bus maintenance department, maintenance department) who also work as part-time custodians in the afternoon/evening. Because the total amount of hours worked during their full-time position and their part-time custodial work they are eligible for overtime.

Conclusion 4-11:

The labor pool in Prince Edward County is capable of providing an adequate number of custodians to work part-time without needing to use individuals who also work a full-time position for PECPS. The use of these individuals creates the potential for several problems. First, individuals working a full-time position for PECPS who also work part-time in another capacity are working more than 40 hours a week, which entitles them to overtime pay (at one and one half times the normal custodial rate). This premium in pay is an extra expense to PECPS. Second, the effectiveness of individuals who work a full eight-hour day, then work another part-time shift is compromised. An occasional requirement to work beyond the normal amount of work hours in a day can be accomplished without much reduction in employee output. But working an eight-hour shift along with another four-hour shift day after day, week after week, creates physical demands that ultimately affect a person's productivity, which shows up in either the amount of time it takes to accomplish a job, in the quality of the job, or both.

Recommendation 4-11:

It is recommended that PECPS discontinue the practice of using individuals who already work in a full-time position for PECPS to also work in a recurring or regular part-time position. Based upon an entry rate for part-time custodians of \$ 7.34 per hour, the overtime premium costs PECPS a minimum of \$ 3.67 per hour.

Based on a minimum three-hour, part-time custodian shift, an individual working full-time for PECPS and part-time as a custodian would work about 50 hours a week. With 10 of the hours subject to overtime, approximately \$ 1,468.00 could be saved per person per year (\$3.67/hour *times* 10 hours/week *times* 40 weeks). There are at least two individuals where this occurs; therefore, total estimated savings are \$ 2,936.00, or \$3,170.88 including FICA, worker's compensation, and unemployment taxes.

Finding 4-12:

The policy manual of the Prince Edward County School Board does not contain custodial standards and nowhere else could we find any standards maintained by PECPS for cleaning the different buildings. As a result, the buildings are not consistently cleaned at the level indicated by the staffing allocation.

Conclusion 4-12:

There are three major components of the time and task standards identified by the Association of Higher Education Facilities Officers or the APPA standards:

1. Appearance levels must be defined and described in some detail. (The APPA handbooks provide descriptions for five levels of cleanliness, as summarized in Exhibit 4-12.)
2. Standard spaces must be identified to ensure that the differences in the types of spaces and the cleaning effort required for those spaces are clearly distinguished. (The APPA

handbooks identify 33 different types of spaces.)

3. CSF (Cleanable Square Feet) is an industry standard used to measure and compare data.

Custodial staff and principals need an established set of policies and guidelines explaining the expectations of the division with regard to cleanliness standards for the facilities. At present, there is no definition of what constitutes a safe and clean learning environment. Until these standards have been established, the level of cleanliness will continue to vary from one building to the next.

Exhibit 4-12 provides a description of the levels of cleanliness according to the Association of Physical Plant Administrators.

Exhibit 4-12
Association of Physical Plant Administrators
Cleanliness Scale

Level 1: Ordinary Spotlessness – Small amounts of litter in containers. Floors bright and clean at all times. No dust accumulation. Glass, light fixtures, mirrors, and sinks kept clean.
Level 2: Ordinary Tidiness – Small amounts of litter in containers. Floors show periods of peaks and valleys in appearance. Dusting is maintained at a high level. Glass, light fixtures, mirrors, and sinks show evidence of spots and dust.
Level 3: Casual Inattention – Small amounts of litter in containers. Floors show periods of peaks and valleys in appearance. Dust accumulation on vents, vertical, and horizontal surfaces. Glass, light fixtures, mirrors, and sinks show accumulations of dust, spots, and prints.
Level 4: Moderate dinginess – Waste containers are full and overflowing. Floor coverings are dull, marked, spotted. Dusting is infrequent and dust balls accumulate. Glass, light fixtures, mirrors, and sinks are dirty and spotted.
Level 5: Unkempt Neglect – No trash pickup, occupants are responsible. Regular floor care is eliminated. Dusting is eliminated. Glass, light fixtures, mirrors, and sinks are very dirty.

Recommendation 4-12:

It is recommended that PECPS develop standards for custodial services that are consistent with APPA or other similar standards. The establishment of custodial standards will create internal consistencies across the division. This will improve the quality of cleaning and light maintenance activities.

Finding 4-13:

PECPS lacks a systematic training program for its custodial employees that would ensure that they are implementing current best practices and provide access to information that would improve services.

Conclusion 4-13:

Ongoing training that focuses on board policy, state and federal laws, and best practices occur only on an intermittent basis at the building level and rely heavily on vendors as the primary trainers.

Recommendation 4-13:

It is recommended that PECPS implement an ongoing staff development program for custodial personnel. Including facilities personnel in regular staff development activities should ensure that they keep pace with changes in technical and human relations skills, and enable them to contribute to larger, system-wide goals. Training should include, at a minimum:

- leadership training for supervisors that focuses on individual growth and contributions of personal leadership;
- training to keep pace with innovations in cleaning processes and chemicals;
- time management;
- customer communication skills; and
- required subjects such as:
 - Sexual harassment.
 - Discrimination.
 - Family Medical Leave Act.
 - HIPAA, and
 - Laws associated with the Fair Labor Standards Act.

PECPS should be directed to contact Richmond schools about their year-long training program for custodial staff. PECPS might well be able to use the same approach to train staff.

4.E ENERGY MANAGEMENT

The school buildings and other facilities of a school division consume significant amounts of energy that often appear to be an ever-growing and sometimes an unpredictable component of the overall annual budget. With the advent of increased costs for energy to provide fuels for HVAC systems, transportation vehicles, food service operations, and other related activities, school systems have established numerous and varied policies, procedures, and methods for increasing efficiencies in energy consumption and reducing operating costs. Policies typically describe a school board's specific desire to ensure that maximum resources are available for instructional purposes and charge the administration with developing related procedures to obtain that objective.

Procedures generally prescribe a range of measures and activities to be implemented and a specific means for computing the results. Some school boards develop incentive systems to reward employees for actions or recommendations that have resulted in substantial savings or improvement in the performance of energy consuming equipment.

Energy management methods range from sophisticated, centralized, computer controls over HVAC systems, and other energy consumption devices to simple manual procedures for turning thermostats down and lights off during periods of minimal building or room utilization. In the survey conducted at PECPS, only 36 percent of administrators and teachers *agree* that "The division has an effective energy management program;" 36 percent *disagree*.

Finding 4-14:

PECPS uses a variety of mechanical systems for heating and cooling its facilities. They also use different methods for controlling and/or monitoring these systems. Exhibit 4-13 illustrates the different systems in place.

**Exhibit 4-13
PECPS Heating and Cooling Systems**

School	Heating/Cooling Systems	Control Systems
High School	Oil fired boiler for hot water heat and chiller for cooling	Honeywell Enterprise Building Integration (EBI) System
Vocational-Technical Center	Heat Pump for heating and cooling	Programmable thermostats
Middle School	Combination of multi-zone, roof top units, oil fired boilers for hot water, and heat pump units for heating and cooling.	Honeywell Controls (Excell 500), Johnson Controls (clock system), and Wallace Day
Elementary School	Oil fired boilers for hot water and chillers, through wall heat pumps, and rooftop heat pumps	Honeywell Enterprise Building Integration (EBI) System for selected areas

The utility costs for the school year 2005-2006 for PECPS are shown below in Exhibit 4-14. The division average energy cost is approximately \$1.46 per square foot for the school year 2005-2006.

**Exhibit 4-14
PECPS Utility Costs and Average per Square Foot (SF) Cost**

Billing Date	Energy Consumption (kwh)	Energy Cost (Electricity)	Late Charge
July-2005	508035	\$ 32,889	\$ 306.34
August-2005	552705	\$ 35,426	
September-2005	666598	\$ 45,888	
October-2005	570745	\$ 42,271	\$ 615.07
November-2005	458034	\$ 36,796	
December-2005	420013	\$ 32,796	
January-2006	453418	\$ 31,219	
February-2006	411658	\$ 28,584	\$ 239.68
March-2006	408988	\$ 24,719	\$ 399.27
April-2006	438933	\$ 30,969	
May-2006	383552	\$ 27,093	
June-2006	428767	\$ 30,913	
Totals:	5683446	\$399,085	\$1,560.36
Heating Services		\$162,434	
Total Utility Costs		\$561,519	
Square Footage		384,097	
Avg. Cost per SF		\$1.46	

Conclusion 4-14:

Currently, the division does not have a comprehensive energy policy. The division's energy cost at \$1.46 per square foot is higher than expected. The latest information available from the

Department of Energy and the Alliance to Save Energy indicates the national average of educational buildings at \$1.25 per square foot.

By comparison, the Roanoke County Public Schools Division has “one of the finest energy conservation programs in the Commonwealth. Since implementing an energy efficiency and cost avoidance program in 1998, the division has saved over \$2.25 million in energy costs over five full school years, for an average annual savings of \$451,040” (*School Efficiency Review: Roanoke County School Division*, April 22, 2004). Roanoke County’s total utility costs in 2002-2003 were \$1,990,930 for 2,464,459 square feet of building area, representing a cost per square foot of \$0.81 (including water and sewer).

In 1994, the United States Department of Energy (U.S. DOE) created a federal program called Rebuild America. This program is a network of hundreds of community-based partnerships across the nation that are dedicated to saving energy, improving energy performance, and enhancing the quality of life through energy efficiency and renewable energy technologies. Most importantly, the program is free to local school divisions. The federal government pays for these costs. Among other initiatives, PECPS may wish to become a member of the program in order to take advantage of the following services the program offers:

- An analysis of utility bills and energy consumption;
- Technical guidance where program staff will visit the schools and suggest changes that can save energy immediately and offer the full technical expertise of U.S. DOE facilities such as Oak Ridge National Laboratory or Lawrence Livermore National Laboratory to answer questions on which building or maintenance materials are the most energy efficient for use in the Virginia climate;
- Review of architectural or engineering drawings for planned construction and suggest changes that will save on energy costs after construction is complete;
- Meeting with division staff and faculty to discuss how changing habits of energy usage could save the division 10 to 15 percent on utility bills;
- Access to projects that worked in other school divisions, including data showing exactly how much money other divisions saved on energy; and
- Student education programs on usage and efficiency (a curriculum that complies with and supports the SOLs have already been developed and used in other divisions with positive results).

Exhibit 4-15 contains the electrical usage (in kWh) for the school year 2005 through 2006 (the latest complete school year) by school. As shown in these charts, we would have expected the usage to go down during the summer months when school is not in session (except for the middle school where summer school is held), but instead the elementary school’s usage for June was only 10.73 percent below the annual average, July was 8.85 percent below the annual average, and August was just 6.03 percent below the annual average. Likewise, for the high school usage for June was 2.29 percent below the annual average, July was 2.51 percent higher than the annual average, and August was 2.00 percent higher than the annual average. Even taking into account the fact that air conditioning usage would normally drive the usage higher than on average, these figures are out of line. This is just another indicator that the utility usage needs to be constantly monitored by doing something as simply as reviewing the monthly bills and comparing them to historical usage.

As a part of our analysis of the utility bills, it was also noticed that late charges have been incurred periodically through the year, as shown in Exhibit 4-14. (This still occurs occasionally, showing up in the March 2007 bills, for example.) Additionally, we noticed when reviewing the Dominion Virginia Power bills that PECPS is sent approximately 20 different electric utility bills each month. These separate bills include items such as Building E, Building F, Elementary School, Education Center, street lighting, Middle School Ball Field, and so on. We understand that this level of detail may be helpful for analyzing trends in energy usage, if someone is able to take the time to record the information on a form or spreadsheet and distribute the data to the facilities maintenance supervisor.

Exhibit 4-15
kwh Usage (School Year 2005-2006)
By School

Month	Elementary	Middle	High
July 2005	68,400	167,040	91,200
August 2005	69,840	169,200	95,680
September 2005	105,840	200,160	112,480
October 2005	97,200	186,480	101,760
November 2005	82,080	156,240	96,640
December 2005	67,680	136,080	93,920
January 2006	71,280	133,920	75,200
February 2006	75,880	123,840	82,400
March 2006	73,440	120,960	78,720
April 2006	74,160	137,520	104,640
May 2006	62,640	132,480	192,160
June 2006	72,000	146,160	95,200
Total	919,440	1,810,080	1,120,000
Annual Average	76,620	150,840	93,333

Recommendation 4-14:

It is recommended that PECPS develop an energy awareness program specific to Prince Edward County Public Schools Division using the Department of Energy guidebook *School Operations and Maintenance: Best Practices for controlling Energy Costs*. This is a guidebook for K-12 school business managers and facilities managers. The PECPS program should address each item discussed in this guidebook.

In addition, PECPS should enroll in Rebuild America, created by the U.S. Department of Energy (DOE). Several Virginia school divisions are partners in this program, including Stafford County, Arlington, Chesapeake, Covington City, Fairfax County, Falls Church, Harrisonburg City, Roanoke County, and Virginia Beach City Schools.

Unless there are compelling reasons for paying the utility and other bills late (such as a dispute), we also recommend PECPS do whatever they can to avoid these late charges. The late charges of \$1,560.36 associated with electric utility bills last school year, for example, could have been used to purchase two new computers. We also recommend PECPS consider coordinating with Dominion Virginia Power in structuring a single bill with the different areas identified separately, rather than sending 20 or more separate bills each month.

Exhibit 4-16 indicates the level of potential savings that could be expected through the implementation of an energy management plan, based on various projected target costs per square foot using 2005-06 historical data.

Exhibit 4-16
Potential Savings PECPS – Annual Energy Use
Based on 2005-2006 Data

Annual cost per Square Foot	Area (SF)	Cost	Annual Savings	Savings %
\$1.460	384,097	\$561,519	-0-	-0-
\$1.400	384,097	\$537,736	\$23,783	4.2%
\$1.350	384,097	\$518,531	\$42,988	7.7%
\$1.316	384,097	\$505,472	\$56,047	10.0%
\$1.300	384,097	\$499,326	\$62,193	11.1%
\$1.250	384,097	\$480,121	\$81,398	14.5%

PECPS should aim for at least 10 percent savings in this area, or \$56,047. With long-range planning and the implementation of additional energy-saving capital improvements, the division may be able to achieve considerable savings.

The Internet contains a variety of sources for ideas and suggestions for conserving energy. Many are tied to classroom lessons for the different grades, and enlist students in the plan by learning and practicing good energy conservation practices, such as part of National Environmental Education Week. In managing energy costs, several areas for quick fixes include:

- Turning things off—this can include computers and lights;
- Turning things down—equipment includes temperature setbacks, special-use rooms (auditoriums), and water heaters; and
- Cleaning and maintenance—items include changing filters on a regular basis, cleaning condenser coils, etc.

Longer-term solutions can include:

- Commissioning—continuously monitoring a building’s energy systems;
- Upgrade to more-efficiency lighting—using day lighting, changing fluorescent lighting;
- Efficient water use; and
- Reflective roofing.

Public schools are constantly recognized as achieving various improvements in increased energy savings. For example, Austin, TX public schools have an energy efficiency program, Schools for Energy Efficiency (SEE), where they saved \$90,000 in the first year. The West St. Paul-Mendota Heights-Eagan school district in Minnesota saved \$330,000 over the past three years also using the SEE program. As reported by the South West Review (11/11/2006):

“The district’s changes haven’t been dramatic, despite the significant decrease in energy use. Administrators and staff developed a district energy plan, encouraged energy-smart behaviors through an awareness campaign, and deployed simple, low and no-cost strategies, such as remembering to turn off classroom lights and computers when they are not in use.”

Another source, the Alliance to Save Energy has numerous guides to help in establishing such a plan. Their energy saving tips include:

- Lighting—turn off when not in use and remove unneeded light fixtures (near windows);
- Heating and cooling—set thermostats, use fans, install programmable thermostats, keep classroom doors closed, and stop leaks;
- Computers—use “sleep” mode, turn off monitors, purchase new Energy Star computers;
- Appliances—maintain existing and replace old appliances, clean refrigerator coils; and
- Involve the whole school—get the entire school involve, and publicize energy costs and savings.

Finding 4-15:

There are lighted vending machines located throughout the three schools. The lighting and cooling for these units remain on twenty-four hours a day.

Conclusion 4-15:

Vending machines, operating continuously, may use 2500 to 4000 kWh/yr, or \$200 to \$350 at average U.S. rates. A commercially available energy control device for refrigerated vending machines consists of an infrared occupancy sensor combined with a controller that senses room temperature and powers up the machine when needed to keep the products cool. Savings average 47 percent, with a payback of less than 2 years. The device is now in use in hundreds of schools, some financed through local utilities. For example, in the Moscow, Idaho school district, each device saves about 1500 kWh/yr, averaging \$75 per year for each vending machine. Some beverage wholesalers are willing to install these controllers in schools at no additional charge. Vending machines are also equipped with fluorescent lamps that help advertise the name brand of the product being sold. A simple, no-cost strategy is to turn off the lights or de-lamp the vending machine during periods of no occupancy, or to permanently remove the lamps. Vending companies tend to believe that removing the lamps from the machines will reduce sales. Therefore, vending companies may not be willing to remove the lamps from their machines. Alternatively, schools could upgrade the vending machine lighting from T-12 to T-8. This could save about 1000 kWh per year.

Recommendation 4-15:

It is recommended that PECPS purchase and install energy control devices on the vending machines. Before purchasing these devices, however, explore the possibility of a partnership with the soda vendor(s) where the vendor will supply the device as part of the agreement to continue supplying the sodas.

These devices cost approximately \$150 each and will save approximately \$100 per year after payback. Total savings for fourteen machines, for example would be approximately \$1,400 per year after payback. These savings would be part of the energy awareness program and as such would be included in the total potential savings.

Finding 4-16:

Prince Edward County Public Schools uses several (Honeywell EBI, Wallace Day, Johnson Controls) energy management/control systems. The purpose of these systems is to monitor and control the operation of the elementary (partial), middle, and high school building systems in order to optimize energy efficiency.

Conclusion 4-16:

The figures in Exhibit 4-2 through 4-3 (Disbursements for Operations and Maintenance Services) are clear indicators that PECPS is managing its expenditures in this area compared to other peer divisions. In our discussions with on-site personnel, we understand that an energy monitoring system was installed in the high school building and a similar unit installed in the middle school building. These systems have enabled the maintenance supervisor to monitor and control room and building temperatures remotely. Unfortunately, due to the configuration of the buildings that comprise the elementary school, such a system is not currently in place. Many of the elementary school buildings have individual exterior doors to each of the classrooms. Within these classrooms, a “through the hall” unit is used for heating and cooling (there are no central units.) Each unit has its own thermostat. Additionally, teachers have their own keys, enabling them to access these rooms virtually at any time. It was reported to us that many times the teachers will visit their space in the evening/night and/or weekends and forget to turn lights off or thermostats down.

PECPS has made good use of energy saving measures, but more can be done to conserve energy costs. These savings have an immediate impact on the cost of operations and a longer impact on the environment. In fact, this might be an area where students could assist or at least learn what the school division is doing for energy conservation.

Recommendation 4-16

There are several practices that PECPS can implement in order to continue efforts to conserve energy and reduce costs, especially in those buildings where there are no existing energy monitoring or energy control systems. These are identified below:

- Install programmable thermostats for “through the wall units” in the elementary school. These units cost approximately \$150.00 a piece. Teachers would also need to be instructed in their use of these thermostats. For example, if a teacher was in their classroom on a weekend, they could temporarily adjust the temperature and allow the unit to adjust itself (set back) after a period of time. (In other words, the teacher would not need to remember to set the temperature back when they leave—the thermostat would do that for them).
- Institute a strict policy against leaving lights on in areas not in use. It was reported by several individuals that lights in certain areas are left on overnight, or over a weekend, after everyone has vacated the premises. This can be controlled by reminding the users (teachers, staff) to turn off lights in areas not in use and by adding this to specific duties of the security staff.
- Evaluate the use of energy efficient or low cost florescent lights throughout the school division. Statistics have shown that these types of lights can generate considerable savings in energy bills. The cost of the bulbs more than pays for the anticipated savings. The school division should develop a plan to replace such bulbs in certain areas, and monitor costs both before and after installation to track savings. This simple analysis where utility cost savings are compared to the cost of the bulbs themselves, (where labor cost to install the bulbs is a sunk cost) would be very clear in its determination of estimated savings.
- Evaluate other potential energy saving opportunities. The maintenance supervisor

should continue to evaluate, with the assistance of the director of support services, other opportunities that arise from time to time. Such opportunities may include:

- Additional timers on lights
- Alternative fuel
- Recycling initiatives

Finding 4-17:

PECPS does not have all of the elements necessary to develop a comprehensive long-term facility plan or capital improvement plan.

Conclusion 4-17:

A comprehensive plan should include descriptions of program offerings, enrollment projections, building capacities, utilization analysis, physical building assessments, and educational suitability.

The omission of critical elements found in a comprehensive master plan results in projects being prioritized through a political process rather than a data-driven process. The political process may leave the most pressing issues unresolved, eroding trust and confidence in the board. An aggressive plan would address all of the building concerns. This can only be accomplished by the development of a comprehensive plan that utilizes numerous sources of data, considers the fiscal implications, and is focused on the educational programming.

School districts in America are now approaching facilities planning in a more comprehensive manner, utilizing sophisticated data to prioritize building needs. A comprehensive plan that is driven by research will help gain public support for funding. For example, studies have been conducted in Anne Arundel, Maryland, Boulder, Colorado, Indianapolis, Indiana, and Citrus County, Florida, and without exception, these school districts have been successful in presenting a comprehensive long-term facility plan to their communities.

PECPS should conduct a physical assessment of all PECPS facilities, including support buildings, to include site conditions assessment, structural, electrical-mechanical, safety, and accessibility issues. (A plan is just now being developed, however, to assess the condition of the roofs on the buildings. This plan will evaluate the current condition, estimate the remaining life of the roof, and identify potential costs to maintain and/or replace the roof. It is anticipated that such a plan will be extended to the various mechanical systems as well.)

The first phase of a comprehensive plan is to assess the condition of all buildings by examining the structural, electrical, and mechanical systems; safety issues; and accessibility issues. By performing an exhaustive physical assessment of all school division facilities, PECPS will be able to create a ranked list of those buildings most in need of repair, renovation, or replacement. The school division will then be able to group repair or renovation projects to obtain economies of scale and ensure that tax dollars are expended utilizing value-engineering concepts.

Recommendation 4-17:

It is recommended that PECPS evaluate the need for an educational suitability assessment of all school division buildings to include general classrooms, special learning spaces, support spaces, technology readiness, and parent drop-off/bus circulation issues.

School buildings are designed to deliver the educational programs determined by the school

board and community. These buildings do not often change structurally while educational programs continue to change at a rapid pace. Often, principals and staff must make concessions in order to house added educational programs, creating issues with adjacencies, storage, and office spaces. An educational suitability review examines a facility based on its ability to deliver an effective educational program. This is a critical piece in developing a long-term facility plan and establishing the right priorities for making changes to a building.

It is recommended that an RFP be prepared to ascertain the exact cost of this comprehensive study before proceeding. The RFP process would also allow the division to establish the criteria for conducting the study and evaluating offerors.



Attachment 4-A

Sample School Board Policy

On use/Rental of School Facilities

Use/Rental of School Facilities

The following rules and regulations shall apply to all applicants desiring to use any facility which is operated by the Prince Edward County School Board. The facility principal is responsible for seeing that the rules and regulations are followed, and that maximum security and safety are maintained during the rental period. Copies of these rules and regulations and "Application Forms-Use/Rental of School Facilities" are available at the individual schools and from the Department of Support Services.

1. General Information

The principal of the individual school has administrative authority to recommend and schedule the use of school facilities. School board policy, rules, regulations and administrative procedures apply to all applicants that use school facilities. Non-school use applicants are those individuals and groups who are not employees of the school system or who are not performing responsibilities as employees of the school system. Non-school use of school facilities shall not be allowed for activities that are perceived to be in direct and/or inappropriate competition with free enterprise. Authorization will only be given for use by not-for-profit groups or organizations.

Non-school use of school facilities must be in compliance with the following stipulations:

- a) School use clearly takes precedence over non-school use.
- b) Scheduling of non-school use of school board facilities starts with the school principal's recommendation and ends with the approval/disapproval by the superintendent or his designee
- c) All non-school users of school board facilities will be in a "non-school use category" recommended by the school board and approved by the Board of Supervisors.
- d) Non-school use categories will be reviewed by the school board in April of each year. A review report with recommendations will be submitted by May 1 to the Board of Supervisors for review and approval. The current approved non-school use categories are:
 - County Governmental Agencies
 - Civic Groups
 - Religious Organizations
 - Political Groups
 - Other Not-for-Profit Organizations
- e) Other than County sponsored activities, no series of meetings, or engagements, will be allowed in the same building without special authorization by the Superintendent or his designee.

2. Allowed Activities

Only those activities open to the public will be allowed in school division facilities or on school campuses.

3. Application

The applicant shall be one of the following:

- A responsible citizen of the County and a member of the organization making application, or
- An officer of an applicant organization that must be headquartered in Prince Edward county.

Reservations for use of facilities are confirmed only after the application has been recommended by the principal and approved by the department of facility services. Application must be submitted to the facility principal at least two (2) weeks prior to the date(s) for which use is requested.

Attachment 4-A (Continued)
Sample School Board Policy
On use/Rental of School Facilities

4. Application Approval/Disapproval

The superintendent reserves the right to approve or disapprove, at any time, any application for use of school board facilities. Principals will recommend approval/disapproval and the director of facility services will approve/disapprove applications for the Superintendent. Advance payment of fees will be refunded if disapproval of application is necessary.

5. Admission Charge Fees

Only the organization approved to use the school board facility may charge any admission or fees for admission to the event.

6. Charges

Rental rates will be established annually by the school board. Rental rates are intended to reimburse the school board for incremental expenses which would not be incurred if the school were not in use. Rental fees will not apply to the use of school board facilities by not-for-profit groups or organizations prior to 10:00 p.m. on those days in which school is in session. Rental rates may be modified or waived by the school board. Current rental rates are available by contacting the individual school or the Department of Facility Services.

When a facility rental is charged, the following will apply: (a) Not-for-profit organizations which charge admission or fees will be charged at the Adult Rental Rate and for custodial services; (b) If the admission fees are to support school-sponsored activities, the not-for-profit organization will be charged at the student rental rate and for custodial services; and, (c) Custodial charges will include thirty minutes before and after the scheduled event.

When special lighting and/or the public address system is to be used by the applicant, arrangements must be made directly with the school. This equipment must be operated by trained school personnel. Organizations authorized to use the lighting or public address system will be charged for its use. Payment will be made directly to the school which will arrange payment to the school's operator. The custodial staff does not perform this service.

Whenever a kitchen is rented, a member of the school food services staff must be present during the authorized time of rental. The food service department must be contacted directly by the applicant. A separate fee will be charged for this service.

When lighted athletic fields are requested, the details of which areas can be used must be arranged directly with the school. A fee to defray the cost of lighting will be established by the department of facility services.

7. Rental Exclusions

Rental fees will not be charged for the use of school board facilities between 7:30 AM and 10:00 PM on those days in which schools are in session. Intra-school groups and Parent-Teacher Associations will not be charged rental fees or reimbursement of costs for services rendered by employees of the school board when facilities are used only once each calendar month for a regular or special meeting. These organizations will not be charged rental fees for additional monthly meetings or special annual events/activities, but they will be charged for services rendered by employees of the school board.

8. Rental Payment

The full rental amount is due within 10 days after the event. Checks should be made payable to the Prince Edward County Public Schools. Those organizations using facilities on a regular basis will be rendered monthly bills. If the fee is not remitted as required, no future use will be granted without prepaid remittance. Interdepartmental transfers will be processed for those governmental agencies which use the facilities outside the Rental Exclusion window.

5. Financial Management

5. FINANCIAL MANAGEMENT

This chapter presents findings, conclusions, and recommendations relating to the financial management functions of Prince Edward County Public Schools (PECPS). The major sections in this chapter are:

- 5.A Organization, Management, and Staffing
- 5.B Financial Performance
- 5.C Planning and Budgeting
- 5.D Administrative Technology

An effective system of accountability for business operations management is imperative for a school division to meet student needs and community expectations. A credible school division accountability system includes preparing and managing budgets supportive of the division's goals and objectives, comprehensive and transparent financial reporting, and dependable asset management. Such an accountability system helps to ensure confidence in, and support for, the division's use of public funds.

INTRODUCTION

For this efficiency review, PECPS was compared against five peer divisions: Charlotte, Cumberland, Lunenburg, Nottoway, and Sussex counties. Exhibit 5-1 presents the PECPS and peer division local composite indexes of "local ability to pay" for the 2006-2008 time frames, the average of the peer divisions, and the statewide composite average. Prince Edward's score is .2776 and places this school system's ability to pay (as a proportion of total school system cost) at the third highest position in the comparison between itself and its five peers. PECPS ranks 36 out of the 136 school divisions, where 80 percent of the school divisions in Virginia exceed the peer division average. The highest composite index is capped at 0.8000 by state law. Thus, no locality is required to fund more than 80 percent of the total public school budget.

Exhibit 5-1
Comparison of Local Composite Indexes
Prince Edward County Public Schools and
Peer Divisions 2006-2008

School Division	2006-2008 Composite Index of Local Ability-to-Pay
Charlotte County	.2234
Cumberland County	.2859
Lunenburg County	.2399
Nottoway County	.2429
Prince Edward County	.2776
Sussex County	.2912
Peer Division Average	.2602
Statewide Average	.3860

Source: Virginia Department of Education web site, 2007.

Exhibit 5-2 presents a comparison of receipts by fund source for Prince Edward and the peer divisions. As presented in this exhibit, Prince Edward county funds 26.84 percent of the costs of the school division from local revenue, while the peer average is 28.67 percent. Conversely,

PECPS receives 48.26 percent of its funding from the state compared to the peer average of 47.42 percent.

Exhibit 5-2
Comparison of Receipts by End Source
School Year 2005-2006

School Division	Sales and Use Tax	State Funds	Federal Funds	Local Funds	Other Funds	Loans, Bonds, Etc.
Charlotte County	9.13%	57.71%	10.55%	19.75%	2.87%	0.00%
Cumberland County	8.90%	40.78%	16.96%	32.10%	1.26%	0.00%
Lunenburg County	9.68%	49.51%	14.80%	23.85%	2.18%	0.00%
Nottoway County	9.34%	50.89%	13.23%	24.15%	2.39%	0.00%
Prince Edward County	10.87%	48.26%	12.54%	26.84%	1.26%	0.23%
Sussex County	6.53%	37.37%	10.17%	45.32%	0.61%	0.00%
Peer Division Average	9.08%	47.42%	13.04%	28.67%	1.76%	0.04%

Source: 2005-2006 Superintendent's Annual Report for Virginia, Virginia Department of Education web site, 2007.

Exhibit 5-3 compares PECPS cost per pupil for 2005-06 to the peer division average obtained from the 2005-06 Superintendent's Annual Report for Virginia, which can be found at the following web address: <http://www.doe.virginia.gov/VDOE/Publications/asrstat/2005-06/asrbook.html>. The following information is illustrated in the exhibit:

- Total disbursement per student at PECPS was \$9,423.42 or 9.67 percent below the peer division average of \$10,431.95.
- Disbursements per pupil at PECPS for instruction were \$74.79 greater than the peer division average.
- Disbursements per pupil for total cost of operation of regular day school at PECPS were \$596.64 (approximately 6.5 percent) lower than the peer division average of \$9,120.85.
- Disbursements for school food services were 37.3 percent lower than the peer division average.
- Disbursements for pupil transportation services were 10.89 percent lower than the peer division average.
- Disbursements for summer school were 74.75 percent lower than the peer average.
- Disbursements per pupil for administration were slightly (less than one percent) below the peer division average.
- Disbursements per pupil for operations and maintenance were considerably lower (47 percent) than the peer division group, while facilities expenditures were almost six times the amount spent by the peer divisions.

