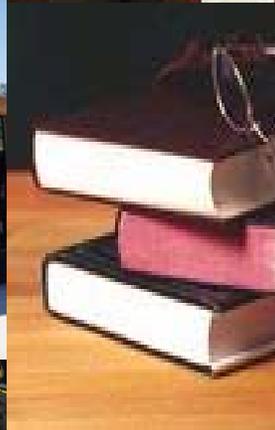




Spotsylvania County Public Schools Efficiency Review



GIBSON
CONSULTING GROUP

TABLE OF CONTENTS

Executive Summary.....	ES-1 – ES-6
Introduction.....	I-1– I-5
School Division Cluster Comparability.....	C-1 – C-13
1. Division Leadership, Organization, and Management.....	1-1 – 1-31
2. Educational Service Delivery.....	2-1 – 2-35
3. Human Resources.....	3-1 – 3-16
4. Facilities Use and Management.....	4-1 – 4-30
5. Financial Management.....	5-1 – 5-12
6. Transportation.....	6-1 – 6-28
7. Computers and Technology.....	7-1 – 7-11
8. Purchasing and Warehousing.....	8-1 – 8-17
Appendix A: Cluster Data.....	A-1 – A-9
Appendix B: Fiscal Impacts	B-1 – B-16

List of Exhibits

Executive Summary

Exhibit ES 1: Summary of SCPSD Savings Opportunities.....	ES-4
Exhibit ES-2: Summary of SCPSD Investments.....	ES-5

Introduction

Exhibit I-1: SCPSD Total Enrollment, 2004-05.....	I-3
Exhibit I-2: Spotsylvania CPSD Total Enrollment, 1999-2000 through 2004-05.....	I-3
Exhibit I-3: SCPSD General Education Fund Revenue, 2004-05.....	I-4
Exhibit I-4: Total General Education Fund Budgeted Expenditures by Object, 2004-05.....	I-5

School Division Cluster Comparability

Exhibit C-1: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Expenditures by Function per Pupil (2002-03).....	C-3
Exhibit C-2: Spotsylvania County Public Schools Compared to Peers Within Its Cluster – Percent of Total Expenditures by Function, 2002-03.....	C-4
Exhibit C-3: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Administration Spending, 2002-03.....	C-5
Exhibit C-4: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Attendance and Health Spending Breakdown, 2002-03.....	C-6
Exhibit C-5: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Instruction Expenditures, 2002-03.....	C-7
Exhibit C-6: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Instruction Salaries and Benefits Expenditures, 2002-03.	C-8
Exhibit C-7: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Transportation Spending, 2002-03.....	C-9
Exhibit C-8: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Operations and Maintenance Spending, 2002-03.....	C-10
Exhibit C-9: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Facilities Spending, 2002-03.....	C-11
Exhibit C-10: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Debt Service and Transfers, 2002-03.....	C-12
Exhibit C-11: Spotsylvania County Public Schools Compared to Peers Within Its Cluster - Technology Spending, 2002-03.....	C-13

Division Leadership, Organization, and Management

Exhibit 1-1: SCPSD School Board, 2004-05.....	1-2
Exhibit 1-2: SCPSD Goals.....	1-12
Exhibit 1-3: Flowchart of Development of Six-Year Division Improvement Plan.....	1-14
Exhibit 1-4: SCPSD Administration Organization Chart, 2004-05.....	1-15
Exhibit 1-5: SCPSD versus Peer Divisions – Technology Classroom Instruction and Instruction Support per Student Spending, 2002-03.....	1-17
Exhibit 1-6: SCPSD versus Peer Divisions – Technology Administrative Spending, 2002-03.....	1-18
Exhibit 1-7: Comparison of Technology Salary Expenditures – SCPSD versus Stafford County Public Schools, 2003-04.....	1-18
Exhibit 1-8: Proposed Central Administration Structure.....	1-20

Exhibit 1-9: Existing Functional Organization Structure – Department of Instruction, 2004-05.....	1-21
Exhibit 1-10: Proposed Structure – Department of Instruction.....	1-23
Exhibit 1-11: Proposed Structure – Financial Management.....	1-25
Exhibit 1-12: Example of Unquantifiable Strategy from SCPSD Six-Year Improvement Plan.....	1-30
Exhibit 1-13: Balance Scorecard Perspectives.....	1-31

Educational Service Delivery

Exhibit 2-1: SOL Pass Rates by Grade and Subject, Division, and State, 2003-04.....	2-2
Exhibit 2-2: Summary of SCPSD Savings Opportunities.....	2-5
Exhibit 2-3: Units, Administrators, and Areas of Oversight – SCPSD Department of Instruction, 2004-05.....	2-9
Exhibit 2-4: Recommended Changes - Department of Instruction.....	2-10
Exhibit 2-5: SOL Pass Rates Grade 3 SCPSD - Peer Divisions, and State, 2003-04.....	2-11
Exhibit 2-6: SOL Pass Rates Grade 5 SCPSD - Peer Divisions, and State, 2003-04.....	2-12
Exhibit 2-7: SOL Pass Rates Grade 8 SCPSD - Peer Divisions, and State, 2003-04.....	2-12
Exhibit 2-8: SOL Pass Rates High School - SCPSD, Peer Divisions, and State, 2003-04.....	2-13
Exhibit 2-9: Number of SCPSD Special Education Students and Complaint Actions, 2001 through 2004.....	2-18
Exhibit 2-10: Medicaid and FAMIS Reimbursements – Spotsylvania and Selected Peers, 2003-04.....	2-20
Exhibit 2-11: Current Classes Taught and Number of Independent Studies/Mentorship Apprenticeships – High School SCOPE Resource Teachers, 2004-05.....	2-24
Exhibit 2-12: Proposed Classes Taught and Number of Independent Studies/Mentorship Apprenticeships – High School SCOPE Resource Teachers, 2005-06.....	2-24
Exhibit 2-13: Teaching/Certification Information for SCOPE Teachers, 2004-05.....	2-25
Exhibit 2-14: Example Matrix Used to Aggregate Data for Making Decisions About Student Placement in the SCOPE Program, Grades 4-7.....	2-26
Exhibit 2-15: Number and Percent of SCPSD Students Identified as Gifted by Ethnicity, 2003-04... ..	2-27
Exhibit 2-16: Elementary Schools, Student Enrollment, Number of Identified Gifted Students, Number of SCOPE Resource Teachers, 2004-05.....	2-29
Exhibit 2-17: ESOL Centers and Enrollment, 2005.....	2-31

Human Resources

Exhibit 3-1: SCPSD Human Resources Organization, 2005.....	3-1
--	-----

Facilities Use and Management

Exhibit 4-1: Total Area of Facilities – Shown by Year Completed.....	4-2
Exhibit 4-2: Operations and Maintenance Costs – Major Categories, 2004-05.....	4-2
Exhibit 4-3: Facilities Staff Organization Chart.....	4-3
Exhibit 4-4: Summary of SCPSD Savings Opportunities.....	4-6
Exhibit 4-5: Facilities Operations and Maintenance Staff – Peer Group Comparison, 2001-02.....	4-8
Exhibit 4-6: Facilities Operations and Maintenance Expenditures – Peer Group Comparison - Cost per Student, 1996-97 through 2002-03.....	4-9
Exhibit 4-7: Historical Cost of New Construction, 1996-97 through 2003-04.....	4-11
Exhibit 4-8: Projected Cost of New Construction.....	4-14
Exhibit 4-9: 2004-05 Custodial Staffing.....	4-19
Exhibit 4-10: 2004-05 Custodial Operation Cost.....	4-19
Exhibit 4-11: Potential Savings from Custodial Outsourcing.....	4-20

Exhibit 4-12: Energy Costs and Usage, 2003-2004.....	4-21
Exhibit 4-13: Potential Savings SCPSD – Annual Energy Use, Based on 2003-04 Data	4-23
Exhibit 4-14: Typical Sources and Uses of Facilities Funds.....	4-28
Exhibit 4-15: SCPSD Skilled Trades and General Maintenance Staffing.....	4-29
Exhibit 4-16: Incomplete Work-orders by Trade, as of January 11, 2005.....	4-30

Financial Management

Exhibit 5-1: SCPSD General Education Fund Operating Budget - Revenue Sources, 2002-03 through 2004-05.....	5-1
Exhibit 5-2: SCSPD General Education Fund - Budgeted Operating Expenditures, 2002-03 through 2004-05.....	5-2
Exhibit 5-3: SCPSD Student Growth - Average Daily Membership, 2001-2011.....	5-2
Exhibit 5-4: Current Finance Department Organization, 2004-05.....	5-3
Exhibit 5-5: Summary of SCPSD Savings Opportunities.....	5-5
Exhibit 5-6: Proposed Organization Structure.....	5-10

Transportation

Exhibit 6-1: Summary of SCPSD Savings Opportunities.....	6-5
Exhibit 6-2: SCPSD Transportation Department - Organization Chart, 2004-05.....	6-9
Exhibit 6-3: SCPSD Transportation Department - Proposed Organization Structure.....	6-11
Exhibit 6-4: Transportation Performance Indicators and SCPSD Performance Statistics and Proposed Targets.....	6-17
Exhibit 6-5: SCPSD and Peer Divisions Regular Route - Riders per Bus, 2002-03.....	6-19
Exhibit 6-6: Percent of Enrolled Students Riding the Bus, 2002-03.....	6-20
Exhibit 6-7: SCPSD and Peer Divisions Population Density/Square Mile, 2003.....	6-20
Exhibit 6-8: SCPSD Regular Route Efficiency – Average Runs per Bus Route, 1999-2000 through 2003-04.....	6-21
Exhibit 6-9: SCPSD and Peer Divisions – Special Services Transportation, 2002-03.....	6-23
Exhibit 6-10: Annual SCPSD Capital Outlay for School Buses, 1997-98 through 2003-04.....	6-27

Computers and Technology

Exhibit 7-1: SCPSD Office of Technology - Organization Chart, 2004-05.....	7-2
Exhibit 7-2: SCPSD Management Information Systems Department - Organization Chart, 2004-05.....	7-3
Exhibit 7-3: Evaluation Matrix Template.....	7-8

Purchasing and Warehousing

Exhibit 8-1: Spotsylvania County Public Schools Division - Purchasing Requirements.....	8-1
Exhibit 8-2: Summary of SCPSD Savings Opportunities.....	8-4
Exhibit 8-3: SCPSD Opportunities to Improve Efficiency in Purchasing.....	8-11
Exhibit 8-4: Effects on SCPSD Staff Efficiency and Internal Controls - Caused by Existing Purchasing Technology.....	8-13

***EXECUTIVE
SUMMARY***

EXECUTIVE SUMMARY

Governor Mark Warner, as a part of his *Education for a Lifetime* Initiative, started a comprehensive school efficiency review program to ensure that Virginia's education dollars are being spent wisely and effectively. In fiscal year 2002-03, Virginia spent almost \$9.5 billion in state, federal, and local funds for elementary and secondary education - approximately \$1,300 for every citizen in the Commonwealth. Governor Warner's initiative and this pilot review of accountability and efficiency are aimed at maximizing the funding available for direct classroom expenditures. The individual school division reviews are modeled after successful programs in Texas and Arizona. Since its inception in 1991, the Texas program has conducted nearly 100 performance audits of public school systems and recommended net savings totaling \$750 million.

The goal of the accountability and efficiency reviews is to identify administrative savings achievable through the examination and implementation of best practices and operational improvements in school division organization, educational service delivery, human resources, facilities, finance, transportation, technology management, purchasing and warehousing, and other non-instructional expenditures, thereby allowing divisions to return administrative savings to the classroom to more directly benefit Virginia's children. These reviews are also intended to identify and acknowledge best practices already in place in Virginia school divisions, so they may be replicated by other school divisions.

The Review of the Spotsylvania County Public Schools Division

The Spotsylvania County Public Schools Division (SCPSD) is one of six school divisions that volunteered to participate in this program in 2004-05. Through a competitive process, Gibson Consulting Group, Inc. (Gibson) was selected by the Commonwealth of Virginia to conduct an accountability and efficiency review of SCPSD. Gibson has conducted 20 of the Texas school district reviews since that program's inception, and has also conducted similar performance audits for school divisions and/or state agencies in Florida, Illinois, and Colorado, as well as in Virginia. The Gibson evaluation team consisted of functional experts in each area of study, including former school teachers, a former superintendent, a former school system chief financial officer, three CPAs, and a nationally recognized K-12 facilities consulting firm.

The work commenced in December 2004 and was completed in May 2005. SCPSD management and staff was very cooperative with the evaluation team's effort, devoted a significant amount of time to the collection of data and interviews with evaluation team staff, and responded to consultant requests for information under a very short timetable. The evaluation team is appreciative of this effort, and wishes to thank Dr. Jerry W. Hill, Superintendent, for his leadership and support throughout this project.

SCPSD serves 22,948 students in PK-12 in 32 schools; five high schools, seven middle schools, 16 elementary schools, one career and technical center, and three alternative schools. The division employs 3,144 full-time equivalents (8 hour employees), including 1,788 teachers, 69 campus administrators, and 45 central administrators. Spotsylvania County is one of the fastest growing counties in Virginia, with enrollment growing 27.2 percent over the past six years.

The Virginia Department of Education (DOE) established clusters of divisions to support comparability of selected criteria across similar school divisions. The division ranks fourth lowest out of nine divisions in total operating expenditures per pupil, and also ranks the lowest or second lowest in per pupil spending in administration and operations, maintenance, and technology.

SCPSD's facility expenditures per student are the highest in the cluster. However, it should be noted that facility expenditures reflect the amount of school construction and will fluctuate from year to year based on each division's construction activity.

In addition to its generally low cost ranking, the division also has many commendable practices that contribute to increased efficiency and effectiveness. SCPSD:

- investigates ways to participate in joint ventures with the county to find opportunities to reduce costs and improve services, such as a joint transportation complex;
- administrative staff establish annual goals, which are reviewed, assessed, and tied back to the employee's annual performance evaluation;
- established innovative and creative initiatives intended to improve communication and information flow from the division to the Board of Supervisors;
- developed effective communication tools and processes to improve communication between the division, the community, parents, the School Board, and staff;
- employed a thorough process to lay the groundwork for how the reinstated Public Information Department will operate by establishing a mission statement and departmental goals and objectives;
- established a Budget Review Committee composed of representatives from all stakeholder groups to discuss the budget process, review proposed expenditures, prioritize the expenditures, and justify the superintendent's recommended budget;
- developed a strategic planning process that focuses on school improvement through comprehensive planning and accountability and solicits input from key stakeholders;
- developed an exemplary program for its students with emotional disturbances;
- conducts ADA tours in all campuses to ensure that the division complies with federal law;
- developed a process for writing K-12 curriculum maps that involves teachers and the supervisory and administrative staffs;
- shares student achievement data with all division stakeholders including the public;
- instituted a cost-effective internship program for teachers interested in becoming building administrators;
- developed a comprehensive approach to address teacher recruiting and retention;
- operates a self-supporting alternative licensure program that allows the division to fill positions in critical shortage areas;
- reduces workers' compensation claims through accident review and investigation by the safety committee and a return-to-work program;

- effectively uses web-based technology to streamline its employee applicant processing;
- is efficient both in terms of facilities personnel per student and total operations and maintenance cost per student, ranking second lowest out of nine among its peer group in facilities personnel and total operations and cost per student;
- uses its website to communicate effectively with parents, division staff, and community members about the budget process;
- provides two-way radios to campus principals to ensure priority communication with the Transportation Department;
- monthly training classes are scheduled allowing the opportunity for newly recruited driver candidates to be trained and qualified on a regular basis;
- efficiently and effectively maintains its school bus fleet with a small group of mechanics;
- provides a tool on its website that makes it possible for parents, teachers, and school administrators to investigate and determine which school bus stop is most convenient to a student's home;
- uses the "quick quote" feature of the state's web-based e-procurement tool, eVA, to save staff time, expand its access to vendors, and achieve savings;
- created a purchasing website to improve communications with the public and reduce advertising costs; and.
- uses just-in-time delivery for its consumable supplies, eliminating unnecessary warehouse costs.

Summary of Potential Savings and Investments

This report contains recommendations to improve the efficiency of SCPSD operations. The evaluation team anticipates that the recommendations contained in this report will be implemented over the next five years. Once fully implemented, these recommendations will result in savings of \$3.9 million each year, representing 2.3 percent of the division's annual operating budget. The major savings opportunities are presented in **Exhibit ES-1**.

Exhibit ES-1
Summary of SCPSD Savings Opportunities

Functional Area	Recommendation	Annual Savings
Education Service Delivery	Increase Medicaid and FAMIS reimbursements.	\$277,216
	Expand responsibilities of high school SCOPE teachers.	70,786
Facilities Use and Management	Consider outsourcing custodial operations.	1,757,000
	Design and implement an Energy Management Policy - Behavior Changes.	567,000
	Design and implement an Energy Management Policy – Capital Improvement.	217,000
Financial Management	Restructure the Finance Department.	18,824
Transportation	Revise division policies and practices to increase regular route efficiencies.	458,326
	Implement an automated routing and scheduling system for special services transportation.	155,396
	Establish a cooperative planning effort to improve service quality.	331,488
Purchasing and Warehousing	Increase centralization of purchasing.	23,821
	Require all schools and departments to implement copier agreements based on use rather than fixed lease costs.	45,000
	Implement a textbook management system.	27,550
Total Annual Savings		\$3,949,407
Percent of annual operating budget		2.3%

Source: Gibson Consulting Group.

The division could also save an additional \$31 million in planned new facilities expenditures over the next five years if it brings its construction cost per student and construction cost per square foot in line with state averages.

The report also includes recommended investments by SCPSD, to achieve best practices or to generate savings. If savings cannot support these investments in the short-term, then the division should request additional funds from the county. If the savings are not generated, the initiative should be discontinued. The major investments are presented in **Exhibit ES-2**.

**Exhibit ES-2
Summary of SCPSD Investments**

Functional Area	Recommendation	Annual Investment	One-Time Investment
Division Leadership, Organization and Management	Reorganize division administration to be better aligned with strategic goals.	(\$350,482)	
	Create a Balanced Scorecard.		(50,000)
Education Service Delivery	Reorganize content supervisory staff and realign other reporting responsibility within the Department of Instruction.	(238,774)	
Human Resources	Acquire and implement technology to efficiently locate substitutes and track their use.	(6,378)	(28,345)
	Purchase the document management module of the online applicant system.		(8,500)
	Develop procedures and implement an automated timekeeping system.		(77,770)
	Update job classifications and consider adoption of alternative pay schedules.		(35,000)
Facilities Use and Management	Develop detailed facilities educational specifications.		(100,000)
	Add a full-time facilities planning position.	(90,612)	
	Develop a division-wide assessment and long-term facilities plan.		(268,000)
	Review maintenance and operations staffing.	(175,686)	
Financial Management	Create an internal auditor position reporting to the School Board.	(84,367)	
Transportation	Revise the Transportation Department's organizational structure.	(269,490)	
	Establish a referral bonus to encourage recruiting.	(19,000)	
	Increase the number of hours for in-service training for drivers and aides.	(57,321)	
	Implement an automated parts inventory system and hire part-time inventory clerk.		(3,866)
Computers & Technology	Conduct a process re-engineering study to assist in evaluating and implementing automated solutions.	(90,000)	
Purchasing & Warehousing	Complete a study to determine optimal warehouse design and incorporate division's just-in-time delivery practice into the design.		(7,000)
	Overhaul the textbook management function and add a textbook coordinator position.	(51,819)	
Total Investments		(\$1,433,929)	(\$578,481)
Percent of annual operating budget		0.8%	0.3%

Source: Gibson Consulting Group.

If all recommendations are implemented, the net annual savings to SCPSD is \$2.5 million, or 1.4 percent of the division's operating budget. The annual savings does not include the one-time investments of \$578,481.

INTRODUCTION

ACCOUNTABILITY AND EFFICIENCY REVIEWS

Governor Mark Warner, as a part of his *Education for a Lifetime* Initiative, started a comprehensive school efficiency review program to ensure that Virginia's education dollars are spent wisely and effectively. In fiscal year 2002-03, Virginia spent almost \$9.5 billion in state, federal, and local funds for elementary and secondary education - approximately \$1,300 for every citizen in the Commonwealth. Governor Warner's initiative and this pilot review of accountability and efficiency are aimed at maximizing the funding available for direct classroom expenditures.

I. Introduction

The goal of the accountability and efficiency reviews is to identify administrative savings achievable through the examination and implementation of best practices and operational improvements in school division organization, educational service delivery, human resources, facilities, finance, transportation, technology management, purchasing and warehousing, and other non-instructional expenditures, thereby allowing divisions to return administrative savings to the classroom to more directly benefit Virginia's children.

Scope

The scope of the accountability and efficiency review of the Spotsylvania County Public Schools Division (SCPSD) included a review of the administrative areas listed below, but did not include a review of classroom instruction, community involvement, food services, or student safety and security.

1. Division Leadership, Organization, and Management
 - 1.A Division Management
 - 1.B Procedures
 - 1.C Campus Administration and Site-Based Decision-Making
 - 1.D. Planning, Budgeting, and Evaluation
2. Educational Service Delivery
 - 2.A Organization and Management
 - 2.B Curriculum Policies and Management
 - 2.C Instructional and Administrative Technology
 - 2.D Staff Development
 - 2.E Special Education
3. Human Resources Management
 - 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.A Facilities Management and Operation
 - 4.B Plans, Policies, and Procedures
 - 4.C Maintenance Operations
 - 4.D Custodial Operations
 - 4.E Energy Management

5. Financial Management
 - 5.A Organization, Management, and Staffing
 - 5.B Financial Performance
 - 5.C Planning and Budgeting
 - 5.D Administrative Technology
6. Transportation
 - 6.A Organization and Staffing
 - 6.B Planning, Policies, and Procedures
 - 6.C Routing and Scheduling
 - 6.D State Reporting
 - 6.E Safety and Training
 - 6.F Vehicle Maintenance and Bus Replacement
7. Computers and Technology
 - 7.A Technology Planning and Budgeting
8. Purchasing
 - 8.A Organization, Staffing, and Budgeting
 - 8.B Policies and Procedures
 - 8.C Operations
 - 8.D Warehousing Policies, Procedures, Planning, Operations, and Staffing
 - 8.E Textbooks Operations, Policies, Procedures, Planning, and Staffing
 - 8.F Contracting Process

Methodology

In conducting this review the evaluation team:

- interviewed SCPSD staff;
- obtained and reviewed documents pertaining to the operation of SCPSD;
- compiled and analyzed data about the operations of SCPSD;
- interviewed professionals in other school divisions that are statistically similar to SCPSD;
- documented the processes and organizations of SCPSD;
- compared the expenditures and revenues of SCPSD with those of statistically similar school divisions;
- obtained information pertinent to the study from other state agencies (the Department of Education, Department of General Services, Department of Human Resource Management, Department of Mines, Minerals, and Energy, and the Joint Legislative Audit and Review Commission); and
- reviewed SCPSD policies and procedures in areas such as Administration, Human Resources, Facilities Use and Management, Transportation, and Information Technology.

About Spotsylvania

Spotsylvania County was formed in 1721 as a frontier outpost and was named for Alexander Spotswood, the Colonial Governor of Virginia. The county is located along the I-95 corridor, situated 42 miles south of Washington, D.C. and 58 miles north of Richmond, Virginia. It is one of the largest and fastest growing counties in the commonwealth. Four major Civil War battles were fought on Spotsylvania soil. The Battle of Spotsylvania Courthouse, one of the bloodiest of the war, marked the beginning of the fall of the Confederacy. Three large military institutions lie in close proximity to the county. Nearly half of the county's work force commutes to the

Washington, D.C. area or Richmond. A large segment of the county remains rural. According to the 2000 Census, approximately 90,395 people reside within the county boundaries.

About Spotsylvania County Public Schools Division (SCPSD)

The SCPSD School Board is composed of seven elected members charged with making policy and providing oversight of the school administration. The school division has 3,144 full-time equivalents (FTEs), including 1,788 teachers, 68 school administrators, and 45 central administrators.

In 2004-05 the student enrollment was 22,948. **Exhibit I-1** presents total enrollment by ethnicity. The student to teacher scale position ratio for all grades for 2004-05 was 12.8 to 1.

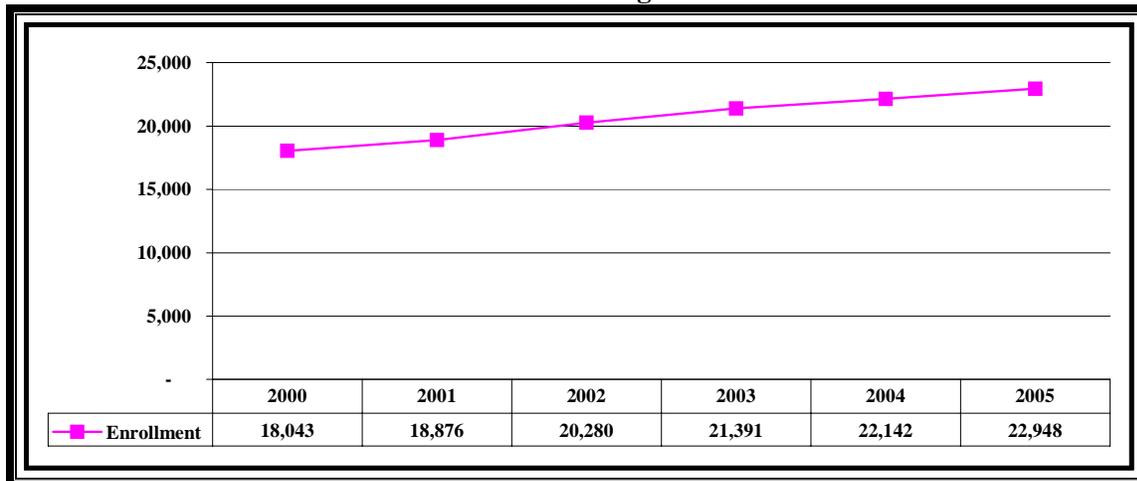
**Exhibit I-1
SCPSD Total Enrollment
2004-05**

Ethnicity Group	Enrollment	Percent of Total
Am Indian/ Alaska Native	74	0.3%
Asian	518	2.3%
African American	4,160	18.1%
Hispanic	1,217	5.3%
White	16,849	73.4%
Unspecified	130	0.6%
Total	22,948	100.0%

Source: Virginia Department of Education, 2004-05 Fall Enrollment.

Exhibit I-2 graphs the change in student enrollment from 1999-2000 to 2004-05. SCPSD enrollment increased 27.2 percent from 1999-2000 to 2004-05. The division faces a number of challenges related to its rapid growth, which will be discussed throughout this report.

**Exhibit I-2
Spotsylvania CPSD Total Enrollment
1999-2000 through 2004-05**



Source: Virginia Department of Education, Fall Enrollment, for the years presented.

SCPSD owns and maintains 36 buildings, 16 elementary schools, seven middle schools, five high schools, one career and technical center, three alternative schools, and four administrative facilities. In the last 15 years, SCPSD facilities, in both size and number, have increased in response to rapid growth in student population. The division has opened two elementary, one middle school, one high school, and the River Run Administrative Service Center in the past four years, and plans to construct one high school, two middle schools and three elementary schools over the next five years.

Spotsylvania County Public Schools Division Budget

SCPSD has a 2004-05 general education fund budget of \$232,790,510. The composite index is an indicator of a division’s local ability to finance educational efforts; SCPSD’s composite index is 0.3573. The general education fund budget is broken down into five primary sources of revenue: county funds, state funds, federal funds, other funds, and loans and bonds. The majority of the other income is from charges for services.

Exhibit I-3 summarizes the division’s breakdown from local, state, and federal sources.

**Exhibit I-3
SCPSD General Education Fund Revenue
2004-05**

Revenue Source	Revenue Amount Received	Percent of Total
State Funds	\$94,131,526	40.4%
Federal Funds	6,941,257	3.0%
County Funds	95,248,577	40.9%
Other Funds	1,678,316	0.7%
Loans and Bonds	34,790,834	14.9%
Total	\$232,790,510	100.0%

Source: SCPSD, Budget Office, 2004-05.

**Totals may not add to 100 percent due to rounding.*

The general education fund supports eight primary categories of expenditures which are assigned object codes for accounting purposes. These expenditure categories include:

- personnel services (salary costs of classroom personnel, instructional, and central office support staff, and school administration);
- employee benefits (social security, retirement, and health insurance);
- purchased services;
- other charges;
- materials and supplies;
- capital outlay; and
- other uses of funds.

Exhibit I-4 details the budgeted expenditures by accounting object code as a percentage of SCPSD's total expenditures. Personnel services and employee benefits represent the largest portion of SCPSD's expenditures, as in all school divisions in Virginia and other states. SCPSD budgets 50.5 percent for personnel services and 15.0 percent for employee benefits for a combined total of 65.5 percent.

Exhibit I-4
Total General Education Fund Budgeted Expenditures by Object
2004-05

Expenditure by Object Type	Budgeted Amount	Percent of Total *
Personnel Services	\$ 117,610,185	50.5%
Employee Benefits	34,895,114	15.0%
Purchased Services	7,163,309	3.1%
Other Charges	6,804,304	2.9%
Materials and Supplies	7,302,347	3.1%
Capital Outlay	35,001,251	15.0%
Other Uses of Funds	24,014,000	10.3%
Total	\$ 232,790,510	100.0%

Source: SCPSD, Budget Office, 2004-05.

* Total may not add to 100 percent due to rounding.

The next chapter compares SCPSD revenue and expenditure levels to its peer school divisions in the Commonwealth of Virginia.

***COMPARABILITY
ANALYSIS***

SCHOOL DIVISION CLUSTER COMPARABILITY

This chapter presents comparisons of Spotsylvania County Public School Division (SCPSD) to its peer divisions in the Commonwealth of Virginia. The comparisons provide relevant benchmarks, but do not and should not represent the sole basis for any conclusion about division spending or efficiency.

Comparing the performance of Virginia school divisions requires that various divisions with similar attributes be identified to allow for meaningful comparisons. School divisions vary greatly in size, resources, and the populations served. There is not much to be gained, for example, from a straight comparison of many aspects of the much larger and more populous school divisions, like Fairfax County, to smaller divisions such as Accomack County. Identifying and using reasonably similar school divisions as “peers” for purposes of comparison, however, presents meaningful opportunities to gain insight into performance issues.

In order to develop comparable peer clusters of school divisions, the Department of Education (DOE) contracted with Virginia Commonwealth University (VCU) to perform a statistical analysis of four primary criteria for all school divisions in the state: population density, average daily attendance membership, percent of students eligible for free lunch, and the composite index. The composite index is a number developed by the DOE to measure the local government’s ability to financially support schools. Data for every school division were compared against these four key criteria and then further divided into subsets of urban, suburban, and rural school divisions in certain clusters.

The VCU data analysis identified seven clusters of “peer” school divisions. The nine school divisions in SCPSD’s cluster are listed below:

- Arlington County Public School Division;
- Chesapeake City Public School Division;
- Chesterfield County Public School Division;
- Fairfax City Public School Division;
- Fairfax County Public School Division;
- Henrico County Public School Division;
- Prince William County Public School Division;
- Stafford County Public School Division; and
- Virginia Beach County Public School Division.

These peer divisions were analyzed and ranked in various categories of expenditures. This chapter presents a comparative analysis of SCPSD and its peers. Tables, found in Appendix A, provide additional information for the divisions within the cluster.

In analyzing the expenditures by function for each peer, the evaluation team noted that the Fairfax County PSD reports aggregate expenditures in some functional categories, such as transportation and technology, for both Fairfax County PSD and Fairfax City PSD because of shared service agreements. In order to improve data comparability, all Fairfax City and Fairfax County Public School Divisions data have been combined in the analysis. Accordingly, there are nine divisions, including Spotsylvania, compared throughout this section.

The evaluation team created a database to analyze cluster-related data, along with data from the DOE Superintendent’s Annual Report for 2002-03. This data details expenditures in categories

such as instruction, administration, transportation, and other division functions. It also includes data for state, local, and federal revenue provided to each school division within the cluster.

This information has a key limitation in that the data is captured in non-standardized accounting systems, and self-reported, without validation or verification, by the school divisions to the DOE. Each school division uses a different accounting system and may use a non-standardized set of definitions to categorize and account for expenditures. The DOE attempts to minimize the impact of the non-standardized data capture and reporting found across school divisions by issuing specific instructions regarding the data that must be “mapped” from the school division’s system into specific categories of expenditures that must be reported to the DOE. Absent a data standardization and verification process, data discrepancies are likely, despite the DOE instructions.

Understanding this data limitation, the evaluation team compared and ranked SCPSD in each expenditure or revenue category to each of the peers in its cluster. The evaluation team also attempted to determine what factors might contribute to the division’s ranking, especially in comparison categories in which the division appeared to be substantially out of line with the values calculated for the individual peer divisions, the peer average, and the state-wide average.

Exhibit C-1 compares SCPSD to the other divisions in its cluster. The designation of 1st indicates the division with the lowest expenditure per pupil in that category, whereas the 9th is the division with the highest per pupil expenditures in that category. The data are sorted on a per pupil basis to remove the distinctions between larger and smaller divisions within the cluster. Note that Spotsylvania's overall ranking is fourth in the total spending per pupil for operations.

Exhibit C-1
Spotsylvania County Public Schools Compared to Peers within Its Cluster
Expenditures by Function per Pupil (2002-03)

Function *	Amount Per Pupil	Rank**
Administration	\$113.11	2
Attendance & Health	119.72	6
Instruction	5,269.05	4
Transportation	455.17	7
Operations and Maintenance	617.04	2
Total Operations Regular School Day	\$6,574.09	4
Food Services	255.33	3
Summer School	14.87	1
Adult Education	36.59	6
Other Educational Services	24.46	1
Facilities	1,437.93	9
Debt Service and Transfers	979.90	7
Technology	198.68	1
Total Disbursements	\$9,521.85	6
<hr/>		
Local Revenue	\$3,236.55	4
State Revenue	\$3,508.01	6
Federal Revenue	\$311.13	5

Source: Virginia Department of Education 2002-03 Superintendents Annual Report, Table 13 Disbursements by Division and Table 15 Sources of Financial Support for Expenditures, Total Local Expenditures for Operations.

*Description of each function category is provided in Appendix A.

**Note: 1st is the lowest in amount per pupil and 9th is the highest.

Exhibit C-2 compares the school division's total actual expenditures to those of its cluster divisions in terms of percent of total expenditures by function. SCPSD is the lowest among its peers and the state average in the percentage of its expenditures devoted to instruction. Although the division is the fourth lowest in instruction spending per pupil, as noted in **Exhibit C-1**, it allocates the lowest percentage of its expenditures to instruction, 55.3 percent, as compared to peers in the cluster group.

Exhibit C-2
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Percent of Total Expenditures by Function*
2002-03

Division	Instruction **	Other Instruction ***	Administration Health and Attendance	Transportation	Maintenance & Operations	Food Services	Facilities	Debt Service and Fund Transfers	Technology
Spotsylvania	55.3%	0.8%	2.4%	4.8%	6.5%	2.7%	15.1%	10.3%	2.1%
Chesterfield	56.7%	1.3%	2.6%	3.9%	9.2%	2.8%	6.5%	13.5%	3.4%
Prince William	58.0%	0.9%	3.0%	5.6%	8.3%	3.3%	12.1%	5.9%	3.0%
Henrico	60.5%	1.3%	3.0%	4.5%	8.3%	3.2%	8.5%	5.8%	4.9%
Arlington	61.1%	4.1%	4.0%	2.4%	7.2%	4.7%	7.2%	5.8%	3.3%
Stafford	61.1%	1.4%	3.4%	4.4%	7.1%	3.3%	4.9%	10.2%	4.1%
Fairfax ****	62.3%	3.3%	3.2%	4.2%	7.5%	2.7%	8.7%	2.4%	5.7%
Virginia Beach	67.6%	1.4%	3.0%	3.7%	10.3%	3.3%	5.9%	0.0% *****	4.9%
Chesapeake City	69.8%	2.0%	3.0%	4.9%	9.8%	2.8%	4.4%	0.2% *****	3.1%
State	62.3%	2.3%	3.5%	4.5%	8.3%	3.1%	7.5%	4.8%	3.8%

Source: Virginia Department of Education Database, 2002-03.

* Total may not add to 100 percent due to rounding.

** Instruction costs represents expenditures for classroom instruction, guidance services, social work services, homebound instruction, improvement of instruction, media services, and office of the principal.

*** Other Instruction includes technology instruction, summer school, adult education, which are reported under separate columns within this table.

**** Fairfax includes Fairfax County and Fairfax City Public Schools.

*****School debt is accounted for by the County.

The sections that follow briefly explain each functional category examined and provide a comparison of SCPSD and its peer school divisions within the cluster.

A. Administration:

According to the Virginia Department of Education's reporting guidelines, administration is defined as, "any activity concerned with establishing and administering policy for operating the [division]." These activities include board, executive administration, information, personnel, planning, fiscal, purchasing, and reprographics services.

As noted in **Exhibit C-1**, SCPSD ranked second out of nine among comparable school divisions in administration spending per pupil. **Exhibit C-3** compares the division's administration costs to those of its peer school divisions in terms of administration spending per pupil and as a percent of total disbursements. SCPSD expended \$113.11 in administrative costs for each attending student during the 2002-03 school year, ranking second lowest among its peers and well below the state average of \$197.01. In addition, SCPSD's administration costs as a percent of total disbursements, at 1.2 percent, closely compares with Stafford as the lowest among its peers, the peer average, and the state average.

Exhibit C-3
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Administration Spending
2002-03

Peer School Division	Administration Spending/Pupil	Rank by Spending per Pupil	Administration Spending	Administration Spending as a Percent of Total Disbursements
Arlington	\$550.08	9 th	\$10,032,367	3.2%
Chesapeake	\$137.59	4 th	\$5,380,861	1.7%
Chesterfield	\$144.24	5 th	\$7,723,938	1.7%
Fairfax *	\$188.52	8 th	\$30,337,461	1.7%
Henrico	\$163.39	6 th	\$7,063,221	1.9%
Prince William	\$179.99	7 th	\$10,614,591	1.8%
Spotsylvania	\$113.11	2nd	\$2,399,779	1.2%
Stafford	\$100.95	1 st	\$2,388,089	1.2%
Virginia Beach	\$137.32	3 rd	\$10,321,106	1.7%
Peer Average	\$200.26	n/a	\$10,482,704	1.8%
State	\$197.01	n/a	\$226,932,439	2.1%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

B. Attendance and Health:

SCPSD ranked sixth out of nine among comparable school divisions in attendance and health spending per pupil. This category includes salary and benefits for those employees assigned to track student attendance data and health related employees such as nurses, clinic aides, and psychologists.

Exhibit C-4 presents the breakdown of the amount expended per student in the subset categories that make up Attendance and Health for SCPSD, its peer school divisions, and the peer average. The subset categories are attendance, health, psychological, and speech pathology. The attendance category includes expenditures for tracking student attendance data and truant officers. The health category is primarily expenditures for school nurses. SCPSD dedicates the highest amount for health, ranking ninth. The health category is the division's primary costs in the Attendance and Health function totaling \$91.66, or 77 percent, of total cost for this function. A review of nurses per pupil shows SCPSD to be higher at one nurse for every 765 students compared to the state-wide ratio of one per 1,000 students.

Note that SCPSD and some of its peers did not report any costs to the Attendance and Speech Pathology categories. These divisions chose to report these expenditures in other categories or functions.

Exhibit C-4
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Attendance and Health Spending Breakdown
2002-03

Peer School Division	Attendance/ Pupil	Health/ Pupil	Psychological/ Pupil	Speech Pathology/ Pupil
Arlington	\$0.00	\$5.09	\$121.15	\$0.00
Chesapeake	\$5.16	\$57.53	\$41.45	\$0.00
Chesterfield	\$2.64	\$35.50	\$41.89	\$0.00
Fairfax*	\$38.14	\$54.48	\$64.82	\$12.85
Henrico	\$0.00	\$50.17	\$37.43	\$0.00
Prince William	\$56.02	\$28.92	\$30.28	\$0.00
Spotsylvania	\$0.00	\$91.66	\$27.08	\$0.00
Stafford	\$7.53	\$72.09	\$29.79	\$71.46
Virginia Beach	\$0.00	\$60.73	\$37.69	\$2.68
Peer Average	\$21.90	\$45.56	\$50.56	\$29.00
Rank	1st	9th	1st	1st

Source: Virginia Department of Education Disbursement Database 2002-03.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

Note: In the above table if the expenditures read \$0 it means that this division reported these expenditures in another category.

C. Instruction:

SCPSD is ranked fourth lowest out of nine among comparable school divisions in instructional spending per pupil. This category refers to the direct costs of instruction, primarily teacher salaries. This category does not include the costs associated with summer school, adult education, and other educational programs.

Exhibit C-5 compares the division's instructional spending per pupil to those of its peer divisions and the state average in terms of total instructional dollar expenditures, and instructional expenditures as a percent of total division disbursements. SCPSD instructional spending per pupil of \$5,269 is significantly lower than the peer average of \$6,132 and the state average of \$5,951.

SCPSD spends 55.3 percent of total disbursements on instruction. In comparing instruction spending as a percentage of total disbursements with its peers, SCPSD is the lowest and is significantly below both the peer and state averages.

Exhibit C-5
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Instruction Expenditures
2002-03

Peer School Division	*Instruction Spending/Pupil	Rank by Spending per Pupil	Instruction Spending	Instruction Spending as a Percent of Total Disbursements
Arlington	\$10,465.18	9 th	\$190,864,018	61.1%
Chesapeake	\$5,540.30	6 th	\$216,670,100	69.8%
Chesterfield	\$4,914.61	1 st	\$263,177,630	56.7%
Fairfax	\$6,986.79	8 th	\$1,124,362,961	62.3%
Henrico	\$5,099.92	3 rd	\$220,469,526	60.5%
Prince William	\$5,670.27	7 th	\$334,392,912	58.0%
Spotsylvania	\$5,269.06	4th	\$111,788,276	55.3%
Stafford	\$5,019.35	2 nd	\$118,732,652	61.1%
Virginia Beach	\$5,362.20	5 th	\$403,028,240	67.6%
Peer Average	\$6,132.33	n/a	\$358,962,255	62.1%
State	\$5,951.48	n/a	\$6,855,472,905	62.3%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
Disbursements by Division.