Exhibit 5-3
Comparison of Cost per Pupil
School Year 2005-2006

Program	Prince Edward Public Schools	Peer Division Average	Prince Edward Public Schools per Pupil Costs Above (Below) Peer Average
Administration	\$ 370.99	\$ 373.58	(\$2.59)
Instruction	\$6,659.38	\$6,584.59	\$74.79
Attendance and Health Services	\$ 142.22	\$ 125.73	\$16.49
Pupil Transportation Services	\$ 669.56	\$ 751.38	(\$81.82)
Operations and Maintenance Services	\$ 682.05	\$1,285.57	(\$603.52)
Total Cost of Operation of Regular Day School (totals all items listed above)	\$8,524.20	\$9,120.85	(\$596.65)
School Food Services	\$ 266.87	\$ 425.71	(\$158.84)
Summer School	\$ 9.20	\$ 36.44	(\$27.24)
Debt Services	\$ 316.47	\$ 384.64	(\$68.17)
Adult Education	\$ 19.80	\$ 85.03	(\$65.23)
Other Educational Programs	\$ 106.61	\$ 348.60	(\$241.99)
Facilities	\$ 180.27	\$ 30.68	\$149.59
Total Disbursements	\$9,423.42	\$10,431.95	(\$1,008.53)

Source: 2005-2006 Superintendent's Annual Report for Virginia, Virginia Department of Education web site, 2007.

Exhibit 5-4 contains a comparison among the peer divisions in terms of the number of principals, assistant principals, and teachers, including teacher aides. As shown in the exhibit, PECPS' staff is much larger than the peer divisions, which contributes directly to the costs of instruction as shown in Exhibit 5-3

Exhibit 5-4
Comparison of Prince Edward County Public Schools and Peer Divisions Principals,
Assistant Principals, Teachers, and Teacher Aides

School Division	Number of Principals	Number of Assistant Principals	Number of Teaching Positions	Number of Teacher Aides	Total Number of Positions
Charlotte County	5.0	3.0	173.7	32.0	213.80
Cumberland County	3.0	3.0	125.7	45.2	176.95
Lunenburg County	4.0	2.0	159.1	44.0	209.10
Nottoway County	6.0	3.0	189.7	30.4	226.07
Prince Edward County	3.0	6.0	239.2	46.5	294.74
Sussex County	5.0	2.0	121.5	24.0	152.45
Peer Division Average	4.3	3.2	168.2	37.0	212.18

Source: 2005-2006 Superintendent's Annual Report for Virginia, Virginia Department of Education web site, 2007.

Exhibit 5-5 illustrates the average annual salary of each category. When comparing PECPS to its peer school division, it became evident that salaries varied significantly. In comparison to its student population, Sussex county teacher salaries were the highest at \$44,141.97 and its teacher to student ratio in grades eight through 12 is 1:10.6. However, PECPS teachers earned an average of \$41,459.35 with its ratio of teacher to student at 1:11.2 across all grade levels. The source data for these calculations can be found at the following web address: <http://www.pen.k12.va.us/VDOE/Publications/asrstat/2005-06/Table19.pdf>.

Exhibit 5-5
Comparison of Salary Averages: Principals, Assistant
Principals, Teachers, and Teachers' Aides

School Division	Principals	Assistant Principals	Teaching Positions	Teacher Aides
Charlotte County	\$59,870.93	\$47,529.06	\$39,041.99	\$15,936.17
Cumberland County	\$68,069.96	\$55,082.00	\$39,380.46	\$7,540.47
Lunenburg County	\$65,417.25	\$62,439.54	\$40,308.73	\$13,401.65
Nottoway County	\$65,868.18	\$63,145.32	\$40,020.30	\$14,326.46
Prince Edward County	\$71,470.39	\$58,399.55	\$41,459.35	\$13,958.02
Sussex County	\$78,261.78	\$73,441.50	\$44,141.97	\$14,683.03
Peer Division Average	\$68,159.75	\$60,006.16	\$40,725.47	\$13,307.63

Source: 2005-2006 Superintendent's Annual Report for Virginia, Virginia Department of Education web site, 2007.

5.A ORGANIZATION, MANAGEMENT, AND STAFFING

An efficiently run school division requires sound financial practices to support the delivery of educational services. Sound financial management includes:

- Effective and reliable internal controls and efficient processing of day-to-day financial activities;
- Well-defined policies and procedures;
- A system that effectively allows goals and policies set forth by the school board to be implemented through sound budgeting processes and allocations;
- An effective budget development process that allows stakeholder input from within the school, from parents and from the tax paying community;
- Useful and timely financial information provided to the superintendent, principals, the school board, and other involved administrative personnel;
- A transparent process that clearly shows where and how resources are allocated;
- Favorable audits from external auditing sources;
- Credible and accurate financial projections; and
- Readily available reports on an on-going basis for revenues and expenditures.

Other studies have shown that a school division's operations must practice sound financial management in order to maximize the effectiveness of limited resources and plan for future needs of the school system. To be effective, financial management must involve a well thought-out strategy of planning, budgeting, and overall managing of resources to maximize financial performance. To perform successfully, a school division must establish a solid relationship with its employees, funding agencies, and the local community.

Financial management is most effective when resources are used based on the school division's priorities and with its stated goals and objectives. Financial information should be provided in a timely manner and presented in a format that is easily understood by all audiences.

The financial management functions of PECPS are supervised and managed by the director of finance who reports to the superintendent. These functions include the division budgets, payroll, purchasing, check processing, and any other duties as deemed necessary by the school board.

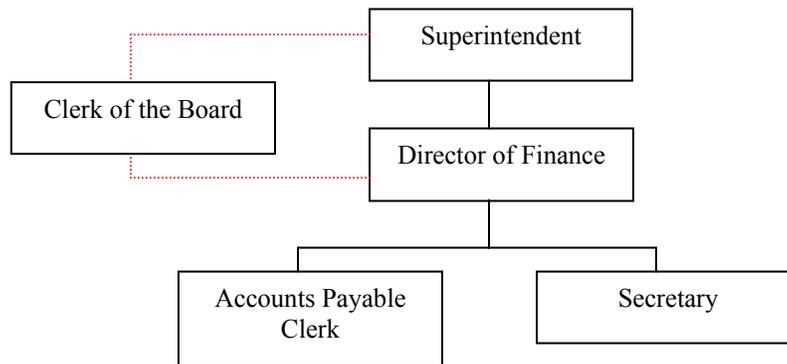
Financial management functions in the division are performed by:

- 2 (two) full-time employees
 - Director of finance (1 person)

- Accounts payable clerk (1 person)
- 2 (two) shared employees
 - Secretary (1/3 time)
 - Clerk of the board (processes payrolls and payroll related items)

Exhibit 5-6 shows the organizational structure of the PECPS Finance Department.

**Exhibit 5-6
Organizational Chart
PECPS Finance Department
2006-2007 School Year**



Source: Prince Edward County Public Schools, 2007.

Finding 5-1:

PECPS has weak fiscal internal controls as evidenced by inadequate segregation of duties and lack of standard operating procedures. Weak internal controls increase the potential for the occurrence of errors and/or irregularities. An unclear accountability system for financial transactions can create ambiguity in establishing responsibility for potential errors or irregularities.

One position that exemplifies inadequate segregation of duties is the clerk of the board, who performs the following duties:

- Processes payroll;
- Processes some purchase orders;
- Posts revenue;
- Maintains check stock;
- Processes checks;
- Signs checks using personal signature plate; and
- Signs checks using the signature plates (of others) on a check-signing machine.

All checks require three signatures, one of which is that of the clerk of the board. This individual not only signs checks under her own authority, but has possession of the signature plates of all (three) other authorized signers and apparently has carte blanche authority to use them to routinely sign all checks including both payroll and accounts payable.

Conclusion 5-1:

The current lack of separation of duties is a classic violation of good accounting practices in that it represents inadequate controls. Trust alone (in a single individual) is ill advised and can lead to a finding of violation of fiduciary duties at all levels. When one person is permitted to perform all financials duties, then total trust has been placed in that person (in this case, clerk of the board). Total trust means that the school board believes that an employee cannot and will not make a mistake, has no incentive to act in any way that is inconsistent with the best interest of the Prince Edward County School Division, and cannot be corrupted to act in any improper manner. Total trust in one employee is a luxury that can have extremely high costs and is difficult to justify given the fiduciary responsibility of the PECPS senior staff and school board. Moreover, the choice is not defensible, because official checks and balances (i.e., three signatures required) have been put into place.

Recommendation 5-1:

It is recommended that PECPS ensure that external auditors make the superintendent and the school board aware of internal control weakness and that action is taken to make certain that internal controls are strengthened to the extent possible by a small organization.

In a small organization, it is difficult to completely segregate duties; however, one position should not perform all the duties that are currently assigned to the clerk of the board. It should be possible to allocate some duties, such as delegating check signing and maintaining check supplies, to other (non-accounting) personnel who are located in the same vicinity without putting an undue burden on any one employee. A safe or other similar securable device should be provided for storing all check stock. (None is currently utilized for check stock maintained by the clerk of the board).

If the purpose of multiple signatures on checks is for internal control, the plate of each authorized signer should be maintained by a different individual. Otherwise there is no reason to require multiple signatures. Upon re-evaluation of the process, the school board may conclude that one or two (vice three) signatures might be determined to be adequate when checks are written for less than a pre-determined dollar amount.

Finding 5-2:

The Prince Edward County Public Schools financial department currently has no documented standardized financial operating procedures.

Conclusion 5-2:

PECPS should have a standard operating procedure that covers the following:

- Payroll processing—should emphasize the use of direct deposit to the maximum extent possible;
- Accounts receivable—should list all known sources of revenue and the expected date of receiving revenue;
- Accounts payable—procedure for logging-in and tracking invoices as well as the time frame for paying invoices;
- Food service fund—should lay emphasis on control and accountability;
- Student activity fund—should emphasize control and accountability;
- Risk management;

- Purchasing—policies should establish limits on personal purchasing authority; methods required for each type of purchase, and provisions for conflicts of interest and applicable purchasing laws;
- Check processing to include signature authority (this is discussed under internal control(s));
- Inventory control—including who is responsible for property, sub-custody signature requirements, who and when periodic inventories are conducted, and who is responsible for lost property; and
- Protection of Privacy Act information such as social security numbers, date and place of birth, mother's maiden name, and medical history.

As a result of the lack of documentation, the division is at risk for loss of institutional information that key personnel possess. Key personnel may retire, go on extended medical leave, or other events may occur which could substantially impair other employees' abilities to complete all duties required to maintain accounting, payroll, purchasing, or other imperative activities. Too much historical knowledge and other critical information reside in the heads of too few key personnel. There is no evidence of knowledge management or succession planning, which should be a major concern for administration. Additionally, there are possible professional and personal liability risks associated with the lack of documented accounting/fiscal procedures.

Recommendation 5-2:

It is recommended that PECPS develop standard operating procedures (SOPs) for all operations performed by the finance department. An initial step could be to obtain SOPs from other school districts. After review and revision, PECPS could then refine the SOPs to reflect the division's needs and forward them to the school board or other designated authority for approval. If needed, outside assistance should be utilized.

Finding 5-3:

PECPS has no standardized personnel forms for authorizing the hiring/termination of personnel.

Conclusion 5-3:

A standardized personnel action form used for hiring/terminating personnel would regulate and systematically document the required approvals for new employees to be added to the payroll and for employees who are terminated and are to be removed from the payroll. A form that has been signed and approved would provide information needed by the department of finance to begin paying a new employee or to stop paying an employee who has left the division's employment.

Recommendation 5-3:

It is recommended that PECPS create and implement a standardized form for authorizing the hiring/terminating of personnel. This process would standardize the procedure and paperwork necessary to provide accountability. In conjunction with Recommendation 5-2, development of standard forms will strengthen internal controls and improve the reliability of information.

Finding 5-4:

The PECPS finance department has three full-time employees. The department consists of the director of finance, an accounts payable clerk, and the clerk of the board who also has duties that are not related to finance department functions. Additionally, there is a secretary who is shared with other senior staff members. The finance department employees are not cross-trained.

Conclusion 5-4:

With only three full-time employees performing all finance-related functions, a departmental employee's extended absence (i.e. if an employee is on extended medical leave) could be detrimental to the division's financial operations and substantially impair the department's overall functionality.

Cross-training involves teaching an employee who was hired to perform one job function the skills required to perform other job functions. Cross-trained employees can become skilled at tasks outside the usual parameters of their jobs.

For small organizations with limited manpower and resources, cross-training can also enable operations to continue if a key employee becomes ill or requires a leave of absence. The serious illness of a key staff member can cause undue hardships on the organization unless that person has trained another to conduct operations smoothly during an extended absence.

To be effective, cross-training must be planned and organized. It cannot be effectively implemented during a crisis situation. Before the training begins, a set of tasks that need to be taught and learned should be created. Cross-trained staff members must be given the time they need to absorb the new information and tasks associated with the position.

Recommendation 5-4:

It is recommended that the finance department cross train its personnel using standard operating procedures (as addressed in Recommendation 5-2) to better prepare for unexpected and prolonged absences.

DIRECTOR OF FINANCE POSITION**Finding 5-5:**

The current position description for the director of finance for PECPS states the following qualifications (obtained from the position description that was revised in May 2006):

1. *Holds a Master's Degree (M.A) or equivalent; or four to 10 years related experience and/or training; or equivalent combination of education and experience.*
2. *Holds a valid Virginia Postgraduate Professional Certificate.*
3. *Has a minimum of five years successful experience in education and has obtained tenure in a teacher position.*
4. *Preferred (strongly) one or more years experience in finance.*

The performance responsibilities for the director of finance are:

1. *To assume responsibility for budgeting and finance procedures as needed in the school division.*
2. *To act as agent for the School Board as provided by state law.*
3. *To manage all insurance programs.*
4. *Assist the superintendent in the annual development of the capital improvement program.*

5. *Plan, organize, control and direct the accounting activities and functions of the division; project, monitor, maintain and account for the fiscal health of the divisions; make presentations to the Board.*
6. *Project and supervise the preparation of various division budgets; monitor and revise division budgets following adoption.*
7. *Coordinate membership reports, annual school report data compilations, and triennial census.*
8. *Assist division staff with budget and accounting functions.*
9. *Communicate with other administrators, division personnel and outside organizations to properly manage division activities and programs, resolve issues and conflicts and exchange information; meet with administrators on respective budgets and financial needs.*
10. *Provide technical expertise, information, and assistance to the superintendent regarding assigned functions; assist as needed in the formulation and development of fiscal policies, procedures, and programs.*
11. *Direct the preparation and maintenance of a variety of State and Federal financial reports; prepare various narrative and statistical reports, records, and files related to the Finance Department.*
12. *Develop and prepare the annual preliminary budget for the department; analyze and review budgetary and financial data; control and authorize expenditures in accordance with established limitations.*
13. *Attend a variety of meetings to maintain correct knowledge of legislation, legal codes and requirements; review changes in school finance; attend workshops and meetings with division, County and State personnel; conduct and facilitate meetings.*
14. *Performs other duties as may be assigned.*

Conclusion 5-5:

The duties and responsibilities of the director of finance are primarily those of a controller. As are readily ascertainable, the duties of the director of finance are primarily accounting in nature and include:

- Planning for control;
- Reporting and interpreting;
- Evaluating and consulting;
- Reporting (school board and state and federal agencies);
- Protection of assets; and
- Economic appraisal.

Under the current position description, the director of finance could hold a Master's degree in English, history, electrical engineering, or any other discipline. It also requires that the person should have experience in education and should have obtained a tenured teaching position. These requirements are not relevant to this position. The director of finance should be required to have education and experience in accounting and finance and should hold a Master's degree in accounting, finance, or a business administration from an accredited institution of higher learning. The current director of finance holds a Master of Education.

Recommendation 5-5:

It is recommended that PECPS revise the position description for the director of finance and require that candidates hold a Master's degree in finance, accounting or business administration from an accredited institution of higher learning and possess experience in the fields of accounting or finance. The requirement for teacher tenure should be deleted.

5.B FINANCIAL PERFORMANCE**Finding 5-6:**

The department's existing monthly financial reports are of limited use in tracking budgeted receipts and expenditures or actual receipts and expenditures. The accounting software system produces reports by object code on 11 by 15 inch paper. These reports are difficult to interpret and to handle. The director of finance produces manual reports on 8.5 by 11 inch paper that summarizes revenues by type and expenditures, using major object codes only. The revenue section includes variances, but no explanation or justification for those variances. The expenditure section does not include variances or explanations of variances. The school board or the superintendent would be unable to easily evaluate financial performance in a particular area of operations.

The current financial accounting system is not a state of the art system (see section on Administrative Technology). However, this system could be used in a much more productive way when providing important financial information to the superintendent and the school board.

Conclusion 5-6:

The information contained in the reports would be more useful if formatted differently and presented in a graphic form. An effective accounting system provides information for three broad purposes, (1) internal reporting to managers for use in planning and controlling current operations; (2) internal reporting to managers for use in strategic planning—that is, the making of special decisions—and in formulating overall policies and long-range plans (capital budgeting in regards to facilities and technology); and (3) external reporting to stakeholders, the school board, state and federal government, and taxpayers. The finance department should formalize control by providing performance reports that compare actual results with planned performance and spotlight exceptions (i.e. variances that deviate from plans). The reports should provide budgeted amounts, actual amounts, variances, and explanations when variances exceed a certain amount or percent.

Exhibit 5-7 provides an sample report that illustrates the budgeted receipts and expenditures by current categories (as of March 31, 2007), showing variances in dollars and percents. In this exhibit, the budgeted amounts reflect three quarters of the year, or 75 percent of the annual budgeted amounts, accounting for the first nine months of the fiscal period (nine months *divided by* 12months = 75 percent). The actual receipts and expenditures are year to date through March 2007. It is recognized that budgeted receipts and expenditures are not always linear, so PECPS should exercise care in developing budgeted amounts for each month, using the best estimates possible. After several years of tracking, reviewing and refining of estimates, these monthly budgets should be very accurate. This exhibit also contains the difference between the budgeting amount and the actual amount. It is these differences that would need to be examined, analyzed, and explained.

Exhibit 5-7
Budgeted vs. Actual Receipts and Expenditures
FY 2007 (through March 31, 2007)

<i>Receipts (as of March 31, 2007)</i>				
Item	YTD Budgeted (\$)	YTD Received (\$)	Difference (\$)	Percent Diff.
State Sales Tax	\$ 2,451,134	\$2,193,778	\$(257,356)	(10.5)
Basic School Aid	5,917,877	5,983,358	65,481	1.1
Other State	4,678,957	3,862,874	(816,083)	(17.4)
Total State	13,047,968	12,040,010	(1,007,958)	(7.7)
From the Federal Government	2,393,639	1,925,068	(468,571)	(19.6)
Local Funds	5,137,779	3,788,854	(1,348,925)	(26.3)
Cash Book	229,006	215,024	(13,982)	(6.1)
Total Revenue	\$20,808,392	\$17,968,956	\$(2,839,436)	(13.6)
<i>Expenditures (as of March 31, 2007)</i>				
Item	YTD Budgeted (\$)	YTD Expended (\$)	Difference (\$)	Percent Diff.
Instruction	\$ 15,486,428	\$ 13,118,958	\$ (2,367,470)	(15.3)
Administration	1,173,953	952,276	(221,677)	(18.9)
Transportation	1,179,102	1,103,948	(75,154)	(6.4)
Maintenance	1,492,806	1,205,640	(287,166)	(19.2)
Food Service	648,983	419,143	(229,840)	(35.4)
Facilities	132,750	10,404	(122,346)	(92.2)
Debt Service	694,364	909,233	214,869	+30.9
Total Expenditures	\$20,868,386	\$17,719,602	\$(3,088,784)	(14.8)
Surplus			\$249,348	

Source: PECPS Finance Department, 2007.

The instruction expenditures YTD indicate that funds may be lost at years end unless action is taken to determine how to better spend these funds to benefit the PECPS students and the community. The PECPS finance department must ensure that expenditures are within established guidelines. When receiving state funds, for example, there are guidelines that must be followed regarding encumbrances and the deadlines for receipt of goods and services. These guidelines can be found via the following web address: http://www.doa.virginia.gov/General_Accounting/General_Accounting_Main.cfm

A report, such as the sample provided in Exhibit 5-8, will spur investigation of exceptions. Operations can then be brought into conformity with the plans, or the plans can be revised. This practice is commonly known as “management by exception.” Management by exception permits the director of finance, the superintendent, and the school board to concentrate their attention and effort on the significant deviations from expected results that are in the most need of investigation. Administrators at their level should not be routinely or excessively concerned with results that conform closely to plans.

Exhibit 5-8
Simple Performance Report

Utilities, Insurance and Other Costs					
	Budgeted Amounts	Actual Amounts	Deviations or Variances	Variances by Percent	Explanation
Receipts					
1xxx	Xxx	Xxx	Xxx	Xxx	-----
2xxx	Xxx	Xxx	Xxx	Xxx	-----
3xxx	Xxx	Xxx	Xxx	Xxx	-----
4xxx	Xxx	Xxx	Xxx	Xxx	-----
Expenditures					
1xxx	Xxx	Xxx	Xxx	Xxx	-----
2xxx	Xxx	Xxx	Xxx	Xxx	-----
3xxx	Xxx	Xxx	Xxx	Xxx	-----
4xxx	Xxx	Xxx	Xxx	Xxx	-----

Exhibit 5-9 provides the month-to-month breakdown of total receipts versus actual expenditures for PECPS for the portion of FY 2007, July 1 through March 31, 2007. This data was provided from the PECPS monthly budget reports.

Exhibit 5-9
Prince Edward County Public Schools
Total Expenditures and Receipts as of
March 31, 2007

Period	Total YTD Receipts	Actual YTD Expenditures	Difference
July	\$1,174,461	\$1,074,597	\$99,864
August	\$2,923,849	\$2,924,569	(\$720)
September	\$5,186,578	\$5,186,578	\$0
October	\$7,226,620	\$7,226,620	\$0
November	\$9,276,408	\$9,276,408	\$0
December	\$11,788,462	\$11,788,462	\$0
January	\$13,686,340	\$13,686,340	\$0
February	\$15,902,914	\$15,750,279	\$152,635
March	\$17,968,956	\$17,719,603	\$249,353

Source: PECPS Finance Department, 2007.

Exhibit 5-10 illustrates the month-to-month total expenditures progressing from mid-July 2006 through March 31, 2007.

Exhibit 5-10 Prince Edward County Public Schools Total Expenditures as of March 31, 2007

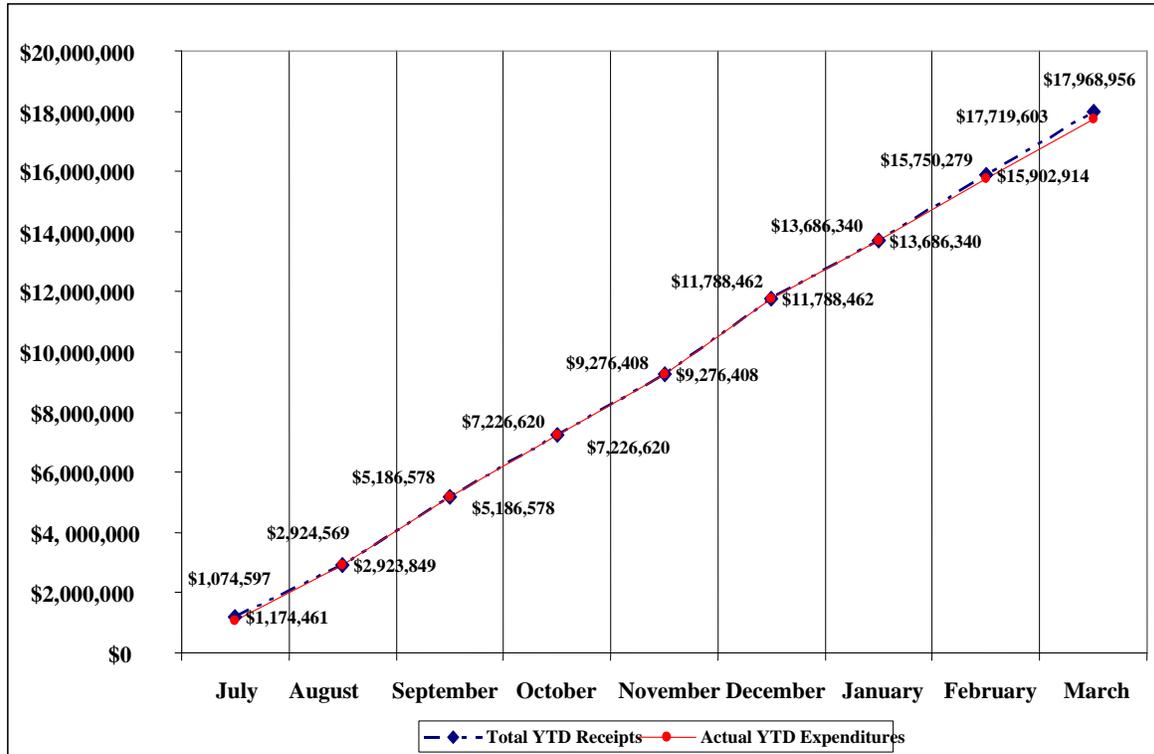


Exhibit 5-11 illustrates the month-to-month total instructional expenditures progressing from mid-July 2006 through March 31, 2007. As evidenced in Exhibit 5-11, there is a spending gap between budgeted instructional funds and those expended as of March 31, 2007 for FY 2007. The source of this data was the PECPS monthly budget reports.

Exhibit 5-11
Prince Edward County Public Schools
Total Instructional Expenditures as of March 31, 2007

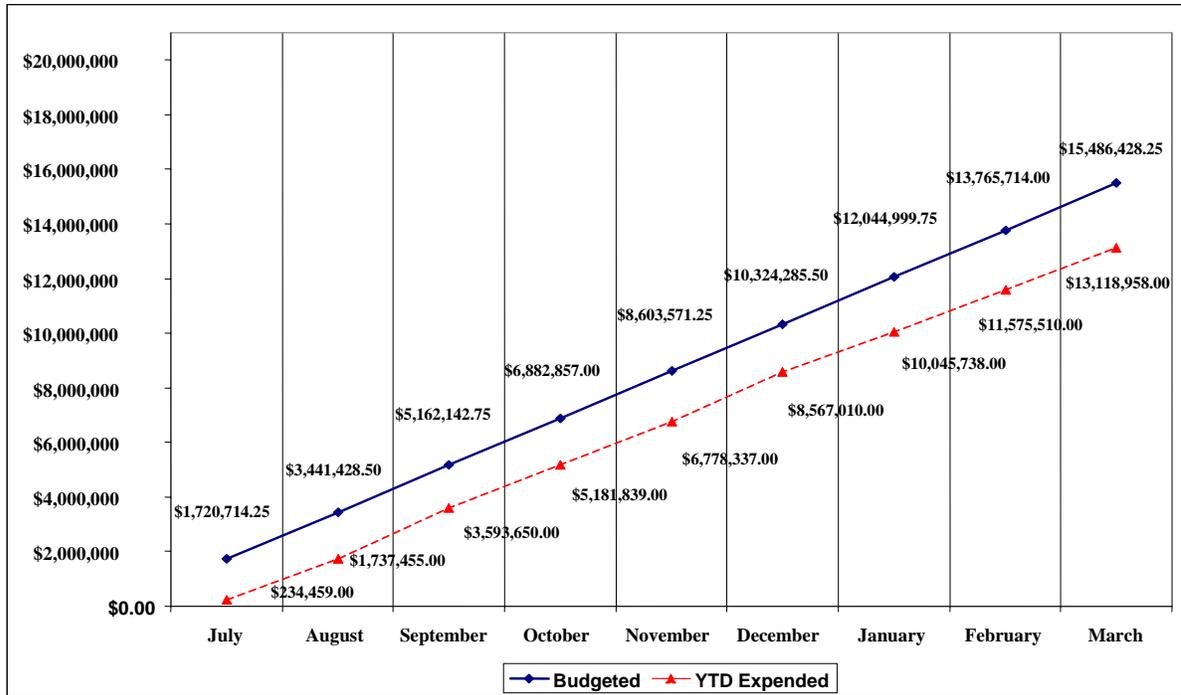


Exhibit 5-12 shows the actual month-to-month PECPS instructional expenditures. As is evident in the illustration, there is a gap in the allocation of funds versus the actual expending of funds. As of March 31, 2007, PECPS has a variance of \$2,367,470 between the amount budgeted and the actual amount disbursed.

Exhibit 5-12
Prince Edward County Public Schools
Total Instructional Expenditures
(as of March 31, 2007)

Period	Budgeted	YTD Expended	Difference
July	\$1,720,714.25	\$234,459.00	\$1,486,255.25
August	\$3,441,428.50	\$1,737,455.00	\$1,703,973.50
September	\$5,162,142.75	\$3,593,650.00	\$1,568,492.75
October	\$6,882,857.00	\$5,181,839.00	\$1,701,018.00
November	\$8,603,571.25	\$6,778,337.00	\$1,825,234.25
December	\$10,324,285.50	\$8,567,010.00	\$1,757,275.50
January	\$12,044,999.75	\$10,045,738.00	\$1,999,261.75
February	\$13,765,714.00	\$11,575,510.00	\$2,190,204.00
March	\$15,486,428.25	\$13,118,958.00	\$2,367,470.25

Recommendation 5-6:

It is recommended that PECPS update or replace the current accounting system (see section on Administrative Technology). Until a new system is provided, Prince Edward County Public Schools should develop spreadsheets and utilize graphics that provide a monthly comparison of the budgeted receipts and expenditures against the actual receipts and expenditures. This information should be provided at the monthly school board meeting. If need be, assistance in developing the monthly reports should be obtained from an outside source. The director of finance should be required to brief the superintendent and school board on all major category variances exceeding *plus-or-minus* five percent, .

5.C PLANNING AND BUDGETING**FIXED ASSETS**

An effective fixed asset management system accurately accounts for division property and safeguards it against theft and obsolescence. Planning and control of fixed asset transactions are crucial to the division's long-range financial plan. Fixed-asset records should designate who is responsible for the custody and maintenance of individual items and assist the division in estimating future requirements. School divisions generally acquire fixed assets through a well-defined authorization procedure.

Separate accountability for fixed assets is a specific legal requirement of many federal programs. An appropriate fixed asset system also provides data for financial reports and ensures adequate insurance coverage.

The most important reasons for keeping and maintaining accurate accounting records of fixed assets are:

- Furnish taxpayers with information about their investments in the division;
- Provide the basis for adequate insurance coverage;
- Allow the division to assess the need for repair, maintenance, or replacement of assets;
- Establish a system of accountability for custody of individual items;
- Determine future budgeting requirements; and
- Identify lost or stolen items so that insurance claims can be filed, additional controls instituted, and accounting records adjusted to reflect the losses.

Finding 5-7:

Prince Edward County Public Schools does not track its investment in fixed assets and does not complete physical inventories to determine if fixed asset items are still in its custody. The division also does not have any formal policies or guidelines to direct the management of its investment in fixed assets. Currently, there is no officially designated responsibility for the fixed assets of the division.

PECPS does not have a complete list of the fixed assets acquired from school division funds, nor does it have a policy requiring that a physical inventory be conducted. The division also does not have a policy that addresses individual accountability for fixed assets. There are no guidelines that require reimbursement for items lost due to negligence or that provide proper procedures for recording lost or stolen items, such as obtaining and attaching a police report or employee affidavit.

Conclusion 5-7:

Conducting a physical inventory will identify the fixed assets currently under the division's control; but without policies pertaining to accountability, there will be no assurance that the items are properly maintained.

The use of a fixed asset management plan would provide guidelines for the proper accountability and safeguarding of PECPS' assets. Such a plan should include an updated policy with comprehensive procedures and clear expectations.

Contained in such a plan are fixed asset policies, which normally address many issues pertaining to a school system's investment in all financially significant assets. Policies include guidelines for all fixed assets and regularly designate:

- Responsibility and accountability for the division's investment in fixed assets and the system that is to be used for the accounting;
- Responsibility and accountability for the property and equipment owned;
- The need for annual physical inventories;
- Capitalization thresholds for property, equipment, land, and infrastructure;
- Depreciation methods, salvage value, and a schedule of estimated useful lives;
- The difference between capitalized improvements and maintenance expenses;
- Procedures for reporting junked, stolen, or missing property and what approvals are required to delete items from the inventory;
- Procedures for receiving donated property; and
- Procedures for transferring assets between division schools and departments.

To protect their investment in fixed assets, most divisions track their assets and have policies that provide direction on how the assets are to be managed. As items are acquired, they are immediately added to the list. And, when the division disposes of an item through normal processes (or its destruction), it is removed from the list. When an item cannot be found, the situation is examined and appropriate action taken. Normally, all deletions to such a list of fixed assets needs be approved by the superintendent and/or the school board (especially, for items over a specified cost or replacement value).

Recommendation 5-7:

It is recommended that PECPS develop and implement a comprehensive fixed asset management plan. Developing a plan such as this will provide guidance for the proper accounting and safeguarding of division assets, including textbooks. The asset management plan should include an updated school board policy, updated comprehensive procedures, samples of expectations for inventory records, and a clear method of communication.