*Does not include summer school, adult education and other educational programs.

Exhibit C-6 presents a comparison of salaries and benefits expenditures per student and expressed as a percent of the total instructional expenditures. SCPSD ranks fifth among its peers in salaries and benefits spending. SCPSD's instructional salaries and employee benefits account for 93.7 percent of the division's total instructional expenditures. Per pupil teacher salaries and benefits expenditures are \$797, or 13.9 percent lower than the peer average of \$5,736.

Exhibit C-6
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Instruction Salaries and Benefits Expenditures
2002-03

Peer School Division	Salaries and Benefits Spending per Pupil	Rank by Salaries and Benefits Spending	*Instruction Spending per Pupil	Salaries and Benefits as a % of Instruction Spending
Arlington	\$9,889.38	9 th	\$10,465.18	94.5%
Chesapeake	\$5,177.51	7 th	\$5,540.30	93.5%
Chesterfield	\$4,651.16	1 st	\$4,914.61	94.6%
Fairfax	\$6,737.05	8 th	\$6,986.79	96.4%
Henrico	\$4,863.53	3 rd	\$5,099.92	95.4%
Prince William	\$5,008.44	6 th	\$5,670.27	88.3%
Spotsylvania	\$4,939.42	5th	\$5,269.06	93.7%
Stafford	\$4,671.22	2 nd	\$5,019.35	93.1%
Virginia Beach	\$4,892.34	4 th	\$5,362.20	91.2%
Peer Average	\$5,736.33	n/a	\$6,132.33	93.5%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
 Disbursements by Division.

*Does not include summer school, adult education and other educational programs.

D. Transportation:

SCPSD ranks seventh out of nine among comparable school divisions for per pupil expenditures for transportation. **Exhibit C-7** compares the division's transportation costs to those of its peer school divisions in terms of transportation spending per pupil and as a percent of total disbursements. SCPSD expends 4.8 percent of total disbursements on transportation, slightly higher than the state and peer averages.

Exhibit C-7
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Transportation Spending
2002-03

Peer School Division	Transportation Spending/Pupil	Rank by per Pupil Spending	Transportation Spending	Transportation Spending as a Percent of Total Disbursements
Arlington	\$417.07	6 th	\$7,606,441	2.4%
Chesapeake	\$385.25	5 th	\$15,066,382	4.9%
Chesterfield	\$339.64	2 nd	\$18,187,578	3.9%
Fairfax *	\$467.80	8 th	\$75,281,838	4.2%
Henrico	\$382.61	4 th	\$16,540,153	4.5%
Prince William	\$545.48	9 th	\$32,168,391	5.6%
Spotsylvania	\$455.17	7th	\$9,656,946	4.8%
Stafford	\$358.73	3 rd	\$8,485,706	4.4%
Virginia Beach	\$292.94	1 st	\$22,017,640	3.7%
Peer Average	\$398.69	n/a	\$24,419,266	4.2%
State	\$425.88	n/a	\$490,567,172	4.5%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
 Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

E. Operations and Maintenance:

Operations and Maintenance includes the cost of operating and maintaining the schools and other division buildings, including gas, electric, and other utility expenses. SCPSD ranks second lowest out of nine among comparable school divisions in operations and maintenance spending per pupil.

Operations and Maintenance funds are used to maintain the division's 32 schools, other facilities, and equipment. Salaries for custodial, security, and maintenance personnel and all utility costs are included. **Exhibit C-8** compares the division's operations and maintenance costs with each peer, and the peer and state averages. SCPSD's 6.5 percent of operations and maintenance costs as a percent of total disbursements is the lowest compared with its peers. Both SCPSD's percent of operations and maintenance costs and spending per pupil are significantly below the state average.

Exhibit C-8
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Operations and Maintenance Spending
2002-03

Peer School Division	Operations and Maintenance Spending/Pupil	Rank by per Pupil Spending	Operations and Maintenance Spending	Operations and Maintenance Spending as a Percent of Total Disbursements
Arlington	\$1,225.63	9 th	\$22,353,115	7.2%
Chesapeake	\$774.55	4 th	\$30,291,260	9.8%
Chesterfield	\$797.35	5 th	\$42,698,121	9.2%
Fairfax *	\$841.40	8 th	\$135,403,203	7.5%
Henrico	\$701.41	3 rd	\$30,322,152	8.3%
Prince William	\$811.37	6 th	\$47,848,692	8.3%
Spotsylvania	\$617.04	2nd	\$13,091,088	6.5%
Stafford	\$581.12	1 st	\$13,746,390	7.1%
Virginia Beach	\$815.66	7 th	\$61,306,063	10.3%
Peer Average	\$818.56	n/a	\$47,996,125	8.3%
State	\$790.22	n/a	\$910,247,078	8.3%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
 Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

F. Facilities:

The Facilities category includes non-recurring expenditures reported for acquiring land and buildings, remodeling and constructing buildings, and improving sites. This category does not include normal building maintenance. SCPSD is ranked ninth out of nine, the highest in both spending per pupil and facilities spending as a percent of total disbursements, among comparable school divisions.

Annual facilities costs are significantly affected by the level of new construction and renovation activity in the division during the year. This makes it difficult to compare across divisions without a clear understanding of the construction activity that occurred in each division. One division may have built or renovated several schools during the period, while another may have had no activity. SCPSD opened one middle school in 2003 and one high school and the River Run Administrative Service Center in 2004, which explains its high ranking in this category. The division plans to construct one high school, two middle schools, and three elementary schools over the next five years. **Exhibit C-9** compares the division's facilities costs with each peer and the peer and state averages.

Exhibit C-9
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Facilities Spending
2002-03

Peer School Division	Facilities Spending/Pupil	Rank by per Pupil Spending	Facilities Spending	Facilities Spending as a Percent of Total Disbursements
Arlington	\$1,238.29	8 th	\$22,583,947	7.2%
Chesapeake	\$347.65	1 st	\$13,595,828	4.4%
Chesterfield	\$565.52	4 th	\$30,283,680	6.5%
Fairfax *	\$977.63	6 th	\$157,327,826	8.7%
Henrico	\$715.80	5 th	\$30,944,013	8.5%
Prince William	\$1,187.26	7 th	\$70,016,075	12.1%
Spotsylvania	\$1,437.93	9th	\$30,507,051	15.1%
Stafford	\$404.15	2 nd	\$9,560,185	4.9%
Virginia Beach	\$464.85	3 rd	\$34,938,498	5.9%
Peer Average	\$737.64	n/a	\$46,156,257	8.0%
State	\$717.08	n/a	\$826,002,645	7.5%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

G. Debt Service and Transfers:

The Debt Service and Transfers category includes debt service payments and transfers to other organizations, or transfers from one fund to another. SCPSD is ranked seventh out of nine among comparable school divisions in debt service and transfer spending per pupil.

Typically, school divisions in the Commonwealth use either bonds or loans to finance long-term projects that are too large to be funded through regular operations. School divisions are considered a component unit of the local government. The local government appropriates operating funds to the local school divisions and the appropriations include amounts specified as debt service payments. The outlays of government funds associated with these obligations are accounted for as debt service payments (principal and interest), as are certain transfers from one fund to another. **Exhibit C-10** compares the division's debt service and transfers costs with each peer division, and the peer and state averages. SCPSD is well above both the state and peer average, as one would expect given the division's rapidly increasing enrollment and the amount of building required over the past four years.

Exhibit C-10
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Debt Service and Transfers
2002-03

Peer School Division	Debt Service and Transfers Spending/Pupil	Rank by per Pupil Spending	Debt Service and Transfers Spending	Debt Service and Transfers Spending as a Percent of Total Disbursements
Arlington	\$998.65	8 th	\$18,213,390	5.8%
Chesapeake	\$13.60	2 nd	\$531,891	0.2% **
Chesterfield	\$1,169.98	9 th	\$62,652,417	13.5%
Fairfax*	\$266.79	3 rd	\$42,933,368	2.4%
Henrico	\$492.63	4 th	\$21,296,365	5.8%
Prince William	\$575.35	5 th	\$33,930,247	5.9%
Spotsylvania	\$979.90	7th	\$20,789,621	10.3%
Stafford	\$840.60	6 th	\$19,884,487	10.2%
Virginia Beach	\$0.00	1 st	\$0	0.0% **
Peer Average	\$622.51	n/a	\$28,491,738	4.9%
State	\$455.32	n/a	\$524,480,816	4.8%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

**School debt is accounted for by the County.

H. Technology:

The Technology category includes technology-related expenditures and ongoing expenses such as Internet Service Providers. SCPSD ranked the lowest among comparable school divisions in the percent of overall spending per pupil devoted to technology. **Exhibit C-11** compares the division's technology costs with each peer, and the peer and state averages. Note that the technology costs for Spotsylvania CPSD do not include \$2,102,925 expended as part of the Capital Improvement Plan.

Exhibit C-11
Spotsylvania County Public Schools Compared to Peers Within Its Cluster
Technology Spending
2002-03

Peer School Division	Technology Spending/Pupil	Rank by Spending per pupil	Technology Spending	Technology Spending as a Percent of Total Disbursements
Arlington	\$573.34	8 th	\$10,456,571	3.3%
Chesapeake	\$248.59	2 nd	\$9,721,893	3.1%
Chesterfield	\$294.44	4 th	\$15,767,052	3.4%
Fairfax	\$639.74	9 th	\$102,951,036	5.7%
Henrico	\$413.18	7 th	\$17,861,821	4.9%
Prince William	\$291.33	3 rd	\$17,180,809	3.0%
Spotsylvania	\$198.68	1st	\$4,215,276	2.1%
Stafford	\$340.54	5 th	\$8,055,419	4.1%
Virginia Beach	\$386.70	6 th	\$29,064,880	4.9%
Peer Average	\$398.48	n/a	\$26,382,435	4.6%
State	\$360.81	n/a	\$415,617,642	3.8%

Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
 Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

The remaining chapters of this report discuss each functional area in terms of revenue and expenditure levels, and operating efficiencies in greater depth.

***DIVISION
LEADERSHIP,
ORGANIZATION, &
MANAGEMENT***

Chapter 1

DIVISION LEADERSHIP, ORGANIZATION, & MANAGEMENT

BACKGROUND

The organization and management of a school division requires cooperation between the elected members of the School Board and division staff. The School Board's role is to set goals and objectives for the division in both instructional and operational areas; determine the policies that will govern the division; approve the plans to implement those policies; and provide the funding necessary to carry out these plans.

The superintendent, as the chief executive officer of the division, recommends the staffing levels and the amount of resources necessary to operate and accomplish the School Board's goals and objectives. The superintendent is also responsible for reporting management information to the School Board and ensuring the division is held accountable for meeting its performance goals. Division managers and staff are responsible for managing the day-to-day implementation of the policies and plans approved by the School Board and for recommending modifications to ensure the division operates efficiently and effectively. While the School Board sets policy, 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 division management is to facilitate and support the instruction of students by ensuring that all available resources are directed into the classroom.

Spotsylvania County Public Schools Division (SCPSD) serves 22,948 students in PK-12 in 32 schools; five high schools, seven middle schools, 16 elementary schools, one career and technical center, and three alternative schools. The division employs 3,144 full-time equivalents (8 hour employees), including 1,788 teachers, 68 campus administrators, and 45 central administrators.

The division has been under the direction of Jerry W. Hill, Ed.D. since February 2001. SCPSD has three assistant superintendents for instruction, administrative services and finance, and human resources. Additionally, the supervisor of Public Information reports to the superintendent. All division principals report to a school level director.

SCPSD has experienced a 27.2 percent increase in enrollment over the past six years and faces a number of challenges related to its rapid growth. Without exception, every administrator and School Board member interviewed expressed concern about effectively managing the growth without sacrificing the quality of education being provided. The superintendent has been successful in prioritizing the issues facing the division and taking steps to address the highest priority items first. He has empowered his administration to seek out solutions and allowed them to take an active role in their implementation.

The Virginia Tech Center for Survey Research conducted a study titled "2005 *Quality of Life in Virginia Survey: Spotsylvania County Schools*". The demographic characteristics of the survey respondents included:

- 51.3 percent with children currently in the home;
- 60.8 percent had an annual household income of \$60,000 or above;
- 80.0 percent reported their race as "white";
- 62.5 percent of the respondents were female; and

- 46.5 percent were college graduates.

The majority of the respondents, 68.1, percent perceived that Spotsylvania County Schools had improved in recent years. Forty-nine percent did not feel that the current level of spending was enough. Ninety-three percent of the respondents agreed that teacher salaries should be competitive with other divisions in the area such as, Fredericksburg, Stafford, King George, and Louisa. Approximately 91 percent felt that funding should be increased to accommodate the growth in the number of students in the county, with 66.8 percent supporting an increase in taxes to fund the necessary improvements in Spotsylvania County Schools.

The division has strived to improve communication between: the division and the School Board; the division and the Board of Supervisors; and central administration and campuses / departments. Central administration has attempted to become more inclusive by inviting widespread participation in the many division advisory committees. Campus administrators are being encouraged to assume a more global perspective – division-wide rather than focusing completely on campus needs. Another initiative successfully implemented this year to improve communication was the reopening of a Public Information Office.

The superintendent has developed a good relationship with the seven-member School Board. During the past four years the SCPSD School Board has renewed its commitment to improving student performance and creating the best possible learning environment for the division’s students. This has been accomplished through better communication, clarification of what the School Board’s role should be, and working to build trust between division administration and the School Board.

The SCPSD School Board meets on the second and fourth Monday of every month. **Exhibit 1-1** lists the SCPSD School Board members, titles, dates elected to School Board office, years of School Board member service, and profession.

**Exhibit 1-1
SCPSD School Board
2004-05**

Board Member	Current Offices Held/Term	Length of Service	Profession
Martin A. Wilder	Chairman Jan 2005	10 Years	Dean of Admissions – University of Mary Washington
Ray Lora	Vice Chairman Jan 2005	1 Year	Training Coordinator – Rappahannock Criminal Justice Academy
Richard Fleming	Past Chairman Jan 2004	11 Years	Self-Employed – Salesman
Lee Broughton	Member	13 Years	Homemaker
Charles Cowsert	Member	4 Years	Self- Employed – Attorney
Donald Holmes	Member	3 Months	Military Analyst – Quantico, VA
Gary Skinner	Member	1 Year	Program Manager for EA-6B Training

Source: SCPSD, Superintendent’s Office, January 2005.

A. ACHIEVEMENTS

- The division is investigating ways to participate in joint ventures with the county to find opportunities to reduce costs and improve services.
- The superintendent requires staff reporting directly to him to establish annual goals, which are reviewed, assessed, and tied back to the employee's annual performance evaluation. In addition, the superintendent provides detailed goals to the School Board each year.
- The division has established innovative and creative initiatives intended to improve communication and information flow from the division to the Board of Supervisors.
- The division has developed effective communication tools and processes to improve communication between the division, the community, parents, the School Board, and staff.
- The process employed prior to developing and reinstating the Public Information Office laid the groundwork for how the department will operate by establishing a departmental mission statement and goals and objectives.
- The superintendent has established a Budget Review Committee composed of members of the community, level principals, division support staff, key division administrators, the county budget officer, and the county financial officer. The committee's purpose is to discuss the budget process, review proposed expenditures, prioritize the expenditures, and assist the division in providing adequate detail to the School Board and the county Board of Supervisors to justify the superintendent's recommended budget.
- The division's strategic planning process focuses on school improvement through comprehensive planning and accountability for results in student learning and solicits input from key division staff, community members, and parents.

B. RECOMMENDATIONS

Recommendation 1-1 (p. 1-15): Reorganize division administration to be better aligned with the division's strategic goals. The current division administrative structure does not provide an adequate foundation for the division to meet key goals and objectives. The division has been unable to focus its efforts to effectively utilize technology tools, both administratively and in classroom instruction. In addition, the management hierarchy in instruction is not functionally aligned and does not provide adequate support to the schools. Finally, the financial management structure of the division has not been revised to reflect the growth in enrollment and financial complexity. The evaluation team recommends that the division expand its management team to provide technology leadership and drive instructional technology, realign the organization structure within instruction to more fully bridge the gap between the central office and division campuses, and put in place additional financial controls by reorganizing the Finance Department to adopt a more traditional management structure found in medium to large school divisions.

Recommendation 1-2 (p. 1-26): Enhance the perception of the Public Information Office by upgrading the title from supervisor to Public Information Officer and establishing a formal departmental operating plan. Although the division created departmental goals prior to reinstating the Public Information Office, it has not strongly communicated the department's importance nor has it developed a formal operating plan for the department. The department is overseen by the supervisor of Public Information. This title does not convey the importance of the department's ability to enhance the division's public reputation. The department plays a critical role in improving the communication between the division and its stakeholders. It is important that the division effectively structure the department to successfully fulfill this role. The evaluation team recommends that the division (i) upgrade the title from supervisor to Public Information Officer to send a message to the community emphasizing the importance placed on this function, and (ii) establish specific strategies to assist departmental personnel in becoming high profile advocates for the division.

Recommendation 1-3 (p. 1-26): Expand the leadership team to include a principal from each school level and include an open dialogue agenda item early in each bimonthly principal meeting. The division struggles with communication between central administration and school administrators. Although the division has taken steps to improve the level of communication, these steps have not been implemented consistently across all school levels. As a result, some school administrators do not feel they are given the opportunity to voice their concerns. The evaluation team recommends that the division appoint a principal from each level to sit on the leadership team and restructure the bimonthly principal meetings to include more opportunities for open dialogue.

Recommendation 1-4 (p. 1-27): Coordinate each school improvement plan with the division's long-term plan. There is a great amount of variation between the school improvement plans from campus to campus. Although principals are encouraged to link their campus plans to the division's six-year plan, there is no process in place to ensure the link exists. The evaluation team recommends that the division create a template to simplify the annual school planning process and develop a procedure to ensure school goals and objectives are aligned with the division's long-term plan. The quality of each school improvement plan would be enhanced if the process were expanded to include an evaluation piece.

Recommendation 1-5 (p. 1-29): Create a Balanced Scorecard to provide the division with a strong monitoring and measurement tool. Although the division has a commendable strategic planning process in place, progress against the plan is not being adequately measured or monitored. The strategic planning review team meets annually to review the plan, but not at a campus or department level. The evaluation team recommends that the division consider incorporating the Balanced Scorecard into its strategic planning process to monitor its progress and measure the implementation success of each strategy.

C. FINANCIAL IMPACT OF RECOMMENDATIONS

This chapter contains recommended investments by SCPSD intended to achieve best practices or to generate subsequent future savings. If savings cannot support these investments in the short-term, then the division should request additional investment funds from the county or delay the implementation if the investment does not yield future savings. Details regarding financial impact calculations can be found in Appendix B.

The recommended investments are listed below:

1. Reorganize division administration to provide a management structure that facilitates the division's ability to meet its strategic goals. The division has been unable to effectively utilize technology tools, both administratively and in the classroom. In order to rectify this shortcoming, the evaluation team is recommending the addition of technology leadership, reporting directly to the superintendent. This will build the necessary infrastructure to focus the division on successfully meeting its technology-based goals. In addition, the division's financial management structure has not been revised to deal effectively with rapid growth. The evaluation team is recommending reorganizing the financial functions under a CFO to take SCPSPD to the next level of financial management and control. Annual investment: \$350,482.
2. Create a Balanced Scorecard to provide the division with a strong monitoring and measurement tool. One-time investment: \$50,000.

If the recommendations found in this chapter are implemented, the net annual costs to SCPSPD will be \$350,482 or 0.20 percent of the division's operating budget. This does not include the total one-time investment of \$50,000.

D. DETAILED ACHIEVEMENTS

DIVISION/COUNTY JOINT VENTURES

The division is investigating ways to participate in joint ventures with the county to find opportunities to reduce costs by sharing overhead expenses and eliminating duplication of effort between the two entities. A County-Schools Joint Operations Committee has been created to identify partnership opportunities.

According to a draft report from a study being conducted by Maximus, Inc., dated February 22, 2005, the division participates in three types of shared services with the county:

- **Barter or Exchange:** These are informal arrangements where one service is provided utilizing excess capacity on behalf of the other entity in exchange for another service. The county provides weekly trash handling for the schools; snow removal and de-icing services; and preparing middle school/high school athletic fields in exchange for HVAC maintenance, snow removal and sanding, and external/internal facility access and maintenance services provided by the division.
- **Independent Services:** These are arrangements where one entity maintains a unique service capacity and provides services at no or minimal cost to the other entity. The county provides approximately 80 percent of the division's sign production, provides public safety radio system access and connection, installs and maintains light and restroom facilities at ball fields, provides school resource officers to individual schools, and initiates joint cooperative purchasing for fuel and trash on behalf of the division. The school division provides florescent light tubes and paper recycling, as well as the County's Internet connection.

- Ad Hoc Services: These are one-time or emergency requests for assistance to meet unique circumstances, not typically considered opportunities for shared services due to the low total demand for the services. The county will, upon request, service sewer and plumbing lines, while the division will, upon request, provide the box van for the county's use.

The committee secured the services of Maximus, Inc. to conduct a shared services study to evaluate the benefit of entering into a shared services agreement related to fleet management, facilities management, and warehousing and inventory management. The preliminary findings support collaboration between the fleet services and custodial and facilities maintenance operations of both entities. The opportunity to collaborate on warehousing and inventory management may not provide the same benefit. The final report is due to the committee in late spring 2005. At that time, the committee will determine whether it will make the recommendation to proceed with the project.

CENTRAL ADMINISTRATORS' ANNUAL GOAL-SETTING

The superintendent requires staff reporting directly to him to establish annual goals. At the beginning of the year, the superintendent meets with his direct reports and reviews each of their individual goals to ensure that they are in-line with the overall goals of the division and will contribute directly toward attaining those global goals. Progress toward meeting the individual goals is reviewed and assessed later in the school year.

Each assistant superintendent and the supervisor of Public Information develop their individual goals according to the following format:

- goal statement;
- action plan;
- resources needed;
- timeline; and
- evaluation of success.

The superintendent signs off on each goal statement and action plan. The evaluation component includes an opportunity for the administrator to evaluate his/her success in attaining the goal and review the superintendent's comments and recommendations. A five-scale rating (a score of five being outstanding) system is used to quantify how successful the administrator was in attaining the goal.

The superintendent provides detailed goals to the School Board each year. These goals are reviewed during his annual performance evaluation, and the School Board assesses how much progress was made against each goal.

COMMUNICATION WITH BOARD OF SUPERVISORS

The division has established innovative and creative initiatives intended to improve communication and information flow between the division and the Board of Supervisors. Each of these strategies is intended to build trust between the two entities. Responses from both division administration and the chair of the Board of Supervisors indicate that the relationship between the superintendent, the School Board, and the Board of Supervisors has improved over the past five years. Some of the strategies being employed by the division dedicated to providing a free and open communication channel with the county include:

- breakfast meetings between the superintendent, School Board president, chair of the Board of Supervisors, and the county administrator;
- informal and consistent communication channels have been established between the School Board member and supervisor from the same district to discuss school division issues;
- a newsletter detailing accomplishments within the division and introducing budget issues early in November to formally initiate the division's budget process;
- a budget summary booklet, "2005-2006 Budget: Executive Summary Rationale for Increases Measuring Student Success," was prepared for the Board of Supervisors as part of its 2005-06 budget presentation, which summarized proposed budget increases, broke down anticipated revenues and expenditures, presented the rationale for the increases, and discussed progress toward the four goals identified in the division's six-year improvement plan;
- quarterly meetings with the Board of Supervisors to update them on school activities; and
- members of the Board of Supervisors are invited to appoint members of their constituency to the Budget Review Committee.

These initiatives have successfully provided the county with an opportunity to gain insight into division events.

DIVISION COMMUNICATION TOOLS AND PROCESSES

The division has developed effective communication tools and processes to improve communication between the community, parents, School Board, and division staff. These tools include:

Community and Parents

- Superintendent's Coffees: The community is divided into three zones and community members are invited to meet with the superintendent at the middle and high schools within each one of these zones. These coffees provide an opportunity for information to be shared regarding events taking place in the division and to ask questions on topics of interest to members of the community.
- Open phone night: This is an initiative that was created and implemented for the first time during the development of the 2005-06 budget. The superintendent received calls from community members and parents one night between 4 and 7 to address any questions they might have concerning the budget. The division is hoping to extend this program to once a month.

- The division publishes a newsletter five times a year. The newsletter provides a “Message from the Superintendent” section that highlights division accomplishments. It acts as a forum to recognize individual students, educators, and staff achievements. The newsletter also highlights timely topics that are part of the school community. The superintendent requests community input to the newsletter through the “Superintendent’s Spotlight” link on the division’s website. The newsletter is an excellent source of information and is artistically compiled and professionally designed. It extends a positive impression about the division to the community.
- The division is looking into creating a magazine called “Spotlight” that will be published twice a year. The division hopes that this magazine will be placed in businesses across the county to provide an additional opportunity for its story to be told. The costs of producing this magazine are to be borne by external sponsors.
- The division is planning to conduct “bus tours” to campuses in the division. Participants will ride a school bus to a school. Upon their arrival, division staff will introduce participating community members to what is happening in the division.
- The division is in the process of organizing “Key Communicators” in the community. The purpose of the group is to “establish quality two-way communication between the schools and the community to share accurate information on the budget, other challenging situations, and good news.” The division has begun sending letters out to invite participation. The kick-off meeting was held on February 21, 2005.
- The division has had a cable access station (Channel 17) for the last twelve years. The program being used is called Scala. Programming consists of slides that contain school contact information, announcements of events and pictures taken at events, staff and/or student recognition details, business partners at each school and the division, School Board member information, and videos of programs in the school or of hot topics within the division, such as budget information or inclement weather warnings. The division is finding a more flexible programming format for the station to improve its value to the community. The access channel also enhances communication between staff and the School Board.

School Board

- The division instituted “BoardDocs” during the 2003-04 school year. “BoardDocs” was developed to provide a means of immediately publishing and revising agenda items, support documents, policies and procedures via the Internet. It provides information to the School Board quickly, efficiently, and economically. All School Board packets are prepared and distributed electronically to each School Board member by Friday before each School Board meeting. Every School Board member has been provided with a laptop and has instant access to supporting documentation before, during, and after the meetings through “BoardDocs.” Recently, the School Board finished second among school systems with student populations of 15,000 or more in a contest sponsored by The Center for Digital Education and the National School Boards Association for its innovative use of technology to improve its efficiency.

- The superintendent prepares a Friday newsletter for the School Board every week. The newsletter contains a brief summary of the important developments that occurred during the week.
- Each School Board member is telephoned on the day of every School Board meeting to address questions on any agenda item that could potentially provoke intense discussion at the meeting. This helps prepare both the superintendent and each School Board member and reduces the likelihood that any surprises will arise during the meeting. It also helps everyone stay on topic and increases the efficiency of the meetings.
- The superintendent maintains regular phone contact with each School Board member throughout the week. Any time an emergency situation arises; School Board members are immediately contacted and given status reports. This ensures that all School Board members are aware of all critical issues within the division.

Division Staff

- **School Board News:** The supervisor of Public Information prepares and distributes an electronic summary of School Board action via the division's email system (Group Wise). School Board News is distributed immediately following the meeting so that staff can check their email either late in the evening or early in the morning and find out what actions were taken by the School Board during the meeting. This provides an alternative method for staff to stay current without having to attend School Board meetings or watch them on the cable access channel.
- **Administrative workshop:** Each summer administrative staff is given a book to read that sets the theme for a three-day workshop. During this workshop, the superintendent discusses the assigned book and staff, in breakout sessions, discusses how to apply the strategies to their campuses and departments. This workshop is an example of the superintendent's desire to establish a warm and friendly culture within the division. During the three-day session, principals are provided an opportunity to share information about their campuses. Division accomplishments are celebrated during the session. The workshop also provides administrators with an opportunity to plan for the coming year. The major focus of the workshop is on instructional issues facing the school division. The content for this portion of the workshop is planned and delivered by members of the division's instructional team.
- **Back to School Rally:** All division staff meets the week before school starts for a half-day rally designed to excite and motivate staff for the coming school year. The rally brings all staff together; administrators, teachers, clerical staff, bus drivers, food service workers, custodians, and facilities and maintenance staff; in one place to celebrate the division. A keynote speaker is brought in to provide a general uplifting message that can be enjoyed by all staff. School participants are bussed to the rally and are encouraged to wear their school colors and are paraded into and out of the facility. It is an impressive team building exercise that acts to infuse all staff members with division pride and dedicates each individual toward understanding that "Great Students Deserve Quality Schools."

- **Principal Meetings:** The superintendent and instructional central administrators meet with all principals twice monthly, two days after the School Board meetings. This time is devoted to presenting instructional issues and also provides the superintendent an opportunity to address issues discussed at the School Board meeting.
- **Faculty Meetings:** The superintendent conducts meetings with the faculty of all schools throughout the year. The meetings provide an opportunity for the superintendent to inform staff about important topics such as the budget. Faculty members are given the opportunity to ask the superintendent questions during these meetings and receive immediate feedback.
- **Public Information Office:** The division reinstated this office to help bridge communication between the division and its stakeholders. The position plays a key role in sharing information between central administration and all division staff.
- **Intranet:** The division is currently working to establish an intranet. The purpose of the intranet is to develop an internal website for the use of SCPSD employees to provide beneficial information in one place that can be easily accessed. The division has set a guideline that any information posted to the intranet site should assist at least five people. Some of the examples provided include standard forms, manuals, phone lists, upcoming events for employees, the division's wellness program, or information on employee discounts from local business partners.

DEVELOPMENT OF THE PUBLIC INFORMATION OFFICE

The superintendent made the decision, with the support of the School Board, to reinstate the Public Information Office, as a means to further improve division communication, both within the division and with external stakeholders. The process employed to develop and reinstitute the Public Information Office laid the groundwork for how the department will operate by establishing a departmental mission statement and goals and objectives. In the spring of 2004, a Public Information Advisory Committee was created to develop a communication plan for the division. In a series of three meetings, the committee developed the following mission and goals for the department:

“The mission of the Public Information Office is to communicate concise and factual information in a timely manner using a variety of media which will educate and provide equal access to all stakeholders. The Public Information Office is committed to maintaining an effective two-way communication system between the school division and its various publics to elicit ideas, suggestions, and reactions.”

The goals of the Public Information Office are:

- Raise public awareness to promote parent and community involvement.
- Advertise the positive aspects of Spotsylvania County Schools and promote achievements.
- Expand methods of internal and external communication.
- Communicate with the diverse populations and cultures in our community.
- Promote the philosophy of “customer service/satisfaction” with all staff that interfaces with the public.
- Investigate additional Channel 17 offerings and enhancements.

- Develop a written plan of communication policies and guidelines which will be available to employees and the public.

The Public Information Office began operating on July 1, 2004, with a strong sense of purpose.

BUDGET REVIEW COMMITTEE

The superintendent has established a Budget Review Committee composed of members of the community, level principals, division support staff, key division administrators, the county budget officer, and the county's financial officer. To build support for the budget, the superintendent invited School Board members and county supervisors to nominate representatives to this committee. Each district in the county is represented on the committee. The committee also includes individuals that had been vocal non-supporters of the division in the past.

The purpose of the committee is to make the division's budget process more transparent to the public and convey the fact that the superintendent's recommended budget is based on needs and not on wants. The process begins when division administrators present the first tier of the budget that has been through one round of careful scrutiny to the committee. In the second tier of the budget process, the committee reviews proposed expenditures, prioritizes the expenditures, and assists the division in providing adequate detail to the School Board and the county Board of Supervisors to justify the superintendent's recommended budget.

The evaluation team attended the final Budget Review Committee meeting on January 13, 2005. During this meeting, the superintendent discussed the results of a participant survey intended to poll the committee and identify the committee's budget priorities. The majority of the committee members surveyed (20 members responded to the survey) listed their priorities as:

- maintaining class size;
- purchasing textbooks, purchased services, and technology (\$2 million);
- implementing the second phase of salary adjustments (\$4 million);
- increasing extra duty supplements; and
- raising salaries for all employees by 3 percent, plus step (\$1.5 million added to current budget).

More than half of the committee members surveyed believe that the division will need to ask for \$5 million in excess of the \$18.4 million increase in funding from the county to fully fund the proposed budget. During this meeting the superintendent solicited input on the best way to communicate the budget request to the county Board of Supervisors. Three scenarios will be presented:

- the budget requirement to fund zero growth in enrollment;
- the budget requirement to fund an extra 1,100 students; and
- the budget requirement to fund an extra 1,100 students and all of the division's strategic initiatives.

The Budget Review Committee has taken a great deal of the mystery out of the budget process and has provided the superintendent and his administrative staff with critical constituent input. The division has a much stronger chance of receiving the needed level of funding by establishing this committee. The chair of the Board of Supervisors is complementary of the process.

STRATEGIC PLANNING PROCESS

The division is required by Virginia statute to submit a six-year improvement plan every biennium. The superintendent improved the division’s strategic planning process by engaging key division staff, community members, and parents, including both division supporters and opponents, in the development of its plan. SCPSD’s six-year plan defines the division’s mission statement, goals, objectives, and strategies required to meet its mission.

The division’s mission’s statement was first adopted in July 1992 and revised in December 1998 to be:

“It is the mission of the Spotsylvania Public Schools to increase the student success rate through continuous improvement. To achieve our mission, we strive to:

- *Improve the quality of curriculum and instruction;*
- *Recruit, train, and retain a high quality staff;*
- *Increase the efficiency of services;*
- *Make planning an integral part of all school division functions; and*
- *Improve the quality of on-going, effective, two-way communication.*

The central focus of our schools is to serve students in order that they may develop specific skills, competencies, and understandings necessary for success in a changing world.”

The plan outlines four goals presented in **Exhibit 1-2** as set out by the School Board intended to move the division closer to meeting its mission.

**Exhibit 1-2
SCPSD Goals**

Goal 1	Increase student success rates and improve the quality of curriculum and instruction.
Goal 2	Improve the quality of communication.
Goal 3	Emphasize planning (short-term and long-term) as an integral component of all school division functions for the effectiveness of services.
Goal 4	Attract, train, maintain, and retain a high quality staff.

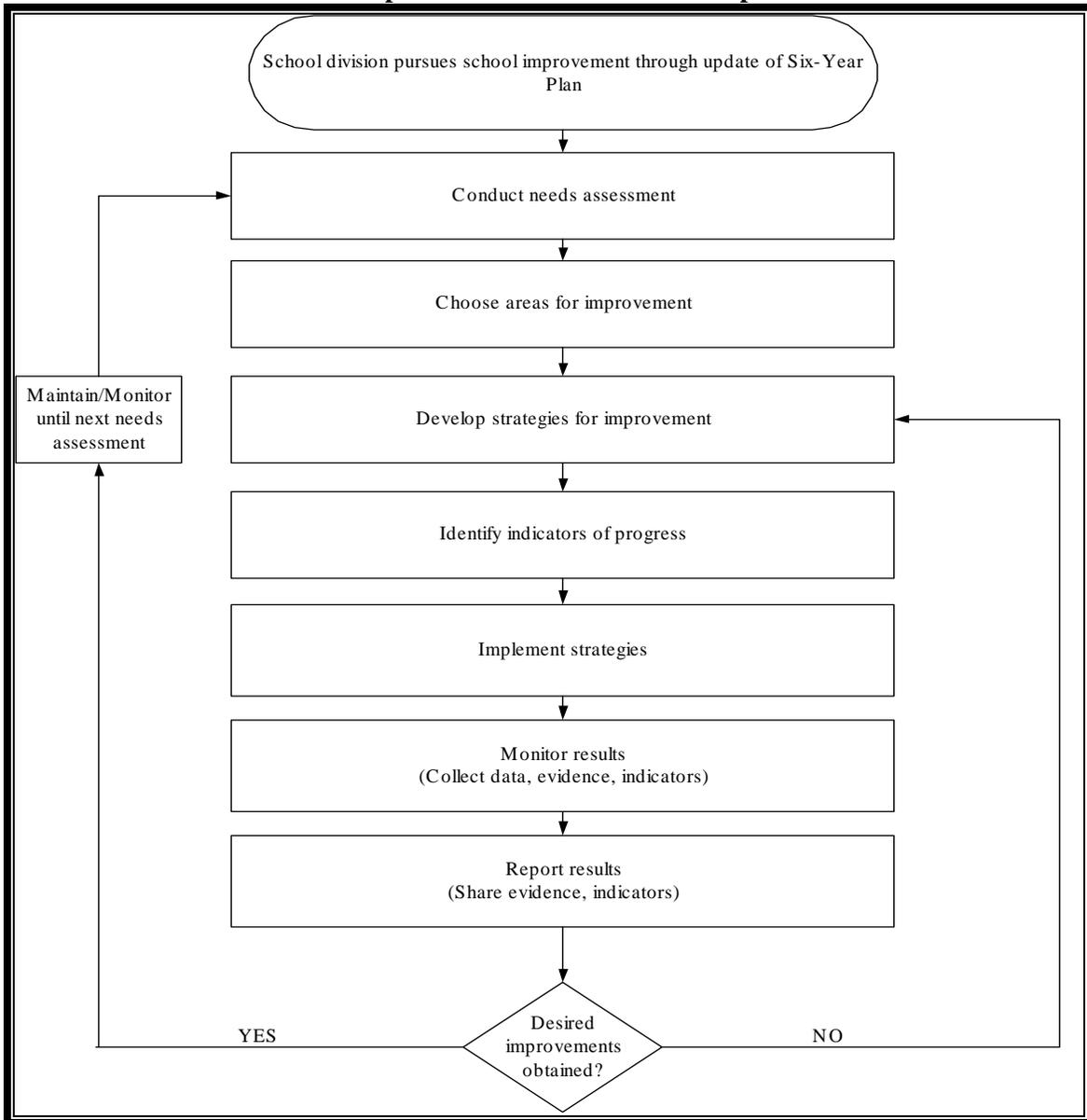
Source: SCPSD, Six-Year Improvement Plan, 2004-2010.

The division has defined objectives to facilitate the attainment of each goal and further identified strategies to meet each objective. Each strategy has a desired outcome, most of which can be easily measured. All of the elements of a strong plan are present, including an assignment of responsibility, a desired timeline, and the required resources. Although there is room for improvement in the mechanics of how each strategy is implemented, how success is measured, and the timelines, as discussed later in Recommendation 1-5, the planning process itself is commendable.

The division's strategic planning process focuses on school improvement through comprehensive planning and accountability for results in student learning. In even numbered years, the school division conducts a needs assessment, chooses the areas for improvement, develops strategies for improvement, and identifies indicators of progress. In odd numbered years, the school division implements the identified strategies, monitors plan results, and reports results to key stakeholders.

Exhibit 1-3 flowcharts the strategic planning process and illustrates how the six-year school improvement plan is a component of an on-going process of continuous improvement within the division.

Exhibit 1-3
Flowchart of Development of Six-Year Division Improvement Plan



Source: SCPSD, Six-Year Improvement Plan, 2004-2010.

E. DETAILED FINDINGS AND RECOMMENDATIONS

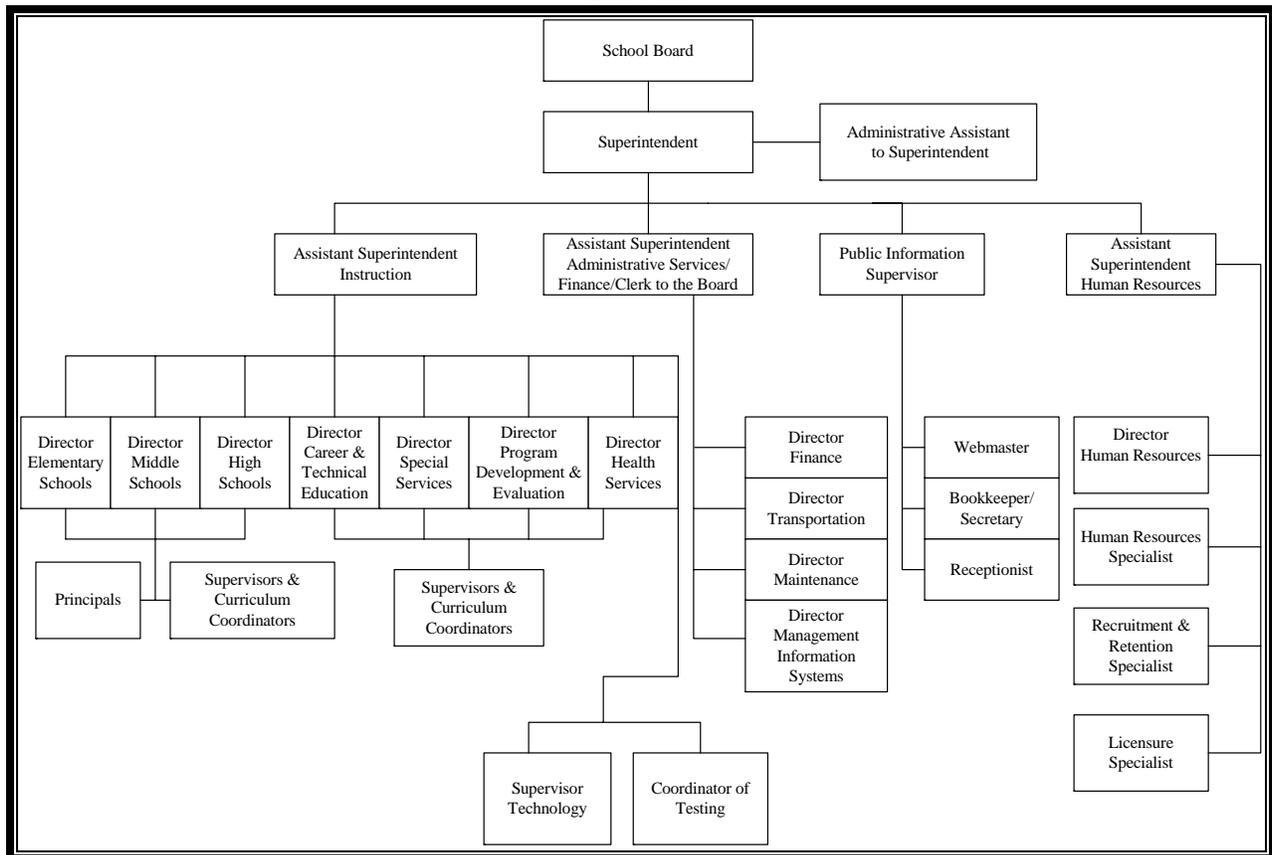
DIVISION MANAGEMENT & ORGANIZATION STRUCTURE

Recommendation 1-1: Reorganize division administration to be better aligned with the division’s strategic goals.