Inventory dollar values and procedures for annual inventory of all division assets for inventory should be established. Certain property and equipment, such as computers, digital cameras and other easily pilferable items should be clearly etched and marked as PECPS property with a property control number. A bar coding system should also be implemented and should become a part of the accountability system.

The accountability system should require information on the purchase (such as the purchase order number, purchase date, item description, including serial and model numbers, and the physical location of the item). The fixed asset records should be updated by additions and deletions of property and equipment. Purchases and disposals should be maintained in

accordance with the school board policy. Exhibit 5-13 shows an example of a spreadsheet that can be used to track fixed assets.

Exhibit 5-13
An Example of a Spreadsheet
Track Fixed Asset Inventory

Acquisition Date	Purchase Order Number	Cost	Manufacturer	Description	Serial Number	Inventory Control Number	Location

Safeguarding and recording assets is essential for proper control and accountability over division assets.

RISK MANAGEMENT

Risk management refers to the assessment and management of various risks that are inherent in public school division operations. Risk management requires the identification and alleviation of risks, that adequate insurance coverage be maintained, and the establishment of policies and procedures to adequately safeguard assets such as property, equipment, cash, and investments. Risk management protects employees by providing appropriate safety equipment and training. Procurement of workers' compensation insurance also typically falls under the umbrella of risk management functions.

Virginia school divisions are responsible for the protection, prudent management, and safeguarding of division assets. An effective risk management program minimizes the risk of loss and protection of division assets to include fixed assets and human resources such as students and employees. Characteristics of an effective risk management program include:

- Analyzing alternatives to traditional insurance coverage;
- Analyzing deductibles, out of pocket expenses, and co-payment expenses; and
- Identifying and protecting against potentially dangerous situations to minimize exposure for potential losses.

School divisions must control the risks of loss through insurance, education, and safety programs. Workers compensation insurance protects against lost wages in the event of work-related injuries; and loss prevention plans strive to prevent injuries. Property and casualty insurance protects the division from liabilities resulting from incidents such property damage and bodily injury.

Finding 5-8:

The director of finance manages PECPS' insurance programs. Currently, PECPS uses the services of an insurance consulting firm to assist in periodically reviewing its insurance needs. It was reported that all inquiries of the consulting firm are billed on a rate that is determined by the nature of the call. Neither a copy of the contract with this firm nor a schedule of rates was available. The consulting firm has been paid \$5,492 during the current fiscal year. This is a

service that reportedly was procured by the previous director of finance. No recent evaluation of this contract has been performed.

PECPS has used the same consulting firm and insurance provider for several years. Quotes from other providers have not been solicited in several years, reportedly due to the cost associated with the preparation of an RFP.

The current director of finance appears to have no experience or training in this area.

Conclusion 5-8:

Training the individuals responsible for risk management (and insurance in particular) is necessary, due to the many products and policy features that are typically set forth by the insurance representative. The division lacks a centrally-trained individual(s) responsible for ensuring overall insurance program effectiveness and efficiency. This could be resolved with specific training. Establishment of a primary point of responsibility or a risk management/insurance committee would help to assure a timely, comprehensive approach to risk avoidance and management. If an outside consultant is utilized, they should be required to annually demonstrate their efforts to solicit competitive bids in all areas of insurance.

Recommendation 5-8:

It is recommended that PECPS analyze the current agreement with the insurance consulting firm it uses and review its contents. They should ensure that the contract is valid and entails all services that are required. PECPS should also establish a training program for those personnel responsible for this aspect of financial management, which will provide such individuals an understanding of the framework of insurance policies and what is entailed in different areas of risk management. Training should include the appraisal of insurance programs and a comparison of needs of the division, making certain that PECPS has the correct coverage and deductibles. PECPS should also consider forming an insurance committee comprised of trained and/or experienced personnel to re-evaluate and determine their insurance contract needs.

Finding 5-9:

PECPS has created a comprehensive crisis plan that addresses school safety. As a part of *Goal #3* and designated as *Strategy 3.3.1* of the division's *Strategic Plan 2006-2011*, PECPS is in the process of developing and implementing a comprehensive crisis management plan. The guidelines for the plan require monthly reviews and updates as deemed necessary.

Conclusion 5-9:

The division has a fundamental crisis plan in place and is working towards creating and implementing an in-depth comprehensive crisis management plan. This plan provides guidelines to employees in the event of an emergency or crisis situation. Communication and training are essential to ensure consistent application of the procedures that are or will be outlined in the plan. PECPS should be commended for its efforts to-date in this regard.

Recommendation 5-9:

It is recommended that PECPS ensure its *Comprehensive Crisis Management Plan* is reviewed and updated as policies and/or procedures change. Each review should be formally documented (i.e., dated and signed). Furthermore, specific procedures should be put in place to make sure that the Plan is available for all employees to read and that all new employees are briefed on its contents.

BUDGETING

An organization's financial planning and monitoring, as well as its budget development and management, establishes the foundation for all financial management operations. Effective budgeting provides a school division with a solid financial foundation.

Accurate budgets are necessary to properly fund a school system; and the benefits of budgeting often outweigh the cost and the effort. The major benefits of budgeting are:

- Budgeting aids managers in coordinating their efforts, so that the objectives of the school system are met.
- Budgeting provides definite expectations that are the best framework for judging subsequent PECPS performance.
- Budgeting, by formalizing individuals' responsibilities for fiscal planning, compels the superintendent, principals, and other managers to think ahead.

The budget is the primary means for communicating overall objectives and for blending the objectives of all of the financial aspects of a school division's responsibilities. Budgeting allows the superintendent, principals, department heads, and the school board the ability to prioritize and efficiently facilitate the planning process. Budgeting helps managers focus on operating and financial issues early, and then effectively plan and provide the needed financial management. Successful school systems are usually characterized by superior operating management and superior monitoring of its funding, as well as effective budget development and administration.

The budget process is generally comprised of four major phases. These phases are:

- Planning—defines the goals and objectives of the school division and develops programs to attain those goals and objectives;
- Preparation—includes allocating resources to support the programs developed to achieve the established goals and objectives;
- Adoption of the Budget—made by the school board with approval after a public hearing and the public has an opportunity to comment; and
- Evaluation of the Budget—performed periodically to examine the receipt of revenue and expenditure of funds, and to determine the extent to which the division is meeting its objectives and goals.

Finding 5-10:

PECPS's budget document provides information identifying major initiatives such as: (1) the addition of a math intervention teacher, an alternative school teacher and additional special education teachers, (2) student support programs, and (3) part-time teacher aides needed to improve the achievement of the students. The budget also provides the information the school board needs to make decisions and to adequately govern the division. However, the division's budget is presented in a format that can be challenging for the public or other governing bodies to comprehend. In particular, it lacks sufficient detail regarding costs pertaining to schools or grade levels. Instead, the budget presents revenues and expenditures by program and functional category. Although this presentation meets the minimum reporting requirements described in the Virginia Administrative Code, this level of detail provides a limited amount of useful information required by authoritative bodies and the taxpaying public when evaluating the division's financial situation. Under the current format, users are unable to identify and compare

anticipated expenditures by grade level or by school, which tend to be more familiar frames of reference.

Furthermore, the budget does not provide enough detail on the extent to which the division is meeting any of its goals and objectives. Long-term goals and objectives that are included in the budget are not measured with progression statements, indicating the percentage of goal/objective attained.

Conclusion 5-10:

The 2007-08 budget presentation package for PECPS contains more relevant data than in previous years; however, it is still difficult to determine the proposed funding for a particular area of operations, such as the middle school. The finance department does not produce a comparative, inclusive spreadsheet that details fund allocations by the specific areas of operations found within an individual department or school. Instead, budget information provides vague and overarching descriptions with titles such as “Instructional Support (Improvement of Instruction)”. The budget does not identify clearly what this description includes either in its contents or in the “Definitions of Budget Terminology” located at the end of the document.

The budget is a device whose value depends on its administration. However, its administration will be more effective if its format is aligned to the goals of the organization.

Recommendation 5-10:

It is recommended that PECPS organize the budget by categories that are more easily identifiable to stakeholders while continuing to meet Virginia Administrative Code requirements. PECPS should create more easily understandable budget support documents, such as spreadsheets, so that month-to-month income and expenses can be more readily compared to budget figures once the budget is implemented.

Finding 5-11:

The division’s budget development schedule is difficult to read. Various unrelated group meetings are included on the same listing and the items relating to budget development are not readily identifiable.

Conclusion 5-11:

The budget development calendar inserted in the most current budget is difficult to understand and decipher. A school division’s budget is a critical tool that ensures that the school system is adequately maintaining and controlling its financial resources. It is most effective when a variety of interested parties have participated in its development. Without a comprehensive budget calendar, important dates may be forgotten and important tasks may be overlooked or performed out of order which may impede the entire process.

Developing and publishing a comprehensive budget calendar helps to ensure that the budget is accomplished on time and those involved know exactly when their input is required so that they can effectively schedule time to complete their tasks in an orderly manner prior to the due date. Additionally, a publicized calendar would disclose when input from the general public can be provided.

Recommendation 5-11:

It is recommended that PECPS develop a calendar that shows each step in the budget process, its due date, and the responsible party(ies)for completing each step. PECPS should also post the calendar on the division's web site, along with posting all dates for the school board's budget discussion sessions and public hearings on the school board's web site.

Finding 5-12:

According to many PECPS supervisors, the development of the 2007-2008 budget was the first time they had been invited to contribute to the budget process. Many had participated in zero-based budget training in preparation for this activity. While these supervisors provided initial input, many indicated that they did not receive feedback concerning their input.

Conclusion 5-12:

Budgeting projections are important and depend a great deal on obtaining accurate information from individuals in the organization who understand their particular operations better than anyone. Since this was the first time that many of these supervisors had participated in the budgeting process on any level, it is important to evaluate the effectiveness of their contributions in order to plan future improvements in the budgeting process.

Recommendation 5-12:

It is recommended that PECPS continue to allow supervisors to participate in the budgeting process. PECPS administration should provide them with feedback and additional training as necessary in order to improve the accuracy and completeness of the information they provide. This will help instill a sense of ownership in the individuals providing input, reduce some of the workload associated with budget development by others (such as the finance director), and improve the budget process as a whole.

PURCHASING

Effective purchasing processes ensure that high-quality supplies, equipment, and services are obtained at the best price, in the correct quantity, from the correct source, and in accordance with local and state purchasing guidelines. Policies should clearly establish purchasing authority, methods required for each type of purchase, and provisions for conflicts of interest and penalties for violating laws and policies. Purchasing procedures implement policies by documenting the steps to be taken by the staff in order to procure goods and services.

Finding 5-13:

The division has no designated purchasing agent. PECPS has not provided schools and departments with written purchasing guidelines. Principals have been informally delegated the authority to make purchases and are not required to obtain competitive quotes for materials/supplies or services for orders under \$36,000. For any purchase over this cap dollar amount, three quotes must be obtained.

Conclusion 5-13:

Divisions with successful purchasing programs usually have a written purchasing manual that accomplishes the following:

- Establishes purchasing policies that clearly state the purchasing procedures for different types and amounts of acquisitions and ensures that the purchases follow applicable laws and guidelines.
- Sets up administrative procedures for implementing policies that reflect step-by-step purchasing guidelines for the central office staff and school administrators.
- Clearly communicates purchasing policies to division staff and potential vendors, and ensures that these policies are followed without deviation.

Neglecting to document purchasing guidelines for those individuals with purchasing authority places an unnecessary burden on them, and leaves them at risk of unknowingly violating the unwritten purchasing procedures of the division.

Recommendation 5-13:

It is recommended that PECPS establish a detailed purchasing policy and develop a purchasing manual that provides standardized guidance to employees. By establishing a detailed purchasing policy, the school board will be able to establish guidelines for the division's purchasing activity. A written purchasing manual will document the procedures that must be followed in order to comply with the purchasing policy. Developing procedures will promote consistent buying practices, reduce inefficiencies in the process, and ensure that the appropriate processes are followed. Including provisions in the procedures for the optional use of the Commonwealth's eVA procurement system will increase the division's opportunities to obtain items at a more competitive price.

Finding 5-14:

Currently, all technology/computer purchases, both hardware and software, must be approved by the technology director prior to the submission of the request(s) to the superintendent.

Commendation 5-14:

PECPS is commended for following a self-established protocol for all technology purchases. The technology director's signature is the first approval signature required to ensure that all purchases are compatible and will interface with the current computer system configuration.

5.D ADMINISTRATIVE TECHNOLOGY

Making maximum use of updated technology is an important and cost effective way of leveraging assets. Automating administrative functions to the greatest extent possible is an important means of reducing labor hours and paper shuffling.

Finding 5-15:

The PECPS finance department uses Pearson School Systems CIMS Finance Business Series as its accounting software. This package is being run on an AS400 platform. The software version currently used is out of date and no longer supported by the supplier. Reportedly, the hardware and software have been in place more than 10 years. Most data is input through emulation or "dumb terminals," even though employees have updated PC desktop systems that are reportedly linked to the system. Reports are formatted and printed on 11 by 15 inch computer paper. The director of finance obtained a proposal for upgrading the software and hardware. This proposal includes replacing the current IBM AS400, which is no longer upgradeable, with an IBM model i520 server. The proposal also includes the most recent operating system software. The

proposal does not include upgrading the CIMS software or purchasing a new printer. Funds for upgrading the system were proposed in the budget for 2007-2008, but were subsequently eliminated by the superintendent in a “good faith” effort to bring the overall budget in line with limited county funds.

Conclusion 5-15:

Although the CIMS Finance software is designed specifically for school systems and is used by other school systems in the state, PECPS does not use it to its fullest capabilities because the division’s finance personnel are not fully trained in its use. The version owned is obsolete and no support is available for it. This could create significant problems if major system issues develop. The technology department was not consulted prior to purchasing the hardware or software. Its staff does not perform system maintenance or training. PECPS must rely exclusively on outside assistance should problems occur.

Recommendation 5-15:

It is recommended that the financial software be either updated or replaced. The technology department should review the finance department’s technology needs, the current software, and the proposal recently obtained in order to assist PECPS in obtaining a system that is compatible with both the budgetary and financial requirements of the school system. Most software is upgraded on a regular basis by its developer. It is not necessary to upgrade every time the developer upgrades, however, it is necessary to maintain the software at a level that is supported by the developer. Therefore, it is also recommended that PECPS make routine provisions to maintain the financial software at a level that is supported by its developer.

Fiscal Impact: The cost for upgrading this accounting system (hardware and software) is projected at less than \$50,000, based on estimates solicited by the director of finance. There should be opportunities during the 2007-2008 school year to procure this new system using funds derived from favorable budget variances in other areas.

6. Transportation

6. TRANSPORTATION

Prince Edward County Public Schools (PECPS), under Virginia Code, provides free of charge home-to-school transportation to all eligible students within the student's attendance area. Transportation is also provided between schools and other sponsored events as per division policy.

This chapter assesses the PECPS transportation operation, and is divided into the following five sections:

- 6.A Organization and Staffing
- 6.B Planning, Policies and Procedures
- 6.C Routing and Scheduling
- 6.D State Reporting
- 6.E Training and Safety
- 6.F Vehicle Maintenance and Bus Replacement Schedules

Within this chapter, transportation in PECPS is compared to five other peer school divisions in the Commonwealth of Virginia, namely: Charlotte County Schools, Cumberland County Schools, Lunenburg County Schools, Nottoway County Schools, and Sussex County Schools. Peer division averages were computed using all six of the school divisions identified as peer divisions (i.e., to include Prince Edward County Public Schools).

INTRODUCTION

Comparing transportation statistics among divisions must be done cautiously. Within transportation, divisions rarely if ever operate exactly the same types of systems with the same types of programs and policies. The Commonwealth does not mandate that schools provide transportation, which leaves the divisions with a higher degree of latitude. This flexibility creates differences among divisions that can drastically affect any of the transportation operating statistics and costs. Transportation programs can differ greatly and must be viewed and compared with this understanding.

Comparative data presented below were supplied by the Virginia Department of Education and represent the latest available data, which are for either the 2004-05 or 2005-06 school years.

Exhibits 6-1 through 6-3 provide a statistical comparative peer school division overview which will be used in the peer transportation analysis.

Exhibit 6-1 shows that PECPS has the highest number of students, about 46 percent above the average of the school divisions used in this comparison. PECPS also has the third lowest student population per 1,000 general population. This is about 11 percent below the average.

Exhibit 6-1
Peer School Division Overview FY 2006

School Division	Cluster Identification	Average Daily Students	County Population	Student Population Per 1,000 General Population	Total Number of Schools ¹
Charlotte County	4	2,297.66	12,472	177.8	7.0
Cumberland County	4	1,499.22	9,017	155.0	3.0
Lunenburg County	4	1,774.26	13,146	129.3	4.0
Nottoway County	4	2,369.02	15,725	145.1	6.0
Prince Edward County	4	2,728.80	19,720	131.7	3.0
Sussex County	4	1,399.63	12,504	112.5	7.0
Peer Division Average		2,011.43	13,764	146.1	5.0

Source: Virginia Department of Education, Web site, 2007 and United States Census Bureau, 2000 Census Data.

As can be seen in Exhibit 6-2, PECPS has the highest percent of special education students within the comparison group and is 6.1 percentage points above the peer average percentage. Special needs students must often be accommodated for and result in a higher than average cost of transportation.

Exhibit 6-2
Special Needs Students
2005-06 School Years

School Division	Average Daily Students	Number of Students	Percent of total students
Charlotte County	2,297.66	375	16.9
Cumberland County	1,499.22	204	14.6
Lunenburg County	1,774.26	323	19.0
Nottoway County	2,369.02	393	17.2
Prince Edward County	2,728.80	612	23.6
Sussex County	1,399.63	201	14.3
Peer Division Average	2,011.43	351	17.5

Source: Virginia Department of Education web site, 2007.

As shown in Exhibit 6-3, PECPS has the third lowest transportation per pupil cost among its peers for FY 2006, which is approximately 10 percent below the peer average. During FY 2005, PECPS' per pupil transportation costs were second to the lowest, which was about 26 percent below the peer average. These figures would seem to indicate that effective cost controls are in place and that PECPS is reasonably efficient in managing their transportation operations. It is important to note, however, that rural school divisions with more students than their peers are generally able to average lower per pupil costs. Although the per pupil cost for PECPS increased from \$576 in Fiscal Year 2005 to \$670 in Fiscal Year 2006 (a 16 percent increase), a substantial portion of this increase more than likely resulted from \$318,865 in bus purchases made in 2006, compared with only \$226,668 in bus purchases made in FY 2005.

Exhibit 6-3
Pupil Transportation Disbursements
FY 2006 and FY 2005

School Division	Pupil Transportation Services	Per Pupil Cost 2006	Per Pupil Cost 2005
Charlotte County	\$1,651,941	\$ 719	\$ 700
Cumberland County	\$1,273,337	\$ 849	\$ 749
Lunenburg County	\$1,118,044	\$ 630	\$ 718
Nottoway County	\$1,174,676	\$ 496	\$ 513
Prince Edward County	\$1,827,085	\$ 670	\$ 576
Sussex County	\$1,487,248	\$1,063	\$1,107
Peer Division Average	\$1,422,055	\$ 738	\$ 727

Source: Virginia Department of Education web site, 2007.

We conducted a survey of PECPS' staff as part of this efficiency review. Several questions related directly to transportation were answered by scoring in categories ranging from *strongly agree* to *strongly disagree*. Exhibit 6-4 reflects responses received from the staff.

Exhibit 6-4
PECPS Transportation Survey Results

Survey Question	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Students are often late arriving to and/or departing from school because the buses do not arrive to school on time.				73%	27%
Buses are often broken down, disrupting services.			27%	64%	9%
Bus route questions are easily and adequately answered.	9%	7%	18%		
The process for requesting a field trip is efficient and effective.		82%	9%	9%	
There are sufficient buses to meet extracurricular needs of students.		55%	18%	27%	
Bus drivers effectively handle discipline issues on the buses.		27%	18%	55%	
Students do not feel safe riding school buses.		29%	18%	55%	
There is adequate safety equipment on buses	9%	46%	45%		
Buses have adequate handicap accessibility.	9%	55%	27%	9%	

The timeliness of buses does not appear to be a factor, but the sufficiency of extracurricular trip buses is a concern along with student discipline issues. It is important that any disparity not be for safety and timeliness issues. These are the two main components of serviceability. If large negative disparities exist in these categories, then the overall program should be totally reviewed for effectiveness.

The division encompasses approximately 356 square miles, which creates elongated routing challenges especially when considering the position of the schools relative to the county. With the schools located so close to the northern boundary with Cumberland County, the longest route from the school is approximately 20 miles. Roads are mixed within the area ranging from normal hard surface city style streets to state highways, with a portion of the non-city thoroughfares being county maintained asphalt/oil based county roads. Some roads must be pre-approved for use based upon the ability to have buses turn around. Routes serve from all points

within the division boundary and are routed to accommodate a centralized high school, middle school, vocational school, and elementary school.

The PECPS transportation department provides the transportation services needed within the division (i.e. regular education, special education, vocational, athletics/field trips, etc.). This is a mid-size operation (46 home-to-school bus routes according to the bus route schedules provided during the review) that does not use any routing or maintenance software to assist in its operational management. Maintenance is performed by the bus maintenance department located at the schools. Driver supply appears to be adequate for this operating year though challenges arise in fielding enough drivers for any given morning or afternoon route. Management of the transportation system falls under the responsibility of the transportation supervisor (scheduling of buses, routing, bus drivers) and bus maintenance supervisor (vehicle maintenance), both of who report directly to the director of support services.

Recommendations within this chapter are meant to offer alternative methods of performance, as well as methods to measure performance. Some will provide cost efficiencies while others are targeted towards service improvements.

6.A ORGANIZATION AND STAFFING

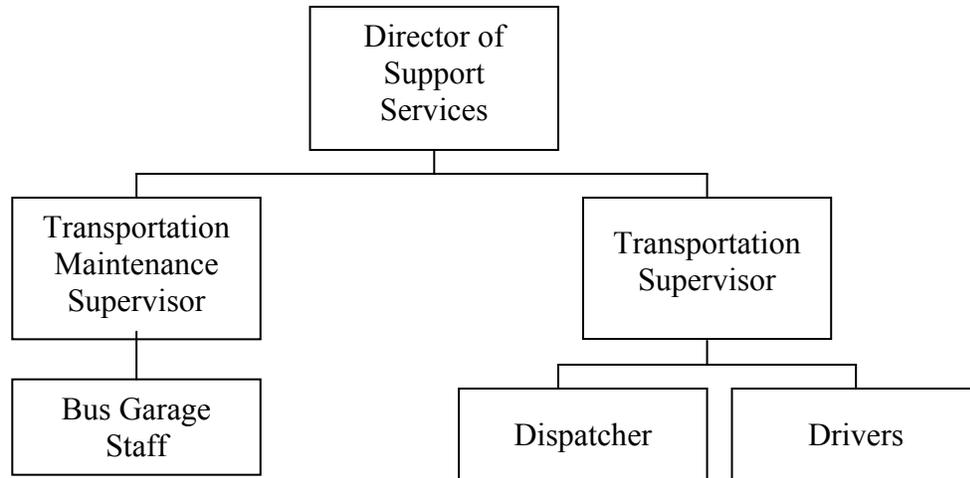
Of paramount importance to a school division's transportation function are the elements of safety and timeliness. The manner in which the department is organized and staffed can and will have a direct impact on the effectiveness and efficiency of the operation and its ability to meet these primary goals.

The organization structure, as shown in Exhibit 6-5, includes the following employees:

- Director of support services (1);
- Transportation supervisor (1);
- Full time drivers (47);
- Full time aides for special education route (4);
- Dispatchers (2);
- Bus maintenance supervisor (2);
- Mechanics (2);
- Car drivers (3); and
- Activity bus drivers (5) – also serve as full-time driver.

There are 46 bus routes (42 regular, three handicap, and one shuttle) and 47 full-time drivers. Forty-six of these full-time drivers are assigned to a specific school and route. The remaining full-time driver is a substitute or back-up driver, used just about every day. The transportation supervisor coordinates all routes and drivers. Their responsibility is to ensure that each bus route is run on time and that all students are picked up/dropped off.

Exhibit 6-5
Prince Edward County Public Schools Transportation Department
Current Organization



Source: Prince Edward County Public Schools, 2007.

The transportation supervisor has been in this position for about three years and works closely with the dispatcher on a daily basis to ensure all transportation functions are performed. The supervisor prepares and helps keep routes current; answers general complaints and questions; manages vehicle assignments, trip requests, driver discipline, and safety issues; and generally is the primary operational contact for drivers and the public. The director of support services is active and involved in all support areas that include six other operational areas: Piedmont detention instructors, resources officers/security guard, food services, custodial, mail, and maintenance. He relies on the different functional supervisors to perform their duties, but will step in, even driving buses if necessary.

Full-time drivers, substitute, and part-time drivers do not receive benefits. Driver wages are competitive for the area, with starting full-time drivers paid \$60.01 a day (for a morning and an afternoon route) or about \$11,162 a year, based on 186 work days per school year, according to the PECPS web site. Substitute drivers are paid \$10.61 per hour. Few transportation specific policies exist within the division. There is no handbook for bus drivers. While each bus has a list of students designated for that route, written procedures for emergencies (for example) are not written or included on the bus. Planning of bus routes from year-to-year is adjusted by the transportation supervisor to balance the following:

- Number of students on the bus and
- Length of time a student is on the bus (ride time).

The transportation department typically does not provide any input into budget development. The budgets are based on historical expenses and adjusted from year to year for any known changes by the finance department. This year, however, the supervisor's input was solicited under the guidelines of zero based budgeting.

In Exhibit 6-6, we see that PECPS has the largest total number of transportation positions among school divisions included in its comparison, along with the largest number of students. When

this amount of staffing is expressed on a per pupil basis (at 2.27), PECPS has the second lowest staffing level in transportation and is below the average of 2.66 (computed by dividing the Average Daily Students into the Total amount of staffing).

Exhibit 6-6
Administrative, Service, and Support Personnel Positions by Function
Transportation—FY 2006

School Division	Average Daily Students	County Size in (Square Miles)	Administrative	Technical and Clerical	Other Professional	Trades, Operative and Services	Total	Staff per 100 Students
Charlotte County	2,297.66	477 sm	0.0	1.30	0.0	48	49.30	2.15
Cumberland County	1,499.22	300 sm	1.25	14.70	0.0	36	51.95	3.46
Lunenburg County	1,774.26	432 sm	.5	.50	0.0	45	46.00	2.59
Nottoway County	2,369.02	316 sm	1.0	0.0	1.0	55.87	57.87	2.44
Prince Edward County	2,728.80	354 sm	2.5	4.00	0.0	55.5	62.00	2.27
Sussex County	1,399.63	493 sm	.35	.13	0.0	54.0	54.48	3.89
Peer Division Average	2,011.43	395 sm					53.60	2.66

Source: Virginia Department of Education web site, 2007 and United States Census Bureau.

The bus service is considered door-to-door service. Students are not required to walk or meet at any type of designated bus stop area, with the exception of students who reside in private areas such as apartment complexes.

Exhibit 6-7 indicates that the corps of bus drivers is fairly experienced. Approximately 70 percent of the total number of drivers have six (6) or more years of experience. Of the drivers with less than six years experience, only five drivers had no prior bus driving experience. This information appears to indicate that the school division is not having difficulty attracting and retaining experienced bus drivers.

Exhibit 6-7
Experience of Bus Drivers (in Years)

Years	No of Bus Drivers	Percentage	No of Automobile Drivers
0-5	14	29.8	2
6-11	17	36.1	
12-19	6	12.8	1
20-24	3	6.4	
25-29	4	8.5	
30+	3	6.4	
Total	47	100.0	3

Source: PECPS Human Resources, 2007.

When comparing the bus driver pay among the selected peer school divisions, as shown in Exhibit 6-8, PECPS is consistently near or at the top of the pay scales. This would further strengthen the position that PECPS is able to attract and retain qualified and experienced bus drivers.

Exhibit 6-8
Pay Comparison for Bus Drivers
(Expressed as Annual Amount and Based on 186 Work Days)

School Division	Min	5 Yrs	10 Yrs	15 Yrs	20 Yrs	25 Yrs	30 Yrs	Max
Charlotte County	\$9,071	\$10,000	\$10,943	\$11,887	\$12,830	\$13,774	\$13,774	\$13,774
Cumberland County	\$11,700	\$11,700	\$12,600	\$12,600	\$12,600	\$12,600	\$12,600	\$12,600
Lunenburg County	\$8,501	\$9,608	\$10,639	\$11,671	\$12,484	\$12,484	\$12,484	\$12,484
Nottoway County	\$9,118	\$9,773	\$10,756	\$11,411	\$12,394	\$12,722	\$13,049	\$14,032
Prince Edward County	\$11,161	\$11,161	\$11,591	\$12,019	\$13,518	\$13,946	\$14,374	\$14,374
Sussex County	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Peer Division Average	\$ 9,910	\$10,448	\$11,306	\$11,918	\$12,765	\$13,105	\$13,256	\$13,453

The data in Exhibit 6-9 shows that based on the previous nine months of 2006-2007, transportation appears to be operating within its budget.

Exhibit 6-9
Expenditures for Transportation

Item	2005-2006 Actual Costs	2005-2006 Budget	1 st 9 months 2005-2006	2006-2007 Budget	First 9 months 2006-2007
Management/Direction	\$ 103,128	\$ 103,128	\$ 77,620	\$ 112,062	\$ 84,249
Vehicle Operation Services	\$ 975,651	\$ 975,651	\$ 673,969	\$1,014,632	\$ 724,003
Monitoring	\$ 43,568	\$ 43,568	\$ 31,160	\$ 38,665	\$ 41,219
Vehicle Maintenance Services	\$ 390,059	\$ 390,117	\$ 241,721	\$ 329,277	\$ 254,950
Bus Purchases	\$ 318,865	\$ 318,865	\$	\$ 64,000	\$
Other Vehicle Purchases	\$ 0	\$	\$	\$ 13,500	\$
Total	\$1,831,271	\$1,831,329	\$1,024,470	\$1,572,136	\$1,104,421

As shown in Exhibit 6-9, costs incurred through March 2007 are running higher than similar cost elements were in 2006 in all areas.

One of the specific areas we analyzed in detail was the area of labor costs for the transportation department. We began our analysis by comparing the total costs for transportation for the 2005-2006 school year and the 2006-2007 (through March) school year. Exhibit 6-10 shows a comparison of costs for these two periods.

Exhibit 6-10
Payroll Expenditures for Transportation

Item	2005-2006	1st 9 months 2005-2006	First 9 months 2006-2007
Operative (1170)	\$593,972	\$404,830	\$447,195
Extracurricular Driver (1171)	\$ 7,553	\$ 3,909	\$ 6,922
Substitute Bus Drivers (1570)	\$ 66,827	\$ 42,890	\$ 36,601
Total	\$668,352	\$451,629	\$490,718

The year-to-date 2006-2007 expenditures reflect an 8.6 percent increase from the prior school year, with most of that increase in the cost category entitled *Operative*. Payroll associated with substitute bus drivers is down approximately 14.7 percent compared to the same period last year.

Finding 6-1:

School bus driver turnover is a national problem. The national average for turnover is above 18 percent. This statistic translates into increased safety for all concerned.

Conclusion 6-1:

PECPS is experiencing a moderate to low driver turnover. Through interviews with the bus drivers, it was obvious that the drivers care about their responsibilities and the welfare of the students.

Recommendation 6-1:

It is recommended that PECPS continue to seek qualified individuals who are willing to accept the responsibility of twice daily transportation of students.

Finding 6-2:

No specific percentage of daily on-time performance was available; however, most staff concur that buses do run on time and are seldom late barring any natural or uncontrolled circumstances.

Conclusion 6-2:

This finding suggests students enjoy having a breakfast in the morning and reap the benefits of getting to classes on time. Having a positive start and finish to the normal school day is important.

Commendation 6-2:

Prince Edward County Public Schools is commended on its routine on-time performance.

Finding 6-3:

The existing position description for the supervisor of transportation list qualifications and performance responsibilities such as:

10. *Develops and forecasts transportation department budgetary requirements and administers the expenditure of funds as allocated.*
11. *Maintains cost accounting records.*
21. *Provides for appropriate fiscal management, according to law and policy, of all allocated funds assigned.*

Based upon interviews with the incumbent for that position and the director of support services (to whom the supervisor of transportation reports), this year is the first time that input into the budget process (for the school year 2007-2008) has been requested from the supervisor of transportation. The supervisor received some guidance for developing budget figures using a zero based budgeting based process. After that information was submitted, no more feedback was provided.

The supervisor does not maintain any cost accounting records, nor does he financially manage allocated funds. Based upon our interviews, no periodic financial reports are provided to this position. They receive some general instructions from the director on occasion (i.e., to avoid overtime costs), but otherwise the supervisor is not aware of his department's financial performance.

Conclusion 6-3:

There exists a conflict regarding this position's responsibilities found in the position description and the actual work performed by the incumbent, specifically in the areas of fiscal management. There are very few costs that can be controlled by the supervisor. There are a certain number of required bus driver positions and their contract rates are set by the school division. The superintendent does not have the authority to purchase major items such as buses and fuel is purchased from the county at their discounted price. Technology related items (i.e. software and maintenance) are purchased through the technology department. Overall there are few costs the transportation supervisor can control through his management of operations, except for the quantity and arrangement of bus routes.

Recommendations 6-3:

It is recommended that the transportation departmental cost information be shared with its supervisor. This will benefit the school division in several ways. First, it will help the supervisor get a better and more detailed understanding of the real costs of his operations. As he learns how these overall costs are impacted by decisions such as the number of bus routes, he can better focus his efforts on ways to reduce these costs, based on appropriate guidance from administration. Second, as the supervisor develops this attitude of financial accountability, he will be better able to prepare future budgets faster and more accurately. By holding the supervisor accountable for the financial performance of transportation, the position will require less guidance from the director of support services and the superintendent.

Finding 6-4:

The PECPS staff expressed above average satisfaction with the manner in which drivers work cooperatively. Conversely, PECPS' bus drivers stated the division staff (principals, teachers, etc.) is easy to work with and all seem to exhibit team spirit.

Commendation 6-4

Prince Edward County Public Schools is commended on the excellent cooperation between bus drivers and school staff, and the ability of its driving staff to cooperate and accommodate the building staff's needs.

6.B PLANNING, POLICIES AND PROCEDURES

Effective management is built upon sound planning, and clearly written and legally valid policies. The department implements plans and policies that the school board adopts governing the operations of school transportation functions, as well as policies that are directed at other programs, but have an indirect impact on the delivery of student transportation services. An effectively managed department will have procedures that show division employees how to carry out the policies in their various functional areas.

Finding 6-4:

The transportation department has some procedures and policies regarding certain aspects of operations, such as:

- Length of time students will be on a bus (ride time);
- Door-to-door pick up/drop off for all students;
- Scheduling of vehicles for extra curricular trips;
- Allowing drivers to take buses home; and
- Requests for leave.

However, many of these policies and procedures are not written, and those that are written are not kept together in any type of manual. There is no transportation procedure manual.

Conclusion 6-5:

Clearly written and approved procedures show employees how to carry out the policies within each of their various functional areas.

Well-written and organized procedures:

- Implement and assure compliance with board policies as well as document the intent of those policies;
- Protect the institutional knowledge of an organization so that as experienced employees leave, new employees have the benefit of their years of experience;
- Provide the basis for training new employees; and
- Offer a tool for evaluating employees based on their adherence to procedures.

The Prince Edward County Public Schools *Policy Manual* does not appear to address any specifics regarding the transportation department. Procedures needed to implement policies are lacking definition and dissemination to ensure the correct execution of the policies or the school board's intent.

Recommendation 6-5:

It is recommended that PECPS develop a comprehensive transportation procedure manual that contains procedures to ensure consistency among staff. This manual should include the appropriate procedures necessary to maintain the integrity of the policies as they are developed by the school board. It should be accessible to all staff and include the following sections:

- General Information;
- Performance Measures;
- Records Management;
- Discipline Procedures;

- Routing/Scheduling;
- Financial Procedures;
- Data Collection;
- Safety;
- Budgeting;
- Special Needs; and
- Maintenance All Forms.

Administrative procedures should be formally documented, with each administrator held responsible for creating and maintaining understandable, cross-referenced procedures.

Finding 6-6:

While attempting to determine if the PECPS' transportation department is delivering adequate levels of service, the factors of on-time performance, accident ratios, and other performance measurements could not be obtained.

Conclusion 6-6:

If any operation is to improve or seek efficiencies, it must establish daily benchmarks from which to operate. The Commonwealth, on an annual basis, supplies a great deal of transportation data to aid any operation with gauging its success against its peers. The state-level information, by itself, is not sufficient to sustain proper planning and procedural changes that may be required.

Recommendation 6-6:

It is recommended that PECPS implement a system for measuring overall transportation performance. Based on information provided by building and administrative staff, the existing transportation service appears to be adequate. The lack of concentrated complaints and concerns points to a system that is working at least reasonably well. Driver turnover is tracked and is low, but the only measurement of success appears to be complaints received. It is always good to establish and measure performance benchmarks, then the division can make any needed corrections/adjustments based on those measurements.

Suggested transportation industry benchmarks should include, but are not be limited to:

- 99.5 percent on-time percentage;
- No more than one preventable accident per 100,000 miles;
- <3 percent overtime pay to payroll ceiling; and,
- <3 percent driver absenteeism.

These benchmarks can be easily measured and monthly comparisons can be made. Each month, statistics should be shared with staff and drivers with appropriate commendations or improvement action plans implemented.

Finding 6-7:

There is no bus driver handbook and there are few written instructions for bus drivers. The written documentation that exists includes:

- Check lists to follow before using the bus;

- Forms for reporting maintenance items (e.g., signal light not working);
- Lists of students assigned to the bus with contact information; and
- Bus routes detailing the pick up and drop off order of students;

Conclusion 6-7:

The importance of the role played by the division's bus drivers cannot be overstated. They are given the responsibility of transporting students to school on time and safely. They need a handbook that lists their responsibilities and duties. An example of major topics should include:

- Procedures to follow in case of an accident/incident;
- Instructions describing responsibilities for completing maintenance forms;
- Bus drivers licensing requirements;
- Items that require disciplinary actions of students;
- Consequences/disciplinary action of bus drivers (e.g., failure to notify transportation supervisor their absence, failure to report traffic violations);
- Periodic safety drills; and
- Drop off/pick up policies.

Recommendation 6-7:

It is recommended that the PECPS' human resource department and the transportation supervisor work together to prepare a handbook for the division's bus drivers. The existence of this document will help to ensure consistency in bus driver actions. This handbook could be part of any resulting transportation procedures manual.

Finding 6-8:

Not all transportation personnel data is kept in the human resources department.

Conclusion 6-8:

It is important that PECPS keeps a copy of all division personnel information in the human resources department. While it is understood that certain information is desired by the transportation supervisor (such as verification of valid Commercial Driver Licenses–CDL, license status, and driver point balances) to ensure he is aware of adverse information regarding drivers who report to him, a copy of this information needs to reside in the human resources department.

Recommendation 6-8:

It is recommended that PECPS keep all information related to transportation personnel in the human resources department, to include driving records.

6.C ROUTING AND SCHEDULING

As can be seen in Exhibit 6-11, the PECPS per-mile cost ranks second lowest in its peer group and is 22 percent lower than the peer average. County systems call for greater than average miles-per-bus rates since the geographical area is larger, which spreads the fixed costs over a larger allocation base and keeps the per-mile cost lower than in urban areas.

Exhibit 6-11
Transportation Per Mile Cost—FY 2006

School Division	Pupil Transportation Costs	Per Mile Cost
Charlotte County	\$1,651,941	\$1.93
Cumberland County	\$1,273,337	\$3.12
Lunenburg County	\$1,118,044	\$1.61
Nottoway County	\$1,174,676	\$2.31
Prince Edward County	\$1,827,085	\$1.74
Sussex County	\$1,487,248	\$2.25
Peer Division Average	\$1,422,055	\$2.16

Source: Virginia Department of Education, 2007.

PECPS has the second largest fleet of buses operated within its peer group as shown in Exhibit 6-12, below.

Exhibit 6-12
Total Route Buses Operated—FY 2005

School Division	Number of Buses Operated
Charlotte County	48
Cumberland County	31
Lunenburg County	36
Nottoway County	38
Prince Edward County	46
Sussex County	34
Peer Division Average	39

Source: Virginia Department of Education, 2007.

Exhibit 6-13 illustrates that PECPS ranks highest in total miles driven and is averaging about 17,584 miles per bus per year—second highest among the peer divisions.

Exhibit 6-13
Total Miles Operated—FY 2005

School Division	Total Miles	Avg. Miles per Bus
Charlotte County	696,159	14,503
Cumberland County	371,130	11,972
Lunenburg County	644,838	17,912
Nottoway County	507,182	13,347
Prince Edward County	808,884	17,584
Sussex County	583,824	17,171
Peer Division Average	602,003	15,436

Source: Virginia Department of Education, 2007

The routing/scheduling function is second only to the safety area in determining the effectiveness of a transportation system. Routing determines the total number of routes, which in combination with scheduling of bell times for the various schools, dictates the total number of buses required. This total route bus count drives nearly every expense associated with transportation. The better the division's routes and schedule system, the more efficient it becomes.

Bus routing at PECPS is manually completed, performed primarily by the transportation supervisor. Drivers assist with the routing and stop identification process by updating their routes at the close of each year. Routes for the new year are based on what is in effect at the end of the preceding year, adjusted for those students moving up to the various schools for the

coming year, any known new students, graduations, and other factors. This results in having each route adjusted for students and stops, but no global re-routing of the entire system is accomplished to help ensure that the total system is synchronized.

Prince Edward County is 354 square miles, and the high/vocation, middle, and elementary schools are centrally located. The routes are arranged geographically and have seen few changes over the years (i.e. they are historical ‘transport areas’ and change very little). Some routes are quite lengthy and operate longer than two hours.

The general transportation operating parameters found in the PECPS’ *Policy Manual* are:

- Walk to stop distance: none specified;
- Walk boundary distance: none specified;
- Percentage of capacity for secondary: none specified;
- Percent of capacity for elementary: none specified; and
- Ride time limitations: None specified—this study assigned and used 75 minutes as a maximum time in order to establish a yardstick.

Finding 6-9:

Attachment 6-A summarizes data regarding bus routes, as provided on the individual bus route sheets maintained by the transportation department. This data reflects utilization of the buses (average number of students per bus compared to bus capacity), approximate length of time students spend on the bus, and the number of stops a bus is making on each route (pick ups). Specific excerpts from the attachment are used periodically throughout the study to illustrate certain points.

Attachment 6-A shows that route buses transport approximately 1,800 students on average, which is approximately a 63 percent use of total available capacity for all of the 46 buses run on a daily basis. The routing scheme consists of separate, single-routed elementary school routes along with combined high and middle school routes. There is one exception, where bus number 9 serving the Meherrin area picks-up elementary, middle, and high school students.

PECPS invested in software to assist with identifying efficient routing of school buses. This software has never been used. The software was purchased in 2006 at the cost of \$4,500.

A maintenance agreement, with an annual fee of about \$2,000, has not yet been purchased. The software is called Transfinder Pro. It has been loaded onto the supervisor’s computer, but has never been used. According to Transfinder Pro’s literature, the features and capabilities of this product include:

- *Improved routing efficiency reduces operating costs. By maximizing routing efficiency, optimization in the use of the fleet and reduced fuel consumption, vehicle wear and repair costs will result. Transfinder Pro can visualize the data on county-wide street-level maps as you create routes and formulate schedules and plans. The user can instantly retrieve data on any map segment or point, allowing quick access to the data needed to do typical tasks such as adjusting routes and responding to inquiries or emergency situations. In addition to the dramatic time savings realized when creating routes and schedules with Transfinder Pro, the user will have time to consider more than one routing option. By varying factors affecting route efficiency (such as bus stop locations, routes, and trip schedules), the user can respond quickly to required changes*

and consider the potential impact of proposed changes such as staggering school start times or varying walking distances. Transfinder Pro also helps to optimize the use of the existing fleet by enabling the user to schedule buses at or near capacity. An action such as reducing the deadhead miles will significantly lower fuel consumption, vehicle wear-and-tear and repair costs.

- *Increased productivity raises efficiency. Transfinder Pro's comprehensive features and state of the art technologies provide many opportunities to save significant time and money. To minimize data entry and maximize processing speed, Transfinder Pro's data components are interlinked. Once the user has entered a particular set of data into the program either electronically or manually, it does not need to be done again. Updating information and making changes becomes a cinch. With just a few key strokes or the click of a mouse, the user can add new information to the database such as new students and routes, identifying bus stops, edit routes, and assign substitute drivers. In other words, Transfinder Pro's related data components automatically update the various databases in the system. This feature saves steps and eliminates many routine manual tasks such as updating records, filing changes and generating reports. The user can use the data on students, schools, buses, drivers, and routes to generate notification letters, passenger lists, emergency reports, and other types of communications. Transfinder Pro is capable of preparing local, state, and federal reports and can perform an automatic student rollover to the next grade at the close of a given school year. Transfinder Pro generates a vast array of other reports which can be customized to meet your specific needs.*
- *More planning enhances service level. Along with facilitating transportation management, Transfinder Pro gives the user greater planning power and ability to increase the level of service you provide. For example, if a school district changes to a multi-tiered trip system, it can reduce route times and correspondingly decrease the amount of time students are riding on a school bus, while maximizing fleet utilization. Transfinder Pro is also beneficial in boundary planning, redistricting and forecasting. Transfinder Pro helps to: evaluate the impacts of policy change, predict future needs, and, complete boundary analyses faster than any other tool in the business.*

The fleet maintenance module has been described as one of the features purchased with this software. This software was purchased without any input from or knowledge of the technology department. An upgrade had to be made to the supervisor's computer (increase in RAM) in order for the product to be installed on his machine.

Conclusion 6-9:

The cost of the software has already been expended, yet the software product has not been used. Without specific knowledge of this particular software, concrete statements regarding the achievement of its total advantages cannot be made. However, as a tool, it would certainly be a benefit when creating the new routes for the 2007-2008 school year. The data generated will then help assess the standards that have been set for seat utilization and ride time.

Recommendation 6-9:

It is recommended that PECPS utilize the Transfinder Pro software to assist in developing a better system of bus scheduling and routing. If the supervisor does not currently have the time to use the software, other individuals within the school may consider the following:



- Treat it as a class project where selected students use the product. They could evaluate the features and at the same time input the valid data unique to PECPS needed in order to create the routes. They could even incorporate training for the supervisor as part of the project.
- Use the technology department staff to set-up the software. It is common business practice for an organization's technology staff to install and use new software placed on staff computers. This staff would probably become acclimated to the peculiarities of the software faster, especially considering that it has to interact with the data on SASE. They could input at least some of the data for PECPS bus routes, train the supervisor on its features, and then be able to offer meaningful support on an as-needed basis in the future.

Finding 6-10:

Currently there are 46 bus routes (including the shuttle bus route performed by bus number 54) run on a daily basis for PECPS. Elementary school students ride on buses separate from the middle and high school students, which is a result of a decision made approximately 10 years ago by the school division's administration. (There is one exception to this rule—Bus 9 serving Meherrin.) Routes are designed with several factors in mind.

- School attended by student;
- Capacity of the school bus;
- Length of time spent on the bus by students ("ride time"); and
- Proximity of student pick up/drop off points.

The decision to separate students appears to have been generated from an expressed desire of the parents in order to limit or protect the elementary students from behavior and language of older students. According to some bus drivers, the language used by some elementary students is as rough as older students. The bus drivers felt that older students would be protective of younger students if they were to share the same buses—especially when siblings attending different schools share the same bus.

The school division has also adopted an informal policy, which limits the amount of time that a student will be on a school bus either traveling from home to school and/or from school to home, called "ride time." The amount of time is one hour and 15 minutes, or a total of 75 minutes. A written version of this policy could not be found.

Also, school bus capacity is limited based upon the size of bus and the age of students that are seated on a bus. The stated capacity of the regular bus ranges from 64 to 78. Elementary students can generally be seated three students to a seat. Middle school and high school students generally sit only two students per bus seat.

The informal school policy currently provides for the pick-up and drop-off of students at each student's residence (door-to-door pick-up/drop-off). There are no specified bus stops where students must gather for pick-up. The only exception to this is in apartment complexes, which are private property. (Here, buses may drive through the complex where students are allowed to gather in selected areas, especially during inclement weather.)

Conclusion 6-10:

Many of the constraining factors used in determining bus routes are controllable by the school division. Even though informal standards for ride time have been established, several of the bus routes are longer than the targeted standard (one hour and 15 minutes, or a total of 75 minutes) for any one student. Exhibit 6-14 through 6-16 shows that of the 46 total bus routes, nine routes exceed that target, or about 20 percent of the routes have a ride time longer than the target standard. Another key statistic illustrated in Attachment 6-A (and in Exhibits 6-14, 6-15, and 6-16) is the variation in the total operating time per route. The total operating times, as computed in these exhibits, allows for 15 minutes of preparation time before the route starts. The total operating times varies from a low of approximately 48 minutes to a high of approximately two hours and five minutes (or 125 minutes). This means that some routes are more than twice as long as others, yet the job duties and pay is the same for drivers regardless of the length of operating time. The average operating time is approximately one hour and 25 minutes.

Exhibit 6-14
Ride Time
Elementary School Buses

Bus #	Route Start Time	First Pick-Up	Reports to School	Ride Time (in minutes)	Total Operating Time in minutes
43	0724	0732	0805	33	56
39	0724	0731	0805	34	56
20	0705	0713	0805	52	75
30	0708	0718	0810	52	77
52	0727	0735	0805	30	53
33	0620	0631	0805	89	120
12	0650	0656	0820	84	105
3	0640	0655	0805	70	100
19	0655	0657	0805	68	85
44	0650	0700	0805	65	90
7	0655	0705	0805	60	85
8	0615	0650	0805	75	125
11	0710	0718	0810	52	75
32	0615	0631	0805	94	125
28	0630	0640	0805	85	110
34	0625	0645	0805	80	115
40	0715	0715	0815	60	75
Average Ride Time and Total Operating Time				64	90

Among the 17 elementary school bus routes, five routes, or 29 percent, exceed the ride time standard. The average ride time among all elementary school buses is 64 minutes. There are wide variations in the ride times and total operating times among the buses.

Exhibit 6-15
Ride Time
Middle/High School Buses

Bus #	Route Start Time	First Pick-Up	Reports to School	Ride Time (in minutes)	Total Operating Time in minutes
59	0715	0720	0750	30	50
27	0655	0705	0750	45	70
21	0710	0722	0750	28	55
2	0717	unk	0750	33	48
36	0705	0711	0805	54	75
4	0614	0640	0750	70	111
60	0655	0656	0750	54	70
47	0647	0650	0750	60	78
41	0628	0648	0750	62	97
14	0630	0635	0750	75	95
53	0647	0650	0750	60	78
23	0705	0705	0750	45	60
24	0630	0634	0750	76	95
57	0635	0655	0750	55	90
31	0650	0700	0750	50	75
5	0705	0708	0750	42	60
58	0620	0628	0805	97	120
55	0633	0705	0750	45	92
29	0615	0625	0745	80	105
25	0625	0635	0750	75	100
26	0640	0640	0750	70	85
15	0635	0650	0750	60	90
56	0626	0650	0750	60	99
22	0645	0645	0750	65	80
9	0627	0635	0750	75	98
Average Ride Time and Total Operating Time				59	83

Among the 25 middle/high school bus routes, only three routes have a ride time that exceeds 75 minutes, though there are another three routes that have a ride time of exactly 75 minutes. The average ride time for middle/high school bus routes is 59 minutes, slightly less than that of the elementary school routes.

Exhibit 6-16
Ride Time
Handicap Bus Route

Bus #	Route Start Time	First Pick-Up	Reports to School	Ride Time (in minutes)	Total Operating Time in minutes
37	0625	0630	0740	90	95
45	0620	0640	0745	85	105
46	0700	0705	0740	60	65
Average Ride Time and Total Operating Time				78	88

Two-thirds of the handicap bus routes have ride times exceeding the standard of 75 minutes. The average ride time for handicap bus routes also exceeds this standard.

Opportunities exist for improving the low seat utilization of 63 percent. From the data contained in Attachment 6-A, the review team computed the percentage of available seating space utilized based on the average number of students riding each bus. This information is shown in Exhibits 6-17 through 6-19.

In Exhibit 6-17, elementary school bus utilization is approximately 66 percent of capacity of the 17 buses. This means that of the total 1,118 available seats on all of the buses that serve the elementary school, approximately 383 seats are empty. Four buses average less than 50 percent capacity (some as low as 34 percent) and only four buses experience average utilization above 80 percent.

**Exhibit 6-17
Seat Utilization
Elementary School Buses**

Bus #	Capacity	Average Number of Students	Percent Utilized
43	64	48	75.0
39	64	39	60.9
20	64	48	75.0
30	78	52	66.7
52	78	59	75.6
33	64	25	39.1
12	64	60	93.8
3	64	29	45.3
19	64	55	85.9
44	64	30	46.9
7	64	37	57.8
8	64	27	42.2
11	64	59	92.2
32	64	39	60.9
28	64	35	54.7
34	64	36	56.2
40	66	57	86.4
Total/Avg. Utilization	1,118	735	65.7

There is an average of 735 bus-riding elementary school students. Using a target capacity figure of 80 percent, approximately 919 seats ($735 \text{ divided by } .80$) are needed to transport these students. Using a 64-seat bus as a gauge, approximately 15 buses would be needed to transport elementary school students. Currently, 17 buses are used to transport the same number of students (This figure does not include efficiencies that could be gained by combining students of all ages on all or some bus routes.)

Exhibit 6-18 shows seat utilization for the middle/high school bus routes. Here, though, actual seating capacity is less than the rated vehicle capacity. The standard used by PECPS for determining bus capacity for its middle/high school students is two students per seat (versus

three elementary school students per seat). Of the 24 buses used for the transportation of middle/high school students, overall utilization is 63 percent of seat space. Accounting for the fewer number of students that can fit comfortably on a seat, there are about six buses that average 50 percent or less capacity and four buses that experience capacity utilization above 80 percent.

Exhibit 6-18
Seat Utilization
Middle/High School Buses

Bus #	Capacity	Average Number of Students	Percent Utilized
59	78	45	57.7
27	78	53	67.9
21	65	44	67.7
2	64	32	50.0
36	64	26	40.6
4	64	27	42.2
60	64	47	73.4
47	78	68	87.2
41	64	32	50.0
14	64	35	54.7
53	64	41	64.1
23	64	44	68.8
24	64	44	68.8
57	64	39	60.9
31	64	54	84.4
5	64	41	64.1
58	64	38	59.4
55	64	22	34.4
29	64	31	48.4
25	64	46	71.9
26	64	51	79.7
15	78	50	64.1
56	64	51	79.7
22	64	43	67.2
Total/Avg. Utilization	1,593	1,004	63.0

Exhibit 6-19 shows that the seat utilization of capacity for handicap buses is only 17 percent.

Exhibit 6-19
Seat Utilization
Handicap Bus Route

Bus #	Capacity	Average Number of Students	Percent Utilized
37	35	5	14.3
45	31	9	29.0
46	32	3	9.4
Total/Avg. Utilization	98	17	17.3

The policies regarding ride time, separation of elementary school students from middle/high school students, bus stops, and seat utilization can inflict artificial constraints that may hamper effective and efficient bus routing and scheduling, especially when these policies are combined.

Recommendation 6-10:

It is recommended that PECPS re-evaluate policies governing the transportation of its students. There are several major changes that could be made to lessen restrictions influencing bus routes. They include:

- Eliminate the separation of students by school. When students of all ages ride the same buses, the bus makes fewer stops. It is expected that at least one bus could be eliminated if students in all grades could ride the same buses, even if this change only applied to selected bus routes. This reduction in the number of buses would reflect the elimination of stops made for the elementary school students on one bus, and again for middle or high school students on another—sometimes at the same stop.

Additional benefits include:

- More efficient bus routes could be developed because the overlap of routes between elementary school and middle/high school will be eliminated.
- Total student time on buses (ride time) could be reduced because buses could be filled quicker (less stops).
- Develop a bus stop policy by the establishment of selected sites (“bus stops”). Instead of picking up all students at their “door,” establish bus stops through out the county as appropriate. First, establish how far the county will allow students to travel to a stop from their home and set up these stops in areas where there are larger concentrations of students. The benefits of these bus stops include:
 - Reduced maintenance costs on vehicles, and
 - Reduced student time on buses.
- Relax the policy limiting ride time to one hour and 15 minutes. While this could be a goal to aim towards, it should not cause undue interference with certain bus routes. (This policy is not being met on several routes anyway.)
- Increase the seat utilization percentage goals for elementary school students.

A reduction in the number of stops and the efficient/effective routing of buses has a direct impact on the maintenance cost of the bus. The savings include:



- Less wear and tear on brakes
- Less start/stop on transmission
- Less wear and tear on tires
- Overall reduced operating time of the bus, resulting in lower fuel costs

The operational cost for all buses in school year 2005-2006 was \$1,512,406 (total expenditures *minus* school bus purchases). Quantified reductions in operating costs are shown below:

One percent reduction in operating costs =	\$ 15,124
Three percent reduction in operating costs =	\$ 45,372
Five percent reduction in operating costs =	\$ 75,620
Ten percent reduction in operating costs =	\$151,241

Adoption of any of these changes (or a combination) also reduces the total time that buses are on the road (whether with students or not) reducing exposure to traffic.

After checking with the transportation personnel in the peer divisions, no other school district has a similar organization where all schools are located in the same geographical location such as PECPS. Lunenburg, Cumberland, Charlotte, and Sussex counties do not commingle students and their schools are dispersed in several different locations. Nottoway County Public Schools does commingle elementary, middle and high school students on various routes in an effort to reduce costs and keep transportation costs down. For example, Nottoway includes the town of Burkeville. Nottoway disperses a bus to pick up and deliver the Burkeville elementary students, but also picks up Nottoway middle and high school students and delivers them to Nottoway intermediate, middle, and high schools. According to the Nottoway transportation director, there are no problems associated with the commingling of students and this action has reduced the number of buses required and costs associated with those buses. Further, Nottoway has been using on-bus video cameras to record student behavior. Any student who is recorded misbehaving on any bus is dealt with administratively. According to Nottoway's transportation director, the cameras have eliminated the need for bus monitors and further reduced operating costs.

PECPS should strongly consider modifying the constraints that influence bus routing, but only if they would result in reduced operating cost.

Fiscal Impact: It is believed that balancing the number of students per bus with just the elementary school bus routes (assuming students of all ages did not ride the same bus) would result in approximately two fewer buses. The savings equates to \$156,788, represented by two buses at \$65,417 each, *plus* two drivers at approximately \$30,176.72 (\$12,977 each *times* two drivers *plus* 16.27 percent fringe benefits). It is not unrealistic to expect implementing a combination of the recommendations could eliminate more bus routes, producing further savings.

6.D STATE REPORTING

The Virginia Department of Education requires each school division to submit certain transportation reports each year. Divisions must submit these reports on a timely basis with accurate information.

Prince Edward County Public Schools uses the required daily driver report sheet that contains the number of students transported along with mileage figures. These daily recordings are kept on monthly reports and maintained by the transportation supervisor. The dispatcher then combines them onto a monthly spreadsheet for the submission to the Virginia Department of Education at the close of the year. The department relies on the finance staff to record the appropriate costs into the web-based Pupil Transportation Verification Report. Reporting is very straightforward and is not complicated. The only automated portion of the system is the web-based document on the DOE web site.

Finding 6-11:

PECPS is the third lowest school division in its peer classification regarding “per pupil costs” (Exhibit 6-3) and ranks second lowest in its peer classification as to “per mile costs” (Exhibit 6-11). The “per mile costs” are 22 percent below the peer average and 40 percent below the highest in the peer group. The “per pupil cost” figure increased in 2006 (compared to 2005), which is attributed to a large increase in bus purchases. These statistics indicate that efforts are being made to control costs.

Commendation 6-11:

Prince Edward County Public Schools is commended for its cost controls, low per pupil cost, and low per mile costs when compared to peer school divisions.

6.E TRAINING AND SAFETY

The goal of any school transportation department is to safely transport students to and from school. Training and a strong safety awareness program are needed to achieve this goal.

As discussed above, the PECPS transportation department enjoys a moderate to low driver turnover rate, which reduces the overall time and expense for initial training requirements. There is one consultant used to conduct driver training. This trainer must renew his certificate every five years. Training is guided by and accomplished via state requirements and training manuals. Training requires 24 classroom hours and 24 “behind the wheel” hours, along with the standard CDL requirements. In-service training occurs at least twice per year, usually including an orientation at the start of the year and one other session during the second semester. The division has used videos and speakers as part of its training presentations.

The PECPS safety record is very good. Accidents are rare both in terms of vehicular as well as workers’ compensation injuries. The longevity and experience level of the driving force pays dividends in the area of safety. It was apparent, through interviews, that drivers have a positive attitude towards safety and the overall requirements related to maintaining a safe program.

Student training is confined to two evacuation drills conducted annually. Drivers felt they had adequate training, and support in this area. However, in a surprise visit by VDOE’s Pupil Transportation Service, deficiencies were noted to include the lack of verifiable driver training.

Finding 6-12:

The buses do not contain any formal instructions as to how to proceed during an emergency situation. Drivers know to use radios to report accidents or incidents and bus breakdowns, but little or no formal information was present describing the process if this occurs after hours or over weekends.

Conclusion 6-12:

Accurate and timely information must be communicated when drivers experience some type of emergency. The department's organization structure does not lend itself to assuring that drivers know whom to contact in an emergency situation. Doing the right thing at the right time during an emergency can help the division avoid potential liability and it can greatly assist student passengers as well.

Recommendation 6-12:

It is recommended that emergency information sheets should be prepared and present on each bus. The transportation supervisor should ensure that each bus is supplied with two important communication items:

- Emergency call sheet, listing in order of priority, the name and telephone number (to include home and cell numbers) of contacts the drivers should notify after hours or on weekends; and
- A simple one-page accident handling instruction sheet in the event of a collision. This sheet would provide guidance so that drivers take the necessary and proper steps in handling the accident scene, ensuring students' well being, notifying authorities, and other important initiatives.

Taking the proper steps during an emergency situation is critical, and it is always helpful to have consistent, easily understood instructions.

6.F VEHICLE MAINTENANCE AND BUS REPLACEMENT SCHEDULES

Division school bus replacement is expensive and inevitable. As a result, keeping an existing fleet in superb operating condition is a paramount component of an effective transportation department. Routine and preventive maintenance, maintenance of accurate records, and employment of qualified mechanics are major factors to consider when examining a division's maintenance department.

The PECPS bus fleet appears to be well maintained. The average age of the fleet is about five years old with the oldest active route bus purchased in 1997 (10 years old), as indicated in Exhibit 6-20. The fleet has a total of 43 school bus units (not including the handicap buses) leaving eight spare buses, which is a spare ratio of about, 1:6. In addition to the school bus fleet, the division owns approximately 34 other vehicles that are not buses (i.e. sedans, trucks, trailers, and vans) that also need to be regularly maintained. A summary of usage associated with these other vehicles is shown in Exhibit 6-21.

**Exhibit 6-20
Model Year of Buses**

Year	Regular	Spare	Handicap	Activity
2007	4		1	
2006	2			
2005	5			
2004	5			
2003			1	
2002	7			
2001	5			
2000	6			1
1999	5			
1998	2	2		
1997	1	3		1
1995			1	
1993		3		
1992			1	
Total	42	8	4	2

**Exhibit 6-21
Other Vehicles Maintained by Transportation**

Usage of Vehicles	Quantity of Vehicles
Other student transportation	12
Maintenance	9
Food Services	2
School Board	3
Resource Officer	2
Supervisors	4
Driver's Education	2
Total	34

The staff responsible for the maintenance of these buses works in the transportation maintenance shop along with the transportation division. The garage stores all parts, supplies, and equipment necessary for the division fleet upkeep. Diesel fuel is purchased from the county. Buses are fueled by one of the bus garage mechanics. The purchase of parts and supplies is accomplished at the garage, but is signed-off by the director of support services.

Just prior to this efficiency review, the Commonwealth of Virginia completed a spot/surprise maintenance inspection, the result of which was very unfavorable. There were several concerns, one of which included the lack of mandatory 30-day bus inspections. All buses are supposed to be placed on a maintenance schedule that ensures they are inspected at least once per month and buses have a 180-day (semi-annual) inspection as per state requirements. These procedures are discussed in the VDOE Preventive Maintenance Manual for Virginia School Buses (March 2003). Non-bus equipment must be individually scheduled for maintenance by the division, as they are not on a stated schedule. Oil changes and lubes are usually performed every other inspection period, or as needed (generally at 6,000 and 10,000 miles). Part and supply items are shopped locally or through the bus manufacturers. Buses are purchased through the state's purchasing program, as funds are available. Maintenance records are manually prepared; no computerized maintenance system is used.