Technology

SCPSD’s technology function is fragmented, and its organizational position does not reflect its strategic importance to the division. Management Information Services (MIS) has been overseen by the assistant superintendent of Finance/Administrative Services. The division’s instructional technology and its technology services are directed by the assistant superintendent of Instruction. Neither assistant superintendent position requires a background in technology. **Exhibit 1-4** presents the division’s current organization chart.

Exhibit 1-4
SCPSD Administration Organization Chart
2004-05



Source: SCPSD, Superintendent’s Office, January 2005.

Many of the division’s key goals and objectives are contingent on a strong technology function. The first goal in the division’s six-year plan “Increase student success rates and improve the quality of the curriculum” is tied to technology through Objective 1.5 “Use technology as an

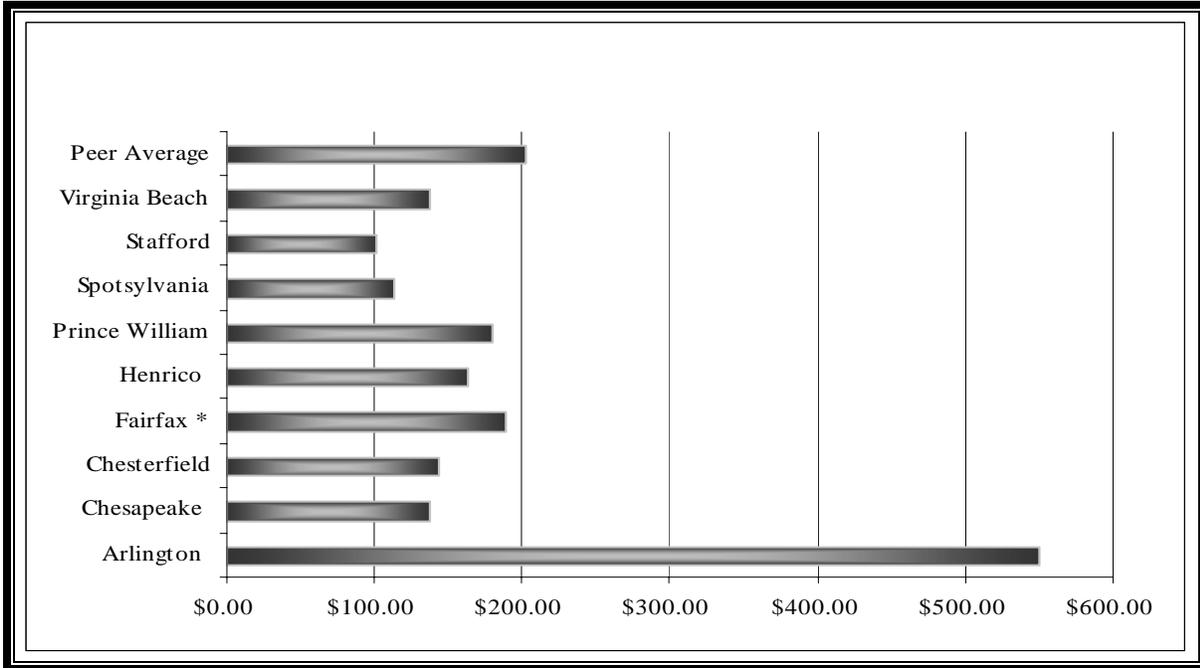
integrated tool for learning.” The current technology management infrastructure has not provided the guidance to successfully implement this objective.

Instructional technology has not been effectively integrated into the curriculum, and division teachers have not been adequately trained to augment their teaching strategies with technology. Technology is still considered an elective in the division, with computer labs set-up in each school dedicated to teaching students computer skills rather than teachers using technology tools to facilitate classroom instruction. Additionally, gaps exist in linking professional development to individual teacher needs related to instructional technology. Professional development courses focusing on instructional technology are limited. In 2004-05, teachers were offered six courses dealing with instructional technology. Participation in these classes was limited to 20 to 30 participants, reaching approximately 10 percent of the teachers in the division. The discussion presented in the Instructional Technology section of the “*Education Services Delivery*” chapter of this report provides more detail regarding the division’s instructional technology deficiencies.

The third goal in the division’s six-year plan “Emphasize planning (short-term and long-term) as an integral component of all school division functions for effectiveness of services” addresses technology through objective 3.3 “Focus and expand the appropriate use of technology in performing administrative tasks for efficiency and effectiveness.” The division has not effectively used administrative technology to increase efficiencies. Many manual and duplicative processes exist. A more detailed discussion of administrative technology issues and efficiency is presented in the “*Computers and Technology*” chapter of this report.

The division ranks third out of nine among comparable school divisions in technology spending per student, both in technology administration spending and in technology classroom instruction and instruction support spending. In 2002-03, the division spent 1.2 percent of its total budget on technology. **Exhibit 1-5** compares technology classroom instruction spending (\$156.44) per student among all peer divisions in the cluster. SCPSD spends significantly less than the peer average, \$259.31.

Exhibit 1-5
SCPSD versus Peer Divisions
Technology Classroom Instruction and Instruction Support per Student Spending
2002-03

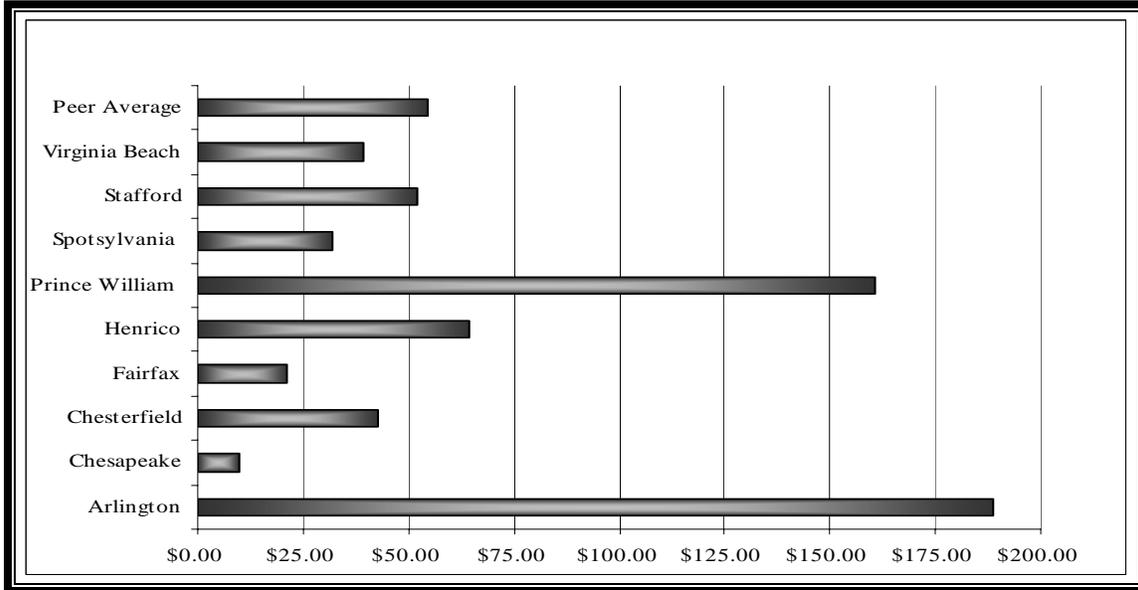


Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13
Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

Exhibit 1-6 compares technology administration spending (\$31.74) per student among all peer divisions in the cluster. The division spends significantly less on its technology administrative staff than its peers, with the peer average spending at \$54.39 per student.

**Exhibit 1-6
SCPSD versus Peer Divisions
Technology Administration Spending
2002-03**



Source: Virginia Department of Education Superintendents Annual Report, 2002-03, Table 13 Disbursements by Division.

* Fairfax includes Fairfax County and Fairfax City Public Schools.

SCPSD also falls short of its peer divisions in salary expenditures for technology staff. The division is often compared to Stafford County Public Schools (Stafford) due to their close proximity and the fact that they often compete for the same resources.

Exhibit 1-7 compares the technology personnel spending between Stafford and SCPSD. Stafford spends 58.9 percent more on technology salaries than SCPSD. This indicates that Stafford either has a more complete instructional technology staffing infrastructure in place than SCPSD or is paying more competitive salaries to attract and retain staff dedicated to instructional technology, or perhaps, a combination of the two. The division will be unable to meet its technology-based goals and objectives without adequate personnel in place and paid competitive salaries.

**Exhibit 1-7
Comparison of Technology Salary Expenditures
SCPSD versus Stafford County Public Schools
2003-04**

Division	Technology Classroom	Technology Administration	Total Technology Expenditures
Spotsylvania	\$1,459,055	\$373,665	\$1,832,720
Stafford	\$2,131,939	\$780,038	\$2,911,977
% Variance	(46.1%)	(108.8%)	(58.9%)

Source: Virginia Department of Education Superintendents Annual Report, 2003-04, Table 13.

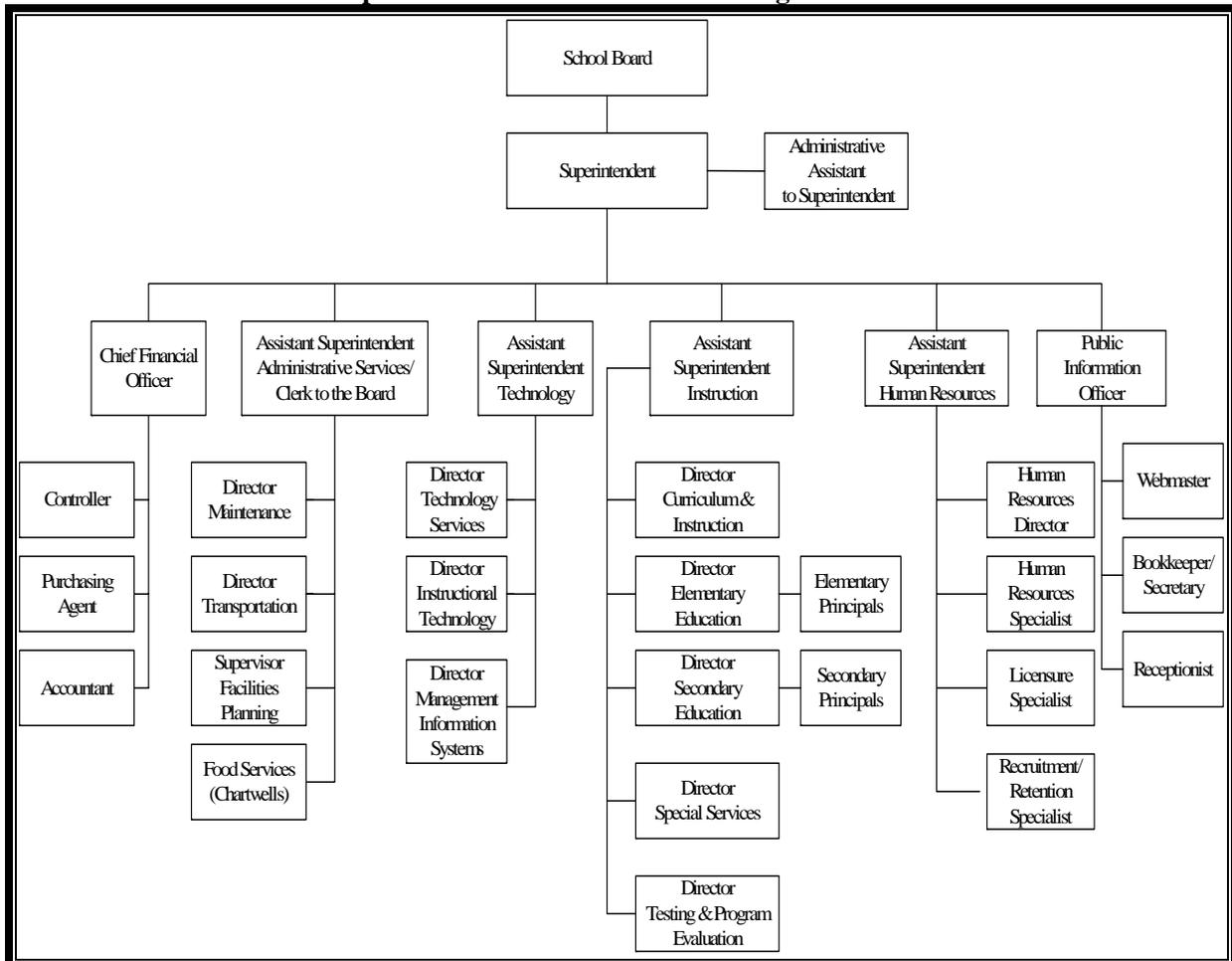
The division needs to make a commitment to a coordinated technology effort that is linked to strategic goals. The organization should elevate technology in the organization, demonstrating the importance of this function to the division. The benefits that can be derived from integrating instructional technology into teaching strategies and the curriculum have been lost by not having technology management in place to provide direction.

The evaluation team recommends that the division create an assistant superintendent of Technology position that reports directly to the superintendent. This position would assume responsibility for implementing the appropriate strategies and securing resources, both staff and funding, to assist the division in building a more integrated technology function that is tied to meeting the technology-based goals and objectives of the division's plan. The addition of this position would bring all of the technology functions under one position and help build a more interconnected department.

As a means of ensuring each technology component is operating effectively, three directors, under the direct supervision of the newly created assistant superintendent, should be responsible for the daily oversight of the departmental components: technology services, management information systems, and instructional technology. Currently, there is a director of Management Information Systems and a supervisor of Technology. The assistant superintendent of Instruction has been directing instructional technology in the division, one of many duties. The evaluation team recommends that the division upgrade the supervisor of Technology to a director of Technology Services position responsible for the division's technology infrastructure. A director of Instructional Technology position should be created to concentrate solely on how to effectively integrate technology into the curriculum and establish a comprehensive teacher training program to help the division achieve its goal to bring technology into classroom instruction. Each director would assume ownership of developing his/her component, while the assistant superintendent would be ultimately held accountable for the department's success.

Exhibit 1-8 illustrates the proposed central administration organization chart. Four new positions are being created under the proposed reorganization; an assistant superintendent of Technology, a chief financial officer, a director of Instructional Technology, and a supervisor of Facilities Planning, with one supervisor position being upgraded to a director position. The additional direct reports do not overly extend the superintendent’s span of control. Rather, the reorganization establishes technology as a vital function in the division and provides necessary financial controls. The new organization structure provides for a more reasonable span of control for the assistant superintendent of Finance and Administrative Services by shifting the technology and finance functions under the newly created assistant superintendent of Technology and the chief financial officer. The assistant superintendent of Administrative Services would now oversee facilities and maintenance, transportation, and the outsourced food service operations. Two of the newly created administrator positions, the assistant superintendent of Technology and the director of Instructional Technology will require secretarial support. The existing secretarial support in the Finance Department is sufficient. The rationale for the changes to Instruction and Finance are presented under separate headings below. The newly created supervisor of Planning will be discussed in the *Facilities Use and Management* section of this report.

**Exhibit 1-8
Proposed Central Administration Organization**

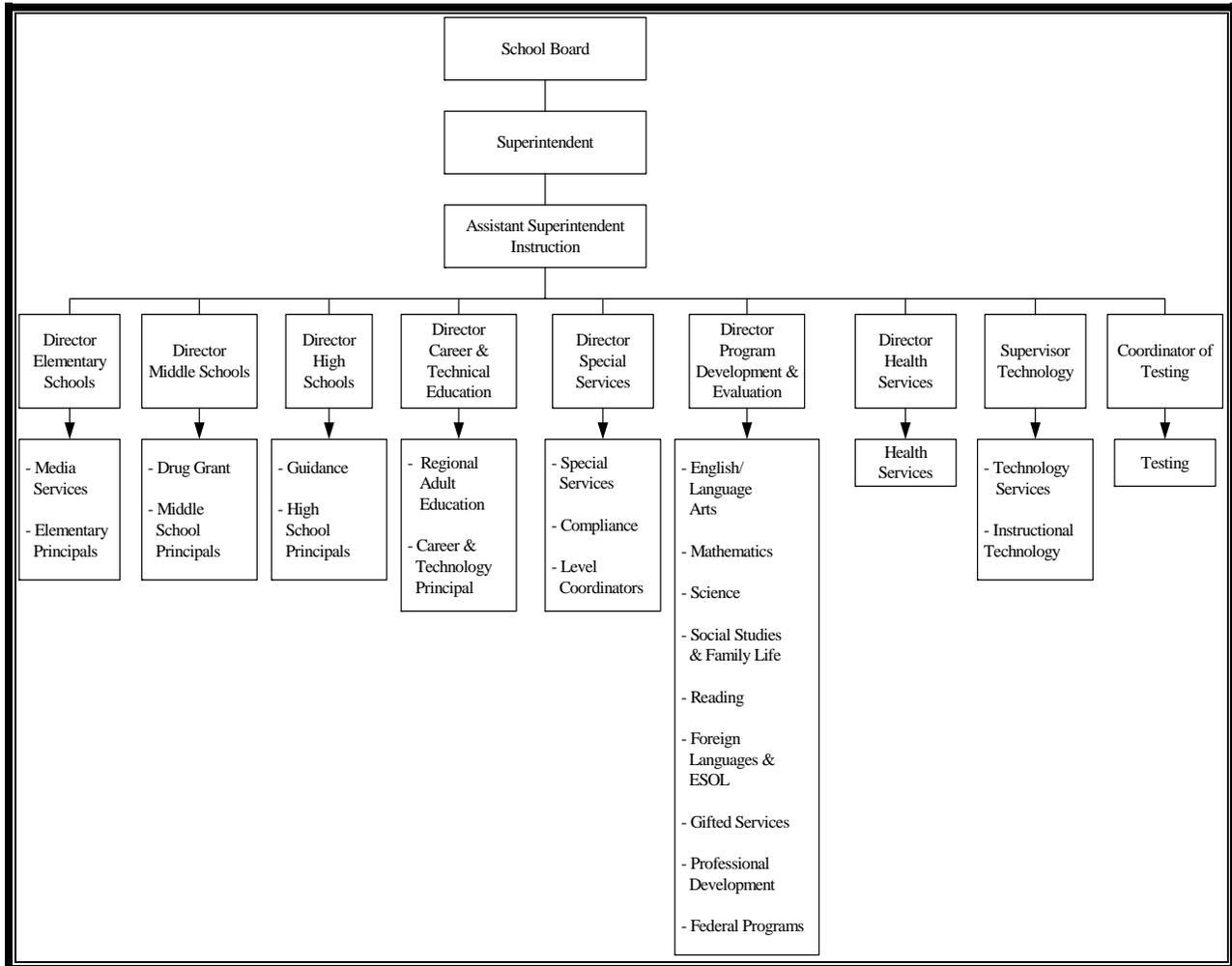


Source: Gibson Consulting Group, Inc., February 2005.

Instruction

In addition to technology, the organizational structure of the Department of Instruction is not functionally aligned to provide the highest level of support to the campuses or an adequate span of control at either the assistant superintendent level and at some director levels. **Exhibit 1-9** presents the Department of Instruction’s current organization structure, by function. The assistant superintendent has nine direct reports. The director of Program Development and Evaluation oversees curriculum and instruction issues, federal programs, foreign languages and ESOL, and professional development. It is unclear what program evaluation is being conducted by this function. The director of Health Services and the director Career and Technical Education do not have the appropriate level of supervisory duties to be classified as directors. Finally, the school level directors that oversee principals are assigned other areas that are not logically aligned with their primary function.

**Exhibit 1-9
Existing Functional Organization Structure
Department of Instruction
2004-05**



Source: SCPSD, Department of Instruction, February 2005.

The evaluation team recommends that the department consider realigning its structure to more adequately assign span of control, as well as reassign duties based on functional necessity to more

effectively balance responsibilities at the director levels. This realignment should also provide a better allocation of duties at the supervisor and coordinator levels that will allow them to provide better support to the campuses.

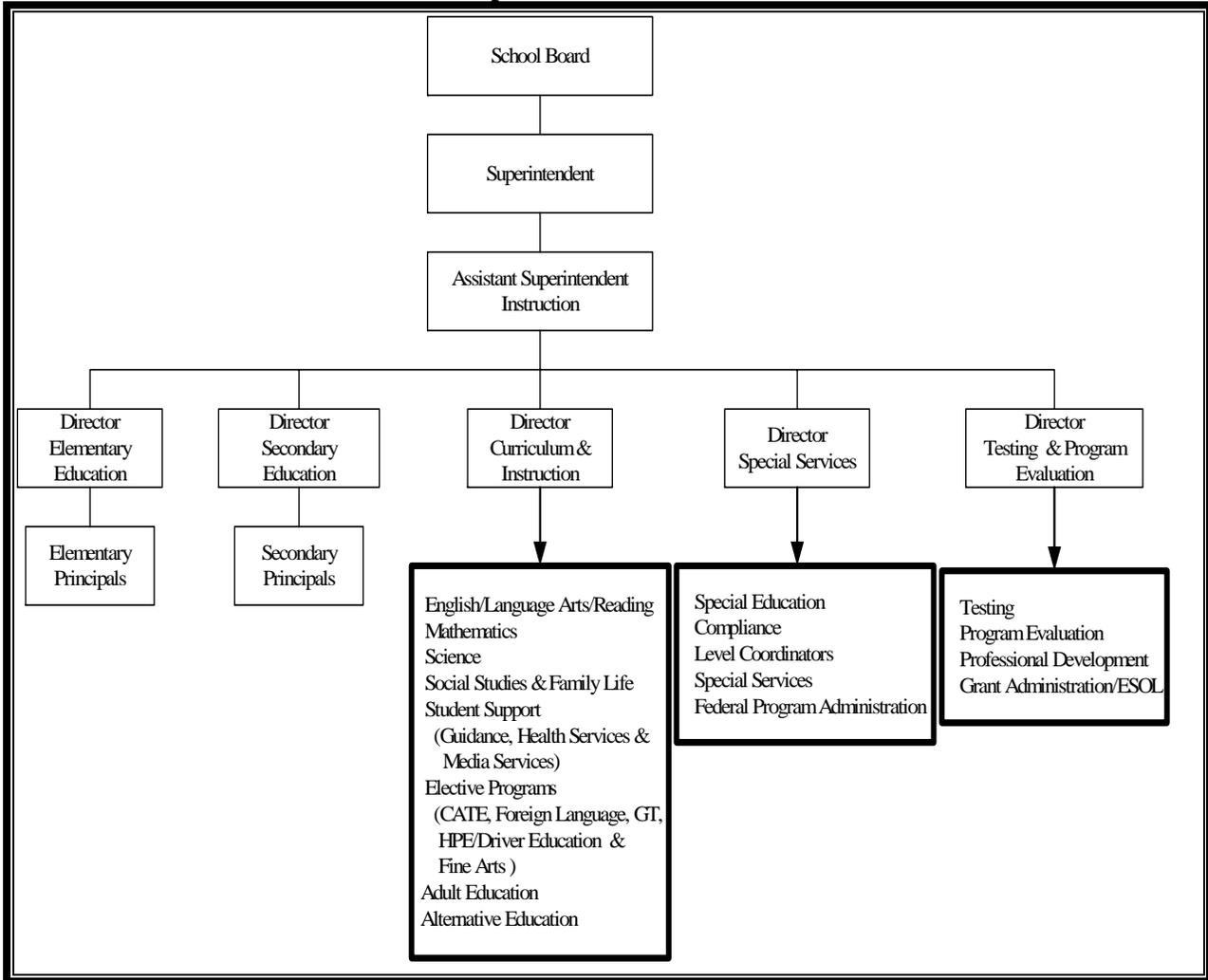
Two director positions, the director of Career and Technical Education and the director of Health Services, should be downgraded to supervisor level positions. The former director of Program Development and Evaluation position should be split into two positions, a director of Curriculum and Instruction and a director of Testing and Program Evaluation. The director of Curriculum and Instruction should be solely responsible for curriculum and instruction issues related to the core curriculum, student support services, and electives. The director of Testing and Program Evaluation should oversee all issues related to testing, provide a program evaluation role, coordinate professional development, and administrator grants for the division, as well as the division's ESOL program. The coordinator of Testing should no longer report directly to the assistant superintendent of Instruction but instead report to the director of Testing and Program Evaluation.

The three school level director positions should be consolidated to two positions, one for elementary education and one for secondary education. The two directors should only be responsible for the supervision and evaluation of principals.

As discussed above, instructional technology functions should no longer be under the supervision of the assistant superintendent of Instruction. Rather, these functions should all be coordinated under the guidance of the assistant superintendent of Technology. It should be noted that this recommendation is not intended to downplay the role of instruction in technology. By moving technology into a separate department, the director of Instructional Technology can direct his/her primary focus to enhancing instructional technology and provide concerted leadership and better coordination to the division's effort. It will be important that effective communication channels be established between the Technology and Instruction Departments to ensure all programs are properly aligned. The proposed reorganization of the Department of Instruction does not require additional staff to be put in place. Rather, it allows the division to shift existing directors to assume better aligned duties and responsibilities. The assistant superintendent of Instruction would have a more manageable span of control under the proposed structure, going from nine direct reports to five.

Exhibit 1-10 presents the proposed restructuring of the Department of Instruction and provides a breakdown of departmental responsibilities. The impact of the reorganization at the supervisor and coordinator level is discussed in greater detail in the *Education Services Delivery* section of this report.

**Exhibit 1-10
Proposed Structure
Department of Instruction**



Source: Gibson Consulting Group, Inc.

Financial Management

The division is experiencing rapid growth and consequently needs to adopt a proactive financial strategy and put stricter financial controls and procedures in place to effectively manage this growth. It is critical that the financial systems keep up with the realized and anticipated growth and provide a well thought out strategy to effectively manage the division’s financial resources. Most medium to large school divisions have a chief financial officer (CFO) position in place to direct financial operations.

Currently, the assistant superintendent of Finance and Administrative Systems oversees the division's finance functions, as well as transportation, maintenance, custodial, food service outsourcing, and construction. Given the rapid growth in enrollment and the growing need to build or renovate schools, the division will likely be unable to provide adequate oversight to these functions under the current structure. The 2005-06 proposed budget recently sent to the Board of Supervisors for approval, requests \$257,843,159. The size of the division and the promise of continued growth make a chief financial officer a necessary investment.

Typically, a CFO performs many functions in the area of fiscal management. This position should be responsible for planning, organizing, and coordinating the business office and overseeing the technical accounting tasks concerned with the financial operations of the division. A CFO would broaden the division's ability to identify trends that should be integrated into budget planning. This position should be charged with developing budget reports that can be used by division administrators, both in the central office and in campuses to monitor program and departmental expenditures without requiring line item explanations from the director of Finance. The financial complexity of the division has increased, requiring more sophisticated accounting controls be put in place. A CFO is a logical choice to establish and monitor these controls.

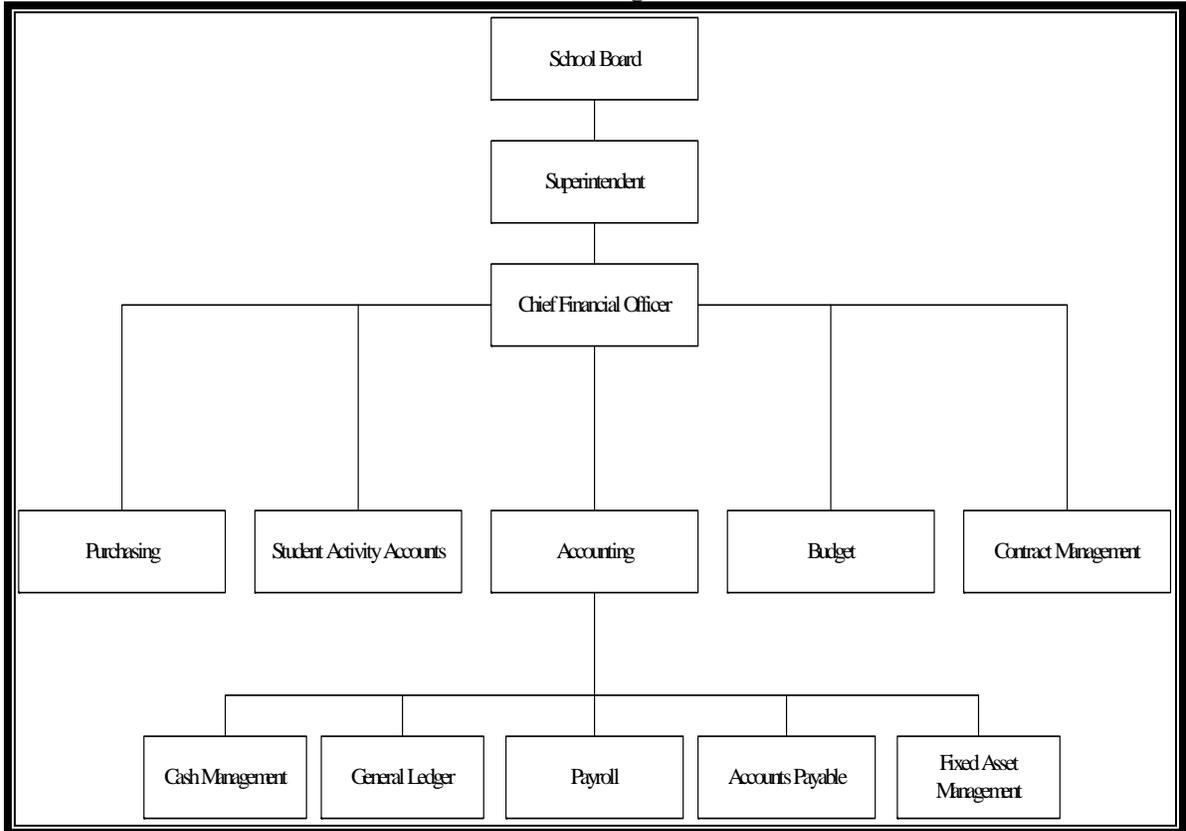
The evaluation team recommends that the division reorganize its financial functions to operate under the direction of a CFO reporting directly to the superintendent. This can be accomplished by splitting the responsibilities of the current assistant superintendent of Finance and Administrative Services position into two assistant superintendent level positions, a CFO and an assistant superintendent of Administrative Services. The assistant superintendent would continue to act as the Clerk to the Board, until deemed otherwise by the School Board. Research has indicated that a medium to large school division has greater success when the CFO is at the assistant superintendent level, as the required qualifications of the position are usually much higher than when these functions are overseen by a lower level. Further reorganization of the Finance Department would entail combining the director of Finance and the business manager positions into a newly titled controller and having this position administer all of the division's accounting functions (cash management, accounts payable, general ledger management, payroll, and fixed asset management). Salary savings from combining these two positions would offset the cost of creating the CFO position.

The superintendent may wish to gather research from peer divisions to help create a job description for the CFO position. The evaluation team recommends the division look for candidates that meet the following minimum requirements:

- a master's degree with a major in business or public administration or a CPA (Certified Public Accountant) designation;
- seven (7) to ten (10) years experience in all phases of school accounting services and recent experience supervising school division business office staff, or the equivalent; and
- experience preparing school division budgets, expenditure reports to include cost analysis studies, investments, and annual financial statements.

Exhibit 1-11 illustrates the functional duties assigned to the CFO under the proposed reorganization. The CFO would be held accountable for developing financial controls, processes, and procedures that are in line with the size of the budget he/she oversees. By creating this position, and reorganizing the Finance Department to serve directly under a CFO, the division provides additional safeguards of the division’s financial resources by dedicating a professional with the proper level of experience to administer its financial operations. The impact of the reorganization at the departmental level is discussed in greater detail in the *Financial Management* section of this report.

**Exhibit 1-11
Proposed Structure
Financial Management**



Source: Gibson Consulting Group, Inc.

The proposed reorganization of the central office administration will provide the division with sound technology leadership, enhance central office support to campuses, and establish more effective financial control of division resources.

PUBLIC INFORMATION ROLE

Recommendation 1-2: Enhance the perception of the Public Information Office by upgrading the title from supervisor to Public Information Officer and establishing a formal departmental operating plan.

Prior to the 2004-05 school year, the division operated without a public information function after the School Board voted to eliminate it in 1999. Public relations became one of the superintendent's responsibilities. As the division grew, the need for a more formal public information function became apparent. In July 2004, the division reinstated the function by creating the Public Information Office, managed by the supervisor of Public Information. Given the steps the superintendent has taken to improve communication throughout the division, reinstating this department was a logical decision. However, the title "supervisor of Public Information" does not adequately convey the importance of this position. The division should consider upgrading the title from supervisor to Public Information Officer (PIO). This will send a clear message that this position is intended to be a high profile advocate for the division.

Prior to reinstating the department, the division created a Public Information Advisory Committee to develop a departmental mission statement and goals. Developing communication policies and guidelines was included as a departmental goal. Although the department has begun a number of innovative initiatives, it is still a work-in-progress without a well-developed operating plan as to how best to meet its mission. The long-term objectives of the department are directed toward assisting the division successfully implement Goal Two "Improve the quality of communication." However, no strategies have been identified to assist the department in performing its role. As a result, the division is not effectively utilizing the department's potential. The department should be given a higher profile within the division, as well as with the division's key stakeholders.

The PIO should draft a long-term plan on how she intends to get the message out, both internally, to staff and students, and externally, to community members School Board members, and parents. Once the plan has been drafted, the superintendent should review it and ensure it clearly articulates the strategies the department will implement to bring the division closer to meeting Goal Two. Accountability measures, both short and long-term, should then be created to allow for any necessary modifications. These accountability measures will allow the PIO and the department to take ownership of its role in improving the quality of communication.

CAMPUS ADMINISTRATION LEADERSHIP

Recommendation 1-3: Expand the leadership team to include a principal from each school level and include an open dialog agenda item early in each bimonthly principal meeting.

The division's instructional leadership team deals directly with instruction issues. However, no principals are on the team. This translates to principals having no representation when decisions are being made on instructional issues that directly impact them and their campuses. Communication between central administration and school administrators is a major concern in the division.

The majority of the communication is via email, with the correspondence consisting primarily of information on workshops, conferences, and upcoming meetings. It is important that principals are kept informed and are involved in the decision making process related to instruction.

Assigning a principal from each level to the leadership team creates a more complete team. Both central office and building level issues can be addressed with input from representatives of each side. In order to more successfully facilitate information flow, the principals that are members of the leadership team should be charged with reporting back to their level principals.

A principals meeting is held twice each month, two days after the School Board meetings. During this meeting time, an instructional program dealing with instructional issues facing the division is presented, the superintendent reviews any pertinent actions taken by the School Board, and then each level breaks out into meetings with their level director. There is an inconsistency in the level of open discussion between principals provided during these break out sessions. As a result, some school administrators do not feel they are given the opportunity to voice their concerns.

The January 12, 2005, elementary principals meeting agenda contains many of the same items reviewed in a previous meeting and is more a housekeeping exercise than an opportunity for dialogue. Many of the items on the agenda could have been shared in an email. The last agenda item "Open" represents the opportunity for the elementary principals to share ideas. However, by the time this agenda item comes up, the meeting has already lasted most of the morning and the principals are eager to get back to their campuses and the opportunity for strong communication between the central office and campus administrators has been lost. It would be more effective if the housekeeping items were communicated in an email prior to the meeting and used as preparation material for the meeting. The majority of the principals' meetings should be spent engaging in conversation between the director and the principals and among themselves. This would provide the opportunity for principals to share innovative strategies, discuss specific problems in their schools with their peers, and understand their impact from a division-wide perspective. Every principal meeting should have an agenda item for open roundtable discussion. The "Open" item should appear as second or third on the agenda.

SCHOOL IMPROVEMENT PLANS

Recommendation 1-4: Coordinate each school improvement plan with the division's long-term plan.

The 2005 General Assembly amended §22.1-253.13:6. *Standard 6. Planning and public involvement* requiring each school division to "adopt biennially a division-wide comprehensive, unified, long-range plan based on data collection, an analysis of the data, and how the data will be utilized to improve classroom instruction and student achievement. The plan shall be developed with staff and community involvement and shall include, or be consistent with, all other division-wide plans required by state and federal laws and regulations. Each local school board shall review the plan biennially and adopt any necessary revisions." The statute requires that the division-wide plan include:

- the objectives of the school division, including strategies for improving and maintaining student achievement;
- an assessment of the extent to which these objectives are being achieved;
- a forecast of enrollment changes;
- a plan for managing enrollment changes including consideration of the consolidation of schools to provide for a more comprehensive and effective delivery of instructional services to students and economies in school operations;
- an evaluation of the appropriateness of providing certain regional services in cooperation with neighboring school divisions;

- a technology plan, designed to integrate educational technology into the instructional programs of the school division, including the school division's career and technology education programs, consistent with, or as a part of, the comprehensive technology plan for Virginia adopted by the Board of Education;
- an assessment of the needs of the school division and evidence of community participation, including parental participation in the development of the plan;
- any corrective plan required pursuant to §22.1-253.13:3; and
- a plan, developed with staff and community involvement and including parental participation, for parent and family involvement in building successful school and parent partnerships.

Each school in the division is required to align its school improvement plans (SIP) to each goal and strategy contained in the division's plan. Completed SIP's are due to the superintendent in August. A report must be presented by the School Board by November 1 of each odd-numbered year indicating the extent to which the division's objectives were met during the previous two years.

The division has established a process for creating a school improvement plan in line with the state requirements contained in the Standards of Quality (SOQ's). The SOQ's require each school to prepare a biennial plan that includes:

- a profile of the school;
- statement of beliefs and mission;
- goals and performance expectations for student learning;
- analysis of instructional and organizational effectiveness;
- an action plan for addressing areas identified through the planning process as needing improvement; and
- an implementation process that provides for continuous monitoring.

Although each SIP is required to contain these elements, there is a great amount of variation between the plans from campus to campus. Principals are encouraged to link their campus plans to the division's six-year plan, but there is no process in place to ensure the link exists. Very little coordination occurs between the division and the schools to ensure that the SIPs are aligned with the division's plan.

The evaluation team recommends that the division consider a number of options to build consistency in the ways schools develop SIPs that are aligned with the division's goals and objectives. It should create a template that contains all of the required elements. Principals should be encouraged to share their SIPs with each other and identify any components that can be incorporated into the template. Examples of how the template is to be completed will further simplify the process. The evaluation team encourages the division to adopt a common school improvement planning document. Each school should be expected to incorporate school board goals and objectives into its plan and to tailor those goals and objectives to individual school needs as identified by the school planning committee. Each school should consider student achievement outcomes when developing these plans.

The division should also incorporate a quarterly agenda item into the principals' meetings to discuss planning issues including, but not limited to, any changes in the division's goals and objectives, any issues related to strategies that may or may not have worked, how each campus is monitoring plan progress, and recommended changes in the process. Although the theme for the

January 12, 2005, elementary principal's meeting was "*How do you know where you are going, if you don't know where you've been?*," no agenda item was dedicated to planning. These meetings could be an excellent opportunity to facilitate the school planning process.

Finally, the campus planning process should include a consistent evaluation piece. This entails that each campus establish measurable goals and objectives and annually report back to the community how successful its efforts have been in meeting expectations. Each plan should feature student achievement outcome expectations, comprehensive planning for a growing enrollment, and the use of technology tools for instruction, administration, and data analysis.

STRATEGIC PLANNING

Recommendation 1-5: Create a Balanced Scorecard to provide the division with a strong monitoring and measurement tool.

Although the division has a commendable strategic planning process in place, progress against the plan is not being adequately measured or monitored. The strategic planning review team meets annually to review the plan, but not at a campus or department level. The division has attempted to establish measurable objectives for the four School Board goals. The instruction related goals do have measurable objectives associated with them. However, there are measures in the plan that cannot be easily quantified. Many of the timelines are too broad to be effective, making performance measurement difficult. In addition, many of the strategies do not accurately reflect budget requirements to successfully be implemented.

Exhibit 1-12 presents an example of an existing divisional strategy that does not have a measure that can be quantified. It is not clear what trend data will be used to indicate when recruiting efforts are or are not successful. There is no statistical measurement to track successful implementation. No benchmark for success has been established, nor have the funding requirements been determined. The evaluation team recommends that the timeline be broken down into pieces that would establish decision points as to whether the existing strategy is working and should be continued or if it should be revised. A five-year timeline does not allow the division to react.

**Exhibit 1-12
Example of Unquantifiable Strategy
From SCPSD Six-Year Improvement Plan**

Goal 4: Attract, train, maintain, and retain a high quality staff.	
Objective 4.3: Identify areas of critical need and develop a plan to attract staff in those areas.	
Strategy	4.3.1 Analyze the current and anticipated teacher shortage areas to plan for recruitment.
Measure	All recruiting efforts will be guided by the trend data revealed through ongoing analysis.
Person(s) Responsible	Assistant Superintendent for Human Resources and Director of Human Resources
Timeline	2004-2010
Resources Required	Staff time, recruitment travel funds

Source: SCPSD, Six-Year Improvement Plan, 2004-2010.