The garage is staffed with two supervisors. There is no administrative staff specifically assigned to the maintenance department. Based on the two mechanic positions, the bus to mechanic ratio is approximately 28:1 (56 buses to two mechanics). However, one of the supervisors works as a mechanic. Overall, the bus maintenance system seems to be working and the safety of the fleet is maintained.

The review team also sampled several vehicle repair folders to draw our own conclusions regarding maintenance work performed, or reported as being performed, on the vehicles. A summary of the data collected during that sampling is contained in Exhibit 6-21. Conversations with the staff indicated that there is a substantial amount of work performed that is not recorded. All of this calls into question the accuracy of the maintenance records.

Exhibit 6-21
Sampled Work Order for Selected Vehicles

Vehicle No	# of Work Orders	Driver Generated Work Orders	# of 30 Day Inspections	# of 180 Day Inspections
1	7	2	3	1
2	14	11	1	1
3	13	10	1	2
9	11	11	1	1
14	19	15	1	1
41	23	19	1	2
42	1	0	0	1
45	15	10	2	2
27	8	3	1	1
31	2	0	1	1
33	6	5	0	0
36	8	6	4	0
38	1	0	0	1
53	11	6	3	1
64	1	0	0	0
80	1	0	1	0
87	5	3	0	0

As illustrated by the sample we made of the maintenance records, none of the vehicles complied with the requirements for 30-day inspections or the 180-day inspections. Other important data that should be recorded on the work order was also missing. This data included the mileage at the time of repair or inspection, parts required, or labor hours used to perform the work.

Finding 6-13:

In accordance with the March 2003 version of the Preventive Maintenance Manual for Virginia School Buses, PECPS does not maintain its bus maintenance records as required by DOE. We could find no justification that explains why the bus maintenance records were not maintained properly.

Conclusion 6-13:

While there is no automated system currently used, simple software (such as MS Excel) could be used to develop the required maintenance schedules and create electronic copies of the forms.

For example, the form currently used for the 30-day maintenance is a paper copy of the form (made on a copier machine) included in the PM manual. An electronic copy could be templated and then customized with the school's name (Prince Edward County Public Schools), location, and bus number. In fact, the form could be created and printed for the entire year or printed when needed. Adjustments in the schedule would be made as needed. Accurate and complete work records could help identify recurring problems. The school division could be held liable if an accident occurred and scheduled maintenance records were missing or maintenance work was not performed.

Recommendation 6-13:

It is recommended that electronic copies of recurring maintenance forms be developed and a schedule of recurring maintenance be prepared and followed. The dispatcher or a technology student could perform the work. Additionally, when maintenance is completed, the mechanics should provide all data relating to the repair or inspection (mileage, parts/materials, labor hours). Accurate historical data will play a significant role in assessing future maintenance requirements and staffing needs. Analysis of this data should be reviewed periodically by the bus garage supervisor.

Finding 6-14:

The current staffing at the transportation maintenance shop consists of the following:

Exhibit 6-22 Transportation Staffing and Salary

Position	Salary
Supervisor –Bus Garage	\$43,632
Supervisor –Bus Garage	\$31,114
Mechanic –Garage	\$36,271
Mechanic –Garage	\$38,010

The transportation maintenance department staff work shifts are staggered to provide coverage during the operation of the bus routes, which is typically 6:30am to 4:00pm.

Two of these mechanics also work for the school division during the afternoon and evening as part-time custodians. The pay associated with this part-time work is labeled as pre-approved overtime, and a part of the pay for this part-time custodial work is performed at 1.5 times the normal (regular) pay for custodians.

High intensity work sampling of several of the bus garage mechanics was conducted by the review team. The work sampling methodology consists of observing workers every two minutes as they perform their normal work routine. These individual observations are placed into three basic categories, which include:

- Direct Productive– Work that is directly applicable to altering the composition, condition, or construction of the item or area being repaired or altered. Direct productive work varies from function to function.
- Indirect Productive– Work which is necessary and renders service to the productive portion of the job, but does not alter the composition, condition, conformation, or construction of the product.
- Non-Productive– Idle or personal time spent by the worker which does not contribute

directly or indirectly to altering the composition, condition, conformation, or construction of the item or area being repaired or altered.

The work sampling methodology used is based on the binomial distribution; an individual is either direct productive or not direct productive. When the sample size becomes large, the bi-normal distribution approaches and eventually becomes the normal distribution. This provides a statistical method for the sample mean to be utilized for estimating the population mean. The results are shown below:

Percent Direct Productive	49.0 percent	(206 observations)
Percent indirect Productive	1.2 percent	(5 observations)
Percent Non-Productive	<u>49.8 percent</u>	<u>(209 observations)</u>
Total	100.0 percent	(420 observations)

Conclusion 6-14:

The staffing at the transportation maintenance shop can be reduced without affecting its ability to perform its mission. The review could not discern any value added associated with having two bus garage supervisors. One supervisor works as a mechanic, but receives supervisor pay. That person does not appear to participate in any way as a supervisor (does not attend meeting in that capacity) or is otherwise recognized as such. Additionally, as stated above, the productivity level of the mechanics indicates that they are working at a less than acceptable level of productivity. This, coupled with the fact that some of them receive additional pay (at overtime rates) for custodial work above and beyond their mechanic duties, indicates that the cost of their services can be reduced without impacting the mission and workload.

The results of the work sampling show that the productive time is very low and the non-productive time is very high. In a shop operation such as this, direct productive time should average at least 75 percent, indirect productive time about 15 percent, and non-productive time about 10 percent.

These observed percentages indicate that there are too many workers, not enough work, or part of both. One reason the non-productive percentage is so high is that one mechanic, while being observed, did not perform any work after lunch. That individual sat at the table in the garage and talked with other staff or bus drivers for the rest of the day. (It should be noted here that this same mechanic clocked a three hour custodian shift for work that only took one hour to complete.)

With the size of the work force, the bus garage supervisor should be a working supervisor (not a manager). With the results of the work sampling, we expect enough time would be available for the supervisor to also perform necessary paperwork and other administrative duties. There also appears to be adequate time for mechanics to perform the state-required 30-day inspections of all buses.

Recommendation 6-14:

It is recommended that bus garage operations should be revised as follows:

- Eliminate one bus garage supervisor. The remaining bus garage supervisor should be responsible for assignments of work, development of work schedules, evaluation of staff, as well as the performance of specific maintenance functions.

- Stop the practice of using existing full-time mechanics to perform custodial work after normal hours. Based on what was observed during the analysis, the existing staff could perform the custodial duties as a part of their normal work day (no additional pay) at the end of their shift or a shift could be moved to start later so that the custodial work would be performed once everyone else had left for the day.
- Stop the practice of using bus mechanics to fuel the buses. The bus drivers have enough time during their day to fuel their own buses.

Fiscal Impact: The elimination of one bus garage supervisor would result in a savings of at least \$36,176 (\$31,114 in salary *plus* 16.27 percent in benefits) each year. Eliminating the need for a separate custodian for cleaning the transportation shop would result in a savings of about \$9,489 per year.

Finding 6-15:

Normal, reoccurring supplies are purchased for the bus maintenance shop from several vendors who periodically make stops at the shop. These vendors are also able to deliver needed parts/supplies by placing orders through telephone calls. By ordering parts/supplies as needed, the transportation maintenance shop reduces the need to store vast quantities of parts/supplies. However, there is no inventory system in place that accounts for the parts/supplies purchased. The items purchased are stored in the transportation maintenance shop where virtually anyone has access to them. There is no way to tell if any materials are missing or to tell the quantities of items ordered in a given month or year.

Conclusion 6-15:

The method used for purchasing parts/supplies is inadequate for accounting for these items. The VDOE preventive maintenance manual includes specific instructions and forms to be used for inventory control, but they are not currently used by the bus maintenance shop. There is no periodic inventory or any inventory documents provided by the school division, so no reconciliation can be performed. Accountability of property is an important element of the department and should not be ignored.

Recommendation 6-15:

It is recommended that PECPS require the transportation maintenance shop to use the inventory form provided in the VDOE preventive maintenance manual. Use of this form will force accountability. Also, parts/supplies should be secured in a locked area where access is only granted to specific maintenance personnel.

Finding 6-16:

The maintenance shop has buses moving through it throughout the entire workday. Hydraulic lifts are used to raise buses off the floor in order to inspect the undercarriage, change oil, and change tires. Any number of accidents could occur to staff that are not part of the maintenance crew while these buses are on the lifts. The floor has painted lines, which clearly prohibit non-staff members from entering into the work area, yet the review team observed other personnel, particularly bus drivers, routinely lounging in the maintenance area and talking with the mechanics. There are table and chairs between two of the work bays where staff members congregate.



Conclusion 6-16:

The presence of staff members who are not part of the maintenance shop represents a safety hazard. The area is labeled as restricted to maintenance staff to reduce accidents and harm to personnel. Unfortunately, these markings (and the policy prohibiting the unauthorized personnel) are disregarded. The school division puts staff at substantial risk by letting virtually anyone walk and congregate in the work area. The location of the vehicle work records in the shop area and the area where bus drivers drop-off their vehicle work orders, further contributes to the personnel traffic in the shop area.

Recommendation 6-16:

It is recommended that the maintenance shop use the existing office area in the building for the storage of their records. The dispatcher could serve as the person responsible for filling the forms or retrieving the vehicle file folders for the mechanics. Likewise, drivers could have a work order request drop box in the office. The shop should strictly enforce the policy prohibiting unauthorized personnel in the shop area. Removal of table and chairs from this area will assist in reducing the likelihood of unauthorized individuals entering the work area. The only items that should be in the shop area are items directly related to vehicle maintenance.

Finding 6-17:

PECPS has an unwritten policy of rotating the different buses among the different bus routes to balance the mileage among them. Exhibit 6-23 shows the average annual mileage for each of the 42 regular buses. The calculation of average annual mileage is based upon the years the vehicle has been in service (rounded to the nearest half year) and the miles incurred, each of which are shown in the exhibit.

Exhibit 6-23
Average Annual Mileage

Bus #	# Miles on Vehicle	Model Year of Vehicle	Years in Service	Average Annual Miles
43	42,074	2004	4.0	10,518
39	2,982	2007	1.0	2,982
20	18,711	2005	3.0	6,237
30	42,699	2005	3.0	14,233
52	54,578	2000	8.0	6,822
33	89,195	2002	5.0	17,839
12	44,131	2005	3.0	14,710
3	69,497	2004	4.0	17,374
19	51,003	2004	4.0	12,750
44	39,564	2005	3.0	13,188
7	113,855	2000	7.0	16,265
8	119,074	2000	7.0	17,011
11	69,260	2001	6.0	11,543
32	85,736	2002	5.0	17,147
28	94,843	2002	5.0	18,969
34	71,063	2002	5.0	14,213
40	19,240	2006	2.0	9,620
59	70,683	2000	7.0	10,098
27	45,966	2002	5.5	8,357
21	16,784	2006	2.0	8,392
2	87,631	2000	7.0	12,519
36	18,973	2005	3.0	6,324
4	116,838	2001	6.0	19,473
60	26,502	2007	1.0	26,502
47	9,741	2007	1.0	9,741
41	182,098	1998	9.0	20,233
14	155,499	1997	10.0	15,550
53	93,448	1999	8.0	11,681
23	42,745	2004	4.0	10,686
24	68,227	2001	6.0	11,371
57	93,298	1999	8.0	11,662
31	40,485	2004	4.0	10,121
5	32,744	1998	9.0	3,638
58	117,021	1999	8.0	14,628
55	112,119	1999	8.0	14,015
29	55,963	2002	5.0	11,193
25	87,409	2002	5.0	17,482
26	92,813	2001	6.0	15,469
15	13,924	2007	1.0	13,924
56	93,806	1999	8.0	11,726
22	115,128	2000	7.0	16,447
9	77,216	2001	6.0	12,869

The data from the exhibit above has been summarized below:

Vehicles averaging less than 5,000 miles a year	=	2 (4.8%)
Vehicles averaging between 5,000 and 10,000 miles a year	=	7 (16.7%)
Vehicles averaging between 10,000 and 15,000 miles a year	=	19 (45.2%)

Vehicles averaging over 15,000 miles a year	=	14 (33.3%)
Total vehicles	=	42 (100.0%)

The average annual miles for all of these 42 vehicles are approximately 12,774 miles per year.

Conclusion 6-17:

PECPS is not effectively balancing the number of miles used by the regular buses each year. The range in average miles per year ranges from a low of 2,982 miles to a high of 26,502. A failure to balance the miles (thus the usage) of the buses will cause some buses to incur more wear and tear than other buses, which in turn will severely increase maintenance costs. On the other hand, proper balancing of miles used by each bus will result in an overall reduction in maintenance costs and reduce the likelihood of bus failures or breakdown. As long as PECPS adheres to a 10-year replacement cycle for replacing bus in the active fleet, balancing will not necessarily affect the length of time that a bus will remain in active service.

Recommendation 6-17:

It is recommended that PECPS rotate the active buses among the bus routes to balance the amount of miles put on each bus. Periodically evaluating the miles on each of the buses used in the bus routes and re-assigning, as necessary, the buses according can achieve this. Ideally, PECPS should develop a policy that defines when this evaluation is performed (e.g., annually) and when buses would be re-assigned (e.g., no more than once year) to reduce confusion to parents/students and administration.

Financial Impact: Savings would be achieved through reductions in maintenance costs of buses.

Attachment 6-A Bus Information

Bus #	Capacity	# Miles On Vehicle	Model Year of Vehicle	Average Number of Students	Departs From	School (ES, MS, HS)	Pick-Ups	Route Start Time	First Pick-Up	Last Pick-Up	Reports to School	Total Operating Time (1)	Area
43	64	42,074	2004	48	Bus Shop	ES	9	0724	0732	0749	0805	56min	Farmville
39	64	2,982	2007	39	Bus Shop	ES	20	0724	0731	unk	0805	56min	Farmville
20	64	18,711	2005	48	Home	ES	17	0705	0713	0745	0805	1 hr 15min	Farmville
30	78	42,699	2005	52	Bus Shop	ES	19	0708	0718	0804	0810	1 hr 15min	Farmville
52	78	54,578	2000	59	Bus Shop	ES	unk	0727	0735	unk	0805	53min	Farmville
33	64	89,195	2002	25	Bus Shop	ES	27	0620	0631	0742	0805	2 hr 0min	Rice
12	64	44,131	2005	60	Home	ES	33	0650	0656	0804	0820	1 hr 45min	Rice
3	64	69,497	2004	29	Bus Shop	ES	22	0640	0655	0758	0805	1 hr 40min	Green Bay
19	64	51,003	2004	55	Home	ES	25	0655	0657	unk	0805	1 hr 25min	Green Bay
44	64	39,564	2005	30	Bus Shop	ES	28	0650	0700	0755	0805	1 hr 30min	Hampden-Sydney
7	64	113,855	2000	37	Bus Shop	ES	32	0655	0705	0810	0805	1 hr 25min	Meherrin
8	64	119,074	2000	27	Bus Shop	ES	24	0615	0650	unk	0805	2 hrs 5min	Abilene
11	64	69,260	2001	59	Home	ES	25	0710	0718	0809	0810	1 hr 15min	Darlington Heights
32	64	85,736	2002	39	Bus Shop	ES	39	0615	0631	0801	0805	2 hrs 5min	Prospect
28	64	94,843	2002	35	Home	ES	36	0630	0640	0755	0805	1 hr 50min	Pamplin/Tuggle
34	64	71,063	2002	36	Bus Shop	ES	unk	0625	0645	unk	0805	1 hr 55min	Prospect
40	65	19,240	2006	57	Home	ES	34	0715	0715	unk	0815	1 hr 15min	Prospect/Tuggle
59	78	70,683	2000	45	Bus	MS/HS	unk	0715	0720	unk	0750	50min	Farmville

Bus #	Capacity	# Miles On Vehicle	Model Year of Vehicle	Average Number of Students	Departs From	School (ES, MS, HS)	Pick-Ups	Route Start Time	First Pick-Up	Last Pick-Up	Reports to School	Total Operating Time (1)	Area
					Shop								Area
27	78	45,966	2002	53	Bus Shop	MS/HS	19	0655	0705	0741	0750	1 hr 10min	Farmville Area
21	65	16,784	2006	44	Bus Shop	MS/HS	24	0710	0722	0743	0750	55min	Farmville Area
2	64	87,631	2000	32	Bus Shop	MS/HS	unk	0717	unk	unk	0750	48min	Farmville Area
36	64	18,973	2005	26	Bus Shop	MS/HS	21	0705	0711	0735	0805	1 hr 15min	Farmville
4	64	116,838	2001	27	Bus Shop	MS/HS	27	0614	0640	0745	0750	1 hr 51min	Rice Area
60	64	26,502	2007	47	Home	MS/HS	14	0655	0656	unk	0750	1 hr 10min	Rice
47	78	9,741	2007	68	Home	MS/HS	27	0647	0650	0735	0750	1 hr 18min	Rice
41	64	182,098	1998	32	Bus Shop	MS/HS	28	0628	0648	0732	0750	1 hr 37min	Rice/Green Bay
14	64	155,499	1997	35	Home	MS/HS	24	0630	0635	unk	0750	1 hr 35min	Green Bay
53	64	93,448	1999	41	Home	MS/HS	29	0647	0650	0746	0750	1 hr 18min	Green Bay/ Meherrin
23	64	42,745	2004	44	Home	MS/HS	37	0705	0705	0746	0750	1 hr 0min	Meherrin/ Hampton/ Sydney
24	64	68,227	2001	44	Home	MS/HS	29	0630	0634	0740	0750	1 hr 35min	Meherrin
57	64	93,298	1999	39	Home	MS/HS	23	0635	0655	0745	0750	1 hr 30min	Meherrin
31	64	40,485	2004	54	Home	MS/HS	unk	0650	0700	unk	0750	1 hr 15min	Tuggle
5	64	32,744	1998	41	Bus Shop	MS/HS	unk	0705	0708	unk	0750	1 hr 0min	Farmville/ Hampden- Sydney
58	64	117,021	1999	38	Home	MS/HS	27	0620	0628	0739	0805	2 hr 0min	Abilene
55	64	112,119	1999	22	Bus Shop	MS/HS	14	0633	0705	0720	0750	1 hr 32min	Hampden- Sydney
29	64	55,963	2002	31	Home	MS/HS		0615	0625		0745	1 hr 45min	Abilene
25	64	87,409	2002	46	Home	MS/HS		0625	0635		0750	1 hr 40min	Hampden- Sydney
26	64	92,813	2001	51	Home	MS/HS	28	0640	0640	0730	0750	1 hr 25min	Prospect
15	78	13,924	2007	50	Bus	MS/HS		0635	0650		0750	1 hr 30min	Prospect

Bus #	Capacity	# Miles On Vehicle	Model Year of Vehicle	Average Number of Students	Departs From	School (ES, MS, HS)	Pick-Ups	Route Start Time	First Pick-Up	Last Pick-Up	Reports to School	Total Operating Time (1)	Area
					Shop								
56	64	93,806	1999	51	Home	MS/HS	31	0626	0650	0743	0750	1 hr 39min	Prospect/ Farmville
22	64	115,128	2000	43	Home	MS/HS	19	0645	0645	0725	0750	1 hr 20min	Pamplin
9	64	77,216	2001	37	Shop	ES/MS/HS	24	0627	0635	0729	0750	1 hr 38min	Meherrin
Handicap Bus Routes													
37	35	5,766	2007	5	Home	E/MS/HS	6	0625	0630	0740	0800	1 hr 50min	Prospect
45	31	80,958	2003	9	Bus Shop		8	0620	0640	0745	0805	2 hr 0min	Green Bay
46	32	187,729	1992	3	Bus Shop		4	0700	0705	0740	0805	1 hr 20min	Farmville
Shuttle Bus Route													
54	78	130,331	2000	54	Bus Shop			0650	0703		0820	1 hr 45min	

7. Computers and Technology

7. **COMPUTERS AND TECHNOLOGY**

This chapter reviews staffing and organization related to administrative and instructional technology in Prince Edward County Public Schools (PECPS) and includes five major sections:

- 7.A Organization and Staffing
- 7.B Staff Development
- 7.C Technology Planning and Management
- 7.D Technology Policies and Procedures
- 7.E Inventory and Control
- 7.F Systems Infrastructure and Web Development
- 7.G Technical Support and Help Desk Operations
- 7.H Technology Acquisition Practices

A little over a decade ago, technology was seen as an add-on at many organizations, including private businesses. Now, technology is a foundational aspect of almost every organization. Technology drives efficiencies and analysis in school districts. The requirements of the *No Child Left Behind* Act include that divisions make data-driven decisions, that students achieve technological literacy before 9th grade, and that teachers effectively integrate technology into the classroom. Meeting these mandates depends heavily on a district's technology implementation. *Education Week's* annual Technology Counts survey for 2007 recently graded Virginia with an A- on its state technology report card. Although Virginia overall earned an A in access to technology and an A- in use of technology, it received a B in capacity to use technology. Exhibit 7-1, below, compares the Virginia school technology environment with national averages.

Exhibit 7-1
Overall Virginia School Technology Environment Compared Nationally

Technology Environment	Virginia Average	National Average
Access to Technology		
Number of students per instructional computer	3.1	3.8
Percent of students with a computer in the classroom	63.0	49.5
Number of students per high-speed Internet-connected computer	3.0	3.7
Percent of students with computer in lab/media center	88.5	77.0
Use of Technology		
Student standards include technology	Yes	48 states
State tests students on technology	No	4 states
State has established a virtual school	Yes	23 states
State offers computer-based assessments	Yes	23 states
Capacity to Use Technology		
State includes technology in its teacher standards	Yes	45 states
State includes technology in its administrator standards	Yes	36 states
State includes technology in its initial teacher license requirements	Yes	19 states
State includes technology in its initial administrator license requirements	Yes	9 states
State includes technology in its teacher recertification requirements	No	9 states
State includes technology in its administrator recertification requirements	No	5 states

Source: *Editorial Projects in Education Research Center*, www.edweek.org, 2007.

A survey of PECPS' staff was completed as a part of our data collection efforts with several questions related to the division's technology. Respondents acknowledged that technology is an increasing part of everyday activities at the school, but there were several areas where



respondents disagreed that technology applications outside of instruction were adequate. Respondents were not pleased with the adequacy of the web site and with availability of administrative procedures on-line.

PECPS is operating technology at a commendable level in a number of areas. The division has developed a highly detailed technology plan that provides strategic direction for both instructional and administrative technology in the division. The division is supporting a best practices organizational structure to obtain high-quality technical support. PECPS also maintains a detailed web site.

There are several potential special revenue categories for PECPS' technology department:

- 1) The Virginia Standards of Learning Technology Initiative is a large-scale project funded by the Commonwealth of Virginia beginning in the year 1994 to assist school divisions in improving student achievement through the use of statewide, web-based computer resources. The initiative includes funding that is targeted to achieve the following three goals:
 - Provide a ratio of one computer for every five students;
 - Create Internet-ready local area network capability in every school; and
 - Assure high-speed, high-bandwidth capabilities for instructional, remedial, and testing needs.

Funding is based on grants of \$26,000 per school and \$50,000 per division. Prince Edward County Public Schools receives \$128,000 per year under this initiative.

- 2) The Technology Literacy Challenge Grant – The Department of Education (DOE) also issued a competitive technology grant and told the school divisions to form consortiums to spend the grant.
- 3) E-Rate is a federal program created by the Telecommunications Act of 1996. The purpose of the program is to have telecommunications services provided to local school divisions at a discounted rate. A non-profit corporation created by the FCC for that purpose administers the program. School divisions apply for reimbursement each year for expenses such as telephone service and Internet service. The PECPS receives reimbursement based on a discount to these services.
- 4) The Ed-Tech Grant is a federal grant which is formula driven. It comes from the *No Child Left Behind* Act. The funding rate is based on the number of students qualifying for the free and reduced-price lunches in the division. PECPS receives services from the Ed-Tech consortium in the form of subscriptions. Reports Online and United Streaming services for PECPS are paid by Ed-Tech.

The Virginia Department of Education also has a statewide web-based Standards of Learning initiative (2005). Exhibit 7-2 illustrates that readiness certification has been achieved by all of the PECPS schools.

Exhibit 7-2
Divisions with SOL School Readiness Certification

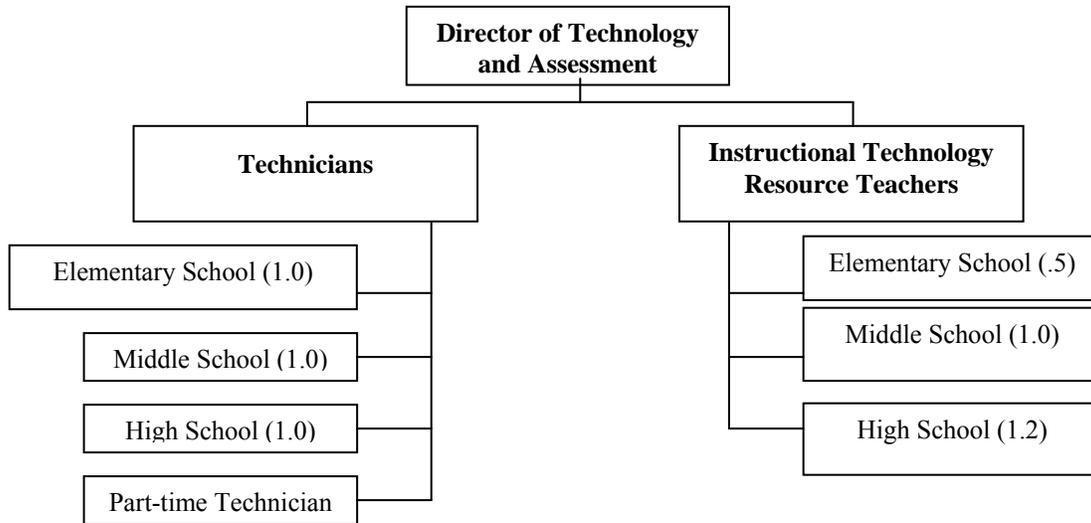
School Division	Elementary	Middle	High School Stage 1	High School Stage 2
Charlotte County	Yes	Yes	Yes	Yes
Cumberland County	No	No	Yes	Yes

Lunenburg County	No	No	Yes	Yes
Nottoway County	No	Yes	Yes	Yes
Prince Edward County	Yes	Yes	Yes	Yes
Sussex County	Yes	Yes	Yes	Yes

7.A ORGANIZATION AND STAFFING

To achieve its technology-related goals, a school division must have an organizational structure that creates and promotes an environment for using and supporting new technologies. Ideally, technology is one area of a school division that supports all administrative and instructional personnel in a positive manner. Organizing technology resources to effectively achieve this outcome can be challenging. The current organizational structure for supporting technology is shown in Exhibit 7-3.

**Exhibit 7-3
PECPS Technology Organization**



Source: Prince Edward County Public Schools, 2007.

The division is supporting technology through adequate staffing and meets the state minimum in instructional technology staffing of one per 1,000 students. For the approximately 2,700 students at PECPS, the technology staff consists of two full-time instructional technology resource teachers (ITRT’s) and two part-time ITRT’s (see organizational chart).

Exhibit 7-4 compares the PECPS ratio of technology instructors per 1,000 students to those of its peers. (As reported on VDOE’s web site for FY 2006.) As the exhibit shows, PECPS is substantially above the peer and state averages.

The Virginia Standards of Quality (SOQ) Technology Staffing Standards for the 2004-2006 Biennium implemented policy changes recommended by the Virginia Board of Education. One of the provisions of the SOQ is that, by July 1, 2006, divisions must have one instructional technology FTE position per 1,000 students. From the Virginia Superintendent's memo #1 (January 14, 2005), these teacher positions "are intended to serve as resources to classroom teachers, but are not intended to serve as classroom teachers."

Exhibit 7-4
Technology Instructors per 1,000 Students FY 2006

School Division	Total Technology Instructors	Technology Instructors Per 1,000 Students	Instructional Support	Total Technology Administrative, Service, and Support Personnel
Charlotte County	6	2.63	0	9.0
Cumberland County	0	0	1.5	8.5
Lunenburg County	1	.57	1.0	3.7
Nottoway County	0	0	1.0	3.5
Prince Edward County	5	1.85	0.0	7.65
Sussex County	1.4	1.02	0.0	2.6
Peer Division Average		1.01	.58	
State Average		.97		

Source: Virginia Department of Education web site, 2007.

As shown in Exhibit 7-4, PECPS is reported on the VDOE web site as having no instructional support staff. It is known through the review team's data collection, however, that PECPS meets the SOQ requirement, since they have designated 2.7 FTE for instructional support.

Additionally, a designated technician is assigned to each of the three schools, providing technology troubleshooting and acting as additional resources to teachers.

Adequate, on-site, and readily available technical support for all of the division's technology will ultimately support better integrated instruction in the classroom. Teachers are more likely to use technology in the classroom if they know they can get immediate support if something goes wrong.

The International Society for Technology in Education (ISTE) is just one source for professional development, knowledge generation, advocacy, and leadership for innovation. ISTE is a nonprofit membership organization that provides leadership and service to improve teaching, learning, and school leadership by advancing the effective use of technology in grades pre-K through 12 and teacher education. Exhibit 7-5 contains the staffing matrix developed by ISTE for use in determining levels of technician staffing as a function of the number of computers to be maintained.

Exhibit 7-5
ISTE Technology Support Index Rubric for Staffing

Index Area	Efficiency of Technology			
	Low	Moderate	Satisfactory	High
Technician Staffing to Computer Ratio (# of Computers: Technician)	250:1	150:1 to 250:1	75:1 to 150:1	Less than 75:1
Formula-Driven Technology Staffing (e.g., W computers + X network drops + Y applications divided by Z = # of required technicians)	Staffing formulas aren't used or considered.	Formulas for staffing are considered but are limited in scope and aren't used to drive staffing.	Comprehensive formulas have been developed, considering multiple dimensions of the environment, but are only used as a guide and don't drive staffing.	Comprehensive formulas have been developed and drive staffing as a normal part of operations. Formulas include multiple dimensions of the environment.

Exhibits 7-6 and 7-7 contains the number of computers at each of the three schools, along with staffing levels under low, moderate, satisfactory, and high categories from ISTE for staffing shown above in Exhibit 7-5.

Exhibit 7-6
Ratio of Computers To Technicians, by School,

	Elementary School	Middle School	High School
No. of Technicians	1	1	1
Computers	290	145	227
Ratio:	290:1	145:1	227:1
Low Staffing	X		
Moderate Staffing			X
Satisfactory Staffing		X	
High Staffing			

Source: Inventory provided by PECPS Technology Department, 2007

Exhibit 7-7
Ratio of Computers To Technicians and ITRTs, by School,

	Elementary School	Middle School	High School
No. of Technicians	1	1	1
No. of ITRT	.5	1	1.2
Total Staff	1.5	2	2.2
Computers	290	145	227
Ratio:	193:1	72:1	103:1
Low Staffing			
Moderate Staffing	X		
Satisfactory Staffing			X
High Staffing		X	

Finding 7-1:

PECPS has three dedicated technicians assigned to each of the three schools. These technicians are assisted by one part-time technician (Longwood University student) and occasionally by a consultant familiar with the PECPS computer network. Additionally, PECPS has 2.7 ITRT's, in accordance with SOQ Technology Staffing Standards. The total number of computers in the three schools (according to the inventories provided to us) available for use by students (labs and classrooms) equals 662, or approximately one computer per 4.2 students.

Conclusion 7-1:

Using the ISTE staffing standards contained in Exhibit 7-5, the technician to computer ratio is satisfactory for the middle school, moderate in the high school, and low in the elementary school. However, if the ITRT's are also included in the ratios (as shown in Exhibit 7-7), the results are more favorable, with the middle school in the high category, the high school at satisfactory staffing, and the elementary school at moderate staffing.

Recommendation 7-1:

It is recommended that PECPS evaluate the total staffing requirements of the technology department once the network stabilizes. Current staffing levels do appear to be adequate, and substantial improvement regarding response time to work orders was noted. However, as the technology skill levels of the users increases, a change in workload for the technicians may also occur. A key resource in this analysis is the data generated by Track-IT, which is a help desk

and asset management software tool implemented by PECPS in 2006. PECPS uses this tool to automate repetitive activities such as logging and tracking requests for computer service and maintenance-related issues via email. Continual analysis of the work performed by the staff, as maintained by Track-IT, needs to be performed to better align the staffing with the workload. This analysis would also assist with the balancing of work among technicians, as well as identify potential needs for additional training.

7.B STAFF DEVELOPMENT

School divisions must provide staff development in technology. This training needs to be part of the division's overall training program and must be focused on the needs of the end user. Training in the use of technology is the most critical factor in determining whether that technology is used effectively or even used at all. Administrative and instructional staff must be able to use effectively the technology available to them. Training must be ongoing; the technology environment is continuously evolving, and divisions must keep pace with the evolution. The ISTE Technology Support Index identifies exemplary divisions as having these staff development practices:

- A comprehensive staff development program is in place that impacts all staff. The program is progressive in nature and balances incentive, accountability, and diverse learning opportunities.
- Online training opportunities are provided for staff both on-site and remotely, and represents a diversity of skill sets.
- Expectations for all staff are clearly articulated and are broad in scope. Performance expectations are built into work functions and are part of the organizational culture.
- Technical staff receives ample training as a normal part of their employment, including training towards certification.
- Basic troubleshooting is built into the professional development program, and is used as a first line of defense in conjunction with technical support.

Finding 7-2:

Prince Edward County Public Schools has not developed specific technology proficiency expectations for administrators, teachers, and staff. The division relies on the Virginia Technology Standards for Instructional Personnel (VA TSIP) for guidance, but these are rather broad and are not translated by the Commonwealth into specific expectations for division administrators to implement.

In interviews, PECPS' staff noted a variance in the abilities of administrators, teachers, and staff in effectively using technology, both inside the classroom and out. Staff noted that, while some teachers are highly proficient, others are only rarely using technology. A survey of teachers was performed, where specific hardware/software and training needs were addressed.

Currently, training is available for all staff members each Wednesday. Based upon the attendance sheets for prior sessions, attendance is relatively low (usually no more than 3-4 attendees) which indicates that teachers are already very proficient, or choose not to attend due to time constraints, or lack interest.

Conclusion 7-2:

The Virginia Technology Standards for Instructional Personnel (VA TSIP) provides a foundation for developing technical literacy standards within PECPS. To date, all PECPS instructional personnel have met or are in the process of fulfilling these standards. The VA TSIPs are listed in Attachment 7-A, included at the end of this chapter. As shown, these standards provide broad expectations for teachers in implementing technology, but do not establish specifics for divisions to implement. For example, while one standard addresses the use of technology in the classroom to meet the needs of diverse learners, there are no specifics provided as to how the technologies available in Prince Edward County Public Schools can be used to differentiate instruction within the 3rd grade classroom on a daily basis.

The developers of the Levels of Technology Implementation (LoTI) conducted a nationwide survey of a sample of nearly 45,000 teachers in 2005-06, assessing their classroom technical proficiency with the framework. Attachment 7-B, included at the end of this chapter, includes the definitions for the LoTI Framework for assessing teacher technology proficiency. The survey found this distribution:

- Level 0 - eight percent
- Level 1 - 18 percent
- Level 2 - 22 percent
- Level 3 - 23 percent
- Level 4a - 18 percent
- Level 4b - nine percent
- Level 5 - one percent
- Level 6 - less than one percent

The developers recommend a target technology level of at least Level 4b.

School divisions where teachers are highly literate with technology and seamlessly integrate technology into instruction for enrichment, remediation, and differentiation often have one common characteristic—they are led by administrators who embrace technology and expect teachers to use it. For that reason, the technological competency of administrators and staff is also important, beyond the obvious efficiencies that can be gained from highly automated, online administrative processes in the central office.

Recommendation 7-2:

It is recommended that PECPS develop rigorous technology expectations for teachers and staff. Developing more explicit rigorous expectations for technical expertise will ensure that all teachers are maximizing the division's technology resources. This initiative could be met through professional development requirements.

Finding 7-3:

Currently, PECPS does not have any mechanism in place to track attendance in professional development for instructional staff nor administrative staff. The ITRTs do retain attendance rosters, but the information is not provided to anyone else.

Conclusion 7-3:

Best practices in other school divisions require the continuance of technology training as well as the accountability of staff training to ensure that technology will be used throughout the school system.

Recommendation 7-3:

It is recommended that PECPS create and implement a system to track staff development as it relates to technology, especially technology training beyond TSIPs. In order for technology integration to be completely successful, an accountability system is needed for staff development and actual use of the learned information. A simplistic approach that PECPS can implement is to request a list of all instructional and administrative staff from the human resources department by school and administrative office. This list could then be input into a spreadsheet, with the types of training taken by the individual placed in columns. Staff should then submit written verification for the training taken within the current school year. This update should then be required on a semester or annual basis to ensure staff is receiving additional training. There should also be a method to assess the implementation of such expectations (such as tracking equipment and software usage of teachers).

7.C TECHNOLOGY PLANNING AND BUDGETING

The most effective technology plans contain clear goals, objectives, and action plans for technology projects. They assign individual responsibility for implementation steps and set deadlines.

PECPS aims to capitalize in a technology-rich environment ensuring that all students develop the technology skills and knowledge to become effective members of a technology supported information division economy. Successful technology planning is the foundation for successful technology implementation and development. School division technology is not just a stand-alone project—it is a long-term, ongoing effort that affects every aspect of school division operations. The technology planning process is complicated. There are many factors to consider, including instructional integration, legislated data reporting, funding, training, and staffing for support.

Technology plans should cover between three to six years. By analyzing current trends in division demographics and available technology, planners can predict what the needs of the division will be and what technology will be available to fill those needs. Technology, however, is the fastest changing segment of our society, so frequent updates and revisions of any technology plan will be necessary. The Virginia Department of Education (VDOE) has made technology planning a requirement of every school division. The latest technology plan for PECPS is their *Technology Plan 2003-2009*.

Finding 7-4:

Prince Edward County Public Schools has developed and adopted a detailed technology plan that is based on a needs assessment and is long-range in nature. This plan is intended to be a living document.

The PECPS' *Strategic Plan 2006-2011* was drafted and presented to the school board as a draft in February 2007. It includes six objectives related to division technology listed under Goal 4: Build Capacity of School Division. They are shown in Exhibit 7-8.

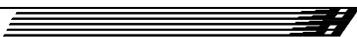


Exhibit 7-8
Prince Edward County Public Schools
Strategic Plan 2006-2011
Objectives Related to Technology (under Goal 4)

Goal	Objective
Goal 4: Build Capacity of School Division Through infrastructure of support and learning	4.1 Implement a data warehouse to facilitate district-wide decisions
	4.2 Implement classroom technology best practices
	4.3 Use technology as a way to enhance student learning in the classroom
	4.4 Improve district-wide student management system
	4.5 Improve infrastructure of district network
	4.6 Use statistical software such as SPSS to predict student success on SOL assessments

Source: PECPS Strategic Plan 2006-2011 (draft), 2007.

PECPS utilized the “Taking a Good Look at Instructional Technology” survey (TAGLIT) in the Spring of 2002 as a part of their data collection. The surveys revealed needs for each of the schools in curriculum, professional development, hardware/software, and technical support. Many of the specific needs have been addressed and implemented. Additionally, the technology department continues to solicit input from teachers regarding their needs.

The PECPS *Technology Plan 2003-2009* is quite detailed, beginning with a “Needs Assessment” revealed in the surveys at the three schools. The plan then includes an implementation plan to address these needs through the development of goals, objectives (targets), strategies (representative actions), and assessment of such actions to ensure the desired outcomes are met.

The *National Education Technology Plan* for the U.S. Department of Education outlines seven action steps to be used by schools to prepare today’s students for the opportunities and technology challenges of tomorrow. These action steps are:

- Strengthen leadership;
- Consider innovative budgeting;
- Improve teacher training;
- Support e-learning and virtual schools;
- Encourage broadband access;
- Move toward digital content; and
- Integrate data systems.

For each of these steps, the DOE plan provides specific recommendations that can be implemented to help in accomplishing those action steps.

All of these steps are supported and formed by a division technology plan that is long-range, realistic, and strategic in nature. In divisions operating at a best practices level, the division technology plan is integrally tied to the division’s overall strategic plan.

Commendation 7-4:

Prince Edward County Public Schools has adopted a commendable technology plan to guide technology development from 2003 through 2009 that is comprehensive in addressing all elements in order to be aligned with the *Education Technology Plan* for Virginia.

Finding 7-5:

PECPS has developed a detailed technology plan aligned with the *Educational Technology Plan* for Virginia. While specific needs were identified as part of the plan for each of the schools (elementary school, middle school, and high school), the individual plans for each the schools are the exactly the same. Exhibit 7-9 shows the number of goals, objectives, strategies, and assessment for each major area of the plan for the different schools.

The technology plan also indicates that measuring progress of the plan results from the development of systems that provide easy collection and analysis of information that contains consistent/accurate data. The implementation portion of the plan details by school year the actions to be taken and the assessment section for each area of the plan identifies information that is to be used to assess accomplishment of the goals.

Conclusion 7-5:

The technology plan, by its own description, is to be a fluid, living document. It is to be updated periodically to reflect changes in needs and success or failure of prior implementation items. Likewise, there is supposed to be a system that measures the progress of the plan, and this system is to make it easy to collect and analyze information through the use of consistent and accurate data. During the interviews and data collection conducted as part of this review, we were unable to verify that this is being done.

The technology plan is an important document and much work was put into analyzing the survey data, assessing the needs of the different schools, preparing the implementation strategy, and developing the individual school plans. This document should be used for its intended purpose and serve as a useful guide for reaching PECPS' technology-related goals.

Recommendation 7-5:

It is recommended that PECPS develop a formal system(s) for evaluating specific accomplishments and implementation of actions with regard to the technology plan on an annual basis. This system should be evaluated and the data collection analyzed and reviewed on a formal periodic basis. Successes and failures should be discussed, with the idea of revising the plan as needed. To the extent it is applicable, elements of the plan for the different schools should be tailored directly for that school (in other words, not be identical for each school).

An annual update of the technology plan will communicate the importance of the planning process. PECPS should also tie its technology plan with its overall improvement plan and its budgeting process. A well-established link between the plans and the budgeting process is essential for sound financial management, as well as the ultimate achievement of all plan goals.

Exhibit 7-9
Technology Plan Elements

	Elementary School	Middle School	High School
I. Implementation			
Goals	2	2	2
Objectives	14	14	14
Strategies	34	34	34
Assessment	28	28	28
Professional Development and Support Problem			

	Elementary School	Middle School	High School
Goals	4	4	4
Objectives	9	9	9
Strategies	25	25	25
Assessment	8	8	8
Connectivity			
Goals	4	4	4
Objectives	12	12	12
Strategies	31	31	31
Assessment	15	15	15
Educational Applications			
Goals	3	3	3
Objectives	10	10	10
Strategies	19	19	19
Assessment	21	21	21
Accountability			
Goals	4	4	4
Objectives	12	12	12
Strategies	14	14	14
Assessment	10	10	10
Total			
Goals	17	17	17
Objectives	57	57	57
Strategies	123	123	123
Assessment	82	82	82

Source: Prince Edward County Public Schools, Technology Plan 2003-2009.

It may be that the plan, with 123 strategies (representative actions) associated with the 57 objectives (targets), is overly ambitious in some areas. While it would not be impossible to complete all of the activities outlined in the plan, it would require a focused effort that, in turn, would require at least an annual review of the technology plan. In fact, many of the activities require periodic review according to the plan.

Finding 7-6:

Prince Edward County Public Schools lacks a formalized computer replacement policy. The technology director has a goal of replacing computers every five (5) years, which is stated in the PECPC *Technology Plan 2003-2009*.

In the past several years, the division has completed a number of technology projects and installed a number of newer computer labs, cleaned up the equipment “closets,” and is in the process of installing equipment cabinets and rack-mounted servers in each of the schools.

Conclusion 7-6:

The division is largely already following a five-year replacement cycle, but without a formally adopted policy. A formally adopted policy would assist in determining and solidifying annual budget needs.

As it relates to the cycling of computer equipment, ISTE rates organizations in this manner:

- Low - no replacement cycle has been defined;
- Moderate - equipment is placed on a replacement cycle greater than five years;
- Satisfactory - equipment is placed on a four- to five-year replacement cycle; and
- High - equipment is placed on a three-year replacement cycle.

Recommendation 7-6:

It is recommended that PECPS adopt a formal computer replacement policy in Prince Edward County Public Schools. The creation of this policy would solidify the division's current practices related to technology spending. By adopting a formal policy, the division's budget priorities will be clearer. A replacement plan will assist division leaders in the annual budget development and ensure that division technology remains relatively current. PECPS should develop and adopt a formal computer replacement policy to support its current momentum in embracing technology. Adopting a formal policy can be accomplished at no cost to the division through the use of existing resources.

7.D TECHNOLOGY POLICIES AND PROCEDURES

Policies, procedures, and standards are the bedrock of effective technological change. Divisions need clear policies and procedures for the purchase of technology, its acceptable use, the application of copyright laws and control of software and hardware inventories.

Finding 7-7:

Prince Edward County Public Schools has no procedures in place to assess satisfaction with, and use of, technology already in the division. Likewise, it has no formal mechanisms for assessing the level of technology integration in PECPS classrooms. As a result, it is not ensuring it is maximizing its technology expenditures.

Exhibit 7-12 compares per pupil technology expenditures for 2003-04 (the last year in which Virginia collected expenditures in this manner; subsequent years do not provide a breakout for technology expenditures). These figures contain all expenditures incurred for all technology-related activities, including instruction, administration, and technical development and support, as well as software, hardware, and infrastructure purchases. As the exhibit shows, Prince Edward County Public Schools spent the least per pupil and was well below both the peer and state per pupil averages. Since the 2003-04 school year, PECPS has increased its investments in technology areas, most notably through the creation of instructional technology resource teacher (ITRT) positions.

This relatively low level of investment was at least partially reflected in PECPS student test scores. Exhibit 7-13 compares PECPS students in 5th and 8th grades to those in peer divisions on the Standards of Learning (SOL) tests in computers and technology. The exhibit shows the 2002 results, which are the most recent available through the Virginia Department of Education. As the exhibit shows, 73 percent of PECPS 5th graders and 67 percent of PECPS 8th graders met or exceeded the SOL standards. These figures are lower than the peer averages of 74 percent for 5th grade and are about the same as the average for 8th grade, and are substantially lower than the state averages of 86 percent and 76 percent. Overall, PECPS students demonstrated lower levels of computers and technology skills than their peers or the state as a whole.

Exhibit 7-12
Technology Disbursements by Division
Fiscal Year 2004

School Division	Total Technology Disbursements	Per Pupil Cost
Charlotte County	\$755,609	\$345.57
Cumberland County	\$538,886	\$403.13
Lunenburg County	\$524,434	\$308.88
Nottoway County	\$619,941	\$267.97
Prince Edward County	\$627,628	\$229.12
Sussex County	\$522,468	\$385.86
Peer Division Average	\$598,161	\$323.42
State Total	\$433,958,314	\$372.07

Exhibit 7-13
Standards of Learning (SOL) Results
Percentage of Students Meeting or Exceeding Standards in Computers/Technology
Spring 2002

School Division	5th Grade	8th Grade
Charlotte County	93.50%	84.60%
Cumberland County	61.20%	60.70%
Lunenburg County	81.90%	53.80%
Nottoway County	72.40%	77.70%
Prince Edward County	73.40%	66.80%
Sussex County	63.02%	53.30%
Peer Division Average	74.24%	66.15%
State Total	86.10%	76.40%

Conclusion 7-7:

Since 2003-04, the PECPS is likely much closer to its peers in technology spending. However, it is not yet systematically assessing the use of its technology, or user satisfaction with technology deployed. Anecdotally, the staff reports that technologies like SmartBoards are just now being introduced.

The technology department does periodically request input from staff (to include teachers) to assess needs. The latest data obtained from surveys was solicited in January 2007. Exhibit 7-14 contains the results of those surveys.

Exhibit 7-14
Results of Survey
Conducted by Director of Technology
(Area of Need and Number of Requests)

Hardware/Software Needs		Training Needs	
Laptops for students or teachers	27	Excel Spreadsheets	10
Computer projectors	22	Mail Merge	10
Additional or faster classroom computers	11	SASIXp	8
Elementary grading software	10	E mail	7
SPED communication software	7	Quizdom	4
Smart board	6	United Streaming	4
More cameras	3	Access databases	3
		Web page	3

While the solicitation of such information is commendable, more detailed information needs to be gathered and assessed. Some areas to consider include:

- Plan - addresses technology planning, policies, and expenditures;
- Teachers - addresses teacher technology skills, teacher technology use in teaching and learning, technology-related professional development, and technology-related instructional support;
- Students - addresses student technology skills, student frequency of technology use for learning, and student and teacher perspectives about how technology affects their classroom environment;
- Community - addresses technology-related community connections; and
- Other - addresses hardware software and electronic/online resources, and technical support.

Recommendation 7-7:

It is recommended that PECPS develop procedures to assess technology usage, satisfaction, and instructional integration. The division should, through the use of its ITRTs and other technicians, track and analyze technology use by department or school site, grade level, and subject area in order to ensure it has used its technology funds wisely, identify areas needing additional technology, and determine whether additional support, such as training or further infrastructure, is needed for full technology implementation. The division could also implement a method to assess student and community satisfaction with classroom tools and the PECPS web site. Finally, the division should implement a regular assessment of technology integration in the classroom, either through the web site or a tool similar to TAGLIT. (The technology plan even calls for such an assessment tool.)

Finding 7-8:

Standard operating procedures are not available for technology-related practices. Even though PECPS has an appropriately staffed technology department, standard operating procedures for many routine functions are not available. According to staff interviews, many of the individuals have procedures that they have personally developed for accomplishing work (such as assigning e-mail addresses, passwords, user names, etc.), and while these procedures may be written, they have not been consolidated in a single document.

Conclusion 7-8:

The individuals supporting technology seem very knowledgeable and the school division should take advantage of their knowledge by documenting all processes and procedures that are part of the work requirements. Best practices with any school-based operation include written procedures for all functions of a department. PECPS needs to start drafting procedures as staff work on each area within technology, and maintain these procedures in a central location. The benefits of having written procedures include a reduction in staff time trying to “figure-out” how to perform certain work. Additionally, transitions when employees are terminated are made much easier when a procedure manual already exists, particularly where skill levels and work experience of individuals differs. Such manuals are also valuable in cross-training individuals.

Recommendation 7-8:

It is recommended that PECPS begin developing written procedures for all functions within technology operations. Procedures should be developed to assist current and future staff requirements in technology-related operations. Written procedures are created to assist division technology personnel in following a process from beginning to end should they suddenly need to perform that function. The division should also incorporate a schedule to annually review the such a manual to ensure that all processes are current. The implementation of this recommendation should assist the school division whenever staff changes occur to continue operating without any disruption of service. The procedures manual would also be a good place to include other documentation of the network design (physical and logical) and the network components.

One source for assisting in this would be for PECPS to seek out the assistance from Winchester Public Schools (we understand they have written procedures that are considered quite extensive). A comprehensive procedure manual for a technology department would contain the division’s organizational chart, roles of the department, job descriptions, the technology plan, general guidelines and procedures, and technical notes.

The general guidelines section of the manual can contain the following essential information for technology staff:

- Materials to be carried by computer and network technicians;
- Work order procedures;
- Parts ordering procedures;
- Maintenance to be performed on computers; and
- School news coordinator guidelines.

Particular sections could include steps on various areas such as backup procedures, using different keyboards and printers, and student record input.

Additional written procedures that can be developed and/or documented by PECPS’ technology department include:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Technology Basics <ul style="list-style-type: none"> – Guidelines for Purchase – Guidelines for Donations – Maintenance – Inventory | <ul style="list-style-type: none"> • Web Pages <ul style="list-style-type: none"> – Goals/General Statement – Web Publishing Procedures – Webmaster Role/Duties |
|--|--|

- Disposal
- Backups, Cleanups
- Disaster Recovery
- Year-End Procedures
- Peripherals
- Hardware and Software
 - Selection
 - Standardization
 - Replacement Schedules
- Telecommunications
 - Division Network
 - Internet Use (Students & Employees)
 - Electronic Mail Protocol
- Division Technology Forms
 - Software Approval Form
 - Charitable Contribution Form
 - Request for Network Access
 - Employee Internet Access Form
 - Technology Maintenance Request
 - Proposed Web Page Application
 - Release Form for Student Work
 - Student E-Mail Account Request
- Division Policies and Procedures

(We understand that many of these elements may already exist, but are not assembled into a single resource document, with easy access by all the technology staff.) This recommendation can be implemented with existing resources.

7.E INVENTORY AND CONTROL

Technology hardware and software inventories can be extensive in a school division, yet ensuring that these tools are available to the right staff and at the right location is challenging. Protecting the assets of the division by accurately accounting for both the hardware and software of the division is a primary responsibility of the technology department.

Finding 7-9:

Currently the technology department maintains a series of electronic inventory spreadsheets that contains information such as equipment descriptions, locations(s), date placed in service, serial number, cost, and how funded. These spreadsheets are developed and maintained by the technicians assigned to the different schools. While similar, the format, and consequently the types of information contained on these spreadsheets, is not exactly the same. Also, the spreadsheets are not linked into a single inventory document. Inventories are being conducted; however, accountability down to the responsible individual level has not been established. Likewise, the inventories are not compared to any master list or matched to a list of procured equipment to ensure that all items are accounted for in the documents.

Conclusion 7-9:

PECPS needs to ensure that annual inventories are performed and that these inventories are compared to previous inventories. All differences should be accounted for in notes. Additionally, employees should be required to sign accountability forms and be held responsible. Hand receipts can be generated to be signed by individuals who have control of the equipment. Implementing the recommendations will result in better accountability and make the hand receipt process more efficient.

Recommendation 7-9:

It is recommended that PECPS automate and standardize the inventory process with current retail software, and inventory a certain percentage of equipment in common areas each month. PECPS should continue with a 100 percent inventory of equipment at the end of the school year.

Equally important, PECPS should develop a labeling or tag system for hardware items. Currently, some hardware is shipped with an identifying label already affixed to the equipment. Many other items do not have any information that would identify the item as belonging to PECPS. This makes it harder to track or identify equipment that might be loaned, "borrowed," misplaced, or stolen. The use of a bar code system for identifying equipment would also automate and substantially reduce the amount of time necessary to inventory equipment.

7.F SYSTEMS INFRASTRUCTURE AND WEB DEVELOPMENT

Infrastructure is the underlying system of cabling, phone lines, hubs, switches, and routers that connects the various parts of a computer network. Maintaining a strong infrastructure and integrating these systems is critical to increased staff productivity, fewer costly data errors and better customer service to the students, parents, and the community served by the division.

Of all technology resources, infrastructure is probably the most important. If a sound infrastructure is in place, most users will have a means of accessing people and information throughout their organization and beyond, greatly facilitating their ability to accomplish the responsibilities of their job. Increased efficiency and effectiveness will be the result.

The current PECPS system architecture includes a flat (or single) network. Its Internet pipeline is now 10 Mbps. The technology department is in the process of installing rack mounted servers in equipment racks at each of the three schools. Fiber connections run between each school building. The current staff manages the PECPS network.

Finding 7-10:

Prince Edward County Public Schools maintain a web site and the responsibilities are spread among several individuals. Primarily the ITRT's at the respective schools maintain the web pages related to their schools. Teachers are also encouraged to maintain a web page for their own class.

It is believed the web site is used frequently by community members. According to the counter on the web page, the PECPS web site had more than 570,000 visits. Presently, there are no statistics available on how many times the web sit was visited per day, or how long visitors spent on the web site per visit.

In our survey, PECPS staff did not have particularly positive opinions regarding their division web site. Exhibit 7-15 contains the results on survey questions related to the web site:

Exhibit 7-15
Administrators and Teachers Survey Results Related to the Web Site in the
Prince Edward County Public Schools and Districts in the Survey Database

Survey Question	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
The division web site is a useful tool.	18%	64%		18%	
Curriculum is adequately displayed on the web site.	9%	27%		55%	9%
Parental questions are adequately answered on the division web site.		18%	9%	64%	9%

Conclusion 7-10:

Prince Edward County Public Schools maintains an acceptable web site, but enhancements could be made to include certain information currently not included on the web site and include features not currently included. Some examples of these items include:

- Drop down menu with quick links;
- Policy manual;
- Student handbook;
- Strategic plan;
- Code of conduct; and
- Home or similar curriculum related information.

Exhibit 7-16 compares information maintained by the peer division web sites. (The web site for Nottoway County Public Schools was not accessible at this time.)

Exhibit 7-16
Comparison of Division Web Sites
As of April 2007

	Prince Edward www.pecps.k12.va.us	Charlotte County www.ccps.k12.va.us	Cumberland County www.cucps.k12.va.us	Lunenburg County www.lun.k12.va.us	Nottoway County www.nottowayschools.org	Sussex County www.sussex.k12.va.us
School Calendar	X	X	X			X
Lunch Menu	X	X	X			X
Employee Vacancies	X	X	X	X		X
Individual School Web Sites	X	X	X	X		X
Detail Information on Staff with Contact Information	X	X	X	X		X
Board Agendas, Minutes, and Summaries	X		X			
Comprehensive Improvement Plan						X
Technology Plan			X			X
Technology Resources			X			
Photos of Schools and Staff	X	X	X			X
Bus Schedule	X		X			X
Student Handbook		X				X
Parent Resources	X	X	X			X
Policy Manual		X	X			

Updates to the web site need to be made on a regular basis. On the elementary school web pages, for example, pictures were from February (2 months old) and the cafeteria menu was from November – December 2006. Each school's web site (within PECPS) is different, as illustrated below:

Elementary School – Main Menu

- Contact Form
- What's new updated 1-21-06
- Food Services
- Gifted Program and Services
- Prince Edward County Public Schools Home
- Scrapbook
- Faculty E-mail
- Announcements

Prince Edward Elementary Calendar
Faculty and Staff
Independence Day
Accelerated Reader
Diabetes Awareness
Guidance
Grade Groups
Teachers of the Year 2005-2006
Black History Month Program

Middle School – Main Menu

Administration
Monthly News
Departments
Clubs and Groups
Web Resources
Gifted Program and Services
Faculty E-mail

High School – Main Menu

Administration
What's New?
Sports Zone
Clubs and Groups
Academic Departments
Class Dues
Useful Links
Going the Extra Mile
School Announcements
Gifted Program and Services
Graduation Information
Faculty E-mail
Scrapbook

As a communications tool, the division could improve the current web site by adding access to its school board policies. Links could also be created for students to use for help with homework, SOL's, and other similar resources. The division could also provide the community an avenue to give input on division matters through the web site.

Recommendation 7-10:

It is recommended that PECPS continue to modify and update the school division's web pages. This is an ongoing process that never stops. PECPS should look at the web sites from other school divisions (either in Virginia or outside the state) for ideas. Suggestions for improvement should also be solicited from parents and others outside of the school system. The web site could also be used to provide information regarding current events such as procedures to be followed resulting from bomb threats. In other words, use the web site as a tool and repository of information. If the web site has more data, people would soon get in the habit of consulting the

web site first (or be directed to it) rather than calling the school for information. Additionally, PECPS should consider assigning an individual as being responsible for the entire web content. Even if that person were paid a stipend, the cost of maintaining a thorough, well-organized, and up-to-date web site would pay big dividends.

7.G TECHNOLOGY SUPPORT AND HELP DESK OPERATIONS

Technical support significantly influences how effectively technology is used in the classroom or the business office. Teachers, students and administrators, even those who are experienced computer users, may encounter technology-related difficulties that interrupt their planning or activities. Unless they receive quick responses to their questions, their effectiveness can be diminished.

Finding 7-11:

Prince Edward County Public Schools has developed a number of online forms and systems for use by staff members, including forms for:

- Certificate of absence
- Time keeping
- Work order (using Track-IT)
- Requests for leave

The use of Track-IT has been very well received by the users at PECPS. It has eliminated the use of a paper documents, requests for services are documented, feedback is provided to the request or when work is complete, and an historical record of all work is kept. This work management system has been accepted by all users and, as noted from interviews and surveys, everyone is very pleased with the system.

The following exhibit shows the quantity of technology work orders performed since the Track-IT system was implemented in October 2006.

**Exhibit 7-17
Processed Work Orders using Track-IT**

Time Period	Total Work Orders
October 2006	74
November 2006	160
December 2006	113
January 2007	343
February 2007	358
March 2007	392
April 2007	317
Total	1,757

The longer Track-IT is used, the more both staff and technicians rely on it to request and record work. This system will provide good historical information for analyzing system problems and technician requirements. In our survey, we found that all respondents felt that assistance with computer problems was adequately provided; they all felt that adequate instructional technology was provided and all felt that adequate equipment and computer support was provided. Approximately 64 percent of respondents, though, disagreed with the statement “Administrative processes are done on line.”

Conclusion 7-11:

While PECPS has been making good use of electronic copies of routine forms, there are additional forms that can be made available to users through the network. These would include, at a minimum, all of the forms from the faculty handbook. Any number of currently available software applications (to include MS Excel) can be used to develop electronic versions of these forms.

Recommendation 7-11:

It is recommended that PECPS continue to automate administrative forms and make them available through the network. When applicable, PECPS should eliminate the need to print electronic forms, but rather have them completed electronically and emailed. Cost savings associated with this recommendation include printing costs associated with certain forms, paper for copies, and additional time spent by individuals printing, filing, and sorting paper copies.

Finding 7-12:

PECPS requires the use of technology for administrative purposes. Email became the standard for communication among the PECPS staff at the beginning of this school year. Daily notices and other similar type correspondence are only transmitted electronically through the school's network via email. This surely indicates that the central administration does encourage technology use.

Conclusion 7-12:

In order for a school division to integrate technology in the classroom, it is necessary to integrate its use among administrative staff and functions. If this integration does not continue to grow, PECPS' staff and students will fall well behind other school divisions in Virginia, as well as the country, which is a disservice to all staff and students. Use of email and other technology is a more efficient and effective practice for PECPS and flows from the central administration office to school administration offices, and then to the classroom level.

Recommendation 7-12:

It is recommended that PECPS increase the use of technology for communication and other daily operations by division and school administration and instructional staff. In order for a school division to successfully integrate technology, all central office and school administrators should set an example for teachers, classified staff, and students. It is very difficult, if not impossible, to fully integrate technology in the classroom when administrators are not using automated tools.

All users should continue to contact the technology department for training needs or guidance in using technology. The instructional technology resource teachers should continue to hold training sessions as needed for school administrators. Evaluation should be performed to see if technology use has been implemented and request corrective action plans from school administrators if the incorporation of technology has not increased.

This recommendation can be implemented with existing resources and should create a savings by using this more efficient and effective way to communicate among staff in the school division.

Finding 7-13:

PECPS currently backs up student data daily by copying data from the server to an external hard drive. This back-up hard drive is kept on-site and no formal disaster recovery plan is in place for the division.

Conclusion 7-13:

A formal disaster recovery plan is not available for PECPS. The rack-mounted servers to be procured will utilize a tape backup system. The plan for these back up tapes is to be stored on-site in a separate building from the servers. No rotation policy regarding these tapes has been developed. Disaster recovery plans are a necessity in school divisions due to federal and state requirements of collecting and retaining data on students, financial data, and day-to-day operations. It is also a way for central office and school administrators, teachers, students, and parents to be reassured that recovery plans are available, and that PECPS will not be asked to recreate an entire school year's worth of data in the event of a problem or disaster.

Recommendation 7-13:

It is recommended that PECPS create and test a written disaster recovery plan and coordinate routine tape backups for off-site storage. Disaster recovery plans provide reassurance that if data are lost or destroyed due to a natural or manmade disaster, data can be recovered quickly and reduce a lapse in operation of a school division.

PECPS should develop a written procedure to store weekly data tapes off-site in a fireproof storage container for at least one month depending on the frequency of the backups. Then monthly backup tapes should be created and kept in the same type of environment for one school year. While best practices recommend the testing of disaster recovery on an annual basis, we realize that this may not be possible or practical.

It is our understanding that the Winchester Public Schools (WPS) has a well-written disaster recovery plan that PECPS should try to replicate. Their plan uses a system that incorporates the following:

- Automatic off-site backup;
- Redundant hardware;
- Large capacity; and
- Centralized administration.

All WPS backups are full backups and require only one tape for full restoration of content to a user. Each evening servers run opposite scripts that back up a different subset of servers, with the exception of same site servers. Same site servers are always backed up to a particular site because they are remote and provide automatic off-site backup.

7.H TECHNOLOGY ACQUISITION PRACTICES

School divisions must select and employ software and hardware to meet both instructional and administrative objectives. While computers in the classroom are primarily an instructional resource, they also serve an administrative function, as most divisions now use computerized attendance and grading programs. Moreover, adequate administrative technology must be present to support schools in meeting instructional goals. One of the primary tenets of *No Child Left Behind* Act is that school divisions will make data-driven decisions. The data to make those

decisions can only come from sufficient administrative software and hardware.