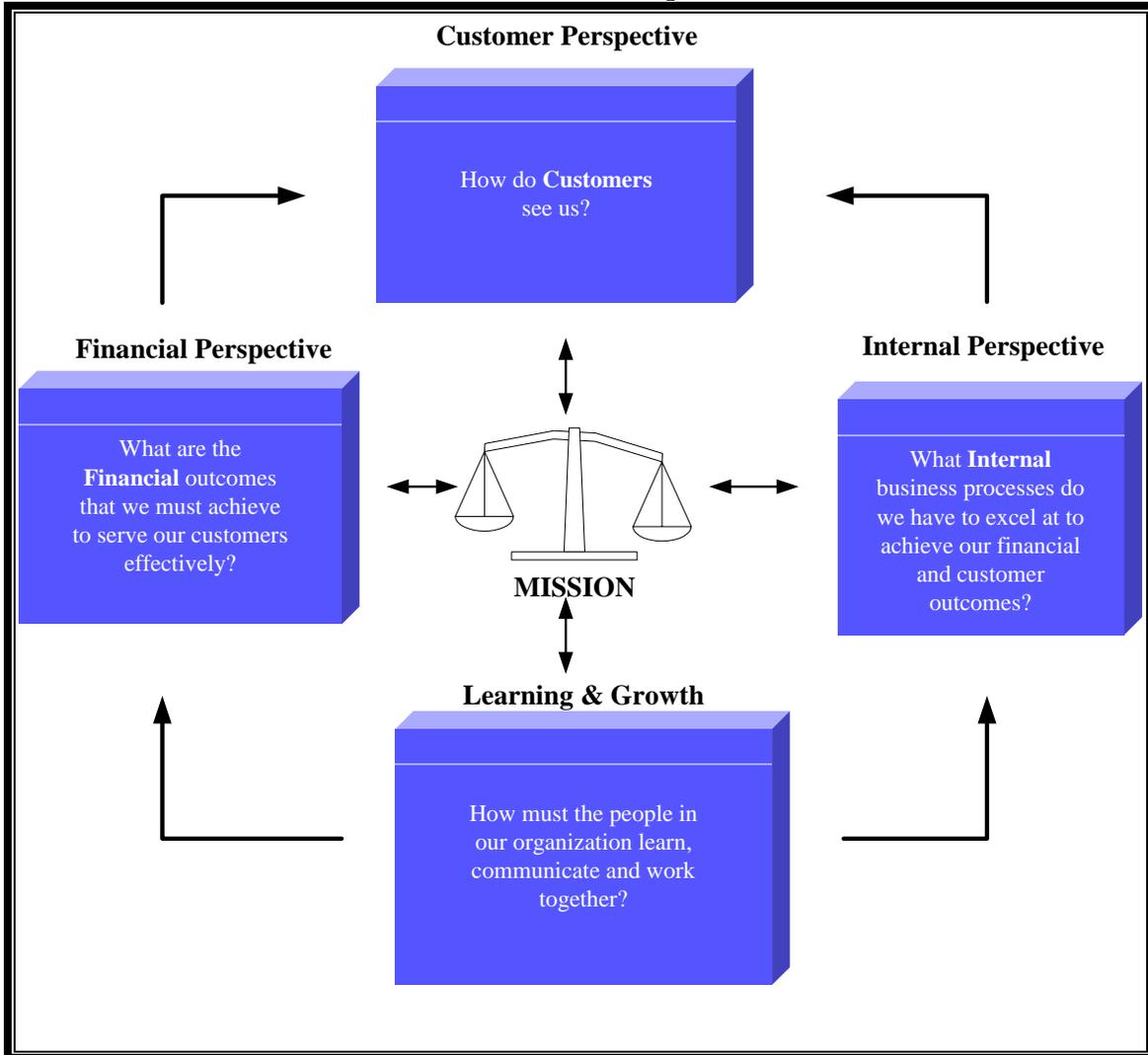
Recently, school divisions have attempted to define key performance measures that enable them to monitor the successful implementation of their strategic plan. Throughout this report, there are many examples of measures that can be used to track efficiency objectives. One tool that has gained recent popularity among educational organizations to systematically track and report performance measures, including efficiency measures, is a variation of the Balanced Scorecard.

A Balanced Scorecard is a management tool that provides an integrated framework for describing and translating strategy through the use of linked performance measures for balanced perspectives: Customer, Internal Processes, Employee Learning and Growth, and Financial. It acts as a measurement system, strategic management system, and a communication tool for the organization.

Robert Kaplan, an accounting professor at Harvard University and David Norton, a consultant from the Boston area, developed the Balanced Scorecard in 1990. Management has traditionally relied solely on financial information as a measure of performance. Over time, managers began to wonder if financial measurement was indeed an effective management tool. Financial measurements are historical in nature, and do not allow managers to predict outcomes or to respond quickly to changes in the business environment. The Balanced Scorecard has long been considered the domain of for-profit business. However, in recent years it has been translated and implemented in both the nonprofit and public sectors and has been found to be a valuable tool for all types of organizations.

Exhibit 1-13 illustrates what perspectives should be considered to ensure that the Balanced Scorecard plays an integral role when establishing the objectives of the strategic plan.

**Exhibit 1-13
Balance Scorecard Perspectives**



Source: Paul R. Niven, *Balanced Scorecard: Step-by-Step for Government and Nonprofit Agencies*, 2003

The strategic planning cycle does not end with the publication of the strategic plan. Ongoing strategic management must occur so that SCPSD can be poised to respond to changes in the environment and as a prelude to the next round of strategic planning. Effective strategies must be monitored and revised through vigilance, adaptability, and updates.

Without a mechanism to track performance and monitor the value of the plan, strategic planning becomes a time consuming process that provides little benefit. SCPSD should solicit the services of a strategic planning firm to assist the division in incorporating the Balanced Scorecard into its planning process.

***EDUCATIONAL
SERVICE DELIVERY***

Chapter 2

EDUCATIONAL SERVICE DELIVERY

BACKGROUND

The primary function of any school division is educating children. The extent to which this goal is achieved is dependent largely on the efficient use of the division's human and financial resources. The division must also have a well-designed and well-managed process for directing instruction, maintaining the curriculum, and providing the resources needed to support its programs. In addition, assessment data must be collected and used to evaluate and monitor its educational programs.

Spotsylvania County Public Schools Division (SCPSD) provides educational services to 22,948 students in Grades PK-12 in 32 schools—five high schools, seven middle schools, 16 elementary schools, one career and technical center, and three alternative schools. All schools in the division, with one exception, are fully accredited. This means that the students in each elementary school achieved adjusted pass rates of at least 75 percent on English tests in Grades 3 and 5 and at least 70 percent in mathematics and in science and history in Grade 5. High school and middle school students must achieve adjusted pass rates of at least 70 percent in the four content areas—English, mathematics, history/social science, and science. Berkeley Elementary School received a rating of “accredited with warning,” indicating that the adjusted pass rates of its students are below those required for full accreditation. Riverbend High School, which opened in 2004-05, is not currently eligible for an accreditation rating.

The Virginia Standards of Learning (SOL) establish the expectations for student learning and achievement for various subjects in Grades K-12. In the four core areas of English, mathematics, science, and history/social science, state-developed tests are utilized at Grades 3, 5, 8 and in high school to determine the extent to which students have mastered the specific knowledge and skills contained in the curriculum frameworks for those subjects. Compared with students state-wide, the pass rates for SCPSD students for the 16 SOL tests were equal to or higher in four areas—reading/language arts at Grades 3 and 8, history/social science at Grade 5, and science at Grade 8. The largest variances between SCPSD students and those state-wide were in science in Grade 5, history/social science in Grade 8, and in high school mathematics, where division students scored 7, 8, and 9 percentage points below students state-wide, respectively. The highest advanced pass rates for SCPSD students were in mathematics (44 percent) and history/social science (40 percent) at Grade 3 and history/social science (42 percent) at Grade 5. The lowest advanced pass rates for division students were in reading/language arts at Grade 3 (15 percent), science at Grade 5 (10 percent), mathematics at Grade 8 (12 percent), and high school mathematics (15 percent) and science (10 percent).

Exhibit 2-1 presents the division’s 2003-04 pass rates on the SOL by grade and subject and compares them to the state.

**Exhibit 2-1
SOL Pass Rates by Grade and Subject
Division and State
2003-04**

Grade/ Level	Subject Area	Percent					
		Division Advanced	Division Proficient	Division Passed	State Advanced	State Proficient	State Passed
3	Rdng/LA	15	57	72	14	58	71
	History/SS	40	45	85	51	37	87
	Math	44	39	83	49	38	87
	Science	32	53	85	38	48	86
5	Rdng/LA	24	60	83	31	53	84
	History/SS	42	44	87	39	48	87
	Math	22	53	76	20	58	78
	Science	10	67	77	22	62	84
8	Rdng/LA	21	52	73	22	50	72
	History/SS	*	59	75	29	54	83
	Math	12	63	75	22	52	80
	Science	25	62	88	28	60	88
High School	Rdng/LA	29	59	87	30	60	89
	History/SS	30	52	82	27	56	83
	Math	15	60	75	23	61	84
	Science	10	69	79	12	69	81

Source: Virginia Department of Education website, 2004.

*Below state definitions for personally identifiable results.

A. ACHIEVEMENTS

- The division has an exemplary program for its students with emotional disturbances.
- ADA tours are being conducted of all its campuses ensuring that the division complies with federal law.
- The division has developed a process for writing K-12 curriculum maps that involves teachers and the supervisory and administrative staffs.
- Student achievement data are shared with all division stake-holders including the public.
- The division has instituted a cost-effective internship program for teachers interested in becoming building administrators.

B. RECOMMENDATIONS

Recommendation 2-1 (p. 2-7): Develop and adopt a School Board policy that provides direction for the management of the curriculum. The policy should include statements that define the curriculum, outline how the curriculum is developed, and establish the relationships between the curriculum and student assessment and between curricular priorities and the budget.

Recommendation 2-2 (p. 2-8): Reorganize the Department of Instruction by reassigning content supervisory staff and realigning other responsibilities within the department. Curricular-related services to schools can be delivered more effectively by reassigning all content supervisory personnel to a Curriculum and Instruction unit, adding a program evaluation function, and realigning other responsibilities within the department. Greater operational efficiency can be achieved in the department by reducing the number of positions reporting directly to the assistant superintendent of Instruction.

Recommendation 2-3 (p. 2-11): Monitor the delivery of the curriculum to better focus on improving student achievement. Test scores indicate a possible inconsistency between what is being taught in the classroom and what students are being tested over, particularly in Grade 5 science and in high school mathematics. Although virtually all schools are accredited, when ranked against its peers, Spotsylvania's scores are in the bottom one-third of all tests at all grades except science in Grade 3.

Recommendation 2-4 (p. 2-15): Evaluate all division instructional programs on a rotating basis. Guidelines for program evaluation and process oversight are needed in order to help determine program effectiveness. A schedule should be developed by which all instructional programs are evaluated within a designated period of time.

Recommendation 2-5 (p. 2-16): Implement additional tracking and reporting functions for *MyLearningPlan* (MLP). The plan should include priorities for implementation and address timelines and training needs.

Recommendation 2-6 (p. 2-17): Align teacher professional development with state and federal requirements. The division should establish a comprehensive design for professional development that coordinates all planning and delivery of professional development activities. The plan should support division and building goals for student learning and ensure that all staff members are engaging in learning opportunities aligned with the Virginia Department of Education (VDOE) Highly Qualified Staff Development criteria.

Recommendation 2-7 (p. 2-18): Develop a monitoring process to enable the division to continue to identify and resolve systemic compliance problems. Place accountability for compliance with building principals, and provide feedback to principals during the monthly principals meeting.

Recommendation 2-8 (p. 2-19): Increase Medicaid and FAMIS Reimbursements. The division files Medicaid for very few of its eligible students and does not file for all eligible services. The supervisor of Compliance does the filing in addition to her numerous other duties. A clerk's position in Special Services has been included in the 2005-06 budget. This position should be dedicated to processing Medicaid and FAMIS claim reimbursements.

Recommendation 2-9 (p. 2-22): Conduct an evaluation to determine the extent block scheduling affects the level of services special education students receive. The division implemented a block schedule in its middle schools beginning in 2004-05. High schools will change from a traditional seven period schedule to an eight period block schedule in 2005-06. This may change a special education student's designation from receiving Level 2 services to Level 1 by reducing the percent of time of each period.

Recommendation 2-10 (p. 2-22): Provide additional training and joint planning time for Special Education teachers using the collaborative model. The division is using a collaborative model to serve many of its special education students. This model pairs a general education and a special education teacher or a paraprofessional to co-teach academic classes. While this model can work efficiently, there is inconsistency in the effectiveness of the model due to lack of training and in some instances a lack of joint planning time for co-teachers.

Recommendation 2-11 (p. 2-23): Expand the job responsibilities of high school SCOPE teachers when block scheduling is implemented. High school SCOPE resource teachers are underutilized. Of the five high school teachers, two teach three academic courses, two teach two academic courses, and one teaches one academic course in addition to other SCOPE responsibilities. Four to six periods per day are used to offer independent studies, mentor apprenticeships, and coordinate services of gifted students.

Recommendation 2-12 (p. 2-25): Ensure that all SCOPE teachers receive their endorsement or advanced degree in gifted education within three years of assignment. According to the *Local Plan for the Education of the Gifted, 2001-2006*, among the qualifications necessary for SCOPE teachers is an endorsement in gifted education or enrollment in a master's degree program with a major in gifted education. Of the 24 SCOPE teachers in SCPSD, 17 are fully certified, three will complete their requirements this year, 2 are slated to begin the process, and two provided no indication of either the endorsement in gifted education or enrollment in a master's degree program with a major in gifted education.

Recommendation 2-13 (p. 2-26): Revise criteria for the identification of gifted students. The division uses a matrix to aggregate the data collected for students nominated for the SCOPE program. The matrix has several major flaws and the weighted score does not take into account individual student strengths.

Recommendation 2-14 (p. 2-28): Align the SCOPE program from K-12. There is little alignment to the SCOPE program across grades resulting in fragmented services for SCOPE students.

Recommendation 2-15 (p. 2-28): Develop a scope and sequence to extend the core academic subject areas in elementary and middle school. SCOPE teachers are planning to write a process scope and sequence. The evaluation team recommends that SCPSD determine the extent to which general education curriculum in the four content areas should be extended. Coordination between elementary and middle school teachers will help define a scope and sequence that extends in a logical manner from Grades K-8.

Recommendation 2-16 (p. 2-29): Evaluate SCOPE staffing guidelines for Grades K- 2. The division uses an inclusion model to provide services to students in Grades K through 2. Current staffing guidelines for elementary resource teachers do not take into account students in Grades K through 2 who are not formally identified and should be revised.

Recommendation 2-17 (p. 2-30): Develop written guidelines for assessing, monitoring, and exiting ESOL students to ensure consistency across the division. Consistency in processes will promote compliance with the NCLB regulations for ESOL.

Recommendation 2-18 (p. 2-32): Strengthen communication with parents who are speakers of other languages. Form partnerships with neighboring divisions, church groups and community-based organizations that serve international populations.

Recommendation 2-19 (p. 2-33): Formulate a comprehensive and clear strategy to resolve instructional technology deficiencies. Ownership of the instructional technology function is not clearly defined within the SCPSD’s organization. The *Division Leadership, Organization, and Management* chapter in this report recommends creating a director of Instructional Technology position and discusses the organizational alignment of the function. The evaluation team recommends that this position be directed to immediately begin formulating a comprehensive and clear strategy to resolve instructional technology deficiencies.

C. FINANCIAL IMPACT OF RECOMMENDATIONS

This chapter contains recommendations to improve the efficiency of SCPSD instructional operations. Once fully implemented, these recommendations will result in savings of \$348,002 each year, representing 0.2 percent of the division’s annual operating budget. The major savings opportunities are presented in **Exhibit 2-2**. Details of how the financial impact was calculated can be found in Appendix B.

**Exhibit 2-2
Summary of SCPSD Savings Opportunities**

Functional Area	Recommendation	Annual Savings
Education Service Delivery	Increase Medicaid and FAMIS reimbursements.	\$277,216
	Expand responsibilities of high school SCOPE teachers.	\$70,786
Total Annual Savings		\$348,002
Percent of annual operating budget		0.20%

Source: Gibson Consulting Group, Inc.

This chapter also includes recommended investments by SCPSD intended to improve instructional efficiencies to ensure the best quality education will be provided to the division’s students. If savings cannot support these investments in the short-term, then the division should request additional investment funds from the county or delay the implementation if the investment does not yield future savings.

The recommended investments include reorganizing reporting lines in the department of instruction for an annual investment of \$238,774 or 0.14 percent of the division’s annual operating budget.

If all recommendations found in this chapter are implemented, the net annual savings to SCPSD will be \$109,228 or 0.06 percent of the division’s operating budget.

D. DETAILED ACHIEVEMENTS

PROGRAMS FOR STUDENTS WITH EMOTIONAL DISTURBANCES

SCPSD's program for students with emotional disturbances (ED) is based on best practices. Three elementary schools and selected middle and high schools have programs for students with serious emotional disturbances. Each program provides academic instruction in all core content areas and includes students in the general education classroom to the extent possible. ED programs use a level system which is a hierarchy of contingency arrangements that link student responsibilities to privileges. Teachers are trained in the Mandt system, a program designed to help de-escalate a situation with a student who has lost control. While restraint is part of the training, both Mandt and the division advocate using other strategies first. Floor restraint is never used and in the few situations where other types of restraint are needed, students are released quickly. This year, the division opened Courthouse Academy, a therapeutic day school for students with critical emotional needs. Approximately 10 students are at the facility at any given time with a placement goal of less than one year. Personnel from six Virginia divisions have visited and emulated Spotsylvania's program. Staff has been invited to make presentations at regional conferences on the division's program.

ADA COMPLIANCE

The division's Special Education Advisory Committee is conducting American with Disabilities Act (ADA) tours of all schools. The committee's chair and vice chair, the director of Special Services, and one person in a wheelchair have visited an elementary school and a middle school and completed a checklist of ADA compliance. The goal is to visit all schools by the end of 2004-05.

CURRICULUM MAPS

The division has developed a process for writing curriculum maps that involves all teachers and building administrators in order to capitalize on the strengths of staff and to incur a sense of ownership in the documents. A three-year process was initiated early in 1999-2000 to create K-12 curriculum maps with the training of 44 division trainers to provide training for all teachers by grade level. Teachers initially drafted maps of their grade-level curriculum correlated to the state's Standards of Learning (SOL) which were shared with other grade levels to identify and address duplications and oversights. The maps were then shared with all teachers and finalized by a committee representing all schools. The final drafts were posted on the division's web page for inspection and critique for final revision and adoption. The curriculum maps are revised annually based on scheduled input from staff and a review of any periodic changes to the SOL.

COMMUNICATING STUDENT ACHIEVEMENT DATA

SCPSD analyzes available student achievement data and shares it with the public. Laminated color-coded charts indicating the progress of each division school in meeting adequate yearly progress (AYP) as required by the federal No Child Left Behind legislation and the accreditation standings are posted throughout the division in a number of high traffic areas. Smaller copies of the charts are distributed to all schools for use and circulation among constituents.

CAMPUS ADMINISTRATOR INTERNSHIP PROGRAM

SCPSD has instituted a cost-effective internship program for teachers interested in becoming building administrators. The division has recognized that there is a shortage of qualified applicants for building level positions. The administrative intern program is designed to provide teachers with the opportunity to work with current school administrators in transitioning from the classroom to becoming an administrator through on-the-job training.

The program enables the division to develop campus administrators from within, while providing prospective administrators with an opportunity to understand the expectations of the job. Interns are paid a teacher salary and receive training from the building administrator. Additionally, they participate in division-wide training initiatives relative to building level leadership. This training consists of an annual two-day retreat which focuses on the role of the building administrators as members of the instructional leadership team of their schools. Follow-up activities are also planned and conducted.

The internship program has been in existence since 1998. Currently, 11 of the 15 high school assistant principals were a part of the intern program before becoming a building administrator. Five of the seven middle school assistant principals were interns, while two of the seven middle school principals were part of the program.

E. DETAILED FINDINGS AND RECOMMENDATIONS

MANAGEMENT OF THE CURRICULUM

Recommendation 2-1: Develop and adopt a School Board policy that provides direction for the management of the curriculum.

SCPSD maintains a policy manual organized according to the classification system of the Educational Policies Services of the National School Board Association. The manual is composed of 12 major classifications or sections, one of which is “instructional program.” Each policy in the section is formatted similarly—general statements related to the topic or policy area followed by the date of adoption and revision, if appropriate, and the legal references supporting the policy, usually including the *Code of Virginia* and *Regulations of the Virginia Board of Education*. Most of the policies in the section relating to the instructional program were adopted in 1995 with some revisions dated 2002. The most recent revision of the policy manual itself occurred in July 2002.

The SCPSD policy manual contains 51 policies relating to instruction and instructional-related issues. Several of the policies provide some direction in one or more elements related to the management of curriculum including:

- *Policy IA, Instructional Goals*: provides a general statement of the division’s instructional goals and references the Virginia Standards of Quality as providing the overall direction for instruction.
- *Policy IF, Curriculum Development*: outlines the process to be followed in the development of “effective curriculum” and lists six purposes of the process.
- *Policy IFD, Curriculum Adoption or Modification*: provides the process by which curriculum will be adopted or revised and the responsibilities of staff related to the process.
- *Policy IFE, Curriculum Guides and Course Outlines*: outlines which guides will be used in the division.

- *Policy IGA, Basic Instructional Program*: speaks to providing for formal studies and special interest programs; maintaining programs that are balanced, integrated, and sequentially articulated; and providing for a wide range of individual differences.
- *Policy IL, Testing Programs*: provides for the use of a state standardized testing program and allows schools to provide other tests to meet specific student needs.

None of the policies, however, comprehensively address the elements necessary for providing direction for the management of the curriculum. It is recommended that the SCPSD School Board develop and adopt a curriculum management policy that provides direction for curriculum related issues. Elements to consider in the development of a policy include:

- purpose and definition of the curriculum;
- curriculum philosophy and beliefs;
- expectation of a written curriculum and the process for its development;
- use of student assessment data;
- purpose and use of curriculum guides/documents and the development cycle;
- relationship of professional development/training to curriculum improvement;
- roles and responsibilities of the local School Board and all staff with instructional responsibilities; and
- relationship between curricular priorities and budget development.

REORGANIZATION OF THE DEPARTMENT OF INSTRUCTION

Recommendation 2-2: Reorganize the Department of Instruction by reassigning content supervisory staff and realigning other responsibilities within the department.

The assistant superintendent of Instruction provides leadership for the Department of Instruction with support from three level directors—high school, middle school, elementary school—and directors of Special Services, Career and Technical Education, and Program Development and Evaluation. The director of Health Services, supervisor of Technology, and coordinator of Testing also directly report to the assistant superintendent of Instruction. Principals, who report to and are evaluated by the appropriate level director, provide leadership for the instructional program at the building level.

The sections within the Department of Instruction and major areas of responsibility are indicated in Exhibit 2-3.

**Exhibit 2-3
Units, Administrators, and Areas of Oversight
SCPSD Department of Instruction
2004-05**

Department/Unit	Administrator	Areas of Oversight
High School Education	Director	High school principals
	Supervisor	Guidance program
Middle School Education	Director	Middle school principals
	Coordinator	Drug Grant
Elementary School Education	Director	Elementary school principals
	Coordinator	Media services
Special Services	Director	
	Supervisor	Special services
	Supervisor	Compliance
	Coordinators	High school, middle school, and elementary school
Career and Technical Education	Director	
	Program Manager	Regional Adult Education
	Principal	Career & Technical Center
Program Development and Evaluation	Director	
	Supervisor	English/Language Arts/Reading
	Supervisor	Mathematics
	Supervisor	Science
	Supervisor	Social Studies & Family Life
	Coordinator	Foreign Language, ESOL, Gifted Services
	Specialists	Professional Development
	Specialist	Reading
Health Services	Director	School nurses, drug screening, bus driver physicals, health-related training
Technology	Supervisor	Computer engineers, lead technician
Testing	Coordinator	School testing coordinators, on-line testing

Source: SCPSD, Department of Instruction, Organizational Chart.

Considering the SOL scores of division students, more emphasis should be placed on providing content-area services to the schools. Adequate school-based staff to effect improved student achievement will be available if the division continues its effort to provide mathematics specialists at the school level on the same basis as reading specialists. Coordination of services in the core areas is currently difficult, however, due to the limited time central office supervisory staff has to meet with school-based instructional coordinators and content area specialists both division-wide and in individual schools. The limited number of staff has resulted in infrequent visits to schools by some content area specialists. The major means of communicating with instructional personnel in the schools come through memoranda and emails.

The evaluation team recommends that the current nine positions reporting directly to the assistant superintendent of Instruction be reduced to five (see Recommendation 1-1 in the *Division Leadership, Organization, and Management* section of this report): curriculum and instruction, secondary education, elementary education, testing and program evaluation, and special services. It is recommended that all instructional supervisory staff be reassigned to a new unit of Curriculum and Instruction and that one new specialist position be added each to mathematics, science, and social science to better meet the K-12 responsibilities. The new positions will require secretarial support. All elective programs would be reassigned to a single unit and a separate unit established to

coordinate the guidance, health, and media functions of the division. It is also recommended that the job descriptions and new instructional personnel be revised to emphasize the importance of school visits.

The units of secondary education and elementary education would continue to provide assistance and support to principals on daily operations, to serve as liaisons with other central office senior staff, and to conduct the principal evaluations. The Testing and Program Evaluation unit would replace Program Development and Evaluation with responsibilities for program evaluation (see Recommendation 2-4 in this section), testing, professional development, and the administration of all grant programs and the ESOL program. Special Services would remain as currently organized with the addition of federal program administration. **Exhibit 2-4** provides detail of the recommended realignment of responsibilities within the Department of Instruction.

**Exhibit 2-4
Recommended Changes
Department of Instruction**

Department/Unit	Administrator	Areas of Oversight
Secondary Education	Director	Middle School and High School Principals
Elementary Education	Director	Elementary School Principals
Curriculum and Instruction	Director	Instructional Support
	Supervisor	English/Language Arts/Reading
	Supervisor	Mathematics Add one (1) professional position.
	Supervisor	Science Add one (1) professional position.
	Supervisor	Social Studies and Family Life Add one (1) professional position.
	Supervisor	Elective Programs (Foreign Languages, Gifted and Talented, Fine Arts, Career and Technical Education, HPE/Driver Education)
	Supervisor	Student Support Services (Guidance, Health Services, Media Services)
Testing and Program Evaluation	Director	Program Evaluation
	Coordinator	Testing
	Coordinator	Grants Administration, ESOL
	Specialists	Professional Development
Special Services	Director	Level Coordinators
	Supervisor	Compliance
	Supervisor	Special Services
	Supervisor	Federal Programs

Source: Gibson Consulting Group, Inc., February 2005.

MONITORING DELIVERY OF CURRICULUM

Recommendation 2-3: Monitor the delivery of the curriculum to better focus on improving student achievement.

SOL pass rates of SCPSD students compare favorably to those state-wide. On only four of 16 tests administered were the pass rates of division students five or more percentage points below the rates state-wide. Although the differences in some instances are not large, the comparison is less favorable when SCPSD pass rates are compared to the eight divisions in its cluster. At Grade 3, the 2003-04 pass rates of SCPSD students were the second lowest among peer divisions in reading/language arts and the lowest in history/social science, mathematics and science. At Grade 5, SCPSD pass rates were second lowest in history/social science and mathematics and the lowest in reading/language arts and science. At Grade 8, SCPSD student’s pass rates was the second lowest in history/social science and lowest in reading/language arts, mathematics, and science. At high school, the pass rates of SCPSD students were third lowest in science, second lowest in reading/language arts and history/social science, and lowest in mathematics.

Exhibit 2-5 presents the 2003-04 Grade 3 pass rates for the division, its peers, and the state.

**Exhibit 2-5
SOL Pass Rates Grade 3
SCPSD, Peer Divisions, and State
2003-04**

Grade	Division	SOL Pass Rates			
		Reading/ Language Arts	History/ Social Science	Mathematics	Science
3	Arlington	70	86	89	86
	Chesapeake City	74	92	91	89
	Chesterfield	78	93	93	92
	Fairfax	76	90	91	88
	Henrico	81	95	89	92
	Prince William	73	91	90	87
	Spotsylvania	72	85	83	85
	Stafford	72	86	88	88
	Virginia Beach	77	91	90	87
	State	71	87	87	86

Source: Virginia Department of Education website, 2004.

Exhibit 2-6 presents the 2003-04 Grade 5 pass rates for the division, its peers, and the state.

Exhibit 2-6
SOL Pass Rates Grade 5
SCPSD, Peer Divisions, and State
2003-04

Grade	Division	SOL Pass Rates			
		Reading/ Language Arts	History/ Social Science	Mathematics	Science
5	Arlington	84	85	79	86
	Chesapeake City	86	88	85	88
	Chesterfield	92	92	89	92
	Fairfax	90	89	83	87
	Henrico	87	91	83	87
	Prince William	85	89	80	85
	Spotsylvania	83	87	76	77
	Stafford	86	87	75	87
	Virginia Beach	88	91	85	90
	State	84	87	78	84

Source: Virginia Department of Education website, 2004.

Exhibit 2-7 presents the 2003-04 Grade 8 pass rates for the division, its peers, and the state.

Exhibit 2-7
SOL Pass Rates Grade 8
SCPSD, Peer Divisions, and State
2003-04

Grade	Division	SOL Pass Rates			
		Reading/ Language Arts	History/ Social Science	Mathematics	Science
8	Arlington	73	80	83	89
	Chesapeake City	75	75	87	94
	Chesterfield	80	89	88	91
	Fairfax	81	66	89	93
	Henrico	76	83	78	90
	Prince William	77	87	83	89
	Spotsylvania	73	75	75	88
	Stafford	81	100	85	92
	Virginia Beach	78	98	87	92
	State	72	83	80	88

Source: Virginia Department of Education website, 2004.

Exhibit 2-8 presents the 2003-04 high school pass rates for the division, its peers, and the state.

Exhibit 2-8
SOL Pass Rates High School
SCPSD, Peer Divisions, and State
2003-04

Grade	Division	SOL Pass Rates			
		Reading/ Language Arts	History/ Social Science	Mathematics	Science
High School	Arlington	90	82	86	76
	Chesapeake City	85	86	90	83
	Chesterfield	93	87	84	83
	Fairfax	93	94	88	84
	Henrico	94	93	90	88
	Prince William	88	80	80	77
	Spotsylvania	87	82	76	79
	Stafford	90	87	86	86
	Virginia Beach	90	87	87	85
	State	89	83	84	81

Source: Virginia Department of Education website, 2004.

A similar pattern exists when comparing SCPSD pass rates with peer divisions on SOL tests administered in prior years. Over the three-year period 1998-2000, 12 tests were administered in Grades 3, 5, and 8—one each in English, mathematics, history, and science in each grade. Of the 288 total tests administered (4 tests per grade x 3 grades x 3 years x 8 divisions), the pass rates of SCPSD students were higher than the rates of students in the peer divisions on only 81 (28.1 percent). At the high school level, 12 end-of-course examinations were administered—two in English, three each in mathematics and science, and four in history/geography. Results are not available for all divisions on two of the tests in history. Of the 240 total tests administered for which data are available (10 tests x 3 years x 8 divisions), the pass rates of SCPSD students were only higher than the rates of students in the peer divisions on 83 (34.6 percent).

The lower than expected performance of SCPSD students on the SOL tests may suggest that the material over which students are being tested may differ from the material they are being taught, particularly in Grade 5 science and high school mathematics. In those two areas, both the overall pass rates and the combined percent of students scoring at the advanced and proficient levels of SCPSD students were between seven and nine percentage points below that of students state-wide.

The division has a well-developed set of curriculum guides or “curriculum maps” for all subjects and courses in Grades K-12 available to teachers on the division’s website. Each map is organized by nine-week periods and contains a listing of the content and essential questions, skills, and suggested assessments for the subject or course. Each document is correlated to the appropriate SOL objectives. School Board policy *IFE, Curriculum Guides and Course Outlines* establishes the expectation that guides are to be used by division teachers.

An important component in developing a comprehensive system for managing the curriculum is to ensure that there is an effective process in place for monitoring what is being taught and how the curriculum is being delivered. How lesson plans are used, classroom instruction is monitored, and

the extent to which instructional supervisory staff is available to teachers are important elements to an effective system for managing the curriculum.

Lesson plans help structure what is to be learned for both the teacher and the students. SCPSD does not take a division-wide approach to the development or use of lesson plans. Most division schools reference lesson plans in their staff handbooks although the emphasis placed on plan development, the elements to be included in the plans, and statements of purpose and use differ. For example, all seven middle school staff handbooks reference lesson plans. The majority of the plans indicate how far in advance the plan books should be kept and when and where they should be available. They require lesson objectives and supporting activities, include references to the SOL number reference, and define how the objective is to be evaluated. Two handbooks contain somewhat more detailed explanations of the requirements as well as a sample of the lesson plan form. Four handbooks indicate that the plans are to be available to administrators and supervisors when classroom observations are being made. Two handbooks reference lesson plans in information related to planning for substitute teachers.

At the high school level, two handbooks outline in some detail what is expected in lesson plan development. None of the handbooks indicate the purpose for lesson plans or how they will be used to improve instruction.

Providing instructional supervisory assistance to teachers is important to effectively manage the curriculum. SCPSD makes available a number of instructional personnel to provide supervisory services to teachers. School-based personnel include instructional coordinators at the middle and high schools and reading specialists, and, in some schools, mathematics specialists at the middle and elementary schools. The time instructional coordinators have to provide assistance to teachers is limited due to other responsibilities. The division-developed job description for the middle school instructional coordinator contains 15 instruction-related essential job functions. However, several middle school staff handbooks list a number of non-instructional responsibilities including:

- handling transportation requests;
- coordinating testing;
- scheduling assemblies;
- reviewing team/department meetings;
- maintaining workroom inventory;
- organizing and maintaining the substitute folders or notebooks; and
- supervising lunch and extracurricular activities.

It is important that these school based positions be used to help drive instruction based on a division-wide focus, goals, and objectives, rather than used as administrative support to the campuses.

Division-wide personnel include specialists, coordinators, and supervisors. At the central office, supervisory staff in the core content areas includes one supervisor each in English/language arts/reading, mathematics, science, and social science and one reading specialist. In elective areas, one coordinator serves grades K-12 foreign language and works with the ESOL and gifted programs. In addition to responsibilities for division-wide professional development activities, two specialists serve as liaisons for the K-12 health and physical education and K-12 fine arts programs. Due to the number of schools and teachers in the division as well as other responsibilities such as coordinating textbook committees, developing benchmark assessments, and coordinating externally funded grants, the amount of time central office personnel spend in schools working directly with teachers and building instructional personnel is limited.

Developing a comprehensive system for managing the curriculum requires that an effective process be in place for monitoring what is being taught and how the curriculum is being delivered. The use of benchmark testing currently in use in Grades 6-12 and under development for the elementary grades should provide a systematic monitoring process in this regard. In addition, the evaluation team recommends that the division develop and implement a system for monitoring the curriculum that includes:

- incorporating a comprehensive review of lesson plans into the instructional monitoring cycle to ensure that instructional planning is occurring;
- requiring principals to correlate their monitoring plans more directly to SOL results and have the plans reviewed and feedback provided by the appropriate instructional personnel;
- requiring principals to informally conference with teachers and teams of teachers on a regularly scheduled basis as a means of encouraging two-way communication regarding the teaching/learning process;
- ensuring that central office instructional staff visit schools and classrooms regularly for the purpose of informally observing instruction and providing assistance to school-based personnel; and
- providing opportunities for building and division supervisory personnel with major instructional responsibilities to meet on a regular basis on instruction-related issues.

EVALUATION OF INSTRUCTIONAL PROGRAMS

Recommendation 2-4: Evaluate all division instructional programs on a rotating basis.

The division does not evaluate its instructional programs to ensure that they are meeting established goals and objectives or to ensure that the programs are cost effective. Program evaluation in SCPSD is limited to those required by external funding sources. As with all divisions in Virginia, the SOL tests are used to assess student progress relative to the content embedded in the SOLs. However, there is only a limited formal linkage between the use of the state assessments and the evaluation of division programs. No documentation was provided to the evaluation team to indicate how student assessment data is used to assess program effectiveness.

The primary reason for conducting program evaluation is to collect data that will lead to informed decisions about programs. Knowing the extent to which a program is meeting its goals will assist in determining what program modifications, if any, are necessary. Concerns related to accountability, funding limitations, and added requirements from state and federal agencies have led to greater emphasis on program evaluation.

The steps in developing an effective program evaluation process require deliberate and thoughtful planning to ensure that efforts lead to improvement. Guidelines and procedures must be developed early in the process to ensure that the evaluation is sufficiently comprehensive for its intended purpose. The process involves gathering data and applying accepted criteria to the data collected in order to arrive at justifiable decisions. It must be completed systematically and recorded in a manner that ensures the process can be replicated. The results must be communicated clearly and accurately so that decisions related to program continuation and resource allocation can be made.

The evaluation team recommends that the division develop and implement procedures and processes for evaluating all instructional programs on a rotating basis and that the results of the evaluations be provided to decision-makers. At a minimum, the steps in the process should include determining the purpose of the evaluation, designing the scope of the evaluation, collecting and analyzing needed data, and reporting and interpreting the findings. It is also recommended that a schedule be

developed by which all programs will be evaluated within a specified period of time with the results made available to the superintendent and School Board in conjunction with budgetary and other decisions that impact programs. The responsibility for program evaluation should be assigned to the new Testing and Program Evaluation unit (see Recommendation 2-2).

IMPLEMENT ADDITIONAL FUNCTIONS OF *MyLearningPlan*

Recommendation 2-5: Implement additional tracking and reporting functions for *MyLearningPlan* (MLP).

The division has *MyLearningPlan* (MLP) software in place that can improve efficiency in planning, tracking, and reporting professional development. For example, Professional Development (PD) specialists, who are part of the Department of Instruction, schedule and track required division-wide training. The licensure specialist (LS), who is in the Human Resources Department, meets with provisional teachers and those up for renewal each year to ensure they meet the state requirements for licensure renewal and division requirements for contract renewal. Information that the LS needs to make appropriate determinations is on the MLP database. However, at the time of the site visit, the LS did not have access to MLP records. As another example, division policy dictates that the building principal and/or the budget office approve any out-of-division training, such as college courses and professional conferences, but neither the building principal nor the budget office had access to individual teacher training records.

Since the site visit, the LS has been given rights and provided training on accessing transcribed data on staff. In addition, the LS has participated as a member of the *MyLearningPlan* user group which was created as a means of providing input on the improvement of services. Users, including PD specialists, the licensure specialist, principals, and teachers, who need the information have 24-hour access to MLP via the Internet. A recently formed user group is considering additional functions that would be useful to the division for activation within the next two years.

MLP has still greater capacity for improving professional development efficiency. For example, professional development staff, teachers, and principals can view canned system reports and request customized reports through the professional development staff. The PD staff can use the Report Designer function to create unique reports, add fields to canned reports to assist in tracking information for Human Resources, or download data for evaluating and improving the professional development program. Online forms can be customized to add activities and register participants. Teachers can propose a study group or request approval to attend a course and automatically route registration through the division approval process.

COMPREHENSIVE PLAN FOR STAFF DEVELOPMENT

Recommendation 2-6: Align teacher professional development with state and federal requirements.

Professional development is not coordinated between the central administration and the buildings, resulting in an unsystematic approach that may be inefficient and ineffective. For example, there is no way to know if the training provided at the campus level supports the core curriculum. Gaps exist between instructional technology strategies and teacher needs (see Recommendation 2-19). The division requires 38 hours of professional development each year. The PD specialists plan system-wide professional development, usually 20 hours, which is aligned with division goals and offered on teacher workdays. Attendance is required by the teacher contract. Principals usually plan 18 hours of professional development at the building level, and time is reported to the central office.

There is no central database of campus-based training activities. Although the PD specialists can offer suggestions, each principal decides what counts as professional development. Interviews with faculty members revealed a wide range of campus-based activities, including structured meetings with speakers, conference or seminar attendance, group book study, or faculty meetings. Keeping track of attendance at campus-based professional development also varies by campus. Central administration has no way to ascertain if schools are duplicating training that might more efficiently be provided to several schools at once. Teachers and building principals have no way of knowing if specific training needs are being addressed elsewhere in the division.

Flexibility for planning professional development to address building needs is important. However, many divisions recognize that the NCLB emphasis on highly qualified teachers makes it necessary to monitor professional development more closely to ensure that activities address improvement in student achievement in core subject areas. Divisions with exemplary professional development programs have identified goals for student learning and adopted related professional development plans at the division, department, and campus levels. A broad-based team that includes representation from all levels of the organization's stakeholders typically develop these comprehensive plans. A compelling mission and clear expectations for measuring student learning typically is the keystone for the plans and guide the selection of staff development strategies that will enable the division to achieve its goals. At a minimum, consideration should be given to such strategies as job-embedded coaching, mentoring, and examination and reflection on student work and instructional practices; visitations to classrooms of teachers of high performing students both within and outside the division; and workshops and seminars that target teachers' content knowledge and content-specific instructional practices.

Once staff development goals are identified, the Professional Development Department should help determine what is most effectively done at the system level and what would best be delivered at the schools. Often, the department becomes a service agency for the schools.

The evaluation team recommends that SCPSD establish a comprehensive design for professional development that coordinates all planning, delivery, and tracking of professional development activities including:

- supporting division and building goals for student learning;
- coordinating and tracking all professional development activity for maximum efficiency and cost effectiveness; and

- ensuring that all staff members are engaged in learning opportunities aligned with the Virginia Department of Education (VDOE) Highly Qualified Staff Development criteria.

Staff development is more likely to positively impact student achievement results when it is focused on student learning, designed to be sustained over time, closely aligned with the division's standards and assessments against which students are measured, and supported with the appropriate resources.

SPECIAL EDUCATION COMPLAINTS

Recommendation 2-7: Develop a monitoring process to enable the division to continue to identify and resolve systemic compliance problems.