With regards to software, one of the most important aspects of the technology revolution is the advent of e-mail. E-mail allows division personnel to communicate quickly with another individual or with the entire division. Central office administrators can use e-mail to communicate important news across the division. Principals can use e-mail to communicate with their entire school in an instant. Teachers can use e-mail to share information with other teachers across the building, across the division, or across the world.

Hardware costs have been declining over the past decade, due to greater mass production of computers and peripherals. While the price of hardware is generally declining, so is the effective lifespan of many types of hardware. Each year, new hardware is released that is orders of magnitude more powerful than prior years. As well, each year reveals completely new forms of hardware, many of which may be useful in the classroom or in streamlining administrative tasks.

Finding 7-14:

Only recently has there been a policy requiring the director of technology to approve hardware or software acquired at the schools. Even with this policy, the procedures have not always been followed and have not yet made it into PECPS' policy manual.

Conclusion 7-14:

Currently, school administrators can purchase hardware or software for one or many computers without the approval of the technology department. Areas of concern with this practice include network compatibility for software and hardware, and the possible purchase of software that is not consistent with instructional program goals.

Site-based purchasing practices can lead to numerous small batches of specialized software and hardware spread throughout the school division. Technical specialists are expected to support these purchases even if they may not have the proper training on the applications or hardware.

Best practices found in other school systems, require the written authorization of technology-related purchases or reimbursements of these types of purchases from the technology director. The network is currently configured to prohibit software from being installed on computers in the labs and classrooms, which provides a certain level of protection from rogue software being loaded on a network machine, but this measure does nothing to prohibit the purchase of software and hardware that have not been pre-approved.

Recommendation 7-14:

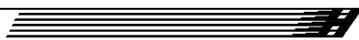
It is recommended that PECPS require that the director of technology approve all software and hardware purchases by schools and departments prior to the issue of a purchase order. The selection of software, whether it is for the financial management or student information management of a school division, should be driven by stakeholders involved and ultimately approved by the corporation's technology leadership. While no one software solution will meet all the needs of a particular school division, care should be taken in the initial selection so that a division does not fall into the trap of selecting a program that fails to meet many needs, necessitating additional purchases of other packages that must then be patched into the first system. School systems should also not purchase software that is in competition with existing applications.

PECPS should evaluate future purchases of how well the new software will work with the established base, especially once the primary enterprise solution has been successfully put into place. One potential resource to assist with this is found on the Virginia Department of Education web site. There is a link entitled *Division Software Evaluations*. There are several software applications that are listed, as well as the school division and year reviewed/submitted. The .pdf files attached to the web site contain the details of the review, which include among other things the system requirements and standards of learning correlations. The site also contains a *Handbook for Evaluation and Selection of Software for Instruction and Remediation*. This is another useful tool that teachers could review, for example, before they make their request for purchase.

When applicable, software should also be purchased with a multi-user license instead of desktop or single-user license. This will enable the technology staff to install the new software on each computer designated to have access within the school division. This saves time and money, and will ensure compatibility with current software along with subsequent upgrades for the software. Therefore, there will not be multiple licenses for different versions on computers randomly throughout the school division. This recommended practice should also provide a cost savings due to bulk purchasing of technology-related products. This recommended approval regarding technology-related software is a growing trend and among best practices according to CDW-G, a government technology publication providing computing solutions to educational organizations.

**Attachment 7-A
Virginia Technology Standards for Instructional Personnel**

Standard	Sample Enablers	Justification
Demonstrate effective use of a computer system and utilize computer software.	<ul style="list-style-type: none"> • Use a variety of computer system input/output devices and peripherals • Store, organize, and retrieve software programs and data files on a variety of storage devices • Use different types of software programs including instructional, productivity, application tools, and courseware • Troubleshoot general hardware and software problems 	It is expected that by the year 2000, all classrooms in Virginia schools will have computers for teacher and student use. In the “information age,” the need to operate a computer and utilize basic software should be as much a part of the daily routine for instructional personnel as it is for most of the business world.
Apply knowledge of terms associated with educational computing and technology.	<ul style="list-style-type: none"> • Apply functional knowledge of basic computer components, e.g., operating, application, and utility software; permanent and removable storage (main memory, hard drive, and optical or magnetic disc); monitor; scanner and digital camera; matrix, inkjet, and laser printers • Apply functional knowledge of various technology tools, e.g., video records and players, optical disc players, computer presentation devices, multimedia computer work station 	Educators need a common vocabulary and a functional understanding of educational technologies
Apply computer productivity tools for professional use.	<ul style="list-style-type: none"> • Use software tools to assist with classroom administrative tasks; use software tools to design, customize, or individualize instructional materials • Use software to enhance communication with students, parents, and community • Use telecommunications software to collaborate and find resource materials 	The use of basic productivity software to aid with student records, correspondence, management, and instructional materials development can be effective and time efficient. Educators should be able to model how technology can be used to enhance learning and job performance.
Use electronic technologies to access and exchange information.	<ul style="list-style-type: none"> • Use local and worldwide telecommunications • Use search strategies to retrieve electronic information 	An understanding of how to search for, organize, and present information using modem media is becoming a common workplace and learning skill. State and national technology initiatives are moving toward local area networks for all schools. These networks are connected to state, national, and international networks. Educators must know how to access networks and to exchange an/or retrieve information for both teaching and professional development.



Attachment 7-A (Continued)
Virginia Technology Standards for Instructional Personnel

Standard	Sample Enablers	Justification
Identify, locate, evaluate, and use appropriate instructional technology-based resources (hardware and software) to support Virginia's Standards of Learning and other instructional objectives	<ul style="list-style-type: none"> • Understand types, characteristics, sources, and use of effective instructional software and other technology-based learning resources • Use tools of technology including, but not limited to, computers, modems, networks, printers, large group presentation devices, scanners, digital cameras, camcorders, video cassette recorders, optical disc players, etc. 	Educators need to utilize effectively all available resources, both traditional and technology-based, and be able to use these resources to assist students in achieving the Standard of Learning.
Use educational technologies for data collection, information management, problem solving, decision making, communications, and presentation within the curriculum.	<ul style="list-style-type: none"> • Incorporate word processing, spreadsheet, or database software in instruction • Incorporate telecommunications as a component of instruction; and use a presentation and/or authoring program to present a lesson or develop instructional materials 	Many modern jobs require the skills that are mentioned in this standard. Students will need learning experiences that help them become life-long learners with the ability to function in these areas, regardless of their eventual work or educational environment. Therefore, teachers must develop and model skills in the use of technology in order to offer students appropriate learning experiences.
Plan and implement lessons and strategies that integrate technology to meet the diverse needs of learners in a variety of educational settings.	<ul style="list-style-type: none"> • Utilize technology to facilitate assessment and student-centered instruction as determined by the discipline and/or grade level taught • Use multimedia, hypermedia, and telecommunications software to support individual and/or small group instruction; as teaching assignments dictate, utilize and/or understand resources available concerning adaptive technology • Use technology effectively in various educational settings, e.g., one computer in a classroom, class-size computer lab, computers in classroom clusters or mini labs, multimedia computer work stations, integrated learning systems (ELS) • Effectively utilize an automated library media center. 	Educators strive to be responsive to the individual needs and learning styles of a diverse group of students. Technology-based resources can be used to meet these diverse needs in a variety of classroom and laboratory settings.
Demonstrate knowledge of ethical and legal issues relating to the use of technology.	<ul style="list-style-type: none"> • Abide by copyright laws • Practice responsible uses of technology 	

Attachment 7-B
LoTI Framework for Assessing Teacher Technical Proficiency

Level	Description
Level 0 Non-use	A perceived lack of access to technology-based tools or a lack of time to pursue electronic technology implementation. Existing technology is predominately text-based.
Level 1 Awareness	The use of computers is generally one step removed from the classroom teacher (e.g., integrated learning system labs, special computer-based pull-out programs, computer literacy classes). Computer-based applications have little or no relevance to the individual teacher's operational curriculum.
Level 2 Exploration	Technology-based roots generally serve as a supplement to the existing instructional program. The electronic technology is employed either as extension activities or enrichment exercises to instructional programs, and generally reinforces lower cognitive skill development (e.g., knowledge, comprehension, application).
Level 3 Infusion	Technology-based tools including databases, spreadsheet, and graphing packages, multimedia and desktop publishing applications, and Internet use augment selected instructional events (e.g., science kit experiment using spreadsheets/graphs to analyze results, telecommunications activity involving data sharing among schools). Emphasis is placed on higher levels of cognitive processing (e.g., analysis, synthesis, evaluation).
Level 4a Integration (Mechanical)	Technology-based tools are integrated in a mechanical manner that provides rich context for students' understanding of the pertinent concepts, themes, and processes. Heavy reliance is placed on prepackaged materials and outside interventions that aid the teacher in the daily operation of their instructional curriculum. Technology is perceived as a tool to identify and solve authentic problems perceived by the students as relating to an overall theme/concept. Emphasis is placed on student action and issues resolution that require higher levels of student cognitive processing.
Level 4b Integration (routine)	Teachers can readily create Level 4 (Integrated Units) with little intervention from outside resources. Technology-based tools are easily integrated in a routine manner that provides rich context for students' understanding of the pertinent concepts, themes, and processes. Technology is perceived as a tool to identify and solve authentic problems relating to an overall theme/concept.
Level 5 Expansion	Technology access is extended beyond the classroom. Classroom teachers actively elicit technology applications and networking from business enterprises, governmental agencies (e.g., contacting NASA to establish a link to an orbiting space shuttle via Internet), research institutions, and universities to expand student experiences directed at problem-solving, issues resolution, and student involvement surrounding a major theme/concept.
Level 6 Refinement	Technology is perceived as a process, product, and tool toward students solving authentic problems related to an identified "real-world" problem or issue. Technology, in this context, provides a seamless medium for information queries, problem-solving, and/or product development. Students have ready access to and a complete understanding of a vast array of technology-based tools to accomplish any particular task.

8. Food Services

8. FOOD SERVICES

The main goal of a successful school division's food services operation is to provide nutritious and delicious meals to students each school day and to do so at a breakeven cost, or better. These programs are funded by revenues from the sale of meals, a la carte sales, and by federal funding/reimbursement for free, reduced-price, and/or full-price meals. If revenues fail to cover costs, school districts must subsidize their food service operation through their operating budget.

This section evaluates the Prince Edward County Public Schools food services department in the following areas:

- 8.A Organization and Staffing
- 8.B Policies and Procedures
- 8.C Planning and Budgeting
- 8.D Management and Operations
- 8.E Qualifying Students for Free and Reduced-Price Meals/ Student Participation
- 8.F Nutrition and Nutrition Education Programs
- 8.G Purchasing, Warehousing and Contracting

INTRODUCTION

The Prince Edward County Public Schools has a food services department that participates in the National School Breakfast Program and the National School Lunch Program. As of December 2006, approximately 60 percent of PECPS students were eligible to receive either free or reduced-price meals. Although applications were sent home during the first quarter of the 2005-2006 school year, completed applications were returned to the food services department as late as April 2006, meaning the number of eligible students may be more than what was reported. The large number of participants in the free and reduced meal program indicates that PECPS has been adequately educating the division's parents about program availability and is assisting them with application completion, as needed.

Generally, the food services department is well received by the division's students, staff and administration. Site visits found very few cafeteria operational issues. Over the past 10 years, the supervisor of food services has put forth a great deal of effort to reduce unnecessary costs, promote employee loyalty and performance, and provide healthy and appetizing meals to the PECPS students and staff.

As shown in Exhibit 8-1, when compared to the other peer divisions in its cluster during the 2005-2006 school year, PECPS had the highest average daily membership (the average number of pupils in attendance), yet had the second lowest overall total food services disbursement. The division spent \$266.87 per pupil, which was the lowest food services cost per pupil among its peer cluster. (In this exhibit, the peer division average was computed by totaling the "End-of-Year ADM" and "Total School Food Services Disbursements" for all six divisions, then *dividing* the ADM into the total disbursements.)

Exhibit 8-1
PECPS 2005-2006 Food Services Costs per Pupil

School Division	End-of-Year ADM for Determining Cost Per Pupil	Total School Food Services Disbursements	Food Services Cost Per Pupil
Charlotte County	2,297.66	\$1,013,707	\$441.19
Cumberland County	1,499.22	\$432,076	\$288.20
Lunenburg County	1,774.26	\$798,175	\$449.86
Nottoway County	2,369.02	\$858,199	\$362.26
Prince Edward County	2,728.80	\$728,237	\$266.87
Sussex County	1,399.63	\$821,643	\$587.04
Peer Division Average	2,011.43	\$775,340	\$385.47

Report information provided by Virginia Department of Education web site, 2007.

The food services operation is provided with sanitation guidelines by the Virginia Department of Health (VDH), and is subject to an annual unannounced inspection of the premises for sanitation guideline compliance. PECPS' menu and nutritional guidelines are provided by the United States Department of Agriculture (USDA). The USDA suggests a menu of meat, fruit, vegetables, bread, and dairy for meals, with the expectation that three of the five items offered will meet their guideline requirements. A federal review of the menus for nutritional value is performed every five years and state review of free and reduced lunch program practices is performed annually. Production records are kept by each cafeteria manager, and they are provided to the USDA and state inspectors evidencing that the nutritional guidelines are met. All kitchen equipment is bought and owned by PECPS, and the general maintenance of the equipment is performed by the division's facilities maintenance department.

All well-run organizations look for ways to improve each department's operations. The following findings, conclusions, and recommendations may improve the efficiency of the food services department.

8.A ORGANIZATION AND STAFFING

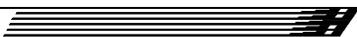
As displayed in the organizational chart shown in Exhibit 8-2, the food services department employs 31 personnel—one supervisor, two secretaries, five cafeteria managers, one assistant manager, 21 food services cafeteria workers, and one food delivery worker dispersed among the three schools. Each school cafeteria manager is responsible for the food services workers within their school. Each school cafeteria manager reports directly to the school division food services supervisor. The food services department supervisor reports to the director of support services.

Finding 8-1:

All food services finance functions, to include payroll and accounts payable, are performed by the food services bookkeeper/secretary. The PECPS finance department does not provide any assistance and has no input in creating the PECPS food services departmental budget or providing financial management. The department has its own checking account with the support services director, supervisor of food services, and the department bookkeeper/secretary listed on the resolution and the signature card.

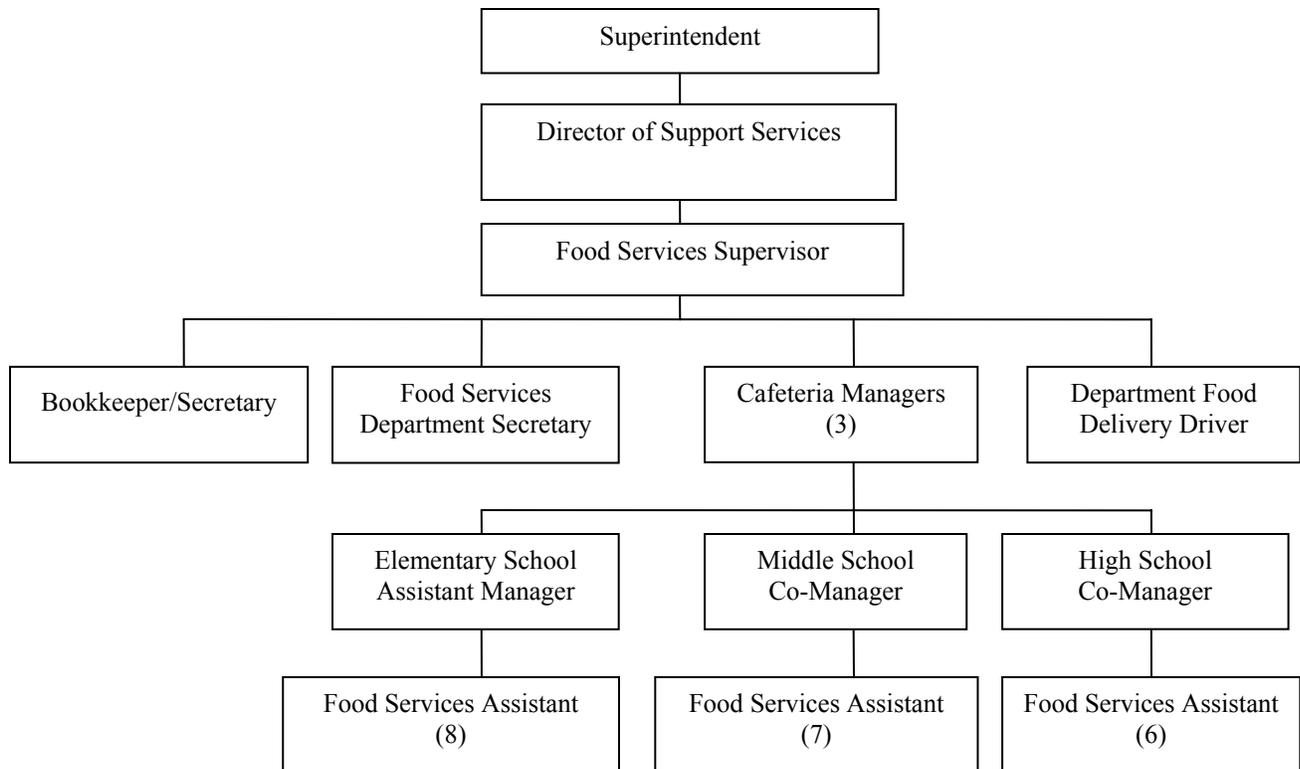
Conclusion 8-1:

Budget and finance reports are generated by the food services supervisor and the food services secretary respectively. These reports are then presented by the department to the school board.



The department payroll and finance management functions are performed on customized finance software that is not compatible with the system utilized by the division’s central office finance department. Decisions made regarding the department’s checking account and the check writing can only be made by those individuals within the food services department or the director of support services.

**Exhibit 8-2
PECPS Food Services Department Organizational Chart**



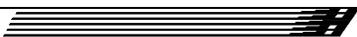
Source: Prince Edward County Public Schools, 2007

Recommendation 8-1:

It is recommended that the food services department limit the financial management functions allocated to the department secretary to bookkeeping and cash collection. Food services payroll and other similar finance functions should be assigned to the division’s finance department. Budget and finance forecast functions should be performed by the food services supervisor, reviewed by the finance director and then presented to the school board for approval. The food services bookkeeper/secretary position should be eliminated and the secretary currently performing that function should be transferred to the PECPS finance department to provide payroll support to the division, at no change in pay. The bank account resolution and signature cards should include members of the school board, to ensure changes and decisions regarding the bank accounts can be made by the appropriate administrative personnel.

Finding 8-2:

All human resource records are kept in the food services main office and all human resources functions are performed either by the food services supervisor or the director of support services.



Conclusion 8-2:

The PECPS human resources department does not have personnel records for any of the food services personnel. Although the department is expected to be financially self-sustaining, food services is a vital part of the PECPS division. As such, all personnel records (i.e., correspondence, disciplinary actions, or grievances) of those individuals employed by the school division should be kept in one central location. This allows the director of human resources to ensure that the appropriate certifications and training are provided, employee rights to confidentiality are preserved, and personnel issues that may arise are resolved appropriately.

Recommendation 8-2:

It is recommended that PECPS maintain all personnel records regarding the food service operations personnel in the human resources department files to increase efficiency of the human resources functions throughout the department and the school division.

Finding 8-3:

Turnover of food services personnel is very low, with the turnover of only two employees in the last three years. Both of these employees left for medical reasons. Although there are food services personnel currently qualified for retirement, the food services manager does not want to force them into retirement. However, some of these employees are not working at a productivity level that is beneficial to the department.

Conclusion 8-3:

Employees appear to be comfortable with the positions held and the salary received. Although the food services supervisor expressed concern regarding the hourly wage (too low), the average wage is comparable with those paid in the surrounding counties.

Commendation 8-3:

PECPS food services department's full-time cafeteria workers receive full benefits for a 6.5 hour full-time workday. The management provides all cafeteria employees with safe and comfortable shoes and, on occasion, other pieces of their uniform; thus ensuring that the employees are well taken care of and are armed with the necessary equipment needed to work safely. Because of the daily work hours (six to six and one-half hours), employees begin their day earlier than traditional workdays and leave earlier. Affordable health care coverage and the early hours required by PECPS food services allow many of its employees to obtain part-time work to supplement their income.

When asked, cafeteria workers said that the health care coverage, retirement benefits, and pleasant working environment are the primary motivators for continuing to work in the PECPS food services department.

PECPS and the food services supervisor are commended for promoting employee loyalty and a positive work environment within the food services department.

8.B POLICIES AND PROCEDURES

Finding 8-4:

There is no written food services departmental procedures manual, nor are the daily functions performed by any of the department employees proscribed in writing.

Conclusion 8-4:

A well-developed policy and procedures manual ensures that all department employees understand and are held to the same requirements while performing job functions. When the finance secretary or the food services supervisor has an unexpected prolonged absence, there is no one available who knows how to perform the required duties to continue food services operations in an efficient manner. Furthermore, in the event of sudden turnover or key personnel incapacity, the department may cease to function efficiently because there are no written instructions to follow or procedures that are easily accessible.

Recommendation 8-4:

It is recommended that PECPS create food services procedures manuals for both the department office staff and the cafeteria workers. These manuals should be kept in a central location and made easily accessible to those who may need them. A cafeteria worker manual should be kept at each campus kitchen and available to all workers. This manual should eliminate any confusion regarding kitchen operations and should assist in ensuring uniform procedures are performed by all staff members, thus increasing efficiency within the department. Existing resources within the division should be used to create these manuals, at no additional costs.

Finding 8-5:

The food services department takes significant strides to ensure that all food is secure during non-working hours. Each cafeteria manager has a key to her respective campus cafeteria and kitchen area. These keys are kept under close control. In addition to the cafeteria managers, the director of support services, the food services supervisor, and the janitorial staff also have keys to the kitchens.

Recently, a vegetable tray was found in the middle school kitchen's "fast food" (a la carte) freezer. It was later brought to the food services supervisor's attention that a middle school assistant principal had placed the vegetable tray in the freezer after a meeting was held in the cafeteria and that the assistant principal had a set of keys to the kitchen area. The superintendent has granted the assistant principal permission to keep said keys.

Conclusion 8-5:

Due to potential health risks caused by contamination, it is imperative that foods purchased and stored for the preparation of student meals are kept separately from food brought in from other sources.

Recommendation 8-5:

It is recommended that the food services supervisor, campus administrators and the director of support services identify the individuals who have a need to access the cafeteria kitchens and ensure that only those individuals have keys. Those individuals who are assigned keys should be reminded of the policies regarding the use of the cafeteria/kitchen facilities and equipment. Basic policies should also be posted in conspicuous locations in the cafeteria/kitchen areas.

8.C PLANNING AND BUDGETING

As mentioned above in Finding 8-1, the food services budget and finance reports are generated by the department's supervisor and secretary respectively. These reports are then presented by the department directly to the school board. Very little planning and forecasting occurs within the department. The supervisor, however, attempts to minimize department food costs by annually soliciting bids for food and supply contracts. The cafeteria management and department supervisor do not generate department goals to either improve student meal participation or increase the meals-per-labor hour (MPLH) rate.

Exhibit 8-3 Summary of PECPS Food Services Revenue and Labor Costs for FY 2006

Total Revenue	Total Salary Disbursements	Total Fringe Benefits	Total Labor Costs (Salaries + Benefits)	Percentage of Labor to Revenue
\$944,904.95	\$451,150.52	\$134,431.61	\$585,582.13	62%

Source: PECPS Food Services Department,, 2007.

Finding 8-6:

As shown above in Exhibit 8-3, the total revenue for the PECPS food services department for school year 2005-2006 was \$944,904.95 and the salary disbursements for that year were \$451,150.52. The fringe benefits disbursements for 2005-2006 totaled \$134,431.61.

Conclusion 8-6:

Best practices state that labor costs should be kept at or below 40 percent of revenue. As stated above, total revenue for 2005-2006 was \$944,904.95. The labor cost (salary *plus* fringe benefits disbursements) for the same fiscal year was \$585,582.13, which was 62 percent of the annual revenue.

Recommendation 8-6:

It is recommended that food services use the best practice of maintaining labor costs at 40 percent of revenue when creating departmental goals. This may be achieved through any of the following options:

- Increasing the cost of meals;
- Increasing the number of students who purchase school meals; or
- Decreasing labor and food costs.

These methods for increasing revenue and decreasing costs are discussed in more detail in the findings and recommendations that follow.

Finding 8-7:

PECPS is providing student and adult meals at competitive prices. As shown in Exhibits 8-4 and 8-5, the current peer divisions' meal prices rank as follows:



Exhibit 8-4
Breakfast Prices for the Peer Cluster Divisions

School Division	Elementary		Middle		High		Adult Meal
	Paid	Reduced	Paid	Reduced	Paid	Reduced	
Charlotte County	\$0.75	\$0.30	\$0.75	\$0.30	\$0.75	\$0.30	\$1.50
Cumberland County	\$0.70	\$0.30	\$0.75	\$0.30	\$0.75	\$0.30	\$1.00
Lunenburg County	\$0.75	\$0.30	\$0.75	\$0.30	\$0.75	\$0.30	\$1.25
Nottoway County	\$0.85	\$0.30	\$0.85	\$0.30	\$0.85	\$0.30	\$1.35
Prince Edward County	\$0.60	\$0.30	\$0.60	\$0.30	\$0.75	\$0.30	\$1.25
Sussex County	\$1.00	\$0.30	\$1.00	\$0.30	\$1.00	\$0.30	\$1.40
Peer Division Average	\$0.78	\$0.30	\$0.78	\$0.30	\$0.81	\$0.30	\$1.29

Source: Reported information provided by the Virginia Department of Education web site from a report prepared January 18, 2007.

Exhibit 8-5
Lunch Prices for the Peer Cluster Divisions

School Division	Elementary		Middle		High		Adult Meal
	Paid	Reduced	Paid	Reduced	Paid	Reduced	
Charlotte County	\$1.25	\$0.40	\$1.25	\$0.40	\$1.25	\$0.40	\$2.50
Cumberland County	\$1.00	\$0.40	\$1.25	\$0.40	\$1.25	\$0.40	\$2.00
Lunenburg County	\$1.25	\$0.40	\$1.25	\$0.40	\$1.25	\$0.40	\$2.50
Nottoway County	\$1.40	\$0.40	\$1.50	\$0.40	\$1.50	\$0.40	\$2.60
Prince Edward County	\$1.50	\$0.40	\$1.50	\$0.40	\$1.50	\$0.40	\$2.50
Sussex County	\$1.50	\$0.40	\$1.50	\$0.40	\$1.50	\$0.40	\$2.65
Peer Division Average	\$1.32	\$0.40	\$1.38	\$0.40	\$1.38	\$0.40	\$2.46

Source: Reported information provided by the Virginia Department of Education web site from a report prepared January 18, 2007.

Breakfast Pricing

- **Sussex**

Sussex charges the highest price for full-price breakfasts in the elementary, middle and high schools (\$1.00), and has the second highest priced adult breakfasts (\$1.40).

- **Nottoway**

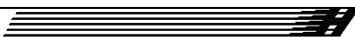
Nottoway has the second highest priced breakfasts, charging \$0.85 for full-price meals; and is ranked with Prince Edward County as serving the second lowest priced adult breakfasts at \$1.25.

- **Cumberland, Charlotte, Lunenburg**

Although Cumberland serves the second lowest priced elementary school breakfasts in the peer cluster, it is tied with Charlotte and Lunenburg counties as serving the third highest priced breakfasts in the middle and high schools. It serves the second lowest priced elementary school breakfasts at \$0.70 and serves the lowest priced adult breakfasts (\$1.00).

- **Prince Edward, Lunenburg**

Prince Edward county serves the lowest elementary and middle school full-price breakfasts (\$0.60). It is ranked, along with Lunenburg county, as serving the second lowest priced adult breakfasts at \$1.25.



Lunch Pricing

- **Prince Edward, Sussex**

Both Prince Edward and Sussex counties charge the most for elementary school full-price lunches (\$1.50). Yet Sussex charges the most of all peer divisions for adult meals (\$2.65), which is \$0.15 more than what Prince Edward County charges (\$2.50).

- **Nottoway, Prince Edward, Sussex**

Nottoway county serves the second most expensive full-price elementary school lunch at \$1.40 and the second most expensive adult priced lunch at \$2.60. Nottoway, along with Prince Edward county and Sussex county, charges \$1.50 for middle and high school lunches, which is \$0.25 more than the other peer divisions charge.

- **Charlotte, Lunenburg**

Charlotte and Lunenburg counties both charge \$1.25 for their elementary school lunches, which is the second lowest price charged for full-price elementary lunches within the peer cluster.

- **Cumberland**

Cumberland charges the least amount for its elementary school full-price lunches (\$1.00). Along with Charlotte and Lunenburg counties, it serves the lowest priced middle and high school lunches at \$1.25 and it serves the lowest priced adult lunch at \$2.00.

Conclusion 8-7:

Although PECPS is providing competitive prices for lunches in all three schools, it is charging the least for breakfasts in the elementary school.

Recommendation 8-7:

It is recommended that the division increase the prices of elementary and middle school breakfasts by 10 cents per meal served after participation by students in breakfast increases.

8.D MANAGEMENT AND OPERATIONS

Finding 8-8:

The elementary school has an assistant cafeteria manager, yet the middle and high schools have two co-managers (one at the middle school and one at the high school). Upon questioning, the cafeteria managers and the food services supervisor explained that co-managers were needed in order to ensure manager availability when one manager from each school must attend meetings during the workday. The food services supervisor further explained that the division might construct an additional school. The co-managers are currently training under experienced managers, with the intent of moving one of the co-managers to the new school to act as a cafeteria manager when needed.

Conclusion 8-8:

The co-managers, cafeteria managers and the food services supervisor could not provide an explanation that justified creating co-manager positions vice assistant manager positions at both the middle and high schools. Although no position description has been recorded for either position, it is customary to delegate the duties of managing the kitchen and cafeteria staff in the

cafeteria manager's absence to the assistant manager. It is also customary to provide the assistant managers with the training and experience needed to promote them to management positions as they become available. The elementary school's assistant manager currently has those assigned duties. Aside from the position title, there is no practical distinction between the two positions.

Recommendation 8-8:

It is recommended that the human resources director, support services director and the food services supervisor evaluate the duties performed by the elementary school cafeteria assistant manager, and the middle and high school cafeterias co-managers and then create one job description that will be applicable to those three employees.

Finding 8-9:

The food services department is not paying for its share of the major utilities, maintenance, or custodial services currently provided by the PECPS. Telephone expenses excluded, the division's general funds are used to support these expenses.

The food services department does not allocate funds for the payment of electric, water and sewer costs associated with the operation of the cafeterias and kitchens located at each campus. When questioned, the department's supervisor stated she understood the department was providing a service and was paid by the students for that service, and that the school division was responsible for providing the space and the utilities required to provide food services functions.

Conclusion 8-9:

The PECPS food services department is a self-sustaining entity, responsible for paying expenses incurred through the provision of food services to the school division. The food services department customarily pays for all direct and indirect costs that support these operations.

Recommendation 8-9:

It is recommended that the division share the expenses it incurs (from the provision of school meals to its student population) with the food services division. This can be done in a number of ways. At a minimum, however, PECPS can estimate the utilities cost by identifying the square footage occupied by the campus kitchens and applying the division's per-square-foot rate to that amount of square feet, to arrive at an approximation of utility costs.

The estimated square footage of each of the campus' kitchens is shown below:

High School =	1,152 sq. ft.
Middle School =	2,090 sq. ft.
Elementary School =	<u>1,950 sq. ft.</u>
Total	5,192 sq. ft.

Based on an average utility cost of \$1.46 per square foot (see Chapter 4), the amount to be allocated to food services would be approximately \$7,580.32 per year (based on 2005-2006 data).

It is certain that allocating a portion of the division's utilities expense to the PECPS food services department would represent a savings for the division's general fund, but at a cost to the food service fund.

Finding 8-10:

The food services department staff has taken steps to ensure that food costs are low. However, it is operating at a meal-per-labor hour (MPLH) rate that does not meet the industry standard. The average meals served per labor hour as currently experienced is shown in Exhibit 8-6.

Exhibit 8-6
PECPS Meals-Per-Labor Hour (MPLH) Comparison

School	Meals Per Labor Hour
Prince Edward County Elementary School	17.75 MPLH
Prince Edward County Middle School	10.36 MPLH
Prince Edward County High School	10.41 MPLH
Overall Average	13.09 MPLH

Currently, there are 21 full- and part-time food services workers, five managers, and one assistant manager dispersed among the three schools. The food services employees have varying work hours, ranging from four to 7.5 hours worked per day. The total number of cafeteria food services worker labor hours per day is 166. The total number of meal equivalents served per day is approximately 2,173. The overall average meal-per-labor hour rate for the PECPS food services department is 13.09 meals per labor hour. Although this rate in total appears to be relatively close to the industry goal of 14 to 20 meals per labor hour, only one school (Prince Edward County Elementary School) is actually operating within the goal at 17.75 meals per labor hour. The remaining two schools are operating well outside the industry standard, at 10.36 and 10.41 meals per labor hour.