SCPSD has had a high incidence of special education complaints and mediations, which is concerning as unresolved complaints may lead to costly litigation for both the division and also the family. Divisions with exemplary monitoring systems may have as few as one or two complaints in a three-year period. **Exhibit 2-9** presents the number of special education complaint actions from 2001 through 2004.

Exhibit 2-9
Number of SCPSD Special Education Students
and Complaint Actions
2001 Through 2004

Year	Special Education Students	Special Education Complaints	Due Process Hearings	Mediation Cases	Total
2001-02	2,896	18	3	NA	21
2002-03	3,163	13	0	2	15
2003-04	3,235	8	0	3	11

Source: VDOE Annual Report for Special Education.

Due process hearings are impartial procedures used to resolve disagreements over issues related to special education services that arise between a parent and a school division. The VDOE prefers that special education issues be resolved at the local level. For this reason, the state has set up a mediation process and will provide the division with a neutral, trained impartial mediator to assist in the process. SCPSD views the mediation process as a positive interaction and preferable to complaints and due process hearings. A pattern of utilizing the state system of mediation has been demonstrated by the division resulting in a decline in the number of special education complaints over a three year time span. This trend continues into the 2004-05 school year, where only one complaint has been filed. That complaint was successfully mediated during the fall of 2004.

Complaints usually arise at the building level over the appropriateness or nature of the student's program of services or an alleged procedural violation. The evaluation team recommends that SCPSD develop a local complaint monitoring process to track the kind and source of complaints; to identify training activities, particularly relating to special education placement, IEP development, services, compensatory services, notices and mandatory timelines; and to identify and address systemic problems in compliance. While the compliance unit will have overall responsibility for handling hearings, mediations and compliance reporting, the division should place accountability for compliance with procedures and development of appropriate service plans with building principals.

The division recently implemented *IEP.Online*, an electronic tool for composing Individual Education Plans (IEPs) for special education students. In general, the IEP (1) establishes measurable annual goals, including benchmarks/short-term objectives, for the child; and (2) states the special education and related services, the supplementary aids, and modifications that the division and teachers will provide to the child. *IEP.Online* also offers modules to manage a comprehensive special education process including student demographics, child study, eligibility, IEP processing, 504 documentation, and caseload management.

At the time of the site visit, the division had trained teachers to use *IEP.Online* to write plans, but had not trained principals and administrators on the administrative module. The administrative module provides a tool to create reports that will assist the compliance unit and building principals in monitoring special education activities. Reports that can be generated at the campus level include the following:

- **Deadline Reports:** lists due dates for pending IEP's and reevaluation review dates;
- **Disability/Level of Service:** lists level of service for all students with any disability and a fully approved IEP;
- **Disciplinary Events:** displays all disciplinary events in a particular school; will report list of students, the infraction, the outcome, their disability and the IEP date;
- **Year-to-date Reports:** will show by school the number of eligibility referrals, number of pending eligibilities, number of approved IEP plans, number of pending IEP plans, etc.;
- **Compliance Reports:** displays IEP overdue reports, IEP Review overdue reports, IEP's that are 100 percent in state and federal compliance, eligibilities that are 100 percent in state and federal compliance;
- **English as a Second Language Reports:** reports number of ESL students also receiving Special Education services; and
- **Testing Reports:** lists tests and results for all Special Education students.

Using the administrative management reports available, the compliance unit should provide feedback on the number and nature of potential special education complaints at a monthly meeting of principals and supervisors.

MEDICAID REIMBURSEMENT

Recommendation 2-8: Increase Medicaid and FAMIS Reimbursements.

Medicaid reimbursement is available to school divisions for direct services (e.g., occupational therapy) provided students with disabilities that are eligible under Medicaid and Family Access to Medical Insurance Security (FAMIS). FAMIS is available to children living in Virginia who meet the following criteria:

- age 19 or younger;
- no insurance for the past 4 months (some exceptions apply);
- not eligible for the Virginia state employee health insurance plan;
- not eligible for Medicaid;
- live in families meeting FAMIS income guidelines; and
- are United States citizens or qualified aliens.

Divisions may also claim federal reimbursement for administrative expenses that support the Medicaid program. These include direct, indirect, and capital costs on activities such as outreach, translation, and coordination of services and referrals for Medicaid students.

The division files and receives Medicaid reimbursement for direct services for 12 of its eligible students. However, the division does not file for students eligible for FAMIS. SCPSD also files for Medicaid administrative claims and completes time studies three times a year. Through January 2005, the division had received \$1,308 in reimbursements for direct services for 2003-04 although it has only recently completed the filing for that year. Administrative filing reimbursements totaled \$24,957 during the same period. The amount of Medicaid and FAMIS reimbursements for direct services for the division and selected peers who also file is shown in **Exhibit 2-10**.

Exhibit 2-10
Medicaid and FAMIS Reimbursement
Spotsylvania and Selected Peers
2003-04

Division	Number of Recipients	Medicaid and FAMIS	Average Per Recipient
Spotsylvania	12	\$1,308*	\$109
Stafford	53	\$19,266	\$364
Fairfax	367	\$202,911	\$553
Virginia Beach	361	\$181,109	\$502

Source: SCPSD, Supervisor for Compliance; Medicaid and FAMIS Special Education Payment and Billing Data by Type of Service and School Provider.

** This amount does not reflect the total amount because the division has just completed filing for direct services for 2003-04.*

In order to facilitate billing of Medicaid special education services, the Department of Medical Assistance Services (DMAS) has contracted with the Health Management Systems/University of Massachusetts Medical School (HMS/UMMS) to provide school divisions assistance in filing for direct services billing and administrative claiming. HMS/UMMS provides school divisions with a list of Medicaid enrolled students to assist with billing direct services. School divisions are then able to identify all special education students for whom they may bill Medicaid (contingent on parental consent). Additionally, they provide an easy to use web-based billing service. To assist with administrative claiming, HMS/UMMS provides free training to school division staff on completing the time study, tabulates the time study results, calculates the claim, and prepares the claim documentation for school division certification. While the division is using the state offered program for its administrative claiming, it does not use the services for assistance with its direct services billing.

Since beginning the Medicaid reimbursement program several years ago, the division has experienced low reimbursements. The division has identified two factors to account for its low reimbursement rates. In the area of speech therapy, Medicaid will only allow billing by qualified therapists with master’s degrees. In Virginia, for many years a bachelor’s level therapist was employable. Of the 22 Speech Language Pathologist (SLPs) currently employed by the division, 7 have only bachelor’s level qualifications. Therefore, 30 percent of the speech language impaired children that could potentially be served cannot be billed for the services due to the qualification level of the therapist. To overcome this, the division would have to hire more SLPs with a Master’s degree to supervise all bachelor’s level therapists so that these services could be billed. Additionally, Medicaid will not reimburse certain services, such as consultation, that are not provided directly to the child. SCPSD utilizes a consultation model for speech and language therapy for many students,

making the therapy ineligible for billing. While these two factors affect the numbers of students eligible for reimbursement, it impacts only about 30 percent of eligible students in one direct service area, speech.

Three critical factors impact the division's direct service reimbursement; (i) not filing for all eligible students; (ii) not filing for all eligible direct services; and (iii) not filing for FAMIS. According to the Virginia Medicaid Special Education Student Estimates by School Division, an estimated 716 SCPSD special education students are eligible for Medicaid. The document also provides a lower (215) and upper (430) estimate of eligible students receiving health services for which reimbursement can be filed. Using the midpoint as a basis, it is estimated that the division has approximately 322 eligible students and is filing for only 12. The division files for reimbursement for the direct services of occupational therapy, physical therapy, and speech-language services. Services that are eligible for reimbursement include: physical therapy, occupational therapy, speech-language pathology, skilled nursing services, psychological services (provided by a psychologist or school social worker), audiology, medical evaluations, and hearing screens. Two additional services, health assistant services (special education aides, nursing aides) and transportation, are not currently receiving reimbursement. The state anticipates that this will change in the near future and is recommending that divisions keep documentation for these services because the reimbursement will be retroactive. Finally, the division does not file for FAMIS reimbursement which has a higher reimbursement rate (65 percent) than Medicaid (50 percent).

The division's administrative claiming reimbursement is also low. The average amount of administrative claiming reimbursement received by school divisions in Virginia for 2003-04 was approximately \$67,000, as compared to the \$24,957 SCPSD received during the same time period. Of 134 divisions in Virginia, only 12 divisions had more special education students than Spotsylvania during the same time period. The state mean number of special education students is 1,292, as compared to SCPSD's 3,235 special education students. It is estimated that administrative claiming reimbursement for Spotsylvania should conservatively be approximately \$40,000. It is important to note that there are other factors, such as community services, that affect administrative claiming besides the number of eligible students. However, it is possible that eligible employees are not reporting the correct claim codes when participating in time studies to determine the amount of eligible costs related to administrative claiming.

In the past, the division employed an outside consultant to file for reimbursement. However, the division generated so little reimbursement money, the outside consultant discontinued his services. Currently, the supervisor for Compliance completes the filing, and, due to numerous other responsibilities, the filing for reimbursement is often of low priority. The division has created a new clerk's position in the 2005-2006 budget to dedicate more time to the Medicaid billing project to increase revenues. The evaluation team recommends that this position's primary responsibility be Medicaid reimbursement.

In terms of direct services, the evaluation team also recommends that the division use the free services provided by HMS/UMMS, file for all possible direct services, and file for FAMIS in addition to Medicaid. After July 1, 2005 the services provided by MHS/UMMS for direct service billing will no longer be free to divisions. The state is working with Medicaid to try to find an alternative free service. The evaluation team further recommends that the division access this service before July 1, 2005, while it is still free to assist with direct services billing. In terms of administrative claiming, the evaluation team recommends that the division conduct a study to determine if eligible employees report the correct claim codes when participating in time studies. If there are some instances where proper claim codes are not being used, eligible employees should participate in the free training on filing claim codes correctly offered by HMS/UMMS.

BLOCK SCHEDULE AND SPECIAL EDUCATION SERVICES

Recommendation 2-9: Conduct an evaluation to determine the extent block scheduling affects the level of services special education students receive.

SCPSD's middle schools switched from a seven period traditional schedule to a block A/B alternating schedule beginning in 2004-05. As a result, some special education students who were classified as receiving services at Level II (services provided more than 50 percent of the time) in 2003-04 are classified as receiving services at Level I (services provided less than 50 percent of the time) in 2004-05. In the seven period traditional schedule, each class was approximately 16 percent of the total instructional time during a day. A student served in a self-contained special education setting for four academic core classes received services 64 percent of the time and was classified as a student receiving Level II services. In the block schedule, each class accounts for approximately 12 percent of the total instructional time. A student currently served in a self contained special education setting for four academic core classes receives services 48 percent of the time and is classified as a student receiving Level I services.

Two middle schools provided data on the number of special education students classified as receiving Level II services in 2003-04 but who received Level I services in 2004-05. At one school, of sixteen students classified as receiving Level II services in 2003-04, 11 or 69 percent are now classified as receiving Level I services. Ten students were classified as receiving Level II services in 2003-04 at the second school, and this year 8 or 80 percent are now classified as receiving Level I services. Although some of the students may have had a change in placement to a less restrictive environment, a number of the level changes more than likely occurred as a result of the change to the block schedule.

Special education staffing and the amount of funds received as a part of the state funding formula are based on the level of services students are receiving. The evaluation team recommends that the division develop ways to minimize the impact on funding and staffing if either is being negatively affected by moving to the block schedule.

SPECIAL EDUCATION COLLABORATIVE MODEL

Recommendation 2-10: Provide additional training and joint planning time for Special Education teachers using the collaborative model.

The division uses a collaborative model to serve many of its special education students. This model pairs a general education and a special education teacher to co-teach academic classes. Currently, 427 classes are taught using the collaborative model, most of which are at the secondary level. While the model can work very efficiently, problems with a lack of training and joint planning time have hindered the division's efficiency incorporating the model.

During the focus group meetings, teachers were asked to describe the training they received in special education during the past two years. None of the teachers in the group had received training from the county, even though several of them teach in the collaborative model. Training in the collaborative model is not mandatory.

The VDOE requires teachers to complete 180 professional development points within a five-year period based on an individualized professional development plan. Professional development points can be accrued by the completion of activities through a number of options including college credit

and professional development activity. For example, a professional development activity counts as 1 point for each clock or contact hour and a college course counts as 30 points for each semester hour.

Teachers in Spotsylvania must participate in 20 hours of division-wide professional development each year. This would accrue 100 points during a five-year period, leaving an additional 80 points to be accrued during the same time period. Division-wide professional development is typically based on a topic chosen by the division. In the summer of 2004, all elementary teachers participated in a three-day workshop on the newly adopted reading series. While useful, other training is needed as well. For example, teachers teaching in the collaborative model would like to have more training in inclusion and co-teaching.

Joint planning time is another issue for teachers working in the collaborative model. Little joint planning time is provided to teachers at the middle school level, except at one middle school where 75 percent of teachers have joint planning time. At one high school, approximately 30 percent of teachers teaching in the collaborative model have joint planning time. Many teachers indicated that they plan through email and notes in mailboxes. Some teachers plan before or after hours.

The collaborative model loses its effectiveness when teachers lack joint planning times, a situation occurring most frequently at the high school level. IEP meetings are often scheduled during teachers' planning times resulting in less time for co-teachers to plan together. Administrators have difficulty in scheduling teachers with joint planning periods particularly when the special education teacher is working collaboratively with more than one general education teacher.

Best practices in co-teaching state a consistent, protected planning time is necessary to allow co-teachers sufficient time to incorporate information about student needs into their curriculum decisions, lesson planning, evaluation, and behavior management techniques. In addition, co-teachers should have equal status and both should have strong content knowledge.

To ensure effective collaborative classrooms, the evaluation team recommends that co-teachers have specific training related to collaboration, co-teaching, and inclusion, as well as a joint planning time. Other topics for training may be added at the division's discretion.

SCOPE HIGH SCHOOL TEACHERS

Recommendation 2-11: Expand the job responsibilities of high school SCOPE teachers when block scheduling is implemented.

There are five high school SCOPE resource teachers; one for each high school. The duties of the SCOPE teachers include offering independent studies and mentor apprenticeships to SCOPE students. In addition, the teachers are to coordinate services for gifted students, such as assisting with the Governor's School and summer program applications.

SCOPE teachers also teach courses in their content area, although the number of courses varies depending on the school. In an attempt to be more equitable, a recommendation was made to the assistant superintendent of Instruction in the spring of 2004 to require high school SCOPE teachers to teach three academic classes in addition to their other SCOPE duties. Currently, two high school SCOPE teachers teach three additional academic courses, two teach two courses, and one teaches one course. High school SCOPE teachers facilitate 34 independent studies or mentor apprenticeships across the five high schools with the number offered varying greatly among the schools. **Exhibit 2-11** shows the current classes taught and number of independent studies/mentorship apprenticeship offered by the high school SCOPE resource teachers.

Exhibit 2-11
Current Classes Taught and Number of Independent Studies/Mentorship Apprenticeships
High School SCOPE Resource Teachers
2004-05

Teacher	Advanced, AP, or Governor's School Classes	Other Classes	Number of Independent Studies/Mentorship Apprenticeships
1	0	1	6
2	0	2	6
3	2	0	2
4	3	0	1
5	3	0	19

Source: SCPSD, Human Resources, January 2005.

In 2005-06, SCPSD's high schools will change from a seven period traditional schedule to an eight period A/B block schedule with high school teachers having teaching responsibilities for three of the four blocks each day. **Exhibit 2-12** shows the proposed number of classes and SCOPE duty periods for the high school resource teachers once the high schools change to a block schedule. This proposed schedule would allow SCOPE teachers to teach advanced, AP, or Governor's School classes in their content area during four of the eight blocks and plan during two of the remaining four blocks. Two blocks would be available to conduct other SCOPE duties, such as, conduct independent studies or mentorship apprenticeships, or help students with applications.

Exhibit 2-12
Proposed Classes Taught and Number of Independent Studies/Mentorship Apprenticeships
High School SCOPE Resource Teachers
2005-06

Teacher	Advanced, AP, or Governor's School Classes	Planning	Other SCOPE Related Duties including Independent Studies/Mentorship Apprenticeships
1	4	2	2
2	4	2	2
3	4	2	2
4	4	2	2
5	4	2	2

Source: Gibson Consulting Group, February 2005.

GIFTED ENDORSEMENT OF SCOPE TEACHERS

Recommendation 2-12: Ensure that all SCOPE teachers receive their endorsement or advanced degree in gifted education within three years of assignment.

The *Local Plan for the Education of the Gifted, 2001-2006* states the assistant superintendent for Human Resources is responsible for selecting, with principal input, teachers responsible for the instruction of gifted students. According to the plan, an endorsement in gifted education or enrollment in a master’s degree program with a major in gifted education is among the necessary qualifications to teach gifted students.

Exhibit 2-13 shows the year each teacher started teaching in the SCOPE program and whether the teacher has completed an endorsement or masters, and if not, his or her projected completion date.

**Exhibit 2-13
Teaching/Certification Information for SCOPE Teachers
2004–05**

Teacher	Year Started in SCOPE	Endorsement or Master’s in Gifted Education	Expected Completion Date Endorsement or Master’s
1	1979	yes	completed
2	1981	yes	completed
3	1987	yes	completed
4	1995	no	spring 2005
5	1997	yes	completed
6	1998	no	spring 2005
7	1998	yes	completed
8	1999	yes	completed
9	2000	yes	completed
10	2000	yes	completed
11	2001	no	has not begun
12	2001	yes	completed
13	2001	yes	completed
14	2001	yes	completed
15	2002	no	winter 2005
16	2002	no	has not begun
17	2003	yes	completed
18	2003	yes	completed
19	2003	no	summer 2005
20	2004	yes	completed
21	2004	yes	completed
22	2004	no	will begin summer 2005
23	2004	no	fall 2005
24	2004	no	will begin fall 2004

Source: SCPSED, Coordinator of Foreign Language/ESOL/Gifted Services, February 2005.

The exhibit indicates that 15 (63 percent) of the 24 SCOPE teachers currently have an endorsement or master’s degree in gifted education. Of the remaining nine teachers, five have started working on an endorsement and two will begin in 2005. Two teachers did not provide the evaluation team with information on their plans for completing either an endorsement or a master’s in gifted education.

Best practices in gifted education support teacher training in the nature and needs of gifted learners, social emotional development of gifted learners, and curriculum development. These topics must be studied in depth and do not readily lend themselves to a six-hour professional development activity. Rather, focused and intensive college level courses are needed. The evaluation team recommends that the division require full-time SCOPE resource teachers to obtain their endorsement or master’s in gifted education within three years from initial assignment to the SCOPE program.

IDENTIFICATION OF GIFTED STUDENTS

Recommendation 2-13: Revise criteria for the identification of gifted students.

The division uses a matrix to aggregate the data collected for students nominated for the SCOPE program. **Exhibit 2-14** presents an example of the identification matrix used in Grades 4 through 7.

Exhibit 2-14
Example Matrix Used to Aggregate Data for Making Decisions
About Student Placement in the SCOPE Program
Grades 4-7

Data Source	Score		
	3	2	1
Otis-Lennon School Abilities Test: Verbal*	99-95**	94-90**	89-85**
Otis-Lennon School Abilities Test: Nonverbal*	99-95**	94-90**	89-85**
Parent Inventory	42-36	35-24	23-1
Teacher Inventory	78-66	65-40	39-1
Creativity Assessment	102+	101-91	90-79
Portfolio	3.0-2.5	2.4-1.9	1.8-1.0
Grades (Honors, Awards)	4.0-3.5	3.4-3.0	2.9-2.5

Source: SCPSD Coordinator of Foreign Language/ESOL/Gifted Services, July 2004.

*The Naglieri Nonverbal Ability Test may be substituted for the OLSAT.

**Percentile rank.

The matrix is flawed in several ways. First, it converts ranges of scores to a weighted number. The ranges were chosen arbitrarily and have little empirical support. Second, raw scores, percentile ranks, and grades are not comparable scores, making meaningful interpretations difficult. One cannot compare a raw score on the parent inventory to a percentile rank on the OLSAT-Verbal without first converting the raw score to a standardized scoring system. Third, standard errors of measurement are not taken into consideration. A score on a test is only an estimate of a student’s true score. Taking into account the standard error of measurement provides a higher probability that the student’s true score is represented. Finally, weighted scores are summed and decisions for entry into the program are based on the total score; the minimum score required changes depending on the grade level. For Grades 4 through 7, the total must be 16 or above for entry into the program, although there is some latitude to admit on a provisional basis a student who scores below the prescribed cut-off. Using a total weighted score as a cut-off often results in ignoring areas in which a student might have considerable strength. This procedure reduces students’ strengths to a number, not taking into account the variability of strengths a student might exhibit, especially those from economically disadvantaged or diverse backgrounds.

The number and percent of students identified as gifted by ethnicity in 2003-04 in the division’s SCOPE program are indicated in **Exhibit 2-15**.

**Exhibit 2-15
Number and Percent of SCPSD Students Identified as Gifted by Ethnicity
2003–04**

Ethnicity	Number	Percent in Gifted Program	Percent in Division
American Indian/Native Alaskan	4	0.3%	0.3%
Asian/Pacific Islander	38	3.2%	2.1%
Black/Non-Hispanic	66	5.6%	18.0%
Hispanic	30	2.6%	4.2%
White/Non-Hispanic	1,036	88.2%	75.5%
Other/Unspecified	0	0.0%	0.0%
TOTAL	1,174	100.0%	100.0%

Source: Virginia Department of Education, Annual Report Gifted Education 2003–04.

This exhibit shows that SCPSD under-identifies students who are Black/Non-Hispanic as gifted. The evaluation team recommends that SCPSD change their identification procedures in the following ways:

1. Discontinue the use of the matrix; instead use a case study approach. A case study approach incorporates evidence from a variety of sources. In a case study approach, ample opportunity exists to include in-depth information about qualitative indicators as well as scores on quantitative measures. Many school systems compare each score on quantitative measures to a predefined criterion. For example, a school division may want to enter students who score one and one-half standard deviations above the mean on at least two of four measures. In addition, they may want to include students who have qualitative information that shows the student is creative or motivated.
2. Change raw scores to a standardized scoring system when applicable. Raw scores represent the total number of points a student earns and are not readily interpretable. Two raw scores on two different measures do not have the same interpretation because one measure may have more range than another. Schools can convert raw scores to a standardized scoring system through local norming of a measure. If local norming is difficult to achieve, the division might first determine the percent of students entered into the program in prior years. Next, the division should rank order all students’ scores. Determine the cut-off raw score by finding the score in the frequency distribution at the percentage of students entered into the program in prior years. This method only provides a gross estimate and is not as statistically defensible as converting raw scores to standard scores through local norming. The division may want to locally norm the creativity measure, but use the information from the teacher and parent checklist in a more qualitative fashion.
3. Take into consideration the standard error of measurement for the OLSAT and the Naglieri. When comparing the students’ score to a predetermined cut-off score, at least one standard error of measurement should be added and subtracted to the students’ observed score to obtain a range of scores. If any score in the range meets the predetermined cut-off score, the student would receive a “yes” on that measure.

4. Discontinue the use of grades. The division is already gathering teacher input through the teacher checklist. This means a teacher's input is being weighted twice as much as other sources of information.

GIFTED PROGRAM DELIVERY OF SERVICES

Recommendation 2-14: Align the SCOPE program from K-12.

Although the SCOPE program offers a variety of services to gifted students, there is limited alignment of services from one grade level to the next. The program changes from an inclusion program to a pullout program focused on studying a topic in depth, to an academic content program as it moves through the grades. In K-2, students are heterogeneously grouped. Classroom teachers receive 30 minutes of training to meet the needs of gifted students. They are provided assistance from SCOPE resource teachers. In Grades 3-5, gifted students are clustered and meet twice weekly with the SCOPE resource teacher in a pullout program for a total of 2 to 3 hours for in-depth study on a specific topic. In Grades 6 and 7, gifted students are clustered in two teams. SCOPE resource teachers meet once a week with gifted students and serve a content area in each grade each nine weeks. In Grade 8 gifted students take geometry, the second half of the first year of a foreign language, advanced science, and advanced English. In high school, gifted students are offered services through the Governor's school, advanced classes, AP classes, dual enrollment, independent study, college/university classes, seminars/internships, and guidance services.

Best practices in education suggest that services for students should be aligned both vertically (from grade to grade) and horizontally (from one class to another within a grade). The evaluation team recommends that the division more clearly define the parameters of the SCOPE program to ensure that it is aligned horizontally and vertically. The division should also consider if offering an elementary pullout program focusing on studying topics in depth supports the curriculum in the general education classroom.

SCOPE AND SEQUENCE FOR GIFTED PROGRAM

Recommendation 2-15: Develop a scope and sequence to extend the core academic subject areas in elementary and middle school.

A study group of SCOPE teachers recommended that the program write a process scope and sequence. In 1999, an audit of the gifted program noted that there was minimal or no correlation between pullout and regular elementary instruction.

Best practices in curriculum development for students identified as gifted state that the general education curriculum must be differentiated. Differentiation should occur in the three dimensions of curriculum: content, process, and product. The content determines what is to be studied, the process determines the method one uses for the study, and the product determines the outcome of what is studied. The Center for Gifted Education at The College of William & Mary has descriptions of curriculum units developed for gifted learners that describe how to differentiate curriculum for gifted students.

The evaluation team recommends that SCPSD develop the process scope and sequence and determine the extent to which general education curriculum in the four content areas should be expanded. If units are used in elementary and middle school, these should be included in the scope and sequence and the objectives that extend the general education curriculum should be identified.

Further, it is recommended that both elementary and middle school teachers be included in the project in order that the scope and sequence extends in a logical manner from Grades K-8.

STAFFING GUIDELINES FOR ELEMENTARY SCOPE TEACHERS

Recommendation 2-16: Evaluate SCOPE staffing guidelines for Grades K-2.

The current staffing guideline for the elementary gifted program is 0.5 teachers for fewer than 35 identified gifted students or one teacher if over 35 identified students. Students in K-2 who are gifted are served in the general education classroom. Current staffing guidelines do not take into account students through Grade 2 because they are not formally identified as gifted. This practice results in SCOPE resource teachers focusing most of their time and attention on the formally identified gifted students and results in fewer services for K- 2 students. **Exhibit 2-16** provides the enrollment at each elementary school by grade, the number of identified gifted students, and the number of SCOPE resource teachers serving the school.

**Exhibit 2-16
Elementary Schools, Student Enrollment, Number of Identified Gifted Students, Number of
SCOPE Resource Teachers
2004-05**

Elementary School	Enrollment						Identified Gifted Students	SCOPE Teacher
	K	1	2	3	4	5		
Battlefield	97	111	102	105	112	108	21	0.5
Berkeley	52	65	59	67	56	53	19	0.5
Brock Road	96	125	127	98	36	141	32	1.0
Chancellor	78	68	78	75	90	68	22	0.5
Courthouse Road	113	123	114	107	109	134	31	1.0
Courtland	100	119	101	106	135	104	28	1.0
Harrison Road	122	112	130	109	139	116	17	0.5
Lee Hill	135	126	136	157	124	121	35	1.0
Livingston	75	71	76	64	74	91	12	0.5
Parkside	84	111	109	109	133	122	37	1.0
Riverview	132	115	132	109	134	108	26	0.5
Robert E. Lee	75	86	64	56	77	69	22	0.5
Salem	95	122	101	86	100	87	18	0.5
Smith Station	155	161	139	148	154	134	39	1.0
Spotswood	106	104	99	81	84	93	13	0.5
Wilderness	125	128	120	154	132	139	41	1.0
Total	1,640	1,747	1,687	1,631	1,689	1,688	413	11.5

Source: Fall 2004-2005 Student Report, October 22, 2004; SCPSPD Coordinator of Foreign Language/ESOL/Gifted Services.

As indicated in **Exhibit 2-16**, there are 413 identified students in Grades 3 through 5, or approximately 8.2 percent of the 5,008 total students in those grades. Using the same percentage for students in K-2, one could estimate that there are approximately the same numbers of unidentified gifted students among the 5,034 students in the lower grades. The evaluation team recommends that the division review the current staffing guidelines for the elementary SCOPE program to determine if services to gifted students are being adversely affected and to consider revisions if needed.

WRITTEN GUIDELINES FOR THE ESOL PROGRAM

Recommendation 2-17: Develop written guidelines for assessing, monitoring, and exiting ESOL students to ensure consistency across the division.

Title VI of the Civil Rights Act of 1964 requires divisions to have programs that educate children with limited English proficiency (LEP). Divisions can meet this obligation in a variety of ways including providing English Speakers of Other Language (ESOL) programs, making available adequate training of classroom teachers on second language acquisition, and monitoring the educational progress of the student. Parents can choose to not have their children enrolled in an ESOL program. When a parent declines participation, the division retains a responsibility to ensure that the student has an equal opportunity to have his or her English language and academic needs met.

The following objective from the consolidated application for NCLB is required of all school divisions in the state.

Ten percent of LEP students will be re-classified as non-LEP after receiving instruction for five years or less and 20 percent of the LEP students will have advanced one proficiency level, as defined by the Virginia English Language Proficiency Standards, and as measured by a body of evidence.

Divisions, therefore, are required to provide services to LEP students and to ensure that they make progress and exit ESOL programs in a timely manner.

As of January 2005, SCPSD served 615 LEP students with 9 ESOL teachers and one interpreter at 10 ESOL centers (**Exhibit 2-17**). One teacher splits the day between a middle school center and an elementary center.

**Exhibit 2-17
SCPSD ESOL Centers and Enrollment
2005**

ESOL Centers	Feeder Schools	Total Number LEP Students at Center	Number of LEP Students Not Receiving Services or on Monitoring Status
Elementary			
Battlefield	Spotswood	47	14
Harrison Road	None	53	0
Parkside	Courtland	34	6
Riverview	Lee Hill, Berkley	25	9
Salem	None	60	0
Smith Station	Chancellor, Wilderness, RE Lee, Brock Road, Courthouse Road	83	51
Middle School ESOL Centers			
Chancellor	Battlefield, Freedom, Ni River	60	35
Thornburg	Spotsy, J.J. Wright	23	7
High School			
Chancellor	Riverbend	54	3
Courtland	Massaponax, Spotsy	40	11

Source: SCPSD Department of Instruction.

Of the 615 total LEP students, 350 attend an ESOL center at their home school, 129 are bussed from their home school to an ESOL center, and 136 remain in their home schools without services because they are on monitoring status or because their parents have opted not to have ESOL services.

There are a number of reasons why the division is providing inadequate support to ESOL teachers and regular teachers of LEP students. The population of LEP students has increased significantly in the last three years from 226 students in the fall 2003, to 409 in fall 2004, and 615 in January 2005. Dealing with 200 or more new LEP students per year has taxed the resources of the division. ESOL teachers' meetings are scheduled only four times per year but are sometimes canceled for weather or other priorities. There is inconsistent contact with regular teachers and poor monitoring of LEP students who have exited the program. According to division staff, each ESOL teacher attempts to meet with the regular teachers of LEP students at the beginning of the year to offer assistance in modifying lesson plans and developing appropriate strategies. However, there is no formal reporting or monitoring protocols, and in some cases that initial contact is the only one that regular teachers have. Building principals, ESOL teachers, and regular teachers of LEP students report a need for more support in meeting the needs of LEP students.

Resources in the ESOL centers vary widely. During campus visits, the evaluation team noted that the ESOL center at one school displayed many world maps, posters such as the Arabic alphabet and national flags, multiple encyclopedias and dictionaries, and lots of games for students to play. The center had six computers, one with access to the Internet, and software for key boarding drills, word

processing, and games at the elementary level for lower functioning students. In contrast, a visit to an ESOL center at a different school revealed few ESOL materials on display to illustrate nationalities other than Spanish, and only one computer.

The evaluation team recommends that SCPSD develop written guidelines for assessing, monitoring, and exiting ESOL students to ensure consistency across the division and compliance with the NCLB regulations for ESOL. An ESOL manual for teachers should contain, at a minimum, the following elements:

- Forms to send to division ESOL office: notification of LEP status; entrance and re-evaluation exit information;
- Letters to parents: notification of ESOL eligibility, assessment and/or monitoring update, invitation to LEP committee meeting, information about state tests required of LEP student, and exit notification;
- Forms to be kept by ESOL teacher for student folder: explanation of required contents, English language proficiency standards, LEP student plans, ESOL exit criteria checklist, post-dismissal monitoring forms, and standardized test scores;
- Forms to be sent to the regular classroom teacher: notification of placement of LEP student to content area teachers, exemptions and modifications forms, quarterly progress report forms or checklists for students in regular classrooms, and progress forms or checklists for students on monitor status; and
- Other ESL Resources: federal, state and local agencies; ESOL teaching strategies and information on adapting regular classroom activities for LEP students; and sources of supplemental materials.

Resources are available to assist the division develop its written policies, including the VDOE website, national associations related to ESOL, and peer divisions such as Stafford County Public Schools.

COMMUNICATION WITH ESOL PARENTS

Recommendation 2-18: Strengthen communication with parents who are speakers of other languages.

As parents and families are children's first teachers, schools must maintain open lines of communication with students' family members. Unfortunately for the families of LEP students, schools are sometimes perceived as intimidating and unwelcoming places. New to the U.S. system of education, LEP parents may find consent and other bureaucratic procedures very complicated, which can have a chilling effect on the parents' perception of school and their attitudes about participation. Even for the families of students who are natural-born citizens, a language barrier can prove to be a major deterrent to becoming involved in the education of their children. Thus, it is incumbent upon schools to create a welcoming environment for the parents and families of LEP students and to communicate with them in a meaningful way about academic programs, services, and their children's progress.

The division's LEP students communicate in 30 different languages. About 60 percent of LEP students have Spanish as their first language. Other major languages represented are Arabic, Urdu, Chinese, Vietnamese, and Japanese. The division employs only one Spanish Language interpreter. Division materials directed to parents are available only in English and Spanish. Parents are told to

bring their own interpreters to parent-teacher meetings, and sometimes the student has to serve as interpreter.

Programs that involve ESOL families should have a comprehensive system for communicating with parents and families. In working with ESOL families, the division should include:

- translation and interpretation services;
- specialized bilingual staff that serve as family-school liaisons;
- bi-literate sources and resources, including access to technology;
- family members from the community as resources to the schools;
- two-way communication so that teachers and other school staff come to understand the community through home visits and by interacting with ESOL families and ESOL families come to understand the U.S. education system through active participation in programs at school and in the community; and
- sustained professional development on cross-cultural communication for school staff and ESOL families.

Effective programs should leverage the resources of the broad community, including businesses, community-based organizations, libraries, and other institutions. To achieve better communications with their non-English speaking parents, the evaluation team recommends that SCPSD develop partnerships with neighboring school divisions, church groups, and local organizations that serve international populations. Because of geographic proximity, the division should also explore the resources of federal agencies and foreign embassies in Washington, D.C. For example, the United States Department of Agriculture provides Free/Reduced Lunch Forms in 18 languages on their website <http://www.fns.usda.gov/cnd/Translations/>.

INSTRUCTIONAL TECHNOLOGY

Recommendation 2-19: Formulate a comprehensive and clear strategy to resolve instructional technology deficiencies.

Ownership of the instructional technology function is not clearly defined within the SCPSD's organization structure. Various resources such as the technology advisory council, the technology leadership cadre, educational technology contacts (ETC's), and library media specialist play an important role in helping instructional personnel integrate technology into the curriculum. These resources are aligned under various functions within the division. The result is that the integration of technology into instructional programs is without a comprehensive and clear vision.

SCPSD has implemented or initiated some projects for facilities and tools to support technology integration into instructional programs, including:

- computer labs at each campus;
- media retrieval/media management systems installed in 21 schools in the division with plans to install in the remaining schools in 2005;
- a division-wide training facility is planned and renovation of the facility is underway;
- video streaming implemented in all middle school, one high school, and one elementary school.
- additional computers installed to improve the computer-to-student ratio;
- online public access catalog software installed at each school;
- implementation of an instructional software evaluation instrument has been analyzed and approved; and

- analyzed and approved productivity and content based instructional software and online resources used by elementary, middle, and high schools.

However, the division's approach to improving student learning through technology focuses primarily on student participation in technology labs as opposed to using the tools listed above to integrate technology into the classroom. Division-wide, there has been limited success integrating instructional technology into the curriculum, and teachers have not been adequately trained to augment their teaching strategies with technology. Additionally, gaps exist in linking professional development to individual teacher needs related to instructional technology as well as setting the global technology-based goals and objectives of the division.

A process is not in place to determine specific technology training needs of teachers. Professional development courses focusing on instructional technology are limited. The following courses available in 2004-05 include:

- building numeracy in Algebra using hand-held technology;
- classroom instruction that works (Book Talk);
- Intel Teach to the Future;
- Teach for Tomorrow;
- teaching middle school mathematics: using a calculator and manipulative; and
- thinking maps training of trainers.

Although these courses do provide some technology based tools to integrate into teaching strategies, each course is estimated to reach only 20 to 30 participants. This level of training does little to roll-out a division-wide initiative that focuses on training teachers to better utilize technology in classroom instruction.

The needs assessment portion of the *Spotsylvania County Six-Year Technology Plan* notes several other instructional technology deficiencies, including:

- A vision needs to be developed for staff members who provide instructional technology support to instructional staff. In conjunction with this vision, protocols need to be established for requesting assistance.
- Multi-level technology workshops need to be evaluated for effectiveness and continued.
- A plan for selecting, evaluating, and training educational technology contacts needs to be established.
- Technology-based opportunities for staff to share ideas need to be expanded beyond use of email.
- The division's professional opportunities need to be expanded to include the role technology plays in student learning and improving student achievement. The division needs to continue to provide appropriate hardware, software, and technical support for the effective integration of technology. The integration of technology needs to be a component of the classroom observation and teacher evaluation process.

Efforts to develop strategies to resolve instructional technology deficiencies will require the newly created director of Instructional Technology discussed in the *Division Leadership, Organization, and Management* section of this report, take ownership of the issues that have led to the division's instructional technology deficiencies. This position must engage instructional staff and instructional technology resources to develop strategies, establish benchmarks to measure successful implementation of those strategies, set reasonable timelines, and continually monitor the results so

that any revisions can be made as soon as possible. The evaluation team recommends this position be directed to immediately begin formulating a comprehensive and clear strategy that addresses:

- developing tiers for professional development for multi-level technology knowledge for teachers;
- promoting technology integration in the classroom;
- increasing special needs students use of assistive technology;
- deploying campus-based technology integration resources (instructional technology resource teachers);
- developing technology competency requirements and training for campus based technical support resources;
- developing assessment tools to gauge the effectiveness of instructional technology; and
- promoting the effective and appropriate selection and integration of educational technology tools; education software, presentation software, library databases, distance learning tools such as virtual field trips, video conferencing, video streaming, and on-line courses.

Campus-based technology integration resources, specifically the instructional technology resource teachers, will be key to formulating instructional technology strategies. Legislation passed by the 2004 General Assembly amended the Standards of Quality and revised staffing requirements related to technology. The Technology staffing standards do not become effective until July 1, 2005, although funding was provided effective July 1, 2004. The staffing standard states, “local school boards shall employ two positions per 1,000 students in K-12, one to provide technology support and one to serve as an instructional technology resource teacher.”

Instructional technology resource teachers are intended to serve as resources to classroom teachers, but are not intended to serve as classroom teachers. The intent of providing funding for instructional technology resource teachers is to assist teachers with the integration of technology in the classroom, to train teachers with the integration of technology in the classroom, to train teachers to use technology in an effective manner, and to assist with curriculum development as it relates to educational technology. The newly created director of Instructional Technology position should direct the Instructional Technology resource teachers to ensure support is built from the grassroots and that they are deployed with a division-wide focus.

***HUMAN
RESOURCES***

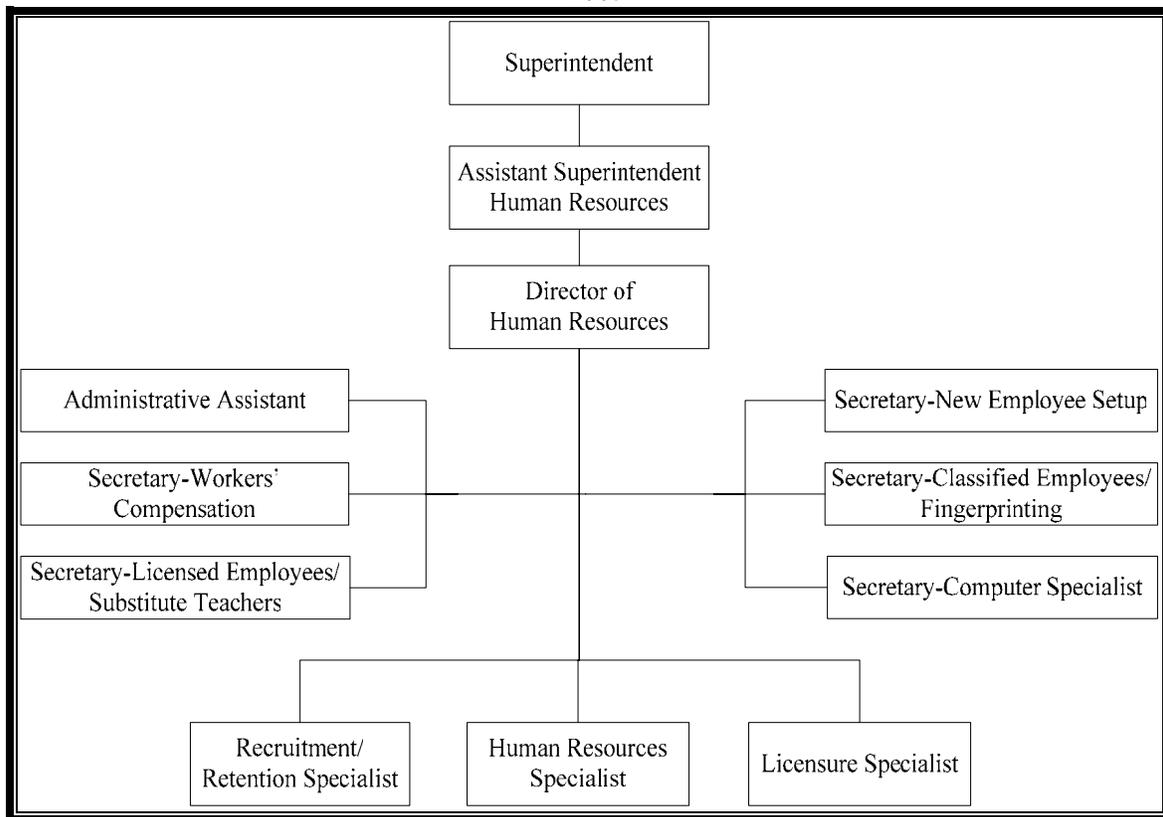
Chapter 3

HUMAN RESOURCES MANAGEMENT

BACKGROUND

The Spotsylvania County Public School Division (SCPSD) Human Resources Department (HR) is responsible for recruiting efforts, hiring new employees (excluding Food Service which is outsourced), processing initial teacher licensure information, hiring and training substitutes, and preparing employment contracts. The HR Department has 11 staff and is headed by the assistant superintendent for Human Resources who reports to the superintendent as shown in **Exhibit 3-1**.