Conclusion 8-10:

The standard labor hours to meals ratio is not a statistic that is maintained by the school nutrition division within the VDOE, although, it is a measure that is looked at by the state annually. Productivity, as measured by this ratio, within the food services establishments, can be analyzed and compared effectively through processes laid out in “School Food Services Management for the 21st Century” by Dorothy Pennell-Martin; and “Managing Child Nutrition Programs” by Josephine Martin and Martha T. Conklin. While complete comparable data is not available, it was readily apparent that most food services directors know how their operation compares to the standard ratio of 14 to 20 meals per labor hour.

Some of the neighboring school divisions to PECPS revealed through telephone conversations that they generally target the standard range. Of those divisions who responded to our inquiry, only one division operated at fourteen meals per labor hour. Other divisions either did not respond or had rates that fell below industry standards. The consensus of all responding divisions was that 20 meals per labor hour is too lean and does not allow for unforeseen events such as employees who fail to report to work due to illness. The Charlotte County Public Schools division operates at an approximate rate of 14 meals per labor hour. Sussex county did not have the ratio available, but did acknowledge that its labor expense for food services is too high based on the last measure that was taken approximately three years ago. Cumberland county, Lunenburg county and Nottoway county did not respond to our inquiry.

The PECPS food services supervisor stated that the department is operating at close to the appropriate meal-per-labor hour rate, because she utilizes her existing staff in such a way that they are used to cover each other in the event of illness. She does not keep a substitute food services worker list and does not have to worry about incurring additional training and certification expenses.

The standard labor hour to meals ratio, as promoted by productivity publications, is 14 to 20 meals. Thus, it can be concluded that the labor expense within the PECPS middle and high school cafeteria operations, at an average of 10.5 meals per labor hour, is outside the industry standard.

According to the food services supervisor, there are three food services workers who currently qualify or are officially “retired,” and she hopes that the numbers of workers employed as food services workers at each facility will decrease through attrition. Because of the loyalty and dedication of her staff, the supervisor is hesitant to terminate these positions.

Although the supervisor hopes to achieve the desired goal through attrition, it may not be a timely method utilized to reduce the labor force by four or five persons to obtain the needed labor savings. As is the case with other non-instructional departments within the division, the supervisor does not routinely review her employees’ performance and document her findings.

Recommendation 8-10:

It is recommended that PECPS review the meals-per-labor hour (MPLH) rates for each campus individually in order to ensure that the three campus cafeterias are working within the ideal 14 to 20 MPLH rate. Currently, an average of 554 meals is served daily in the middle school cafeteria, with 53.5 labor hours expended daily. The MPLH rate for the Prince Edward County Middle School cafeteria is 10.36. In order to reach a rate of 14 MPLH while keeping the number of meals served a constant, the division must decrease the number of daily labor hours by 13.9 hours (approximately two full-time employees), down to 39.6 daily labor hours.

Currently, an average of 536 meals is served each day in the high school cafeteria, expending 51.5 labor hours daily. The Prince Edward County High School cafeteria MPLH rate is 10.4. In order to reach a rate of 14 MPLH while keeping the number of meals served constant, the daily labor hours must be decreased by 13.2 labor hours (approximately two full-time employees), down to 38.3 labor hours per day.

It is recommended that PECPS’ food services establish a goal of increasing each campus’s number of meals per labor hour each year until the industry standard of 14 MPLH is attained. There are two approaches that can be used to increase the number of meals per labor hour. Either the number of labor hours expended daily must decrease, or the number of meals served each day must increase. (Combining the two approaches is also a very viable means of increasing the MPLH rate.)

If PECPS chooses to decrease the number of labor hours expended, it is recommended that the human resources director and food services supervisor create an evaluation form that weighs each food services worker’s performance based on a variety of factors to include, but not limited to, attendance, seniority, and job performance. By assigning points based on each factor’s importance, the supervisor can then assign each cafeteria’s manager the duty of evaluating every employee. The employees can then be evaluated objectively to ensure fairness. If it is determined that the employees with the lowest score qualify for retirement, the division should determine whether offering the employee the option of retiring vice termination is the more appropriate solution.

If the employees with the lowest score qualify for retirement, it may be of benefit to the school system to phase out their positions through retirement and enable the food services operation to capitalize on the reduced payroll expenses. Alternatively, PECPS should consider adjusting the

number of hours worked by some employees, thereby changing their status from full-time to part-time employees.

Eliminating 27.1 daily labor hours is the equivalent to eliminating four full-time positions at 6.5 work hours per day per position. The termination of four food services workers provides a range of cost savings as shown in Exhibit 8-7. In the exhibit, potential savings have been computed based on two different scenarios. One scenario (Scenario A) addresses the reduction in staff through retirement of existing employees, where health insurance would still be paid by PECPS. The other scenario (Scenario B) reflects the reduction in staff as a result of termination, where all related personnel costs (salary, benefits, and health insurance) would be eliminated.

Exhibit 8-7
Potential Savings Associated with Reducing PECPS Food Services Staff

Scenario A	Salary	Benefits (16.27 percent)—Health insurance paid by PECPS	Total
Employees who qualify for retirement	\$11,485.53	\$1,868.70	\$13,354.23
	\$11,487.42	\$1,869.00	\$13,356.42
	\$12,474.00	\$2,029.52	\$14,503.52
	\$15,662.43	\$2,548.27	\$18,210.70
Total Annual Cost	\$51,109.38	\$8,315.49	\$59,424.87
Scenario B	Salary	Benefits (16.27 percent) + Health Insurance (est. \$339.20/month)	Total
Employees who do not qualify for retirement	\$10,965.78	\$5,854.54	\$16,820.32
	\$9,920.16	\$5,684.41	\$15,604.57
	\$11,668.86	\$5,968.93	\$17,637.79
	\$14,868.63	\$6,489.53	\$21,358.16
Total Annual Cost	\$47,423.43	\$23,997.41	\$71,420.84

The benefits costs to PECPS is estimated at approximately 16.27 percent of salary (6.62 percent for FICA, plus 9.02 percent for the Virginia Retirement System, plus .63 percent for unemployment/workers compensation = 16.27 percent) and were based on the benefit costs reported on the 2005-2006 financial report. Depending on the retirement eligibility status of the individuals/positions eliminated, payroll expenses (salary *plus* benefits) may be reduced by at least \$59,424.87 to \$71,420.84. (These figures are conservative estimates based on current salaries of food services employees with various years of employment history with the PECPS food services department.)

It is recommended that PECPS reduce the number of its food services workers daily labor hours from 166 labor hours to 138.9 labor hours and utilize a weighted evaluation of all employees as the means of identifying the positions in need of elimination.

It is also recommended that, when possible, PECPS eliminate the labor hours of those employees who qualify for retirement (two from the middle school and two from the high school).

Fiscal Impact: The total savings resulting from the reduction in staff is estimated to range from \$59,424.87 to \$71,420.84.

Finding 8-11:

It has been observed by the members of the review team that the middle school lunch periods are disruptive. At one point, both lines were serving at a rate that is slower than expected because

the students were not staying in line. Crowds were forming in front of the servers, and the students were speaking at a level that made it difficult for the serving staff to understand what was being said. The serving process was delayed and the children began to complain. When asked whether teachers were assigned cafeteria monitor duties in the middle school, the cafeteria manager and the staff informed the review team that assistant principals were assigned that duty. However, it was observed on more than one occasion that the cafeteria was not monitored by administrative personnel and the students were extremely loud and disorderly. It was further observed that some of the students were disrespectful to each other and to the cafeteria staff.

While observing the high school meal services, it was noted on one occasion that the teacher responsible for monitoring the cafeteria was sitting in a chair reading a book, and for 15 minutes, failed to get up and walk around, look up to observe the cafeteria, or make note of their surroundings. On another occasion, the cafeteria manager requested that the students get into a single line, so that the students could be served quicker. The students began complaining and one of them said, "You can't tell me what to do."

Conclusion 8-11:

While a student's lunch period offers the opportunity to relax and enjoy conversations with friends while eating their lunch, it should not be unsupervised and students should not be allowed the opportunity to disrupt the efficiency of the cafeteria serving lines. The kitchen/cafeteria staff is evaluated based on the efficiency of the serving line. Service workers cannot perform as expected, and students cannot be served as quickly as they should be, when their meal requests are not made and filled one at a time. The lack of students' cooperative makes this situation worse.

Food services personnel cannot function effectively without student and teacher cooperation. Although the high school administration and staff are commended for understanding the importance of supervised lunch periods, supervision requires more than sitting in the same room as the students.

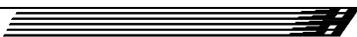
Recommendation 8-11:

It is recommended that school administration either appoint teaching staff or solicit parent volunteers to act as cafeteria monitors to assist the cafeteria workers with controlling the flow of the serving lines and to monitor the student behavior during the lunch period. It is also recommended that the students understand that the same respect extended to the teaching staff and administration should be given to the support services personnel, to include the food services staff. It is further recommended that the administration ensure that the students understand the role that they play in the food services process. The more cooperative they are, the quicker they can be served. It is also recommended that the cafeteria monitors ensure that they play an active part in supervising the flow of the food lines by ensuring that the students are in line and act as they are expected.

Finding 8-12:

The PECPS food services department has adopted an automated point of service (POS) system in its cafeterias. As a result, cafeteria managers, the food services supervisor and central office administrators are able to create and review reports on productivity and profitability.

All Prince Edward county public schools use an automated POS product called Café Terminal. These terminals are linked to the PECPS school administration and student information (SASI)



database. All meal applications are approved in the department's central office using the FARMA program, which is also linked to the schools' student information database.

Conclusion 8-12:

Students may either pay daily for each meal that they receive, pre-pay in the serving line during either their breakfast or lunch period, or pay during a time designated by the principal of that school. Parents may also pre-pay for their children's meals online.

Café Terminal provides numerous reports that can be printed from each cafeteria manager's computer. While observing portions of breakfast and lunch periods during the on-site review, the review team found that the wait times for students entering and then exiting the line with their meal, utensils, and beverage ranged between three to five minutes, depending on the length and organization of the student lines. Efficient service maximizes the amount of time that students have to consume their meals. By employing the POS system, PECPS has provided the food services cafeteria personnel with a tool that promotes efficiency and quality customer service to the division's students and faculty.

Commendation 8-12

PECPS is commended for implementing POS technology that improves food service fiscal controls and aids minimization of student wait times.

8.E QUALIFYING STUDENTS FOR FREE AND REDUCED-PRICE MEALS/ STUDENT PARTICIPATION

According to the Department of Education, 2,771 PECPS students participate in the Virginia Department of Education School Nutrition Program (SNP). Of these students, 59.83 percent are either free or reduced-price eligible. Exhibit 8-8 shows the SNP membership and free/reduced-price program eligibility for each of the peer divisions.

At PECPS, a total of 1,394 students are eligible to receive free breakfast and lunch, and 264 students are eligible to receive reduced-price breakfast and lunch. As shown in Exhibit 8-9, approximately 526 students receive school breakfasts daily. Exhibit 8-10 shows that approximately 1,600 students receive school lunches daily.

Exhibit 8-8
Number of Students Eligible for the Free/Reduced
Meal Program by Peer Division

School Division	SNP Membership	Free Eligible	Free Percent	Reduced Eligible	Reduced Percent	Total Free/Reduced Eligible	Total Free/Reduced Percent
Charlotte County	2,198	818	37.22%	268	12.19%	1,086	49.41%
Cumberland County	1,545	703	45.50%	152	9.84%	855	55.34%
Lunenburg County	1,752	833	47.55%	220	12.56%	1,053	60.10%
Nottoway County	2,400	1,031	42.96%	191	7.96%	1,222	50.92%
Prince Edward County	2,771	1,394	50.31%	264	9.53%	1,658	59.83%
Sussex County	1,383	831	60.09%	204	14.75%	1,035	74.84%
Peer Division Average	2008	935	47.27%	217	11.14%	1152	58.41%

Report information provided by Virginia Department of Education (Data submitted by School Divisions as of October 31, 2006), 2007.

Approximately 19 percent (or 526 students) of the total PECPS student population (2,771 students) purchase breakfast each day. Of these 526 students, 468 students (or 89 percent) are in the free/reduced lunch program. According to the Virginia Department of Education, there are 1,658 students at PECPS currently eligible for free or reduced-price meals. This means that only 28 percent (468 *divided by* 1,658) of those eligible students are receiving breakfasts at school. The remaining 72 percent of those children eligible for the free or reduced-price meal program are either eating elsewhere, or not eating breakfast at all.

Approximately 58 percent (1,600 students) of the PECPS students purchase lunch each day. Of these 1,600 students who purchase lunch, 1,175 (79 percent) qualify for the free or reduced lunch program. In all of the PECPS student body, there are 1,658 students eligible for free or reduced-price meals. Of these 1,658 students, 1,175 (or approximately 71 percent) receive lunch at school. The remaining 483 students (or 29 percent) of those eligible for the free or reduced-priced meal program are either bringing their lunch or not eating lunch at all.

Exhibit 8-9
Number of Breakfasts Served To PECPS Students
Eligible for the Free/Reduced Meal Program

School	Average Daily SNP	Full-Price	Full Percent	Reduced	Reduced Percent	Free	Free Percent
PECPS—Elementary	315	35	11.1%	30	9.5%	250	79.4%
PECPS—Middle	96	13	13.6%	8	8.3%	75	78.1%
PECPS—High	115	10	8.7%	5	4.3%	100	87.0%
Total	526	58		43		425	

Report information provided by Virginia Department of Education (Data submitted by School Divisions as of October 31, 2006), 2007.

Exhibit 8-10
Number of Lunches Served to PECPS Students
Eligible for the Free/Reduced Meal Program

School	Average Daily SNP	Full-Price	Full Percent	Reduced	Reduced Percent	Free	Free Percent
PECPS—Elementary	750	175	23.3%	75	10.0%	500	66.7%
PECPS—Middle	445	125	28.1%	45	10.1%	275	61.8%
PECPS—High	405	125	30.9%	45	11.1%	235	58.0%
Total	1,600	425		165		1,010	

Report information provided by Virginia Department of Education (Data submitted by School Divisions as of October 31, 2006), 2007.

Finding 8-13:

The average number of meals served by the PECPS food services department per day at the three PECPS schools is 2,126 (or 2,026 based on information provided by PECPS' food services personnel), which is 33 percent of the possible 6,456 (student and administration/faculty) meals that could be served.

Conclusion 8-13:

Although the PECPS food services department's *Fiscal 2005-2006 Comparative Financial Report* shows a positive balance, it is possible to increase school division food services revenue by maximizing the number of meals served to students and faculty. The theoretical maximum number of meals that could be served if all students, faculty and staff were to eat two meals per day is 6,456 (2,771 students *plus* 457 faculty =3,228, two times per day). These figures are based on information for the 2006-2007 school year. The actual number of meals served per day (2,126) represents 33 percent of those total possible meals. Since some students and faculty eat breakfast at home, some bring lunch from home, and some do not eat lunch, the food services supervisor and her staff can take actions that will entice the individuals in the three pricing groups (full-price, reduced-price and free) to change their eating habits. Increasing the percentage of meals served will increase revenue.

Maximizing student meal participation has two important benefits to school divisions. First, PECPS can ensure that the students eat nutritious meals each day. Statistics show that students who eat regular nutritious meals learn more effectively because they are more energetic and alert. This increase in energy levels allows them to be more receptive to learning. Second, increasing student meal participation increases PECPS food services revenue and the meal-per-labor hour rate.

Recommendation 8-13:

It is recommended that PECPS' administration, the food services supervisor, and the cafeteria managers evaluate how they can change the menus so that the adults and students find the meals more appealing and, therefore, eat their meals at school rather than eating breakfast at home, bringing a "brown bag" lunch, or skipping meals altogether.

To increase revenue, it is recommended that PECPS' food services department look for ways to increase student and faculty meal participation, especially during breakfast times. It is also recommended that the department supervisor address ways to increase revenue in this way and set a reasonable goal of a 10 percent increase in student meal participation for the 2007-2008 school year by offering meals students find more appealing. For example, students in all grade levels appear to enjoy the sausage biscuits. Offering them as breakfast choices more often may

increase breakfast attendance at all of the schools. Handheld meals, like biscuits and french toast sticks are filling and easy to manipulate, making them favorites among those students who wish to eat while socializing with friends.

It is also suggested that the division determine whether school bus pick-up times can be adjusted, to allow students the opportunity to eat breakfast prior to the start of the school day. PECPS should also attempt to increase the number of lunches served by 10 percent annually. This may be accomplished by conducting a survey of the students and adult employees to determine what changes to menu selections will entice more students and adult employees to eat meals served in the school cafeteria.

Fiscal Impact: It would be difficult to quantify a fiscal impact to the current school year's revenue because the financial report for the 2006-2007 school year is not complete; therefore 2005-2006 figures will be utilized for illustrative purposes.

If the overall number of meals served is increased annually by just 10 percent, an increase in gross revenue of approximately \$94,490.50 annually will result (\$944,904.95 *times* 10 percent). As shown in Exhibit 8-11, the food and non-food items expenses during the 2005-2006 school year was \$375,285.44 (\$352,971.38 *plus* \$22,314.06) and the total sales revenue was \$944,904.95. As a percent of sales revenue, food and supplies are approximately 40 percent of the total revenue (receipts). If gross revenue is increased by \$94,490.50 annually, and the raw materials (food and supplies) cost 40 percent, then an increase in net revenue of \$56,694.30 is available to apply toward other expenses in the food services operating budget.

Exhibit 8-11
Annual Financial Report FY 2005

<u>BEGINNING BALANCE:</u>	\$247,584.22
<u>Receipts</u>	
Federal and State Funds	\$669,845.14
Breakfast & Lunch Collections	234,982.12
Catering Activities	26,266.81
Other Receipts	<u>13,810.88</u>
Total Receipts	\$944,904.95
<u>Disbursements</u>	
Salaries	\$451,150.52
Fringe Benefits	134,431.61
Other Disbursements	9,743.82
Utilities	1,668.53
Repairs (Parts)	7,212.86
Equipment Expense	6,300.77
Food Expense	352,971.38
Non Food Items	<u>22,314.06</u>
Total Disbursements	\$985,793.55
<u>ENDING BALANCE:</u>	\$206,695.62

Finding 8-14:

As shown in Exhibit 8-12, during the 2006-2007 school year the government reimbursed PECPS food services \$2.42 for every lunch served to each student eligible to receive free meals and \$1.56 for each breakfast served to any student eligible to receive free meals. PECPS food services is reimbursed \$1.26 for every reduced-price breakfast served to any student eligible to receive reduced-price meals and \$2.02 for each reduced-price lunch served to any student eligible to receive reduced-price meals. The government also reimbursed PECPS \$.24 for every full-price breakfast served and \$.25 for every full-price lunch served.

Exhibit 8-12
2006-2007 Government Reimbursement Rates for PECPS Food Services

Meal Served	Free Meal	Reduced-Priced Meal	Full-Price Meal
Breakfast	\$1.56	\$1.26	\$.24
Lunch	\$2.42	\$2.02	\$.25

The data contained in Exhibit 8-13 shows the PECPS' SNP total membership with the breakdown of the total number of Free Eligible, Reduced Eligible, and Full-Price meal participants.

Exhibit 8-13
Prince Edward County Public Schools SNP Membership

PECPS SNP Membership	Free Eligible	Reduced Eligible	Full-Price Meal
2,771	1,394	264	1,113

Exhibit 8-14 shows the breakdown of PECPS' SNP breakfast participants and Exhibit 8-15 shows the breakdown of lunch participants.

Exhibit 8-14
Prince Edward County Public Schools SNP Membership
Breakfast Participants

Average Daily Breakfast Participants	Free Meal Participants	Reduced-Price Participants	Full-Price Participants
526	425	43	58

Exhibit 8-15
Prince Edward County Public Schools SNP Membership
Lunch Participants

Average Daily Lunch Participants	Free Meal Participants	Reduced-Price Participants	Full-Price Participants
1,600	1,010	165	425

Exhibit 8-16 shows the breakdown of the average number of breakfasts and lunches served daily, and the percentage of the average number of breakfasts and lunches served daily to SNP membership.

**Exhibit 8-16
Comparison of SNP to Actual Meal Participation**

SNP Membership	Average Number of Breakfasts Served Daily	Percentage of Average Number of Breakfasts Served Daily to SNP Membership	Average Number of Lunches Served Daily	Percentage of Average Number of Lunches Served Daily to SNP Membership
2,771	526	19.0%	1,600	57.7%

As shown in Exhibit 8-17, 1,394 students, or 50.31 percent of the PECPS student population, are eligible to receive free meals through the School Nutrition Program. Also, 425 students, or approximately 31 percent of those eligible to receive free breakfasts, actually eat school provided breakfasts. This means that 969 students who are eligible to receive free breakfasts do not eat school provided breakfasts. There are 264 students, or 9.53 percent of the PECPS student population, who are eligible to receive reduced-price meals through the School Nutrition Program. Currently 43 students, or 16 percent of the students who are eligible to receive reduced-price meals actually eat school provided breakfasts. The remaining 221 students eligible for reduced-price breakfasts do not eat school provided breakfasts.

**Exhibit 8-17
Breakfast Participation of Students Eligible to Receive Free and Reduced-Price Meals**

Average Number of Breakfasts Served Daily	Number of Students Eligible to Receive Free Breakfasts	Actual Number of Students That Receive Free Breakfasts	Percentage of Students Eligible for Free Breakfasts Who Receive Them	Number of Students Eligible to Receive Reduced-Price Breakfasts	Actual Number of Students That Receive-Price Reduced Breakfasts	Percentage of Students Eligible For Reduced-Price Breakfasts Who Receive Them
526	1,394	425	30.5%	264	43	16.3%

The data in Exhibit 8-18 reveals that 165 students, or 63 percent of those eligible to receive reduced-price meals, actually purchase school provided lunches. Approximately 1,010 students, or 72 percent of the students who are eligible to receive free lunches, actually purchase school provided lunches, which means that 384 students, or 28 percent of those who are eligible to receive the free lunches, do not purchase them.

**Exhibit 8-18
Lunch Participation of Students Eligible to Receive Free and Reduced Meals**

Average Number of Lunches Served Daily	Number of Students Eligible to Receive Free Lunches	Actual Number of Students That Receive Free Lunches	Percentage of Students Eligible For Free Lunches Who Receive Them	Number of Students Eligible to Receive Reduced Lunches	Actual Number of Students That Receive Reduced Lunches	Percentage of Students Eligible For Free Breakfasts Who Actually Participate
1,600	1,394	1,010	72.5%	264	165	62.5%

Approximately 1,113 students are responsible for paying full-price for their school-provided meals. Currently, there are only 58 students who purchase full-price school provided breakfasts and 427 students who purchase full-price school provided lunches. Therefore, 1,055 students who would pay full-price for their meals do not eat school provided breakfasts; and 686 students who would pay full-price do not eat school provided lunches.

Conclusion 8-14:

If the government reimburses the school division \$1.56 for each breakfast served to a student eligible to receive free meals and 969 students who are eligible to receive free breakfasts do not eat school provided breakfasts, then the school is missing out on \$1,511.64 in daily potential government reimbursements for free breakfasts (\$1.56 *times* 969 students). An additional \$278.46 is missed each day in potential government reimbursements for reduced-price breakfasts (\$1.26 per breakfast *multiplied by* the 221 reduced-price eligible students who are currently not eating breakfast). Due to lost opportunities to serve full-price breakfasts to 1,072 students, the division loses \$253.20 per school day in potential government reimbursements. Therefore, a total of \$2,043.30 in potential government reimbursements is lost daily due to a school breakfast participation of less than 100 percent.

The government reimburses Prince Edward County \$2.42 per free lunch served each day. An average of 384 students who are eligible to receive the free lunches, do not eat them. Therefore, PECPS loses approximately \$929.28 (\$2.42 *times* 384 students) in potential government reimbursements of free lunch costs each day. The government reimburses PECPS \$2.02 per each reduced-price lunch served each day.

Recommendation 8-14:

It is recommended that PECPS’ food services department set an additional goal to increase the number of students receiving free breakfasts by 64 percent (272 students) to 697 students, which is 50 percent of those 1,394 students who are eligible to receive student meals. It is further recommended that PECPS increase all the student meal participation in each of the other pricing categories (reduced and full-price breakfasts and all lunches) by at least 10 to 20 percent for each meal for the next five fiscal years to maximize government meal reimbursement. By increasing the number of free breakfasts served by 64 percent and the remaining meals by 10 percent in each pricing category [Free (lunch only), reduced-price (breakfast and lunch), and full-price (breakfast and lunch)], an increase in government reimbursements would result, as shown in Exhibit 8-19 and 8-20.

**Exhibit 8-19
Affect of Government Reimbursements by
Increasing the Number of Breakfasts Served**

Breakfast Type	Number of Students	Percentage of Increase	Additional Students Served After Increase	Government Reimbursement per Breakfast	Increase in Reimbursement	Annual Increase Based on 182 School Days
Free	425	64.00%	272	\$1.56	\$424.32	\$77,226.24
Reduced-Price	16	10.00%	2	\$1.26	\$2.02	\$366.91
Full-Price	58	10.00%	6	\$0.24	\$1.39	\$2.53.34
Totals	499		280		\$427..73	\$77,846.50

Exhibit 8-20
Affect of Government Reimbursements
by Increasing the Number of Lunches Served

Lunch Type	Number of Students	Percentage of Increase	Additional Students Served After Increase	Government Reimbursement per Breakfast	Increase in Reimbursement	Annual Increase Based on 182 School Days
Free	1,010	10.00%	101	\$2.42	\$244.42	\$44,484.44
Reduced-Price	165	10.00%	17	2.02	\$33.33	\$6,066.06
Full-Price	427	10.00%	43	\$0.25	\$10.68	\$1,942.85
Totals	1,602		161		\$288.43	\$52,493.35

Exhibit 8-21
Fiscal Impact Created by Increasing Student Meal Participation
for Breakfast and Lunch

Meal	Lunch at 10% Increase	Lunch at 20% Increase
Breakfast	\$77,846.50	\$77,846.50
Lunch	\$52,493.35	\$104,986.70
Total Both Meals	\$130,339.85	\$182,833.20
Food Costs (40%)	\$52,135.94	\$73,133.28
Net Increase in Revenue	\$78,203.91	\$109,699.92

8.F NUTRITION AND NUTRITION EDUCATION PROGRAMS

Finding 8-15:

All campus kitchens and eating areas were clean and routinely inspected by cafeteria personnel. Vending machines were stocked with juice drinks, water, and healthy snacks. Posters promoting healthy eating were found in each school's cafeterias and kitchens, and government-approved menus and meals were prepared daily.

Conclusion 8-15:

The cleanliness of facilities can impact student participation since student consumers will not purchase food cooked or served from a dirty kitchen, or what may be perceived by students as unsanitary. The schools visited were found to be very clean. The kitchen equipment, floors, food storage areas, sinks, and offices were free of food stuffs and were sanitary. Cafeteria walls, floors, tables, and chairs were all free of debris prior to each lunch period, and cleaned immediately after each period ended. The health reports viewed by the review team were in good standing and it appeared that all cafeteria personnel took great pride in the condition of their work area.

Recent studies have focused public attention in the United States on the epidemic in overweight children. According to the Center for Health and Health Care in Schools, a consensus has emerged that childhood obesity threatens the health status of children now and in the future. PECPS is one of many divisions throughout the country that takes positive measures to

encourage healthy eating by providing tasty and nutritious meals and snacks to its students. Low sugar, low fat snacks, 100 percent fruit juice drinks, water, and low fat milk are the only beverages offered. A salad bar offers high school students an opportunity to eat fresh fruits and vegetables, and is frequented by both students and faculty.

Commendation 8-15:

Clean kitchens help facilitate safe food preparation and distribution to students and faculty. The division's food services department is commended for maintaining clean facilities and providing tasty and nutritious meals and snacks to the students of Prince Edward County Public Schools.

8.G PURCHASING, WAREHOUSING AND CONTRACTING

Finding 8-16:

Annually, the PECPS food services supervisor solicits proposals from food distributors in an attempt to procure the best quality food products for the lowest cost. PECPS also receives funding annually through the USDA commodities program based on its school population. The division does not participate in co-ops, although it was considered in the past.

Conclusion 8-16:

PECPS desires to provide their students with appetizing and nutritious food for the best price. The food services supervisor solicits proposals from a variety of food distributors. It is possible these products may be provided at a lower cost through the Virginia Distribution Center (VDC). Over 950 top-quality line items are available through the VDC, including staple foods, frozen foods, janitorial supplies, paper and plastic products, and other select items. The warehouse/shipping facility is located in Sandston near the Richmond International Airport, and the Virginia Distribution Center serves the entire state. Products are shipped from their facility generally within five working days from receipt of orders.

Although not a certainty that utilization of the VDC will save on food costs because of the tight profit margins that are inherent in food costs, it is an exercise that should be completed to determine what benefits it may produce. Currently, the food services division solicits proposals from vendors; however, it would be beneficial to solicit proposals from additional sources to ensure they are making use of the most cost efficient means for purchasing its goods. While PECPS meets the industry standard of a food and supplies cost at 40 percent of revenue, savings of any kind should be considered.

Commendation 8-16:

The division is commended for competitively soliciting its food and supply needs from multiple companies on an annual basis to ensure the procurement of the best quality food and non-food items for the best price.

Recommendation 8-16:

It is recommended that PECPS evaluate utilizing the Virginia Distribution Center to procure needed food and non-food items, to further ensure that the division is receiving quality goods at the lowest available prices

Finding 8-17:

It was brought to the review team's attention that limited storage room for the department's dry goods appears to be a problem. These items are currently stored in the central office's warehouse and at the school cafeterias. Although the food services staff has organized these items to minimize crowding, the delivery driver must go to more than one location to pick up requested items. The additional time spent looking for these items could be spent in a more productive way. According to the supervisor, the food services central office back room facing the school's track and field appears to be vacant for a large majority of the school year. It is utilized by the school's track team for concessions during sporting events, usually once or twice per month.

Conclusion 8-17:

A crowded store room or, as is the case with PECPS food services, dried goods stored in more than one location, creates an increase in labor hours incurred by the delivery driver who must search for the needed items requested by the campus cafeteria staff. Providing additional space within the same building will provide a more convenient means of inventorying and locating the necessary goods.

Recommendation 8-17:

It is recommended that the division share the space allocated for the sports concessions, in a way that improves the efficiency of its operations. For example, the food services department's dried goods could be stored on shelves along each wall.

Finding 8-18:

All equipment malfunctions are reported to the facilities maintenance department for repair. If a part is needed, the facilities maintenance department contacts vendors to procure the part. It is not clear whether more than one vendor is contacted to ensure the best price. During the information gathering process, the review team was informed that the elementary school cafeteria's freezer had broken. All of the foods were removed, labeled and placed in the freezers located in the kitchens of the other two schools and the central warehouse. The malfunction was reported the same day to the facilities department. Five days later, the freezer was still inoperable and the facilities and maintenance department had not arrived to evaluate the freezer or repair it.

Conclusion 8-18:

The division is saving a great deal of money by utilizing the skills of the individuals employed by the facilities maintenance department to provide maintenance/repair of its equipment. However, to ensure that repairs are performed at the lowest cost, the facilities maintenance department should contact more than one vendor when shopping for replacement parts.

When a freezer becomes inoperable and that cafeteria's food is placed in other freezers, filling each of the other freezers to capacity, it creates a very inefficient operational situation for the entire food services department. Delivery of needed foods cannot be accepted because there is no freezer storage space available. Cafeteria employees at the other schools must remove the elementary school's frozen items to get to their needed food, spending unnecessary additional time. It was communicated to the review team that the facilities maintenance department has recently (within the last two months) begun tracking department work orders using a system

named Track-IT. Administrators who have been questioned appear to find it a more effective means of tracking service calls, expediting work orders, and eliminating or reducing similar situations from occurring.

Commendation 8-18:

Prince Edward County Public Schools is commended for utilizing the skills of its employees to reduce repair costs.

Recommendation 8-18:

It is recommended that PECPS contact at least two vendors for parts and equipment purchases regarding food services equipment items. Also, the facilities maintenance department should evaluate the tracking system to ensure that time-sensitive repairs are given priority.