Exhibit 3-1
SCPSD Human Resources Organization
2005



Source: Spotsylvania County Schools Superintendent's Office, January 2005.

Department staff works with the Finance Department staff to administer the division's benefits programs. HR also coordinates with supervisors to ensure federal and state regulations and local employee policies are properly applied.

The HR Department uses various technologies to support daily functions. Fingerprinting technology is used to perform criminal background checks through the Virginia State Police. The division uses the WinOcular™ system for online applicant processing, and also uses the personnel/payroll modules of the Comprehensive Information Management for Schools (CIMS) system. The personnel module allows staff to view staff position and salary information.

The division's website provides information to prospective and current employees on topics such as salaries and benefits, employment opportunities, orientation schedules, professional development, the mentor program, and division and community information. The website also contains an online application form for individuals applying for all positions except substitutes.

A. ACHIEVEMENTS

- The mentor teacher program is a comprehensive approach to address teacher recruiting and retention, combining teacher mentoring strategies with financial incentives, networking opportunities, ongoing professional development, and evaluation.
- SCPSD's Career Switcher alternative licensure program is self-supporting and allows the division to fill positions in critical shortage areas.
- The division's safety program reduces workers' compensation claims through accident review and investigation by the safety committee and a return-to-work program.
- SCPSD effectively uses web-based technology to streamline its applicant processing.

B. RECOMMENDATIONS

Recommendation 3-1 (p. 3-8): Periodically review and update all job descriptions. The division's job descriptions are not complete or up to date. Job descriptions should be reviewed to ensure that they reflect current job duties and requirements as well as the appropriate classification according to the Fair Labor Standards Act (FLSA). Organizations can use job descriptions to ensure consistency and reduce the risk of non-compliance with the law or division policy. They can be used during the hiring process as well as providing documentation in cases associated with reasonable accommodations, workers' compensation, and medical leave. The evaluation team recommends that the HR Department develop a rotating schedule for review and update of all job descriptions.

Recommendation 3-2 (p. 3-9): Provide HR reference materials on the division's website to improve communication and employee access to information. The website does not include the employee handbook, procedures, or employee forms. The evaluation team recommends that the SCPSD post these reference materials to the website to improve communication and provide access to the information.

Recommendation 3-3 (p. 3-10): Acquire and implement technology to efficiently locate substitutes and track their use. The division manually identifies substitutes from a list and calls them in the event of employee absence. Additionally, the process for paying substitutes is cumbersome as substitute timesheets must be manually matched to an absence form and submitted to payroll. The evaluation team recommends that the HR Department work with technology staff, principals, and the purchasing agent, to specify their requirements and purchase an automated substitute management system.

Recommendation 3-4 (p. 3-10): Purchase the document management module of the division's online applicant system to efficiently collect and analyze recruiting and retention data. The HR Department currently collects recruiting and retention data through paper surveys. Results are not

captured in databases for easy analysis of recruiting and retention data. Recently, the division has begun collecting recruiting referral information as part of its applicant module. The evaluation team recommends that the division revise its online application questionnaire to collect additional recruiting information and purchase and implement the document management module to collect and analyze retention and exit survey data.

Recommendation 3-5 (p. 3-11): Develop procedures and implement an automated timekeeping system to reduce the division's risk of non-compliance with FLSA. Classified employees time is not tracked and documented on timesheets in any time systems. Compensatory time and overtime accruals and use are tracked manually by individual departments. The evaluation team recommends that the division implement an automated timekeeping system for all classified employees and track the accrual and use of overtime and compensatory time in its payroll system.

Recommendation 3-6 (p. 3-12): Expedite teacher hiring by offering contracts earlier in the process. The evaluation team recommends that SCPSD allow recruiters to extend contracts to top candidates during recruiting trips for critical needs areas. The division may wish to consider modifying the letter of intent to add language that the letter of intent is contingent upon receiving an online application.

Recommendation 3-7 (p. 3-13): Update job classifications and consider adoption of alternative pay schedules. The division has 38 separate salary schedules to manage compensation, but does not differentiate between positions within the same job category such as clerical. As a result, the division may not be appropriately matching positions to the market to determine the appropriate compensation for actual duties performed. The evaluation team recommends that the division conduct a classification study to differentiate positions within job families and place them appropriately on the salary schedules.

Recommendation 3-8 (p. 3-14): Develop a succession management plan to ensure continuity in key positions. The division has an experienced management team, many of whom are eligible to retire within the next 3-5 years. The evaluation team recommends that the division leadership form a committee and develop a succession management plan to provide administrative continuity.

Recommendation 3-9 (p. 3-15): Consolidate the benefits function into a single organization. The division does not have a consolidated benefits function. Benefits tasks are divided between human resources, payroll, and an outside contractor. The evaluation team recommends that the division form a committee to evaluate its benefits activities and develop a proposal to establish a consolidated benefits function.

C. FISCAL IMPACT OF RECOMMENDATIONS

This chapter contains recommended investments by SCPSD intended to achieve best practices or to generate subsequent savings. The evaluation team recommends the following investments:

- The division's process to locate substitutes and track their hours is manual and labor intensive. The evaluation team recommends that SCPSD purchase a substitute management system to efficiently locate substitutes and track their use. One time investment: \$28,345 plus annual investment for software licenses of \$6,378.
- The division manually collects recruiting and retention data. The division's online applicant system has a document management module that would allow the division to

efficiently collect and analyze recruiting and retention data. The evaluation team recommends that the division purchase and implement the document management module. One time investment: \$8,500.

- The division currently does not track time and attendance for its classified employees. The evaluation team recommends that the division purchase and implement an automated timekeeping system. One time investment: \$77,770.
- The division has many separate salary schedules to manage compensation but does not differentiate between positions within the same job category. The evaluation team recommends that the division update a 1999 classification study to classify positions within job families and place them appropriately on the salary schedules. One time investment: \$35,000.

If all recommendations found in this chapter are implemented, the net annual costs to SCPSD will be \$6,378 or less than 0.01 percent of the division's operating budget. This does not include the total one-time investments of \$149,615. The calculations related to the potential savings and required investments can be found in Appendix B.

D. DETAILED ACHIEVEMENTS

TEACHER MENTORING PROGRAM

SCPSD has developed a comprehensive and integrated approach to address teacher recruiting and retention issues. The division's teacher mentoring program has seven components:

- recruitment tools (mentor teacher video, brochure, and website);
- partnerships with local businesses to provide assistance with housing and transportation;
- professional development for new teachers;
- new teacher recognition;
- networking and social activities to assimilate the new teacher into the division;
- mentor training and support; and
- program evaluation for continuing improvement.

The SCPSD mentor leadership team developed three recruitment tools: the mentor teacher video showcasing the success stories of new hires; the mentor teacher program brochure used at recruiting fairs to advertise the program and reinforce the video; and the mentor page located on the division's website that provides a calendar of events and resource information for both current and potential employees. The mentor teacher video was created in collaboration with students from the SCPSD Career and Technical Center.

To address housing and transportation issues that many new teachers face, the HR Department developed partnerships with local businesses to provide new teacher assistance. For example, one local apartment complex allows new teachers to move in for \$99. A local car dealership has agreed to sell new or used cars to new teachers for a minimal amount above the dealer invoice price, and a local financial institution has provided an incentive package for teachers to buy a house. In addition, to help defray relocation costs, the division provides financial assistance by providing a \$1,000 advance that is paid on the last working day of August.

New teachers are also required to attend 20 hours of training during their first year. HR and the SCPSD Office of Professional Development designed a division-wide course titled “Beef Soup for the New Teacher’s Soul.” The training consists of seven workshops and seminars on topics such as classroom management, parent communication, special education, assessment, and differentiation. Courses can be completed during the year or over the summer.

At the end of the first year, SCPSD recognizes a teacher from each level—elementary, middle, and high school as a First Year Teacher of the Year. Each school selects a New Teacher of the Year, who becomes the school’s nominee for the division’s First Year Teacher of the Year.

The division hires a significant number of out-of-state teachers each year (approximately 30 percent in 2004-05). To help assimilate these new teachers, the mentor program sponsors three annual social activities. In the fall, before school starts, the division holds a picnic to welcome new teachers. During the winter, another social is held at a local restaurant. At the end of the year, a spring tea is held to honor both new and retiring teachers. The costs of the social activities are paid by donations and financial support from local business partners. In addition to the social activities, the division also publishes a newsletter, the *Newbie News*, three times a year.

Mentor teachers are provided and assigned to each new teacher. The mentors are selected by their administrators and must attend training on how to be a mentor. The division provides a stipend of \$500 for each new teacher assigned. Mentor teachers also receive recertification points and may earn up to 45 points a year for a total of 90 points during the five-year recertification period. As part of their responsibilities, mentor teachers must work with new teachers to develop an individual performance plan. As part of the plan, new teachers and their mentors observe each other in the classroom twice a year and evaluate the performance.

The final component is ongoing evaluation for continued improvement. Both mentors and new teachers evaluate the program. In the winter, the mentors complete a survey containing questions about their mentored teacher and the activities that have occurred. The mentored teachers complete a different survey in the spring, in which they evaluate their mentor, the activities with their mentor, and the overall program.

The program has been highly successful in retaining new teachers. During its first two years, more than 237 mentors were trained to provide support for 256 teachers. Of the new teachers, 220 (85.9 percent) have remained at Spotsylvania. The program has received national recognition from the American Association of School Personnel Administrators as an outstanding teacher retention program.

CAREER SWITCHER PROGRAM

SCPSD has developed its own comprehensive, state-approved licensure program to address teacher shortages in critical needs areas such as math, science, and foreign languages. The division received approval from the Virginia Department of Education (VDOE) to implement a division-run, career switcher program to provide an alternative route for individuals to receive a teaching license.

While many divisions have career switcher programs, SCPSD’s is unique, because it is division-run and self-supporting. Individuals selected to participate in the program must have a bachelor’s degree with acceptable coursework in the area of teaching interest; must obtain passing scores on the Praxis I and Praxis II content test; and have five years of relative life or work experience in the desired content area.

The HR Department recruits non-endorsed candidates for the program at its job fairs. HR staff presents an orientation on ways they can receive certification, including the career switcher program. The candidates receive information on the Praxis tests, the career switcher program, and other teacher preparation programs offered by area universities.

Interested candidates apply to the program and their applications are screened by HR staff. Qualified applicants are interviewed by a panel of principals, HR staff, and the career switcher coordinator. The applicants are rated on their communication skills, desire to teach, and successful experiences in working with children.

Applicants accepted into the program pay a fee of \$3,000 to complete the two phases of the program. The fee pays the costs of the program coordinator, program trainers, and program mentors. During phase I of the program, the career switcher candidates complete 180 clock hours of training in the following modules:

- teaching and the development of the learner;
- curriculum and instruction;
- lesson planning;
- understanding of the Virginia Standards of Learning objectives;
- reading and language development;
- instructional technology;
- classroom management;
- communication;
- education law; and
- special education.

Spotsylvania County personnel teach the modules. Typically, the trainers are administrators who have taught the content of the modules at the university level or have conducted workshops on topics related to the modules. The teaching method is interactive and modules are presented using the “learn, process, practice, and debrief” method developed by Joyce and Showers.

During Phase I, candidates apply the knowledge and skills from the module workshops in the field. Candidates are required to complete 20 hours of field experience consisting of visiting classrooms of master teachers and practicing the concepts learned. Candidates keep a journal of their field experiences to assist them in formalizing what they have learned.

Upon successful completion of Phase I, candidates receive a Career Switcher Eligibility License issued by the VDOE and are eligible for employment. In Phase II of the program, newly certified candidates are assigned a mentor during their first year of teaching. Mentors are typically former master teachers of the content area and have received training in the mentoring of career switchers.

Mentors visit and observe the career switchers each week for the first 12 weeks of the school year. After the first 12 weeks, visits occur every two weeks. Career switchers provide the mentor with a needs assessment for additional assistance in areas such as communicating with parents or maintaining student discipline. In addition to intensive mentoring, career switchers are also required to attend monthly follow-up workshops, where initial topics are reviewed and applied to the teacher’s actual experiences. At the completion of Phase II, if the career switcher teacher has a

successful year of teaching, the teacher is issued a full license. If the first year is not successful, the teacher continues a second year with a mentor and follow-up training is provided.

The division's career switcher program has been highly successful in allowing the division to fill teacher shortages in critical needs areas. In 2004-05, 18 positions in critical needs areas were filled by career switchers.

SAFETY PROGRAM

The HR Department implemented a safety program to reduce workers' compensation claims. The program consisted of two elements: an employee safety committee to review accident claims to determine responsibility and a return-to-work program. The employee safety committee, which meets monthly, was formed in June 1999 and includes representatives from high risk areas such as special education, custodial, maintenance, transportation, food services, as well as HR. Its purpose is to review accidents in the workplace and develop prevention strategies. The committee reviews accident filings to determine if the accident could have been prevented or is compensable and forwards the results of the analysis to the carrier.

To reinforce and emphasize safety, the *Safety First News Letter* is issued quarterly. The newsletter spotlights safety tips for each high risk area. It also recognizes schools that had no claims for the quarter or that reported claims promptly.

The second component of the safety program is a return-to-work program. This component analyzes individuals who are out on workers' compensation. Based on the analysis, the division creates light duty assignments to bring employees back to work more quickly.

As a result of these efforts, the division has reduced its workers' compensation claims. The Virginia Municipal League recognized the program in 2002-03 with the 2002 Risk Management Performance Award. Since its inception, overall workers' compensation claims have steadily declined. From 2002 to 2003 claims dropped by 34.1 percent, from \$182,900 to \$120,600. Claims in 2004 as of November 2004, were only \$5,600.

APPLICANT PROCESSING

The division uses the WinOcular™ paperless system for its licensed and classified employee applications. The system was implemented in 2002-03 at an approximate cost of \$35,000 and has allowed the division to speed the screening and processing of its applications.

All applications are processed through the system. Licensed personnel are required to apply online to demonstrate technology proficiency. Although a paper application is available for classified employees such as custodians, bus drivers, and food service workers, these employees are encouraged to apply online. The department provides a kiosk with a computer terminal and HR staff is available to provide assistance. If the applicant submits a paper application, it is scanned into the system for screening and assessment.

Once an applicant applies, HR staff screens and rates the applicant using four codes. For licensed applicants the codes include: red (highly qualified), green (need test), blue green (degree with no experience) and blue (not qualified). Classified applicants are rated similarly. If the applicant is highly qualified, the application is released to principals and administrators for viewing.

Principals review the applications online and select candidates for interviews. The candidates are interviewed by the principals, who then make a recommendation for hire based on the interview and validation of references and licensure. The HR Department issues a letter of intent to selected candidates based on determination of need and assurance of licensure.

The WinOcular™ system has improved HR staff productivity. Before the system was implemented, in order to hire a teacher, HR staff would have to pull paper applications from the files and screen them, taking hours. Once the HR review was completed, principals had to come to the HR office to view the applications, taking them away from their campuses.

The number of licensed applications the division receives has increased since implementing the system. The assistant superintendent of Human Resources estimates that the number of licensed applications has increased by 146.2 percent, from 650 to 1,600. The assistant superintendent attributes the convenience of the online application as the main reason for the increase.

E. DETAILED FINDINGS AND RECOMMENDATIONS

JOB DESCRIPTIONS

Recommendation 3-1: Periodically review and update all job descriptions.

SCPSD does not have a defined procedure or schedule to periodically review and update job descriptions. No trigger exists to update job descriptions. For new positions, the department proposing the new position develops essential functions and HR develops the job description based on the input provided by the user department. Job descriptions for licensed positions have not been updated since 1997. Classified job descriptions were last updated in 2002.

The evaluation team reviewed job descriptions and noted the following issues:

- the “reports to” and “who evaluates” of the job descriptions are incorrect for the directors of high school, middle school, career and technical, and the supervisor of instruction;
- the person responsible for evaluation is different than the person to whom the position reports (division reading specialist and math specialist);
- job duties for school-based instructional coordinators have evolved to be more administrative than instructional, so the title is not reflective of duties; and
- the job description for the English as a Second Language (ESOL) coordinator is different than the assigned responsibilities as reflected on the organization chart.

Employees do not routinely participate in a review of current tasks, even though the job description form contains an employee signature line. Keeping job descriptions current ensures employees are properly classified and receive appropriate treatment under overtime regulations. Having employees participate in the review process provides an opportunity to match actual duties to described duties.

Up-to-date, accurate job descriptions play a role in resolving any dispute over expectations for performance. In addition, job descriptions can serve as documentation for compliance with laws such as the Americans with Disabilities Act (ADA) and the Equal Employment Opportunity Act. The ADA for example, requires employers to treat an individual with a disability as any other employee, if the disabled employee can perform the essential functions of the position with reasonable accommodation. A well-written job description documents the essential functions and the minimum

qualifications needed to perform them. The Equal Employment Opportunity Commission determines if the function of a position is essential by whether or not a written job description was prepared before a position was advertised or applicants interviewed.

In implementing this recommendation, the evaluation team recommends that the HR Department develop a periodic review process to include all job descriptions. SCPSD may consider a rotating schedule, reviewing one job family each year. The review should identify employee roles, reporting relationships, and job duties and should determine if the position has changed classification according to the Fair Labor Standard Act (FLSA). The process should also identify triggers for a review and update of job descriptions between formal reviews. Examples of the types of events that might trigger a review include: approval of new positions, turnover in a position, changes to laws such as the FLSA, departmental reorganizations, or reductions in staff.

HR REFERENCE MATERIALS

Recommendation 3-2: Provide HR reference materials on the division's website to improve communication and employee access to information.

The division does not provide online access of HR policies and forms used by employees. All employees receive a paper copy of the employee handbook and various HR forms are available upon request. However, these items are not online for easy access or reference. The division's HR web page contains information about the application process, job postings, orientation schedules, pay scales, and employee benefits.

Posting HR reference materials, such as the employee handbook; a request for transfer; long-term leave request; direct deposit authorization; exit interview; tuition reimbursement; or request and change of address/name forms on the division's website, improves communication to existing employees as well as applicants. The employee handbook communicates the division's principles and practices. It provides employees with a resource that answers practical questions and guides appropriate behavior. Prospective employees can also benefit by understanding the division's practices and procedures. Forms that employees need for certain events can be easily accessed without calling the HR Department or going through their supervisor. By using the website, SCPSD reduces the staff time and paper costs of printing and disseminating information. It also is a cost effective mechanism for updating information to keep it current.

In implementing this recommendation, the evaluation team recommends that HR staff work with the division webmaster to identify all HR reference materials to be posted to the website and establish a target completion date. In posting materials to the website, the division may wish to consider using templates that can be readily updated by the HR Department, without assistance from the division webmaster.

SUBSTITUTE MANAGEMENT SYSTEM

Recommendation 3-3: Acquire and implement technology to efficiently locate substitutes and track their use.

The division does not have an automated substitute management system that efficiently locates and calls substitutes to fill in for employee absences or tracks substitute use for payment purposes. The HR staff develops and maintains a substitute list in a spreadsheet and distributes the spreadsheet to campuses to use. When a teacher absence is reported, principals and campus staff contact substitutes on the list to determine their availability and tell them where and when to report.

The substitute time tracking and payment process is also manual and cumbersome. Secretaries at each campus must manually match the substitute timesheet to the absence report submitted by teachers. These documents are then provided to the Payroll Department who enter the data for payment.

An automated substitute management system would provide the division with an efficient and effective method for locating and calling substitutes as well as tracking employee absences and substitute use. These systems eliminate the task of calling substitutes manually. They also allow the division to match substitutes to schools and specific assignments based on the substitute's and the principal's preferences. The substitute management system streamlines payroll processing by providing reports of absences and substitute use. Many systems also directly interface to payroll systems to avoid manual matching of absences to substitute timesheets and re-keying data.

To implement this recommendation, the evaluation team recommends that the HR Department work with Technology staff, principals, school staff currently involved with substitute management, and the Purchasing agent, to specify their requirements and purchase an automated substitute management system. System features that the division should consider include: ability to report absences via telephone as well as the Web; ability to transfer data from the substitute system into the payroll system; ability to match substitute preferences to principal preferences; and the types of reports that are available. As part of the process to define requirements, the division may wish to contact other divisions using automated substitute management systems to identify "lessons learned" and receive information related to their experience with the system.

RECRUITING AND RETENTION DATA

Recommendation 3-4: Purchase the document management module of the division's online applicant system to efficiently collect and analyze recruiting and retention data.

The HR Department primarily collects recruiting information using a paper-based survey form. The job fair survey form located on the division's website collects recruiting information. This form asks individuals how they heard about SCPSD or the job fair. It provides several responses, including: newspaper, website, invitation, friend, college recruitment, or job fair. If the response is job fair, the form asks for the name of the job fair and the name of the recruiter.

Although the data is being collected, the HR Department does not electronically store the information from these surveys, making it difficult to analyze different recruiting strategies to determine which ones are effective and which ones need to be adjusted to improve the strategies. Data that can be used to measure retention issues through exit surveys are likewise captured

manually in a paper survey. The responses are not electronically stored or matched to recruiting data. No analysis is conducted that would assist the department in determining the longevity of new hires from other localities.

At the time of the efficiency review site-work in January 2005, the division's online application did not collect referral information. Since then, the division's online application section containing optional survey information has been modified to request the referral source. However, the response is not required. In addition, the referral source does not provide descriptive information that is captured on the form such as name of the job fair or the name of the recruiter.

Recruiting and retention information can assist the HR Department in highlighting effective recruiting and retention strategies. It allows the department to modify recruiting processes and focus resources on the strategies that provide the greatest return. It also provides data concerning the reasons that employees leave the division. These data can be used to develop strategies to reduce turnover.

The division's online applicant system has a document management module that would allow the division to efficiently merge recruiting data with retention data. The module would allow the division to flag employees who are leaving the division. A customized form could be developed within the module to collect the exit survey data currently being collected manually. Custom reports can be created to link the recruiting source to retention data and use it to assess the efficiency of its strategies.

The evaluation team recommends that the division revise its existing online application questionnaire to expand the referral source question to include the name of the job fair and the name of the recruiter. The division may also consider requiring a response to this question to ensure that the data are obtained. The evaluation team also recommends that HR staff work with the Technology staff to purchase and implement the document management module of the applicant system to collect and track its exit survey and retention data.

FLSA COMPLIANCE

Recommendation 3-5: Develop procedures and implement an automated timekeeping system to reduce the division's risk of non-compliance with FLSA.

FLSA sets minimum standards for calculating employee pay including overtime provisions for non-exempt employees. With some exceptions, FLSA requires that a non-exempt employee receive overtime pay at a premium rate of an hour and a half earned for each hour worked in excess of 40 hours per week. FLSA also allows an employee compensatory time off in lieu of overtime pay; however, both the employee and the employer must agree to the terms before the work is performed. Compensatory time off is earned at the same rate as overtime pay.

The division has several practices that may increase its risk of non-compliance with the FLSA. Classified employees are not required to use timesheets or to enter their time in a timekeeping system. Instead, all employees sign in on a payroll sheet daily using their initials. They do not sign in by time of arrival or departure, so their hours worked cannot be verified. The payroll sheets are sent to Payroll bi-monthly. Employees do not validate the time worked as being correct before receiving a paycheck.

In addition, the division does not use the payroll system to track overtime and compensatory hours. Individual departments maintain manual logs to record time earned and taken. The individual department log is the only place where classified employees' leave balance or compensatory time is recorded.

To reduce the risk of FLSA violations, many organizations require employees to document the actual time worked and leave taken, usually on a time sheet, time clock, or automated timekeeping system. This information is then reviewed and approved by a supervisor. The dual approval process gives employees an opportunity to correct errors before a paycheck is issued, and provides evidence of an agreement by both employer and employee that the time captured is correct. In addition, time data will allow the division to capture and calculate compensatory time and overtime accrual and use.

The evaluation team recommends that the division implement an automated timekeeping system for all classified employees to record hours worked. Employees and supervisors should be required to document that the hours worked have been verified. The division should also track compensatory leave and overtime accruals and use on the CIMS payroll module. This will provide consistency in how leave is accumulated and tracked and will reduce the risk of non-compliance with the FLSA.

RECRUITMENT AND HIRING PRACTICES

Recommendation 3-6: Expedite teacher hiring by offering contracts earlier in the process.

The teacher applicant pool in Virginia and other states has declined. This is especially true in hard to fill positions in special education, math and certain science subjects. To expand its applicant pool, SCPSD has used a variety of traditional recruiting strategies. It holds its own local job fair, participates in other job fairs, and recruits from states as far away as Pennsylvania, New York, and Illinois. The division also uses Internet advertisements.

In 2004–05, the HR Department is launching new recruitment strategies in an attempt to fill its vacancies. The division has scheduled the job fair earlier and will be issuing contracts the same day to critical needs applicants. The division is also using donated funds from its business partnerships to pay travel expenses for applicants to entice them to visit Spotsylvania. Data does not yet exist to evaluate the effectiveness of these new strategies.

While SCPSD is implementing a variety of new strategies, recruiters on recruiting trips are not allowed to extend letters of intent to "lock in" candidates early. According to the director of Human Resources, one of the reasons for this is that the division requires an online application that provide both licensure and reference information, before it will extend an offer.

To attract and "lock in" top applicants, existing SCPSD practices should be revised to allow recruiters to extend letters of intent on recruiting trips. The letter of intent could contain language that says the offer is contingent upon receipt of an online application and verification of licensing and references.

CLASSIFICATION APPROACHES

Recommendation 3-7: Update job classifications and consider adoption of alternative pay schedules.

In January 1999, the division completed a personnel and pay classification study that evaluated both instructional and non-instructional positions. The study, conducted by an outside firm, had a number of objectives including a comparison of SCPSD positions to similar positions in nine other Virginia school divisions of comparable size. The study also evaluated the internal equity of certified and support positions in the division and the currency of SCPSD job descriptions.

The study made a number of recommendations including updating job descriptions, changing the classification and salaries for specific positions, and simplifying the multiple existing salary structures. It also recommended that the division adopt one salary schedule for all positions and group similar positions in individual grades on the schedule. This would simplify the compensation development process, help ensure internal and external equity, and reduce the amount of resources spent on this activity. The study limited the market comparison to other school divisions and to Spotsylvania County positions and did not define specific markets for different kinds of positions. Although some changes were made to salaries as a result of the study, the full reclassification recommendations were not adopted.

SCPSD continues to maintain traditional salary step schedules for all its permanent employees. Currently the division has 38 separate schedules, including administrative assistants, paraeducators, bus drivers and bus driver assistants, information systems operator, information technology (3), food service (4), health and safety officer, health services (2), interpreters, maintenance (5), secretarial (4), teachers, supervisors, coordinators (2), principals/assistant principals (6), directors (2), assistant superintendents, and the superintendent. According to interviews, schedules are adjusted over time and the primary goal of the adjustments in these schedules is to ensure equity.

In performing the division's more recent internal compensation reviews, the division limited its reviews to other school divisions for both instructional and non-instructional staff. In its 2005–06 salary study to support the development of the division's budget, the study compared salaries to 14 other divisions. The study also included "area" comparisons to five other school divisions: Louisa, Fredericksburg, King George, Culpeper, and Orange. Markets for specific positions were not defined. For example, the market for an assistant superintendent position may be state-wide, while the market for clerical support may be limited to Spotsylvania County and adjacent counties.

Without definition of appropriate markets and periodic updates, the division may not be appropriately matching positions to the market in determining the compensation for actual duties performed. This affects the ability to attract and retain qualified staff. Maintaining 38 separate salary schedules increases the amount of staff time spent on salary activities. It also fosters the impression that some jobs are more important than others, especially in the clerical area where there are 13 job descriptions but only five separate salaries.

School divisions in Virginia and other states have limited the number of salary schedules that they maintain. Prince William County Public Schools Division maintains one salary schedule with 21 grades and 21 steps and a single 250 day contract length. Teachers are placed on grade 12 and receive additional increments for graduate study and degrees. Contracts for teachers and other staff who work other than 250 days are adjusted accordingly.

The evaluation team recommends that the division update the 1999 classification study to differentiate positions within job families and place them appropriately on the salary schedules.

The update should include private sector jobs in the market comparison where appropriate, especially for clerical and technical positions such as computer programmer/analyst. The division should carefully consider the benefits of going to a single salary structure and implement a process to reduce the number of separate salary schedules.

SUCCESSION MANAGEMENT

Recommendation 3-8: Develop a succession management plan to ensure continuity in key positions.

The division has an experienced management team, many of whom are eligible to retire within the next three to five years. The evaluation team analyzed the retirement eligibility of the three assistant superintendent positions and 13 director level positions. The analysis indicated that almost half of the positions (7 of 16) were eligible to retire within five years. Of the seven positions, two were assistant superintendents and five were director positions. Five of the seven positions were eligible for retirement within two years. Division administrators have expressed concern with continuity and leadership given the number of key administrators that are nearing eligibility for retirement.

Many organizations are dealing with a maturing workforce, particularly in its leadership team by engaging in succession planning. Succession planning is used to develop and maintain strong leadership and to ensure that the skills and competencies required to lead the organization are developed and maintained. Kelly Services HR Manager's article, *Succession Planning in Your Business*, identifies some of the more important elements of succession planning including:

- assessing the organizational readiness for succession planning;
- preparing personnel at all levels for succession planning;
- agreeing on relevant success factors and goals;
- identifying the organization's range of core competencies;
- designing specific measurement systems;
- determining the attitude, personality, learning ability, flexibility, and openness of people towards change; and
- preparing personal development plans for all senior executives.

To address its succession management issues, the evaluation team recommends that the division leadership form a committee to assess the core competencies and management skills needed and to develop approaches to obtain and preserve these skills over the long-term. One approach the division may wish to consider is to identify internal staff and groom them through training and assignments, similar to the division's existing campus administrator intern program, which provides teachers with the opportunity to work with current school administrators to become an administrator through on-the-job training. The program enables the division to develop campus administrators from within, while providing prospective administrators with an opportunity to understand the expectations of the job. Another approach might be to identify the desired qualifications and competencies and fill them externally.

CONSOLIDATED EMPLOYEE BENEFITS FUNCTION

Recommendation 3-9: Consolidate the benefits function into a single organization.

The division does not have a consolidated benefits function. Benefits tasks are divided between human resources, payroll, and an outside contractor. HR staff provides initial benefit information to new employees during employee orientation. They assist new employees in completing benefit elections for benefits such as health, dental, disability, cancer, and life insurance; retirement; and sick leave bank participation. These forms are provided to payroll staff to set up new employee payroll deductions in the payroll system.

The HR specialist counsels employees on division policy related to leave benefits and provides required forms for long-term leave requests such as family medical, workers' compensation, and disability. She communicates with payroll staff to coordinate insurance coverage and administration of the sick leave bank.

Payroll staff provides benefits support by setting up new employee benefits in the payroll system, as well as inputting annual benefit changes or revisions during the open enrollment period. In addition to their payroll processing duties, one payroll staff member coordinates retirement with the Virginia Retirement System and responds to employee questions regarding retirement. A second performs similar tasks to address employee questions and issues regarding health insurance.

Since October 2004, the division has contracted with a third-party contractor to provide administrative services related to continuation of health benefits coverage regulated by the Consolidated Omnibus Budget Reconciliation Act (COBRA) and retiree services. The third-party contractor performs tasks such as providing eligible employees with appropriate notices, accounting for premium payments, and providing collection services and reports. The division contracted with the outside provider due to internal control concerns raised by the external auditor. According to the assistant superintendent of Human Resources, the division is currently spending \$30,000 in fees for these services annually.

With separate departments handling the coordination of benefits, the division may be incurring unnecessary costs. A consolidated benefits function can improve the efficiency of HR and payroll staffs, enhance service to employees by providing a single reference point for access to benefits information, and potentially reduce administrative costs by streamlining processes and eliminating duplication. For example, under the current benefits organization structure, if an employee has a long-term illness that would allow for disability retirement, it would require the involvement of the HR specialist to interpret policies and determine eligibility, and both payroll positions to address insurance and retirement issues. With a consolidated function, employees could go to one department for all services.

To improve the coordination of its benefits function, the evaluation team recommends that the division form a committee to evaluate the benefits activities performed by HR, Payroll, and the third-party contractor. At a minimum, the committee would consist of representatives from HR and Finance. The division may also wish to include employee representatives from administrative, teaching, and classified staff to provide a customer perspective.

The committee would be assigned the responsibility of developing a proposal to consolidate benefit functions based on an evaluation of the efficiency and cost effectiveness of the current structure. In developing the proposal, the committee would consider the following goals of a

consolidated benefits function: 1) improved efficiency for both HR and Payroll staff; 2) improved service to employees; and 3) consistent and accurate interpretation and application of benefits-related policies, ensuring compliance, and possibly saving the division money.

Based on the committee's evaluation, the proposal would recommend the department (HR or Finance) that should be solely responsible for benefits and identify the resources needed to support a consolidated benefit function. It would also include an evaluation of the cost effectiveness of the current contract with the third-party contractor and recommend whether the contract should be continued.

***FACILITIES USE
AND
MANAGEMENT***

Chapter 4

FACILITIES USE AND MANAGEMENT

BACKGROUND

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 provide for a safe and healthy environment for students, teachers, and staff.

The Spotsylvania County Public Schools Division (SCPSD) owns and maintains 32 schools and four administrative sites with 3.5 million square feet of permanent building space, comprised of:

- five high schools;
- seven middle schools;
- sixteen elementary schools;
- three alternative schools;
- one career and technical school; and
- four administrative sites, including the administration complex, maintenance operations, transportation, and the technology and training center.

In the last 15 years, the division has experienced extraordinary growth, both in terms of student enrollment and facilities—over 59 percent (2.1 million square feet) of the division’s facilities have been built since 1990. In the 1990s, the division built five new elementary schools, two new middle schools, two new high schools, and school additions at eight sites. Since 2000, the division has built school additions at fourteen sites and opened the following facilities:

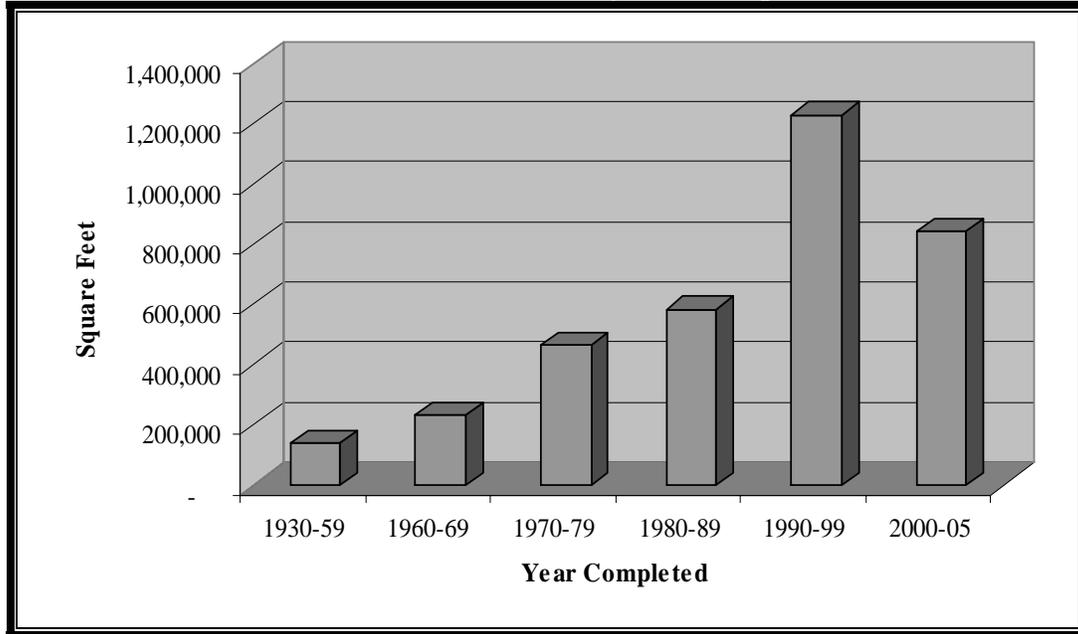
- Parkside Elementary School, opened 2001;
- Harrison Road Elementary School, opened 2001;
- Freedom Middle School, opened 2003;
- Riverbend High School, opened 2004; and
- The River Run Administrative Service Center opened 2004.

In addition, the following schools are planned to open by 2010:

- Elementary School #17, Fall 2007;
- John J. Wright Middle School Replacement, Fall 2006;
- Elementary School #18, Fall 2008;
- Elementary School #19, Fall 2009;
- High School #6, Fall 2009; and
- Middle School #8, Fall 2010.

The average age of the division’s facilities is 15.8 years, making the average building in the division relatively new by national or state-wide comparisons. **Exhibit 4-1** depicts the facilities area shown by year of project completion.

**Exhibit 4-1
Area of Facilities – Shown by Year Completed**



Source: SCPSD Data, January 2005.

Facilities funds categories in SCPSD’s 2004-05 annual budget include **Facilities/School Construction** (construction of new schools, building additions, and renovations of existing buildings), and **Maintenance** (all building operations, including custodial). For 2004-05, **Facilities/School Construction** funds are budgeted at \$34,790,834; **Maintenance** funds are budgeted at \$16,194,614. Construction fund projects include completion of High School #5 (Riverbend), technology upgrades at seven schools, completion of additions at Brock Road and Smith Station Elementary Schools, progress on additions at Courthouse Road and Riverview Elementary Schools, and progress on the replacement of John J. Wright Middle School. Major categories of **Maintenance** costs are shown in **Exhibit 4-2**:

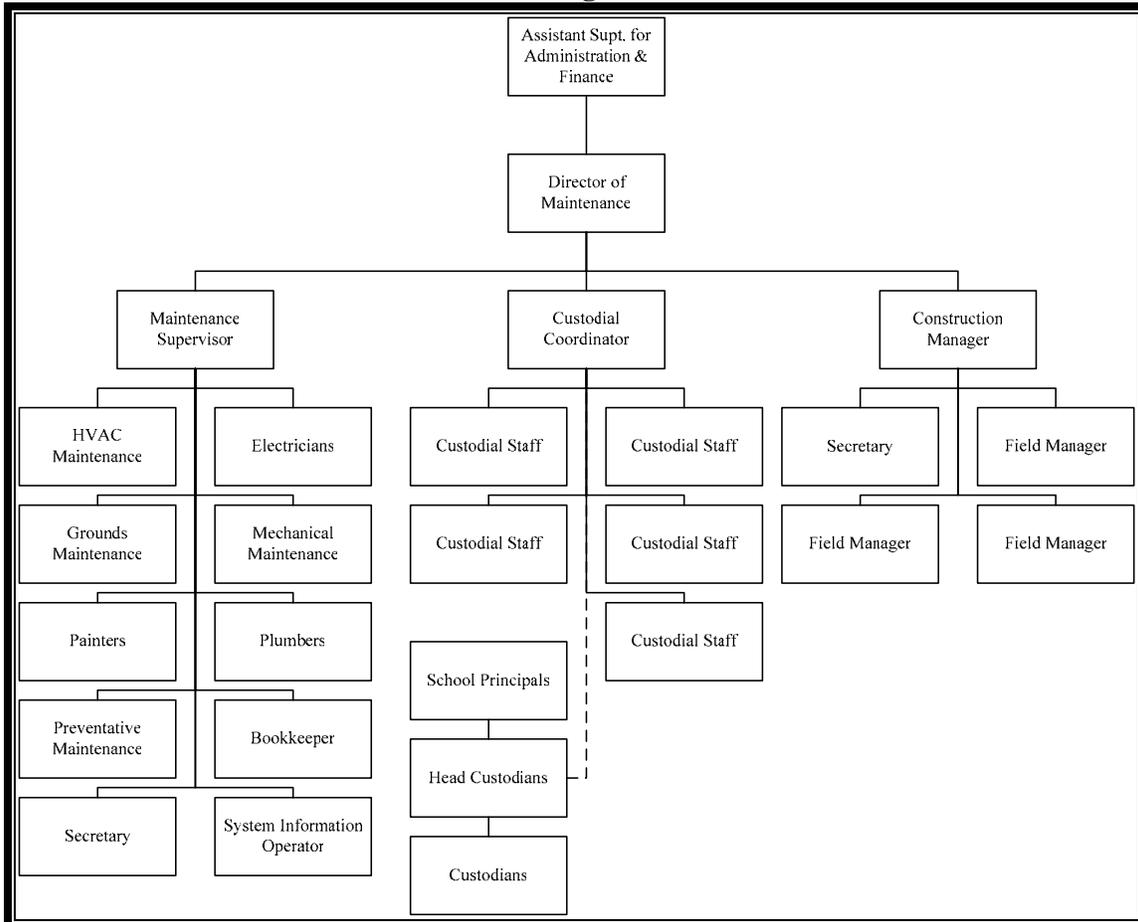
**Exhibit 4-2
Operations and Maintenance Costs – Major Categories
2004-05**

Cost Category	Cost	Cost per Student
Custodial Personnel and Supplies	\$ 5,316,140	\$231.66
Maintenance Personnel and Supplies	4,103,209	178.80
Utilities	5,559,699	242.27
All Other Costs	1,215,566	52.97
Total	\$ 16,194,614	\$705.70

Source: SCPSD 2004-05 Budget.

Operations managed by the facilities group include construction management and planning (Facilities/School Construction) and building operations and maintenance (Maintenance Department). All facilities operations fall under the supervision of the director of Maintenance, who in turn reports to the assistant superintendent for Administration and Finance. The organization of the facilities group is shown in **Exhibit 4-3**:

**Exhibit 4-3
Facilities Staff Organization Chart**



Source: Spotsylvania County Public Schools Division, January 2005.

Currently, the division has a total facilities capacity of 25,556 students (including modular classrooms), and a permanent facilities capacity of 24,287. With current enrollment of 22,948 students (as of September 30, 2004), the division utilizes 94.5 percent of its permanent capacity and 89.8 percent of its total capacity. Approximately 5.0 percent of the division’s total capacity is housed in modular classrooms.

A. ACHIEVEMENTS

- Overall, the division is efficient both in terms of facilities personnel per student and total operations and maintenance cost per student. In the most recent state-wide data available for comparison, the division ranked second lowest out of nine among its peer group in facilities personnel per student and total operations and cost per student.

B. RECOMMENDATIONS

Recommendation 4-1 (p. 4-11): Review cost of new facilities construction compared to peers and state averages. SCPSD builds schools to high standards relative to other divisions throughout the state of Virginia. As a result of these higher standards, on average, the last six schools built or contracted by the division were 23 percent above state average construction costs (based on total costs per student station). Future schools are also budgeted at 28 percent above average. The evaluation team recommends that when new schools are presented to the School Board, they compare the proposed school to other divisions in terms of cost per student, square feet per student, and cost per square foot. The School Board should review its policies for programmatic design requirements (see Recommendation 4-2); revise its capital project reporting and evaluation practices; and seek to determine if savings are achievable relative to new school construction.

Recommendation 4-2 (p. 4-16): Consider the development of detailed facilities educational specifications. Currently, the division does not use detailed educational design specifications as a basis for new school design. For all of its most recent projects, the division has used a modification of an existing prototype as a basis for design of its new school facilities. The division has a current general program for each school type which quantifies the number of classrooms, student capacity, and overall programmatic requirements. However, this program does not provide detailed data that can be translated directly into design parameters. When new schools are presented for consideration to the School Board, no data is provided that would allow the School Board to compare the proposed program to facilities standards on a detailed basis. Relatively high construction costs are likely the result of the division building to a higher standard than other divisions.

Recommendation 4-3 (p. 4-17): Consider adding a dedicated staff position responsible for planning. In order to improve the efficiency of facilities use and construction, the division may wish to consider adding a dedicated position responsible for planning. Currently in SCPSD, there is no single position charged with accountability for all facilities planning—projecting student enrollment, evaluation of current facilities utilization, or determination of requirements for future facility needs—although staff generally responsible for these functions reports to the assistant superintendent for Administration and Finance.

Recommendation 4-4 (p. 4-19): Consider outsourcing custodial operations. Custodial staff in the division meets or exceeds national productivity standards for area cleaned per custodian. However, the cost per square foot for custodial operations in the division is very high, primarily due to salary and benefit levels. The division spends over \$34,000 per custodian, including salary, benefits, overtime, and other personnel costs. The total cost per square foot for custodial operations in the division is \$1.52. By comparison, Stafford County outsources custodial operations at high schools for a total cost of \$0.78 per square foot. If Spotsylvania could achieve the same efficiency with outsourced operations, savings could range from \$518,572 (high schools and administrative areas only) to \$1,591,076 per year (all facilities). The division has made the

decision to begin a pilot program to outsource custodial operations at two high schools beginning in 2005-06. The evaluation team recommends that if the pilot program is successful, the division should consider full implementation of custodial outsourcing. In considering the option to outsource custodial operations, the division should continue to assess quality of service, safety and security, and operational flexibility as part of the evaluation process.

Recommendation 4-5 (p. 4-20): Design and implement a division-wide energy management policy. Currently, the division does not have a comprehensive energy policy. The division's energy cost at \$1.46 per square foot and 100,200 Btu per square foot is high, possibly by as much as 30 to 40 percent. Initial calculations indicate achievable savings of \$514,000, based on behavioral changes alone. With long-range planning and the implementation of capital improvements, the division may be able to achieve savings of up to \$2 million per year—a significant portion of which would initially be used for lease or debt service payments associated with related capital expenditures. The division has recognized the need for energy conservation measures, and has made the decision to include a recommendation for an energy management staff position to the 2005-06 annual budget. In addition, the division has engaged a contractor to look at the potential for savings at two sites and perform a more in-depth analysis of seven schools in the near future. High energy costs within SCPSD are particularly noteworthy given the relative age of the division's facilities and the relative cost of new construction compared to other divisions.

Recommendation 4-6 (p. 4-25): Develop a division-wide facility assessment and integrate the results of the assessment into the division's long-range facilities plan. The division does not have a comprehensive facilities assessment. The adequacy of current capital improvement expenditures is difficult to assess without a comprehensive list of long-term requirements.

Recommendation 4-7 (p. 4-27): Review the division's historical and planned annual spending on capital renewal items. Once the division has completed its long-range comprehensive assessment, the evaluation team recommends that the division review its historical and planned spending on capital renewal and capital improvement items and develop a budget strategy that will provide for high-quality sustainable facilities in the long-term.

Recommendation 4-8 (p. 4-28): Review Operations and Maintenance staffing for possible areas of understaffing. The division may be understaffed with respect to certain trades or general maintenance staff, based on work-order analysis and when compared to peer standards. The evaluation team recommends that the division set standards and policies for work-order fulfillment by trade, monitor this data for trends, compare the trends to appropriate standards, and add staff as needed.

C. FISCAL IMPACT OF RECOMMENDATIONS

This chapter contains recommendations to improve the efficiency of SCPSD facilities use and management operations. Once fully implemented, these recommendations will result in savings of \$2.5 million each year, representing 1.5 percent of the division's annual operating budget. The major savings opportunities are presented in **Exhibit 4-4**. Details of how the financial impact was calculated can be found in Appendix B.

Exhibit 4-4
Summary of SCPSD Savings Opportunities

Functional Area	Recommendation	Annual Savings
Facilities Use and Management	Consider outsourcing custodial services (or increase productivity of in-house staff) at all schools and administrative sites. ¹	\$1,757,000
	Implement energy conservation measures. ²	567,000
	Implement energy management capital improvements. ³	217,000
Total Annual Savings		\$2,541,000
Percent of Annual Operating Budget		1.5%

Source: Gibson Consulting Group, Inc.

¹Estimated savings at full implementation, 2009-10 data; represents savings of \$1,591,076 escalated 2.0 percent per year, rounded to the nearest \$1,000.

²Estimated savings at full implementation, 2009-10 data; represents savings of \$514,000 escalated 2.0 percent per year, rounded to the nearest \$1,000.

³Estimated savings, after payment of lease or finance costs, in 2009-10 at full implementation (see Appendix B for detailed calculations).

In addition to the annual savings indicated in the above exhibit, the division may achieve savings through the revision of its policies and procedures for new construction. Any such savings would depend on the division's willingness to consider the adjustment of its facilities construction standards and/or practices. On average, the last six schools built or contracted by the division were 23 percent above state average construction costs. Future schools are budgeted at 28 percent above average. If the division were to build the new schools in its current capital improvement plan at the state-wide average costs per student station rather than at currently budgeted division costs, savings would be \$31 million over the next five years.

The chapter also includes recommended investments by SCPSD intended to achieve best practices or to generate subsequent savings. If savings cannot support these investments in the short-term, then the division should request additional investment funds from the county or delay the implementation if the investment does not yield future savings.

The recommended investments are listed below:

1. Develop facilities educational specifications. One-time investment: \$100,000.
2. Add dedicated planning staff position. Annual investment: \$90,612.

3. Implement capital improvements to achieve energy efficiency. Requires investment over an extended period. Specific costs will require detailed planning and design.
4. Update facilities assessment and long-range facilities plan. One-time investment: \$268,000.
5. Increase maintenance staff to levels commensurate with appropriate standards. Annual investment: \$175,686.

If all recommendations are implemented, the net annual savings to SCPSD is \$2.3 million or 1.3 percent of the division's operating budget. The net annual costs do not include the one-time investments of \$368,000.

D. DETAILED ACHIEVEMENTS**EFFICIENT FACILITIES STAFFING AND SPENDING**

Overall, the division is efficient both in terms of facilities personnel per student and total operations and maintenance cost per student (with exceptions for energy and custodial costs described in Recommendations 4-4 and 4-5 respectively). In the most recent state-wide data available, the division ranked second in both categories (next to lowest staffing and cost per student) among its peer group. A detailed analysis of custodial staffing is described in Recommendation 4-4, maintenance staffing is described in Recommendation 4-8, and total facilities staffing comparisons for 2001-02 are shown in **Exhibit 4-5** below.

Exhibit 4-5
Facilities Operations and Maintenance Staff – Peer Group Comparison
2001-02

Division	2001-02 ADM	Admin.	Technical, Clerical	Other Profes- sional	Trades, Labor, Service	Total	Total per 1,000 ADM
Stafford County	22,346	12.5	23.8	0	122.4	158.7	7.1
Spotsylvania County	20,117	1.0	3.5	2.0	175.0	181.5	9.0
Prince William Co.	57,345	14.3	46.0	0	518.1	578.4	10.1
Henrico County	42,368	3.0	8.0	13.4	437.5	461.9	10.9
Chesterfield County	52,543	9.8	15.8	0	550.1	575.7	11.0
Fairfax County	161,623	34.0	114.9	18.7	1,890.0	2,057.6	12.7
Virginia Beach City	75,090	5.0	22.7	17.0	1,097.7	1,142.4	15.2
Chesapeake City	38,271	2.0	15.2	7.8	580.2	605.2	15.8
Arlington County	18,410	13.0	8.0	4.0	285.0	310.0	16.8
Spotsylvania County Rank							2
Peer Average	58,500						12.5

Source: State DOE website, Superintendents Annual Reports.

Notes: ADM = Average Daily Membership.

2002-03, 2003-04, and 2004-05 data was not available for comparison.

Fairfax City data is included in Fairfax County.

Apparent discrepancies between divisions in individual categories (such as Administrative positions) may be attributable to differences in reporting methodology. Therefore, the best comparison is most likely a comparison of total staff rather than a comparison by category.

Total positions in Spotsylvania County 2004-05 Budget were 213.5, total enrollment was 22,948, and total per 1,000 students is 9.3. 2004-05 data includes three FTE's assigned to Spotsylvania County maintenance; excluding these positions, the total per 1,000 students is 9.2.

Total staffing in facilities for the Spotsylvania County Public School Division is comprised of custodial staff, Maintenance Operations, and Planning and Construction personnel. While comparative staffing analyses provide a benchmark indicating the staffing efficiency of a division, this benchmark should be used only in conjunction with other data. Using staffing statistics alone can be misleading because divisions may not build, maintain, and operate buildings in the same way, which could cause a wide variation in terms of total quantity of space, amount of on-going new construction and renovation projects, number of buildings and sites, geographic area and density of the division, age and condition of buildings, and efficiency of building systems. In addition, some divisions tend to outsource more services than others, thus reducing staff. When considering efficiency of operations, the total cost of operations should also

be taken into account. **Exhibit 4-6** presents facilities operations and maintenance expenditures for SCPSD as compared to its peers from 1996-97 through 2002-03.

Exhibit 4-6
Facilities Operations and Maintenance Expenditures – Peer Group Comparison
Cost per Student
1996-97 through 2002-03

Division	2002-03 ADM	2002-03	2001-02	2000-01	1999-2000	1998-99	1997-98	1996-97
Stafford County	23,655	\$581.12	\$594.73	\$611.05	\$575.36	\$559.08	\$496.88	\$496.93
Spotsylvania County	21,216	617.04	625.72	613.98	563.22	541.52	493.48	527.15
Henrico County	43,230	701.41	692.64	683.75	670.12	636.51	638.55	592.80
Chesapeake City	39,108	774.55	714.82	704.29	675.37	628.77	617.70	589.30
Chesterfield County	53,550	797.35	751.33	741.26	744.90	633.15	551.56	572.44
Prince William County	58,973	811.37	781.08	786.00	747.61	729.11	706.83	692.16
Virginia Beach City	75,161	815.66	781.62	712.39	641.78	555.78	516.08	491.12
Fairfax County	158,177	855.90	803.13	811.61	790.42	797.39	795.00	811.68
Arlington County	18,238	1,225.63	1,186.05	1,114.35	1,130.35	1,044.48	1,049.69	1,037.29
Spotsylvania Co. Rank		2	2	2	1	1	1	3
Peer Median	48,390	\$804.36	\$766.20	\$726.82	\$710.14	\$634.83	\$628.12	\$591.05
Peer Average	58,762	\$820.37	\$788.18	\$770.59	\$746.99	\$698.03	\$671.54	\$660.47

Source: State website, Superintendents Annual Reports 1996-2003.

Note: ADM = Average Daily Membership.

2003-04 and 2004-05 data was not available for comparison.

The data shown in **Exhibit 4-6** includes the cost of operating and maintaining schools and other division buildings, which includes items such as utility bills, custodial costs, and general maintenance and capital renewal. It does not include the cost of new construction, major renovation, or large capital improvement projects. While SCPSD has the advantage of a relatively new building inventory, this advantage does not solely explain the division's cost efficiency. For example, the largest single facilities cost category for the division is utilities, which accounted for \$205.51 per student in 2002-03 (and have risen to \$242.20 per student in 2004-05). As described later in this chapter, the division has high energy use and cost. The conclusion can therefore be made that the division is cost-effective in other areas of facilities operations and maintenance. As described later, the division should consider the development of a long-range facilities plan in order to determine whether maintenance and capital renewal items are funded at an annual level that will continue to provide sustainable and viable facilities (for further detail, refer to Recommendation 4-7). In general, based on limited site visits, the division's schools appear to be appropriately maintained.

SCPSD's total operations and maintenance costs have risen to \$705.49 per student in 2004-05 (SCPSD approved budget). The 2003-04 and 2004-05 Superintendents Annual Report data were not available for comparison. However, SCPSD's cost per pupil will still be lower in 2004-05 than most of its peer group's 2002-03 costs, with the exception of Stafford and Henrico Counties. It should be noted, however, that in 2004-05 Stafford County's costs have risen to \$683.74 per student (*Stafford County Public Schools Efficiency Review*). SCPSD's 2004-05 maintenance costs

include three full-time equivalent staff positions assigned to maintenance for the County of Spotsylvania. While the costs of these personnel positions have not been specifically identified by SCPSD, the evaluation team estimates that the total personnel cost accounts for less than one percent of SCPSD’s maintenance budget.

The above comparisons do not include the “Facilities” category of funds shown in the Superintendents Annual Reports (generally paid from operating funds) or Construction Funds paid from the issuance of debt. These categories are comprised of the costs of acquiring land and buildings, remodeling and constructing buildings, and improving sites. Because these costs are unique to the requirements of a division, based on growth of student population and the age and condition of existing buildings, a comparison of these costs between divisions is not statistically meaningful.

When SCPSD’s comparing costs to other divisions, it should also be noted that the school division performs limited maintenance services for the County of Spotsylvania. For example, the school division is responsible for HVAC preventative maintenance in the county. However, the school division does not track the costs of county maintenance separately in its operating budget.

The division outsources specialty services where appropriate; following is a list of services that are outsourced or partially outsourced by SCPSD:

- Boiler and Chiller Inspection and Repair
- Chemical Treatment for Boilers
- Elevator Maintenance
- Fire Alarm and Clock System Maintenance
- Generator Repairs and Maintenance
- Grease and Septic Cleanout
- Gym Floor Refinishing
- HVAC Monitoring Equipment Maintenance
- Roofing Evaluation and Repair
- Communications System Repair
- Trash Removal
- Major Repairs and Capital Renewal

As shown in **Exhibit 4-2** on page 4-2, the division’s 2004-05 budget for maintenance items (including capital renewal) was \$4,103,209. Of this amount, \$555,519, or 13.5 percent was comprised of purchased services and maintenance contracts (outsourcing).

E. DETAILED FINDINGS AND RECOMMENDATIONS

FACILITIES PLANNING AND CONSTRUCTION

Recommendation 4-1: Review cost of new facilities construction compared to peers and state averages.

The historical cost of new construction for the division is high relative to other divisions in the state of Virginia. **Exhibit 4-7** presents facilities construction costs for SCPSD new schools from 1997-98 through 2003-04, compared to projects of similar types throughout the state.

**Exhibit 4-7
Historical Cost of New Construction
1996-97 through 2003-04**

School Name/Parameter	Ni River	Harrison Road	Parkside	Freedom	Riverbend	JJ Wright
School Type	Middle	Elementary	Elementary	Middle	High	Middle
Year Contracted	1997-98	1999-00	1999-00	2001-02	2002-03	2003-04
Total Construction Cost (000s)	\$13,500	\$9,300	\$10,062	\$16,900	\$41,037	\$22,215
Student Capacity	800	710	710	900	1,800	900
Area (SF)	128,800	79,129	79,129	126,126	318,858	131,800
SCPSD SF/Student	161.0	111.4	111.4	140.1	177.1	146.4
SCPSD Total Cost/SF	\$104.81	\$117.53	\$127.16	\$133.99	\$128.70	\$168.55
SCPSD Total Cost/Student	\$16,875	\$13,099	\$14,172	\$18,778	\$22,798	\$24,683
Average State SF/Student	131.0	102.0	102.0	135.0	149.7	171.6
Average State Total Cost/SF	\$102.17	\$107.51	\$107.51	\$112.22	\$124.78	\$125.66
Avg. State Total Cost/Student	\$13,356	\$10,916	\$10,916	\$15,147	\$18,682	\$21,569
Number of Projects State-wide	3	14	14	8	11	5
SCPSD State Rank Cost/SF	N/A	N/A	N/A	8	6	5
SCPSD State Rank Cost/Student	N/A	N/A	N/A	8	11	4
SCPSD Relative Cost/ Student	126%	120%	130%	124%	122%	114%
Average Relative Cost/Student						123%
Savings if Construction Costs Equaled State Average (000s)¹	\$2,815	\$1,550	\$2,312	\$3,268	\$7,409	\$2,803
Total SCPSD Cost – State Average (000s)						\$20,156

Source: State Department of Education Facilities Data, SCPSD Facilities Department.

Notes: State data for Riverbend HS is combined data for 2001-04. Since there were only two high schools reported in 2002-03, annual data does not provide a meaningful statistical comparison.

State reported data for 2003-04 middle schools does not include JJ Wright MS replacement.

¹Calculated based on total cost per student. For example Ni River MS potential savings = SCPSD cost per student \$16,875 – State Average Cost per Student \$13,356 = \$3,519 potential savings per student x 800 students = \$2,815,200 (rounded to \$2,815,000 and shown in thousands).

As shown in **Exhibit 4-7**, two of the last three schools built by the division (Freedom Middle School and Riverbend High School) were the most expensive schools in the state the year they

were built (measured in cost per student station). The third school (John J. Wright Replacement Middle School, currently in construction) was the second most expensive in the state, out of five schools. When comparing middle school costs for John J. Wright in 2003-2004, it should be noted the cost of the school was exceeded only by Kenmore Middle School in Arlington County, which had a contracted cost of \$31,830 per student (53 percent higher than the highest cost previously reported in the state). The current cost per student of John J. Wright exceeded the next most expensive 2003-04 middle school (other than Kenmore) in the state by 19 percent. On average, the last six schools built or contracted by the division were 23 percent above state average construction costs, measured in cost per student.

The overall data did not indicate a consistent trend across all school types as to why SCPSD's historical costs have been significantly higher than state-wide averages. High total costs per student can result from a number of factors:

- building to a higher construction standard (cost per square foot);
- building to higher educational specifications (square feet per student);
- high site-development costs relative to peers;
- non-competitive bidding within the market area; or
- high labor market or materials costs.

As an example, Freedom Middle School was built at 140.1 square feet per student, or 4 percent above the state average, indicating that the school was slightly inefficient (comparatively) in terms of square feet per student. This is sometimes the result of a small relative number of students in the school; however, at 900 students, Freedom was the largest middle school in the state in 2001-02. At \$133.99 per square foot (total construction costs), the school was 19 percent above the state average, indicating higher construction standards, high site development costs, or non-competitive bidding in the marketplace. The building-only cost (excluding site development) was \$110.21 per square foot—compared to a state average of \$96.63; Freedom was 14 percent above the state average for building costs alone, again excluding site development—so site development issues did not solely account for higher costs. Site development costs, at \$3,333 per student (Freedom) were 58 percent above the state average of \$2,105 per student, and therefore had a significant impact on total construction costs. The division received bids from five pre-qualified contractors, indicating a relatively competitive bidding environment. It appears likely, therefore, that a combination of factors led the cost of the school to be 24 percent above the state average in terms of total cost per student. The overall indication is that these factors are primarily a result of higher design standards rather than an issue with contracting or implementation.

Freedom Middle School was patterned after Pocahontas Middle School in Henrico County. Pocahontas was built at a cost of \$100.00 per square foot in 1998 (building-only costs). Freedom was built three years later at a building-only cost per square foot of \$110.21, or 10.2 percent higher, representing a compounded annual increase of 3.3 percent. However, when the Pocahontas plan was adapted to meet SCPSD's programmatic building requirements, the size of the building was increased from 112,000 SF (124 square feet per student) to 126,126 square feet (140 square feet per student). In adapting the Pocahontas plan, SCPSD added two health classrooms; four additional classrooms; a strings room; an auxiliary gym; two storage rooms (one for Spotsylvania County parks and recreation); and increased the size of the band room, media center, and mechanical room. While these additions would theoretically increase the capacity of the school, the division continues to calculate capacity at 900 students (see also Recommendation 4-3). Division personnel believe that Freedom Middle School is efficiently designed and utilizes its maximum capacity. While the building-only cost *per square foot* increased by only 10.2 percent from Pocahontas to Freedom, the *total* building-only costs increased by 24.1 percent as a

result of design changes. Total construction costs were further increased by additional SCPSD site requirements.

An analysis of construction costs at Riverbend High School indicates a similar trend in total construction costs. In the case of Riverbend, however, the primary driver for high costs appears to be the building program. At 177 square feet per student, Riverbend was 18.3 percent above the state average (and represented the highest square feet per student) for high schools reported from 2001 through 2004. Total construction costs were \$128.70 per square foot, or 3.1 percent above the state average of \$124.78. Building-only construction costs were \$112.12, or 8.5 percent above the state average of \$103.32 per square foot. Site development costs were \$2,937 per student which was 8.6 percent below the state average of \$3,214 per student. Other high schools in the state have been built at a higher cost per square foot—by comparison, Stafford County's High School 2005 (built under a public-private partnership, and therefore reported under a separate category in the state-reported construction costs), had building-only costs per square foot of \$118.57, compared to \$112.12 at Riverbend. Stafford County shares the same geographic market area as Spotsylvania. However, High School 2005 in Stafford was built at only 132 square feet per student. Overall, on a building-only cost basis (excluding site development), Riverbend High School was therefore 27 percent more expensive than High School 2005 (calculated in terms of cost per student). Based on a student population of 1,800 students, this represents additional building-only costs of \$7.6 million. The design of Riverbend High School was based on Massaponax High School, which was a repeat of Spotsylvania High School. The same prototype is planned for High School #6.

In 2002-03, there were two high school projects reported to the state: Riverbend High School and Harrisonburg High School (Harrisonburg City Public Schools). Based on the state-reported data, Harrisonburg High School was slightly more expensive (\$21,744 per student) than Riverbend (\$21,219 per student, or 2.4 percent lower). Building-only costs were reported at \$17,192 per student for Harrisonburg High School and \$18,485 (7.5 percent higher) for Riverbend. Harrisonburg had significantly higher site development costs (\$7.7 million) than Riverbend (\$5.3 million). The Riverbend data shown in **Exhibit 4-7** is calculated based on a student capacity of 1,800 students, while the Riverbend data reported by the state was based on a capacity of 1,934 students—all documents provided by the division as part of the efficiency review indicated a capacity of 1,800 students. While data showing cost per square foot would remain unchanged, data calculated on cost per student would vary slightly from the data shown in **Exhibit 4-7** if the state reported data were used in the analysis. In fact, based on data reported for eleven high schools from 2001 through 2004, Riverbend would move from being the most expensive school in terms of total cost per student, to being the next most expensive. Regardless of the data used, Riverbend and Harrisonburg High Schools remain the two most expensive schools built, measured in total cost per student, with Riverbend being the most expensive school reported in terms of building-only cost per student. Total costs per square foot were \$135.04 for Harrisonburg and \$128.70 for Riverbend. Building-only costs were \$106.77 for Harrisonburg and \$112.12 for Riverbend.

The design for JJ Wright Middle School Replacement is based on a modification of the design for Freedom Middle School; however, the area of the building has increased from 126,126 square feet to 131,800 square feet (4.5 percent), without a corresponding increase in student capacity. The state average data for 2003-04 shown in **Exhibit 4-7** includes only four schools, including Kenmore Middle School in Arlington, which had the effect of dramatically increasing state reported costs and area analyses. While the data is included, the validity of comparisons should be evaluated carefully. For example, the state average area per student was 172 square feet; the average total cost per square foot was \$125.66, and the total cost per student was \$21,569 with

Kenmore data included. Without Kenmore, the averages would be 154 square feet per student, \$118.12 per square foot total costs, and \$18,247 per student total cost. By comparison, JJ Wright Middle School totaled 146 square feet per student; total costs were \$168.55 per square foot; and the total cost per student was \$24,683.

In general, division personnel indicated that higher historical costs may be attributable to building larger than standard core areas (auditoriums, gymnasiums, commons areas, stadiums, and field houses); including technology in the construction contract; additional site amenities (play fields and baseball fields for use by county parks and recreation); construction using higher quality materials; and higher standards for the prequalification of general contractors. While these factors would increase costs, the division has not specifically quantified the implication of such an approach to design and construction. The overall indication is that historically high relative costs are most likely a result of higher design standards rather than an issue with contracting or implementation.

Exhibit 4-8 shows the budgeted costs of the next five planned SCPSD schools, compared to projected state average construction costs.

**Exhibit 4-8
Projected Cost of New Construction**

School Name/Parameter	ES #17	ES #18	HS #6	ES #19	MS #8
School Type	Elementary	Elementary	High	Elementary	Middle
Year Contracted	2005-06	2006-07	2006-07	2007-08	2007-08
Total Construction Cost (000s)	\$15,060	\$17,850	\$57,655	\$18,596	\$25,955
Student Capacity	894	894	1,800	894	900
Area (SF)	94,600	94,600	330,000	94,600	128,000
SCPSD SF/Student	105.8	105.8	183.3	105.8	142.2
SCPSD Total Cost/SF	\$159.20	\$188.69	\$174.71	\$196.57	\$202.77
SCPSD Total Cost/Student	\$16,846	\$19,966	\$32,031	\$20,800	\$28,839
Average State SF/Student	105.0	105.0	149.2	105.0	146.5
Average State Total Cost/SF	\$137.50	\$144.51	\$153.14	\$151.88	\$153.33
Average State Total Cost/Student	\$14,209	\$15,176	\$23,426	\$16,208	\$23,459
SCPSD Relative Cost/ Student	119%	132%	137%	128%	123%
Average Relative Cost/Student					128%
Savings if Construction Costs Equaled State Average (000s)¹	\$2,357	\$4,283	\$15,488	\$4,106	\$4,842
Total SCPSD Cost – State Average (000s)					\$31,076

Source: SCPSD Capital Improvement Plan, State Department of Education Data, Gibson Consulting Group, Inc.

Note: ¹Calculated based on total cost per student. For example ES #17 potential savings = SCPSD cost per student \$16,846 – State Average Cost per Student \$14,209 = \$2,637 potential savings per student x 894 students = \$2,357,478 (rounded to \$2,357,000 and shown in thousands).

As shown in Exhibit 4-8, SCPSD has budgeted the next five schools at 28 percent above the projected state average cost per student station, slightly higher than the division’s historical average relative to state-wide costs. In the exhibit, the evaluation team estimated the future state-

wide costs, based on historical averages. From 1997-98 to 2003-04, state-wide costs per student station have increased by an average annual rate of 6.8 percent across all school types. Projected state costs were calculated by using 2003-04 average costs by school type (with the exception of middle schools which used 2002-03 data as described below) escalated 6.8 percent per year. During the same historical time period, total annual inflation in the Consumer Price Index has been significantly lower than 6.8 percent, indicating that construction cost growth at this rate may not be sustainable. Nevertheless, the methodology should provide a conservative estimate of future state-wide costs. State-wide area per student has been held constant at the historical five-year average by school type.

The projected costs in **Exhibit 4-8** are subject to several qualifications and clarifications. SCPSD costs are budgeted figures only and are subject to future revisions. Division personnel have included contingencies; anticipated increased costs in construction due to increases in the cost of fuel, steel, and concrete; and believe it is possible that these budgets may be high. It should be noted however, that the completion date for Elementary School #17 has recently been moved from 2006 to 2007 (due to a delay in site acquisition) without a corresponding increase in the budget. The division is holding the budget at current levels pending additional budget data from the architect. State-wide costs are also subject to future revision and are sensitive to the assumptions used. For example, middle school projected costs are based on 2002-03 data, escalated to the year of construction. The evaluation team did not use 2003-04 data as a basis for escalation because there were only four schools reported in 2003-04 and the data was heavily influenced by a single anomaly (Kenmore Middle School in Arlington County, as described above).

The evaluation team recommends that when new schools are presented to the School Board, they compare the proposed school to other divisions in terms of cost per student, square feet per student, and cost per square foot—currently, this data is not used as a basis for evaluation. The School Board should review its policies for programmatic design requirements (see Recommendation 4-2), including its physical education and sports requirements; fine arts, exploratory programs and special areas; academic and educational spaces; and other core areas such as auditoriums and ancillary spaces. Division personnel have indicated that the School Board has made a conscious decision to build schools to a higher standard; however, it is not clear from the documentation that the School Board has had the benefit of comparative data that would specifically quantify the economic impact of these decisions.

The division's budgeting software (AS400) tracks budgets by year, but does not provide for the tracking of capital budgets—which span multiple years—by project. Division personnel prepare project summaries in a spreadsheet, on an as-needed basis, in order to track total project costs. The overall capital budget process appears to make it difficult for School Board members to gain a comprehensive perspective of the total cost or scope of a project. When Elementary School #17 was originally proposed in the December 11, 2000 Capital Improvement Plan (CIP) Project Summary, the school's projected cost was \$14,690,000, with a completion date of fall 2004 and a total project size of 78,000 square feet. The following year, the December 10, 2001 CIP Project Summary showed a budget of \$16,580,000, a completion date of fall 2006, and the total project size was increased to 80,000 square feet. On November 25, 2002, the project size was again increased to 87,600 square feet, the budget increased to \$19,765,000, and the completion date moved to fall 2007. On December 8, 2003, the budget was \$19,780,000 and the size and completion date remained unchanged. On November 8, 2004, in the CIP Project Summary, the budget was decreased to \$18,615,000, the project was moved forward to fall 2006, and the total scope was shown unchanged at 87,600 square feet. On the same date, November 8, 2004, Moseley Architects presented a budget to the School Board that indicated a total project scope of

94,600 square feet and a project budget of \$18,653,086. Subsequent to November 8, 2004, the completion data for the project was moved back from 2006 to 2007; the budget was unchanged, pending additional budget data from the architect.

It is not uncommon for project timing, scope, or budgets to change throughout the planning and design process for a new school. The division uses the approval of its annual CIP as a basis for long-range capital planning, and updates are made annually to the plan. When project scope (cost) is changed from year-to-year, the change is indicated by using a bold font for the figures that have changed, and the School Board has the opportunity to ask questions regarding the change. What is difficult to ascertain from current documentation, however, is whether or not the School Board is appropriately informed of these changes, the reason for changes, and the impact on project budgets. While full information may be available on a verbal basis, the accompanying documentation does not appear to be comprehensive in scope.

The evaluation team recommends that the division review its construction costs and revise its budget reporting practices. Specifically, the team recommends that the division develops and adopts a standard format for the reporting of project budgets, project scope, and changes to previously approved projects. Initial requests for project approval should include full justification for the project under consideration as well as comparative data for similar projects throughout the state; thereafter, any major change in scope or budget should be accompanied by appropriate written justification and comparative data.

Recommendation 4-2: Consider the development of detailed facilities educational specifications.

Currently, the division does not use detailed educational design specifications as a basis for new school design. For all of its most recent projects, the division has used a modification of an existing prototype as a basis for design of its new school facilities. Harrison Road Elementary, Parkside Elementary, and Elementary School #17 are all based on the design of Wilderness Elementary School. Freedom Middle School was a modification of the design for Pocahontas Middle School in Henrico County, and was used as a basis for the design of JJ Wright Middle School (replacement). Riverbend High School was based on the design for Massaponax High School which was a repeat of Spotsylvania High School, and will be repeated again for High School #6. In many cases, the prior prototype was expanded in scope to include additional student capacity, additional program requirements, or both. The use or reuse of existing prototypes generally provides for efficiency in the design process and a corresponding reduction in design costs.

The division has a current general program for each school type which quantifies the number of classrooms, student capacity, and overall program requirements. However, this program does not provide detailed data that can be translated directly into design parameters. For example, the program shows the number of each room type, but does not quantify the size of the room. The program does not specify construction materials or major systems, such as heating, ventilation, and air conditioning.

When new schools are presented for consideration to the School Board, no data is provided that would allow the School Board to compare the proposed program to division-wide facilities standards on a detailed basis. As described in Recommendation 4-1, relatively high construction costs are likely the result of the division building to a higher standard than other divisions.

Construction and educational standards and specifications are generally set by the community and by its elected officials. The evaluation team cannot make the determination that the division is building schools to an unreasonable standard or that other schools throughout the state have developed design and educational specifications that can be reasonably applied to SCPSD. However, without internal specifications, the evaluation team could not determine if the division is building new schools to meet its own internal standards.

The evaluation team recommends that the division develop comprehensive educational specifications for elementary, middle, and high schools and use these specifications in the evaluation of design proposals for schools planned in the future. This process usually involves the services of an outside consultant or facilitator, and requires input from all major stakeholders, including administrators and educators, students and parents, community leaders, and ultimately the School Board.

Recommendation 4-3: Consider adding a dedicated staff position responsible for planning.

In order to improve the efficiency of facilities use and construction, the division may wish to consider adding a dedicated position responsible for planning. Generally speaking, the process of planning new facilities is typically comprised of:

- development of an inventory of existing schools with current use by room type;
- an analysis of existing capacity based on use;
- an evaluation of current utilization;
- demographic projections based on historical analysis and future housing development potential;
- projection of new facilities and modular classroom needs;
- development of (or evaluation of existing) educational standards or specifications;
- site selection;
- development of an architectural program to meet the educational specifications and student population requirements (or modification of an existing prototype);
- facility design or design modification; and
- facility construction.

Currently in the SCPSD, there is no single position charged with accountability for all facilities planning, although staff generally responsible for most of these functions reports to the assistant superintendent for Administration and Finance. The director of Finance prepares demographic (enrollment) projections. Facilities requirements are based in part on input from the Instructional directors, and in general represent a refinement of prior prototypes. As described in more detail in Recommendation 4-2, the division does not have current detailed educational specifications. Facilities design is primarily the responsibility of the construction manager, with input from multiple sources, including the School Board, the superintendent, the assistant superintendent for Administration and Finance, the director of Maintenance, and the Instructional directors. Planning for the River Run Administration facility included space delegated for a dedicated planning staff position; however, this position has not been approved as part of the current budget.

There does not appear to be a comprehensive inventory of existing classroom use or a consistently applied methodology for the assignment of space. For example, Courtland Elementary (79,331 square feet) and Harrison Road Elementary (79,129 square feet) are essentially the same size schools and both have a capacity of 710 students as calculated by the division. Harrison Road, with 728 students enrolled in 2004-05, has one modular classroom, thereby utilizing 99.5 percent of total reported capacity, including modular classrooms.

Courtland, by comparison, has a 2004-05 population of 656 students and four modular classrooms—with 72 less students, Courtland uses only 92.4 percent of its permanent capacity, yet has three more modular classrooms than Harrison Road (for a total capacity utilization, including modular classrooms, of 82.2 percent). Similarly, Livingston Elementary uses only 92.9 percent of permanent space but has three modular classrooms. While full utilization is difficult to achieve because of differences in student population by grade, Stafford County, by comparison, has achieved 100 percent average utilization for the last five years through the use of comprehensive planning. It should be noted that Stafford County has historically avoided the use of modular facilities. In some cases, “this practice has contributed to overcrowding in...parts of permanent facilities, [however] the effect appears to be short-term” (*Stafford County Public Schools Efficiency Review*, December 17, 2004). Spotsylvania division personnel believe that as a result of lower space utilization, the division may provide a better learning environment as compared to Stafford County. A comprehensive evaluation of existing inventory and utilization in Spotsylvania County may have the benefit of reducing the need for modular classrooms or delaying the need for new construction, thus providing the potential for significant savings.

Currently, utilization efficiency is generally delegated to site administrators. The evaluation team recommends that as part of the facility planner’s responsibilities, the position be tasked with making recommendations, based in part on input from site administrators, regarding space utilization and the addition of modular facilities. The division should consider more centralized control decisions related to facilities utilization.

The responsibilities associated with a staff planning position could include accountability for all areas of the planning process through development of the architectural program—at that point the process would involve comprehensive input from the director of Maintenance and the construction manager. Ultimately, final planning and design decisions are the responsibility of the School Board.

CUSTODIAL OPERATIONS

Recommendation 4-4: Consider outsourcing custodial operations.

Custodial staff in the division meets or exceeds national productivity standards for area cleaned per custodian. As shown in **Exhibit 4-9**, custodians in SCPSD clean an average of 23,781 square feet per person. Data published by the U.S. Department of Education indicates that standards for area cleaned per custodian in an eight-hour shift range from 18,000 to 20,000 square feet (“uppermost standard...generally reserved for restrooms, special education areas, kindergarten areas, or food service areas”) to 31,000 square feet (“the norm for most school facilities”). At an average 23,781 square feet per custodian, SCPSD staffing falls within the expected range of productivity.

**Exhibit 4-9
2004-05 Custodial Staffing**

Location	Custodial Staffing		
	Sq Ft	Staff	Average SF/Staff
Elementary Schools	1,169,055	63.5	18,410
Middle Schools	816,356	34.0	24,010
High Schools	1,424,748	44.5	32,017
Administrative Sites	85,678	5.0	17,136
Total/Average	3,495,837	147.0	23,781

Source: SCPSD Maintenance Department.

However, the cost per square foot for custodial operations in the division is very high, due primarily to salary and benefit standards (described in more detail later). As shown in **Exhibit 4-10**, the total cost per square foot for custodial operations in the division is \$1.52.

**Exhibit 4-10
2004-05 Custodial Operations Cost**

Cost Category	Budget
Custodial Salaries	\$3,441,659
Supplements	11,500
Facility Use Overtime	35,061
Custodial Substitutes/Overtime	106,757
Subtotal Custodial Salaries	\$3,594,977
Pro Rata Fixed Charges	1,385,710
Custodial Workers' Compensation	49,521
Custodial Uniforms	7,809
Total Custodial Personnel	\$5,038,017
Custodial Supplies	278,123
Total Custodial Cost	\$5,316,140
Square Feet Cleaned	3,495,837
Cost per Square Foot	\$1.52

Source SCPSD 2004-05 Budget and Maintenance Department data.

As shown in the above **Exhibit 4-10**, SCPSD spends \$5,038,017 on custodial personnel and related expenses alone. With staffing at 147 custodial positions, this represents a cost of \$34,272 per person, including salaries, benefits, overtime, and other personnel costs. Custodial salaries above match the data contained in the 2004-05 SCPSD budget; benefits and other personnel costs (FICA, VRS, health insurance, retiree benefits), workers' compensation, and uniforms are calculated by allocating the 2004-05 budget among custodial and other maintenance personnel expenditures, based on the percentage of total salary costs.

By comparison, Stafford County outsources custodial operations at high schools for a total cost of \$0.78 per square foot (2004-05 data). As shown in **Exhibit 4-11**, Spotsylvania's cost per square foot for high school cleaning is estimated at \$1.11 per square foot. If SCPSD were to outsource custodial operations at high schools and were to achieve the same efficiency with outsourced operations as Stafford County, the potential for savings in high schools is \$0.33 per square foot, or 29.9 percent.

Exhibit 4-11
Potential Savings from Custodial Outsourcing

Location	Personnel Cost	Supplies	Total Cost	SF Area	Cost per SF	Potential Savings*
Elementary Schools	\$2,250,681	\$93,008	\$2,343,689	1,169,055	\$2.01	\$701,446
Middle Schools	\$1,174,838	\$64,948	\$1,239,786	816,356	\$1.52	\$371,058
High Schools	\$1,462,343	\$113,351	\$1,575,694	1,424,748	\$1.11	\$471,592
Administrative Sites	\$150,155	\$6,816	\$156,971	85,678	\$1.83	\$46,980
Total	\$5,038,017	\$278,123	\$5,316,140	3,495,837	\$1.52	\$1,591,076

Source: SCPSD Maintenance Department.

* Note: Total cost above does not equal calculated value due to rounding.

As shown in **Exhibit 4-11**, potential savings from outsourcing could range from \$518,572 (high schools and administrative areas only) to \$1,591,076 per year (all facilities). Savings for building types other than high schools are calculated by applying the potential saving percentage in high schools (29.93 percent) to all building types. The division has made the decision to begin a pilot program to outsource custodial operations at two high schools beginning in 2005-06. The evaluation team recommends that if the pilot program is successful, the division should consider full implementation of custodial outsourcing. In considering the option to outsource custodial operations, the division should continue to assess quality of service, safety and security, and operational flexibility as part of the evaluation process. Projected savings do not include potential additional savings associated with the ownership and maintenance of custodial equipment.

In considering the option of outsourcing custodial operations, the division may wish to undertake an analysis to determine differences in pay rate and productivity between outsourced operations and in-house staff. It may be possible to achieve savings with division personnel by making appropriate adjustments to achieve outsourced cost efficiency. The division may also wish to consider outsourcing the evening shift and continuing to use in-house personnel for day shifts.

ENERGY MANAGEMENT

Recommendation 4-5: Design and implement a division-wide energy management policy.

Currently, the division does not have a comprehensive energy policy. The division's energy cost at \$1.46 per square foot and 100.2 KBtu (thousands of British thermal units) per square foot is as

much as 30 to 40 percent higher than expected.

Exhibit 4-12 shows the division's energy use and cost by site for 2003-04.

**Exhibit 4-12
Energy Costs and Usage
2003-2004**

Location	\$ Cost			Cost/SF		Total Use KBtu/SF
	Electricity	Oil and Gas	Total	Sq Ft	\$/Sq Ft	
Elementary Schools						
Battlefield ES	\$92,970	\$-	\$92,970	72,230	\$1.287	94.7
Berkeley ES	\$70,993	\$13,409	\$84,403	51,261	\$1.647	86.5
Brock Road ES	\$115,164	\$14,484	\$129,648	74,121	\$1.749	105.9
Chancellor ES	\$49,927	\$39,432	\$89,360	49,087	\$1.820	149.8
Courthouse Road ES	\$82,826	\$27,918	\$110,744	74,121	\$1.494	105.8
Courtland ES	\$80,359	\$21,321	\$101,680	82,911	\$1.226	93.0
Harrison Road ES	\$102,355	\$35,748	\$138,103	80,022	\$1.726	121.0
Lee Hill ES	\$95,824	\$9,480	\$105,305	83,396	\$1.263	67.0
Livingston ES	\$86,056	\$17,316	\$103,372	65,476	\$1.579	97.3
Parkside ES	\$122,351	\$55,583	\$177,934	80,024	\$2.224	137.5
Riverview ES	\$87,968	\$17,606	\$105,574	75,016	\$1.407	96.6
Robert E. Lee ES	\$70,814	\$17,261	\$88,075	55,363	\$1.591	122.8
Salem ES	\$80,902	\$10,767	\$91,669	79,880	\$1.148	86.0
Smith Station ES	\$79,100	\$23,998	\$103,098	75,887	\$1.359	77.6
Spotswood ES	\$86,087	\$14,359	\$100,446	59,106	\$1.699	116.6
Wilderness ES	\$114,480	\$35,661	\$150,142	88,708	\$1.693	133.1
Middle Schools						
Battlefield MS	\$121,891	\$22,712	\$144,603	96,827	\$1.493	124.3
Chancellor MS	\$59,173	\$-	\$59,173	114,417	\$0.517	35.3
Freedom MS	\$161,719	\$54,078	\$215,797	126,126	\$1.711	92.2
Ni River MS	\$230,881	\$78,123	\$309,004	129,265	\$2.390	182.6
Spotsylvania MS	\$151,385	\$-	\$151,385	134,628	\$1.124	70.4
Thornburg MS	\$188,791	\$34,957	\$223,748	126,183	\$1.773	113.5
Wright MS	\$107,430	\$21,304	\$128,734	88,909	\$1.448	87.6
High Schools						
Chancellor HS	\$196,434	\$90,679	\$287,113	256,734	\$1.118	94.6
Courtland HS	\$208,627	\$26,317	\$234,944	184,603	\$1.273	95.3
Massaponax HS	\$310,417	\$53,850	\$364,267	270,021	\$1.349	79.4
SCTC	\$116,031	\$38,263	\$154,294	125,546	\$1.229	98.9
Spotsylvania HS	\$312,221	\$97,921	\$410,142	258,700	\$1.585	105.3
Administrative and Other Sites						
Maintenance	\$38,842	\$4,008	\$42,851	15,744	\$2.722	98.0
Tech & MIS	\$16,890	\$3,631	\$20,521	12,272	\$1.672	116.9
Courthouse Academy	\$8,526	\$-	\$8,526	5,320	\$1.603	102.3
Health Services	\$2,165	\$-	\$2,165	668	\$3.241	209.7
Records/Alt MS	\$1,601	\$559	\$2,160	1,743	\$1.239	92.5
Transportation	\$14,658	\$4,861	\$19,519	14,482	\$1.348	106.5
Total	\$3,665,859	\$885,605	\$4,551,464	3,108,797	\$1.464	100.2

Source: Maintenance Department Data.

Note: Totals exclude energy costs for facilities which were not in service in 2003-04.

As shown in **Exhibit 4-12**, SCPSD's energy costs averaged \$1.46 per square foot in 2003-04. By comparison, the Roanoke County Public School 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).

The Commonwealth of Virginia does not compile comparative data summarizing energy use in school divisions. However, as part of this review, data was collected from various sources for comparative energy use in Virginia school divisions where such data was available to the evaluation team. Full or partial data was available from Stafford County, Richmond City, New Kent County, Roanoke County, Danville City, and Loudoun County. In these divisions, total energy cost per square foot averaged \$1.01, and total energy use averaged 65.4 KBtu/SF. By comparison, SCPSD's costs were 45 percent higher on a cost per square foot basis and 53 percent higher on a total energy use basis. It should be noted that some of the data did not include cost information while other data did not include use information. Therefore, the average data should be used only as a general benchmark rather than as a specific target. Data provided by the National K-12 Schools Technical Analyst for the U.S. Department of Energy's Rebuild America/Energy Smart Schools program indicated that energy costs throughout the country total approximately \$1.00 per square foot. This data, however, varies widely by region based on the age and condition of facilities, cost of energy, and the number of degree-heating and cooling days experienced by each region, among other factors. SCPSD has the advantage of relatively new facilities compared to many divisions throughout Virginia and the country. However, this advantage is not apparent in the data shown in **Exhibit 4-12**. For example, Parkside Elementary School, opened in 2001, has the highest energy use per square foot of all the elementary schools with the exception of Chancellor Elementary, which was originally built in 1940. It should also be noted that SCPSD operates 62 modular buildings as part of its facilities inventory. Modular buildings typically use proportionately more energy than permanent facilities.

The division has recognized the need for energy conservation measures, and has begun the preliminary process of looking at the potential for savings at two sites, Spotsylvania High School and Massaponax High School. A preliminary feasibility study was performed by TAC-Americas to determine if there was a possibility for a Performance Contract (described in detail later in this recommendation). While no potential savings were quantified in the study, the consultant did reach the conclusion that "considerable energy savings are attainable, which makes [SCPSD] a strong candidate for Performance Contracting." TAC will perform a more in-depth analysis of seven schools in the near future.

The total cost of energy within a division is determined in part by the cost per unit that the division pays for specific energy types. Natural gas and electricity costs are usually determined by the pricing available from the local utility provider, sometimes referred to as the Local Distribution Company or "LDC." In Spotsylvania County there are two primary providers of electricity: Rappahannock Electric Cooperative ("REC") and Dominion Virginia Power ("Dominion"). An analysis of electricity bills for the months of November and December 2004 indicates that the division paid \$0.0852 per kilowatt-hour to REC and \$0.0590 per kilowatt-hour to Dominion. The REC bills included a "special retirement" cost amortizing the cost of a generator. Had the special retirement costs not been included, the REC charge would have been \$0.0813. Therefore, the division is paying 44 percent more (38 percent more, excluding the special retirement) to REC for electricity than they pay to Dominion. Because REC's distribution

area currently covers a relatively low-density geographical area (measured in number of meters per mile of distribution), REC’s consumer costs will continue to be higher in the foreseeable future. The difference in cost may explain a portion of the division’s relative high cost per square foot for energy; however, it would not explain higher consumption.

The Commonwealth of Virginia has passed legislation known as “Energy Choice,” which provides consumers a legislative basis for choosing an electricity supplier separate from their local distributor. Under the program as designed, consumers are able to choose the company that generates their electricity regardless of the company that supplies the distribution network. At this time, there do not appear to be any suppliers that would offer a choice to consumers in the REC distribution area. However, the division should continue to monitor developments in the area so that if alternative suppliers become available, the division can choose the most cost-effective supplier. The total cost of electricity from REC (\$0.0852 per kilowatt-hour) is comprised of both supply charges (\$0.0633 per kilowatt-hour, fuel and electricity) and distribution charges (\$0.0218 per kilowatt-hour). By comparison, the total power cost from Dominion equals \$0.0590 per kilowatt-hour (distribution costs cannot be calculated separately). There may be additional opportunities for savings either by changing suppliers (if such an option becomes available) or by reducing peak demand, or both. A full energy study would be required in order to accurately quantify such opportunities.

Exhibit 4-13 indicates potential savings that could be expected, based on various projected costs per square foot, using 2003-04 historical data.

**Exhibit 4-13
Potential Savings SCPSD – Annual Energy Use
Based on 2003-04 Data**

Annual Cost per Square Foot	Area(SF)	Cost	Annual Savings	Savings %
\$1.46 per Square Foot ¹	3,108,797	\$4,551,279	\$0	0%
\$1.30 per Square Foot	3,108,797	\$4,041,436	\$509,843	11%
\$1.20 per Square Foot	3,108,797	\$3,730,556	\$820,722	18%
\$1.10 per Square Foot	3,108,797	\$3,419,677	\$1,131,602	25%
\$1.00 per Square Foot	3,108,797	\$3,108,797	\$1,442,482	32%
\$0.90 per Square Foot	3,108,797	\$2,797,917	\$1,753,362	39%
\$0.80 per Square Foot	3,108,797	\$2,487,038	\$2,064,241	45%

Source: Gibson Consulting Group, Inc.

Note: ¹Total cost above does not equal calculated value due to rounding (total division costs in 2003-04 were \$4,551,465).

The National K-12 Schools technical analyst for the U.S. Department of Energy’s Rebuild America/Energy Smart Schools program believes that a division similar to Spotsylvania should target energy costs of \$0.80 to \$0.85 per square foot. He further believes that savings of 10 to 15 percent or more can be achieved by usage behavior changes alone. The above **Exhibit 4-13** indicates possible energy savings based on 2003-04 actual cost data. The division’s 2004-05 budget for energy use is \$5,136,590. Initial calculations indicate achievable savings of \$514,000, based on behavioral changes alone. With long-range planning and the implementation of energy-saving capital improvements, the division may be able to achieve savings of up to \$2 million per year—a significant portion of which would initially be used for lease or debt service payments

associated with related capital expenditures (see Appendix B for detailed calculations used to determine the savings shown in **Exhibit 4-4**, Summary of SCPSD Savings Opportunities).

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, SCPSD 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 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 exactly how much other divisions saved on energy; and
- student education programs on energy usage and efficiency, which includes a curriculum that complies with and supports the SOLs has already been developed and used in other divisions with positive results.

Prior to the initiation of school efficiency reviews, eight Virginia School Divisions were partners in this program. These divisions are Arlington, Chesapeake, Covington City, Fairfax County, Falls Church, Harrisonburg City, Roanoke County, and Virginia Beach City Schools. As a consequence of the efficiency review process, the New Kent and Stafford County Public School Divisions have joined the program, and a recommendation has been made that Richmond City Schools join as well.

As part of its overall energy conservation program, the division may wish to consider energy performance contracting as a method for the reduction of energy costs. Generally, an “Energy Performance Contract” is an agreement for the provision of energy services and equipment, in which a private Energy Service Company (ESCO) agrees to finance, design, construct, install, maintain, operate, and/or manage energy systems or equipment. The role of the ESCO is to improve the energy efficiency of a facility in exchange for a portion of energy cost savings, lease payments, or specified revenues. A “Guaranteed Savings Contract” is a type of performance contract under which the facility owner pays a lump sum price (usually in monthly installments) for the energy-saving improvements and the contractor guarantees that energy cost savings will equal or exceed this payment. The performance contract is structured so that the total payments under the contract are always less than they would have been without the improvements—the energy savings produced by the project must be greater than its amortized cost.

Typically, energy performance contracting is used where the facility owner faces high energy costs (or the need to replace equipment which is at the end of its useful life), but lacks the funds or resources to make building improvements. While energy savings associated with various improvements are generally predictable with reasonable accuracy, a school division may also

enter into a performance contract to reduce economic risk associated with energy-savings investment. Depending on circumstances, performance contracting may not be the most cost-effective means of reducing energy costs. When evaluating the potential use of performance contracting, the division should consider, among other issues:

- the cost of financing provided by the ESCO compared to the division's cost of funds;
- the establishment of how savings will be measured, especially when changes are made to baseline operations (such as hours of use or levels of lighting, heating, and cooling);
- standards of service and comfort; and
- the cost of all fees and services provided by the ESCO as compared to the cost of the same services if performed by the division or other outside consultants and contractors.

The Department of General Services in Virginia has developed a program aimed at reducing the procurement time required for the implementation of Energy Performance Contracting. Under the program, the state has pre-qualified fourteen vendors capable of providing Performance Contracts. Rates for certain categories of service have been pre-established and the process has been streamlined. The division may wish to take advantage of this program when considering energy-reduction options.

It is recommended that the division design and implement a comprehensive energy policy including but not limited to: joining Rebuild America, staff and student training and education, division-wide usage policy (temperature, hours of operation, etc.), capital improvements programs, energy monitoring, and site rewards and/or acknowledgement. Initially, the division could fully utilize services provided free to the division by Rebuild America. Thereafter, the division may wish to consider the use of energy shared savings or performance contracts, outside consultants, and other state or federal assistance programs. The division has made the decision to include a recommendation for an energy management staff position to the 2005-06 annual budget. This staff position will be primarily responsible for the development of the division's energy management program.

OTHER FACILITIES RECOMMENDATIONS

Recommendation 4-6: Develop a division-wide facility assessment and integrate the results of the assessment into the division's long-range facilities plan.

In general, school division budgets are comprised of both regularly recurring operations costs and capital renewal or capital improvements costs—a relationship described in more detail in Recommendation 4-7. This recommendation relates more specifically to capital expenditure planning issues rather than daily operations.

The division prepares a list of current priority maintenance and capital renewal items on an annual basis. The director of Finance initially prepares this list with input from the Maintenance Department. After the initial list is prepared, the director of Finance distributes the plan to each school for additional recommendations and incorporates capital maintenance items into the Capital Improvement Plan ("CIP"), based on the recommendations of the director of Maintenance. In a parallel effort, the director of Finance prepares the enrollment projections with input from the Instructional directors for each school type, and new school construction needs are identified and prioritized. The assistant superintendent for Administration and Finance then prepares the CIP for presentation to the School Board. Thereafter, the School Board conducts work sessions, holds public hearings, and ultimately presents the plan to the county Board of

Supervisors for approval. This methodology gives a good indication of the division's immediate needs, and provides an indication of longer-term needs items that are specifically identified by school administrators or Maintenance staff. However, annual budgets should be prepared within the context of a larger picture that identifies all of the division's long-term facilities needs. The evaluation team recommends that the division consider the development of a comprehensive facilities assessment that will address long-term capital improvements needs.

A comprehensive assessment would include:

- a listing of all immediate and near-term facility needs (items that are functionally obsolete or probably will be soon);
- an estimate of the remaining life of all building systems (in order to identify items that will become functionally obsolete in the future);
- a listing of school needs to address educational adequacy and functional equity among schools, including core-space overcrowding (things that are missing from the educational environment—requires setting educational facilities specifications or standards as described in Recommendation 4-2);
- a comprehensive analysis of capacity, utilization, student population, and new construction requirements; and
- prioritization of items and a capital plan so that annual budgetary appropriations from current revenue are of a similar size or in a similar trend and bonded improvements are appropriate for available resources.

While the Capital Improvement Plan addresses longer-term issues and the annual budget itemizes near-term requirements, there are division requirements that do not appear to be addressed in either of these documents. It is possible that they have been considered and deferred, or considered in another context but not officially documented. A comprehensive assessment would include complete documentation of these items. Some example issues observed or reported during limited site visits but not addressed in the annual budget or 2006 Capital Improvements Plan include but are not restricted to:

- renovation of the areas of Spotsylvania Middle School not addressed in recent improvements, including but not necessarily limited to replacement or renovation of obsolete lighting fixtures, ceiling tiles and the ceiling grid system, vinyl tile and carpet in some areas, and windows and blinds; and
- plans for the replacement of items with predictable obsolescence in all schools such as roofing, carpeting, floor tiles, ceiling tiles, wall coverings, playground equipment, moveable partitions, plumbing fixtures and restroom partitions, alarm systems, lab and kitchen equipment, and HVAC equipment—this can potentially be done with lifecycle analysis for newer facilities. (Focus group comments included: “Need new cafeteria tables at our school – there’s no planned replacement cycle.” “Division just doesn’t do renovations until problem is critical – not enough money, can’t keep up with the growth.”)

In addition, the division should consider creating a comprehensive facilities inventory by space type and use and putting all of its facilities onto CAD (Computer-Aided Drafting), at least in line drawing format.

The division could consider performing the analysis internally (potentially under the supervision of the facilities planner described in Recommendation 4-3), completely outsourcing a

comprehensive facilities assessment to a consultant, or hiring consulting services on an as-needed basis as an extension of staff. Given the current level of staffing within the division, it appears as though a comprehensive assessment would be difficult without the addition of outside resources or additional staff.

Recommendation 4-7: Review the division's historical and planned annual spending on capital renewal items.

Once the division has completed its long-range comprehensive assessment, the division may wish to review its historical and planned spending on capital renewal and capital improvement items and develop a budget strategy that will provide for high-quality sustainable facilities in the long-term.

In 2004-05, the division budgeted \$246,400 for major capital renewal items, excluding new construction and comprehensive renovation projects. This entire amount was added on May 13, 2004, just prior to the beginning of the budget year and very late in the budget process. The proposed 2006-2010 Capital Improvement Plan (November 16, 2004, Revision B) calls for \$2,403,545 in major capital renewal items for 2005-06. In the same plan, 2006-07 expenditures are projected at \$1,154,500 and by 2009-10 projected expenditures drop to \$225,000. For the five-year pro forma period, average expenditures were projected at \$1.1 million, and might have been higher if a comprehensive assessment were performed as described in Recommendation 4-6 above. In the past three years, division's capital renewal budgets have been less than 25 percent of this amount, indicating possible under-funding of capital renewal items. The division is in the process of reviewing the budget for possible expenditures that might be deferred in order to provide a more consistent level of funding. Notwithstanding the current review, it would appear as though the division could benefit from a more comprehensive approach to capital renewal funding in the budgeting process.

In preparing annual and long-term budgets it is often important to consider not only the items to be included in the budget, but also to understand what items are being deferred and what items could or should be accelerated. This decision-making process benefits greatly from the consideration of a comprehensive evaluation of facility needs. The division should continue to consider appropriately matching sources and uses of funds so that facilities funding is sustainable and relatively consistent in order of magnitude, without excessive deferral of needs. Typical uses of facility funds and their appropriate sources are shown in **Exhibit 4-14**:

**Exhibit 4-14
Typical Sources and Uses of Facilities Funds**

Use of Funds	Appropriate Source of Funds	Comments
Building Operations	Current Revenue	Includes such items as custodial costs and supplies, grounds maintenance, preventive maintenance, utilities, and minor replacements such as filters and light bulbs.
General Maintenance - Minor Repairs	Current Revenue	Typical maintenance requests handled by work-orders and small purchase orders—daily maintenance items which occur regularly and are reasonably predictable in total, but which cannot be individually identified on a pro forma basis,
Minor Capital Renewal Items	Current Revenue	Projects defined by their expected life (e.g. less than five years), or by their cost (e.g. less than \$25,000). Examples may include minor remodeling, carpet replacement or painting, or replacement of a single item such as a piece of kitchen equipment.
Major Capital Renewal Items	Current Revenue or Bonds ¹	Replacement of a major system or major system component, such as an HVAC system or cooling tower, or the replacement of significant furniture, fixtures, or equipment. May include transportation equipment, such as buses.
Major Capital Improvements	Current Revenue or Bonds ¹	Usually a significant improvement to a site, such as the addition of a bus canopy or construction of a playfield.
Major Remodeling	Bonds or Current Revenue ²	Typically, complete remodeling of a site or major area in a building.
New Construction	Bonds or Current Revenue ²	Includes the costs of acquiring land and buildings; classroom or other major additions; and new schools and buildings, including design fees and equipment.

Source: Magellan K-12, Inc.

Notes: ¹For major capital renewal items or capital improvements, the bond repayment period should not exceed the useful life of the improvement. For example, buses should not be financed with 20-year bonds.

²Typically, the use of current revenue for major remodeling and new construction (sometimes called "pay-as-you-go"), is only applicable in extremely large divisions with continued and predictable population trends and relatively predictable facilities needs.

Recommendation 4-8: Review Operations and Maintenance staffing for possible areas of understaffing.

The division may be understaffed with respect to certain trades or general Maintenance staff, based on Maintenance Department interviews and when compared to peer school divisions.

The division currently employs a total of 213.5 full-time equivalents in all Facilities Construction, Maintenance, and Custodial areas combined. This represents a staff level of 9.3 full-time equivalents (FTE's) per 1,000 students. As shown in **Exhibit 4-5** on page 4-8, SCPSD's peer group employed an average of 12.5 FTE's per 1,000 students in 2001-02 (the most recent data available). Direct comparisons may be somewhat misleading because required facilities staffing should be based on the age and condition of facilities, the level of outsourcing in the division, and

by the staff required for the administration of new construction. However, the comparison does indicate that the division may wish to review its staffing levels in the area of facilities.

The division currently has a total of 55 positions in the areas of HVAC technicians, electricians, mechanical staff (primarily carpenters), painters, plumbers, preventative maintenance, and grounds maintenance workers. Of these 55 positions, SCPSD estimates that three full-time equivalents are used for routine maintenance for the County of Spotsylvania (two HVAC technicians and one preventive maintenance staff position). The net staffing used for the maintenance of SCPSD facilities is therefore 52 full-time equivalents, representing a net staffing level of 1:70,501 square feet. **Exhibit 4-15** shows facilities maintenance employees (excluding custodial and managerial positions) and the staffing levels for these positions. Combining skilled and general maintenance workers might provide a benchmark that could be compared to peer divisions if such data were readily available. Stafford County’s Operations and Maintenance Department analyzed staffing in other Virginia divisions and found that they had staffing levels for similar positions averaging approximately 1:58,000 square feet. Again, peer standards are somewhat difficult to compare because they depend on the factors listed above, as well as service level and community standards. In fact, the U.S. Department of Education, in its *Planning Guide for Maintaining School Facilities*, states that, “Because local circumstances vary so greatly, there is no national staffing standard for determining the number of plumbers, roofers, or electricians needed by a district.” Nevertheless, Stafford County’s peer analysis indicates that a “standard” staff level (calculated at 1:58,000) for these positions might be as much as 11 full-time equivalents higher than SCPSD’s current maintenance staff.

**Exhibit 4-15
SCPSD Skilled Trades and General Maintenance Staffing**

Trade	Positions	Average SF Area	Average Acreage
HVAC ¹	14.0	261,862	N/A
Electricians	9.0	407,342	N/A
Mechanical	9.0	407,342	N/A
Painters	4.0	916,519	N/A
Plumbers	4.0	916,519	N/A
Preventive Maintenance ¹	5.0	733,215	N/A
Subtotal Building Maintenance	45.0	81,468	N/A
Grounds Maintenance	7.0	523,725	184.7
Total	52.0	70,501	N/A

Source: SCPSD Maintenance Department, SCPSD 2004-05 Budget.

Note: ¹Excludes staff that performs routine maintenance for the County of Spotsylvania (two HVAC staff positions, one preventive maintenance position).

SCPSD's work-order management system (Teamworks™) supports a full analysis in the area of maintenance staffing (e.g., trends in days outstanding for certain types of work-orders). **Exhibit 4-16** shows SCPSD's incomplete work-orders by trade as of January 11, 2005.

Exhibit 4-16
Incomplete Work-orders by Trade
As of January 11, 2005

Trade	Outstanding Work-orders	Annual Work-orders ¹	Work Days	Annual Work-orders/Day	Days Outstanding
Preventive Maintenance	118	800	250	3.2	36.9
Plumbing	13	1,001	250	4.0	3.3
Painting	20	285	250	1.1	18.2
Miscellaneous	3	53	250	0.2	15.0
Mechanical	366	2,607	250	10.4	35.2
HVAC	153	2,638	250	10.6	14.4
Grounds	41	1,311	250	5.2	7.9
Electrical	68	1,968	250	7.9	8.6
Custodial Staff/Maintenance	15	781	250	3.1	4.8
Custodial Equipment Repairs	25	153	250	0.6	41.7
Admin. Office Personnel	4	26	250	0.1	40.0
Total	826	11,623	250	46.5	17.8

Source: SCPSD Maintenance Department.

Note: ¹2003-04 Data

The data in **Exhibit 4-16** provides a snapshot of work-order status as of January 11, 2005, and may not be fully representative of the general status of work-orders throughout the year. However, the division may wish to consider setting standards and policies for work-order fulfillment by trade, monitoring this data for trends, comparing the trends to national and local standards, and adding or adjusting staff as needed. In a survey of customer satisfaction prepared by the Maintenance Department in early 2005, 18 out of 37 sites in the division returned the survey. While the Maintenance Department received high marks for workmanship (4.3 out of 5), they received comparatively lower marks for timeliness (3.9 out of 5). In the major areas of preventive maintenance and mechanical maintenance, the addition of two additional staff members in each area (four total) would potentially reduce the outstanding work-orders to less than 30 days—the fiscal impact of recommendations associated with this chapter includes the addition of four staff positions.

Division management believes that current personnel may be understaffed by as many as eight maintenance staff positions. While the addition of eight staff positions may prove to be justified, the evaluation team recommends a more thorough assessment as described above prior to the addition of this many positions. More thorough work-order analysis may indicate that the division could achieve increases in efficiency by providing additional training, travel management, establishment of productivity standards, centralized scheduling, or other methods. In addition, the division should review its practices for tracking warranty work, especially for long-term warranty items. The division does not currently have a mechanism for tracking warranties. It is possible that some reduction to work performed by staff may be achieved by more aggressively tracking building components that are under warranty.

***FINANCIAL
MANAGEMENT***

Chapter 5

FINANCIAL MANAGEMENT

BACKGROUND

Sound financial management is a critical factor in school operations to ensure that limited resources are expended appropriately for the benefit of all students. Effective financial management includes extensive planning and communication, strong internal controls, appropriate monitoring to ensure that planned results are achieved, and effective use of technology to improve services and limit costs.

The 2005 adopted budget for the Spotsylvania County Public Schools Division (SCPSD) General Education Program Fund is \$232,790,510 increasing 7.8 percent over the 2004 adopted budget. State funds were \$94,131,526 or 40.4 percent of the budget and included \$17,907,205 in sales taxes. Federal funds accounted for \$6,941,257 or 3.0 percent of the budget. County funds in the budget were 40.9 percent of the budget or \$95,248,577 and included \$23,455,105 for debt service. Other funds were \$1,678,316 or 0.7 percent of the budget, and loans and bonds were \$34,790,834 and comprised 14.9 percent of the annual budget. **Exhibit 5-1** summarizes the revenues for the last three years.

Exhibit 5-1
SCPSD General Education Fund Operating Budget
Revenue Sources
2002-03 through 2004-05

Funding Source	Actual 2002-03	Adopted 2003-04	Adopted 2004-05	Percent Change Last Year	Percent of 2004-05 Budget
State Funds	\$76,815,587	\$82,736,818	\$94,131,526	13.8%	40.4%
Federal Funds	4,980,671	6,230,837	6,941,257	11.4%	3.0%
County Funds	77,676,783	88,536,350	95,248,577	7.6%	40.9%
Other Funds	1,361,515	1,628,200	1,678,316	3.1%	0.7%
Loans and Bonds	30,507,051	36,810,016	34,790,834	(5.5%)	14.9%
Total	\$191,341,607	\$215,942,221	\$232,790,510	7.8%	100.0%

Source: SCPSD 2004-05 Adopted Budget, May 23, 2004.

*Totals may not add to 100 percent due to rounding

Exhibit 5-2 summarizes the adopted 2004-05 School Fund Operating Fund budget by major function and compares the 2004-05 budget to the 2003-04 adopted budget and the 2002-03 actual expenditures. The increases in the budget are primarily due to additional teachers being hired to accommodate growth at all levels, to staff the new Riverbend High School, and adjustments to salary schedules for teachers, clerical positions, nurses, principals, directors, and assistant superintendents. Adjustments to these salary schedules, especially the teacher schedule, had a significant impact on the budget.

Exhibit 5-2
SCPSD General Education Fund
Budgeted Operating Expenditures
2002-03 through 2004-05

Funding Source	Actual 2002-03	Adopted 2003-04	Adopted 2004-05	Percent Change Last Year	Percent of 2004-05 Budget
Instruction	\$114,404,907	\$126,607,354	\$138,320,273	9.3%	59.4%
Administration, Attendance and Health	5,533,474	6,019,453	7,019,806	16.6%	3.0%
Pupil Transportation	9,421,837	9,928,491	12,450,983	25.4%	5.3%
Operation and Maintenance	12,857,644	13,328,185	16,194,614	21.5%	7.0%
School Food Services	0	299,268	0	(100%)	0.0%
Facilities	29,309,525	36,810,018	34,790,834	(5.5%)	14.9%
Debt Service	19,814,220	22,949,452	24,014,000	4.6%	10.3%
Total	\$191,341,607	\$215,942,221	\$232,790,510	7.8%	100.0%

Source: SCPSD 2004-05 Adopted Budget.

*Totals may not add to 100 percent due to rounding.

The division, located along the I-95 corridor approximately 42 miles south of Washington D.C., is one of the fastest growing school divisions in the state. **Exhibit 5-3** shows the actual and projected growth of the school division from 2001 to 2011. During the last five years the division has grown by 3,914 students, a 20.6 percent increase.

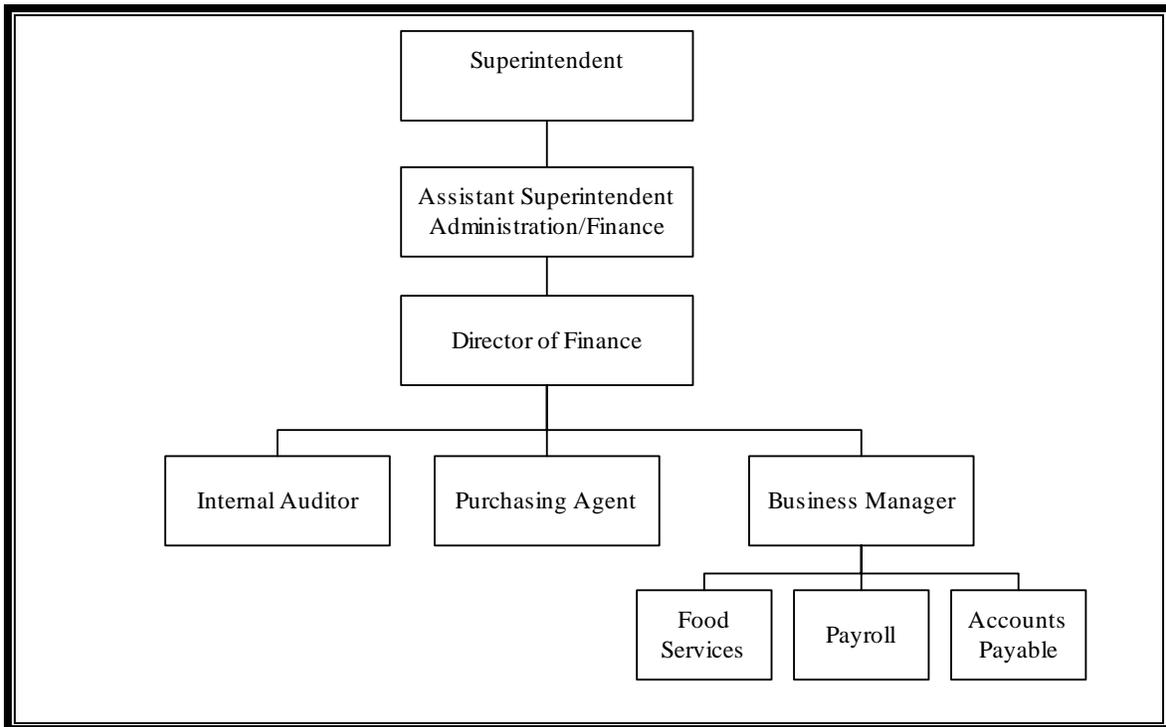
Exhibit 5-3
SCPSD Student Growth
Average Daily Membership
2001-2011

Year	Average Daily Membership	Percent Change
2001	19,034	NA
2002	20,280	6.5%
2003	21,391	5.5%
2004	22,067	3.2%
2005	22,948	4.0%
2006 (projected)	24,052	4.8%
2007	25,128	4.5%
2008	26,363	4.9%
2009	27,448	4.1%
2010	28,430	3.6%
2011	29,372	3.3%

Source: Spotsylvania County Schools Enrollment by Grade, October 18, 2004.

The division’s financial management function is currently assigned to the assistant superintendent of Administration and Finance and the Finance Department. There are four units in the Finance Department, Accounts Payable, Payroll, Purchasing and Internal Audit. The Accounts Payable and Payroll units report to the business manager who then reports to the director of Finance. A Purchasing Unit created in 2003 reports directly to the director of Finance, as does a new Internal Audit position which has not been filled. **Exhibit 5-4** illustrates the department’s organization structure at the time of the review. The business manager is also responsible for overseeing the outsourced food service program.

**Exhibit 5-4
Current Finance Department Organization
2004-05**



Source: Spotsylvania County Schools Superintendent’s Office, January 2005.

A. ACHIEVEMENTS

- The school division is using its website to communicate effectively with parents, division staff, and community members about the budget process. Budget information posted to the website includes the 2005-06 budget approved by the School Board, as well as supporting documentation and rationale.

B. RECOMMENDATIONS

Recommendation 5-1 (p. 5-6): Eliminate prior School Board review of checks and provide an overview of expenditures as an information item. The School Board should modify its current practice of requiring checks to be reviewed and approved by the School Board before issuance. This review process should be performed by the Finance Department at the time the checks are created to improve the overall efficiency of the payment process. An overview of expenditures or a copy of the list of bills could be made available to School Board members for their review prior to the School Board meeting.

Recommendation 5-2 (p. 5-7): Expand the timing and focus of the Budget Review Committee. The benefits of the Budget Review Committee could be even greater if the role and timing of the committee were expanded. The Finance Department should identify an appropriate time in the calendar when the committee could meet to review the results of the prior year's plans, learn about planned programs, and participate in discussions of overall strategies in preparation for the upcoming budget process.

Recommendation 5-3: (p. 5-7) Simplify the current budget document to increase understanding and ease of use. The Finance Department should review the format of the current budget documents used during the budget process to determine the appropriate level of detail needed for an effective review process. The current document format should be simplified and made consistent to increase accuracy during the process and provide a more effective management tool.

Recommendation 5-4 (p. 5-9): Restructure the Finance Department around needed roles and responsibilities filling identified gaps with an additional degreed accountant. The division should evaluate the current staffing levels and skills in the Finance Department, based on the current and projected needs of the division, and develop a plan to obtain staff with the skills needed to perform all department functions. The evaluation team recommends that the director of Finance and the business manager positions be combined into one position titled controller. A degreed accountant position should be added at the same time by upgrading an existing secretarial position. This position will perform the duties including oversight of SCPSD school activity funds, assist with budget preparation and monitoring, and other accounting related duties as assigned by the chief financial officer.

Recommendation 5-5 (p. 5-11): Create an internal audit function reporting to the School Board. After the Finance Department has been reorganized and staff has become familiar with their newly defined roles, SCPSD will have a growing need for an independent internal audit function. The division will benefit from the creation of this function by achieving cost savings due to the implementation of efficiency recommendations resulting from a detailed annual internal audit plan and the prevention or reduction of losses due to theft or fraud based on improved internal controls. The auditor can also help to improve division operations by monitoring the division's implementation of recommendations from the external audit or other independent reviews. The evaluation team recommends that the division create an internal audit function that reports to the School Board.

C. FISCAL IMPACT OF RECOMMENDATIONS

This chapter contains recommendations to improve the efficiency of SCPSD financial operations. Once fully implemented, these recommendations will result in savings of \$18,824 each year, representing 0.01 percent of the division’s annual operating budget. The major savings opportunities are presented in **Exhibit 5-5**.

**Exhibit 5-5
Summary of SCPSD Savings Opportunities**

Functional Area	Recommendation	Annual Savings
Financial Management	Hire a degreed accountant as part of the departmental reorganization using funds currently budgeted for the internal auditor position and the savings generated by eliminating one secretarial position.	\$18,824
Total Annual Savings		\$18,824
Percent of annual operating budget		0.01%

Source: Gibson Consulting Group, Inc.

This chapter also includes recommended investments by SCPSD intended to improve financial management efficiencies to achieve best practices or to generate subsequent savings. If savings cannot support these investments in the short-term, then the division should request additional investment funds from the county or delay the implementation if the investment does not yield future savings.

The recommended investment is listed below:

1. As the division continues to grow, the need to maintain strong internal controls will increase. Currently, SCPSD does not have an objective, independent function in the division to evaluate the operations, both financial and administrative, of the division. The evaluation team recommends that SCPSD create an internal auditor position beginning in 2007-08 that reports directly to the School Board. Annual investment: \$84,367.

If all recommendations found in this chapter are implemented, the net annual cost to SCPSD will be \$65,543 or 0.04 percent of the division’s operating budget. The calculations related to the potential savings and required investments can be found in Appendix B.

D. DETAILED ACHIEVEMENTS

COMMUNICATING DIVISION BUDGET THROUGH WEBSITE

SCPSD uses its website to communicate effectively with parents, division staff, and community stakeholders regarding the 2005-06 budget process. Information posted on the website includes the following key information:

- executive summary of budget increases, revenue source, and expenditures;

- rationale for budget increases;
- 2005-06 Budget approved by the School Board; and
- progress in implementation of the Six-Year Improvement Plan.

The website also includes extensive supporting information, such as ways to learn about the budget, questions and answers regarding the 2005-06 budget, a calendar of budget meeting dates, the Capital Improvement Plan 2005-2011, the 2005-06 salary study, the Six-Year Improvement Plan 2004-2010, and 2005-06 draft budgets at different stages of the budget process.

Posting of this information on the division website provides a wealth of useful information in a cost effective manner. Interested parties can easily obtain information regarding the budget process, the decisions made during the process, and the basis for the approved budget document.

E. DETAILED FINDINGS AND RECOMMENDATIONS

SCHOOL BOARD REVIEW OF CHECK LISTINGS

Recommendation 5-1: Eliminate prior School Board review of checks and provide an overview of expenditures as an information item.

SCPSD's current practice requires the School Board to review and formally approve all checks before they are released to vendors. Checks are prepared biweekly, the week before the School Board meeting. A check listing of each check to be issued is printed and a copy is included in the School Board packet distributed to School Board members prior to each School Board meeting. Supporting documentation for the checks is held in the Finance Department. The check listing is then approved at the meeting and the Clerk to the Board notifies the Accounts Payable staff the following morning that the checks have been approved and can be released. The only exception to this policy is utility checks that are released every Friday to avoid penalties for late payments.

This is a traditional practice that dates back to when School Board members actually signed individual checks. When the division was much smaller, School Board members could review checks and make a reasonable determination that the expenditure was appropriate, that the purchase had been included in the budget, that the amount was reasonable, and that the vendor was reliable. Given the growth of the division and the number and complexity of current purchases this practice can no longer be justified.

School Board members in most large school divisions rely on sound business practices to help ensure that expenditures are appropriate and reasonable. These include budgeting, purchasing, and payment processes. For example, all purchases greater than \$15,000 are competitively bid and approved by the School Board. In addition, School Boards rely on the internal audit function to provide assurance that proper internal controls are in place and implemented.

The use of encumbrances is another safeguard to ensure that the accurate up-to-date information on the status of budget balances is available at all times. When a purchase order is created, the amount of the order is immediately charged to the account to reduce the available balance for control purposes. An encumbrance does not represent an expenditure, only a commitment to expend resources. Once the invoice is received and approved, the encumbered funds are released, and the actual expenditure is recorded. By immediately encumbering funds when a commitment

to purchase is made the director of Finance is able to determine the amount of committed funds and avoid over expending budgeted funds.

The current School Board review practice causes delays in issuing checks that result in vendor inquiries and complaints. If a request for payment misses the deadline for biweekly processing, the check could be delayed for up to three weeks. While the Accounts Payable staff makes every effort to ensure that all check requests are processed promptly, delays do occur. These delays can result in late fees, an unnecessary cost to the division.

The superintendent and the School Board president should modify the current practice to allow checks to be released without formal School Board approval based upon the review of appropriate documentation by its designee in the Finance Department. To provide the School Board with this information, the monthly financial report to the School Board could be expanded to include an overview of expenditures for that month. If needed, a copy of each check listing could be made available at the School Board meeting.

BUDGET REVIEW COMMITTEE PROCESS

Recommendation 5-2: Expand the timing and focus of the Budget Review Committee.

In 2002, the superintendent created a Budget Review Committee composed of community members recommended by School Board members, County Finance Department managers, parents, principals, teachers, the president of the Spotsylvania Education Association, and key central administrators. The purpose of the committee is to encourage support for the budget by including a variety of participants in the process. The committee meets several times during the fall and in January to review the proposed budget and to provide ideas and suggestions. The value of the committee has quickly become apparent as the committee meetings provide a fresh perspective of the many issues that arise during the development of a school division budget.

Additional benefits of the Budget Review Committee could be realized if the committee met once in the spring shortly after adoption of the final budget to review the results of the previous year's operations and to provide input on the planning process for the next year. This would be done in advance of any budget presentations for the next year. The meeting would serve to highlight the accomplishments of the year and serve as a starting point for work on the forthcoming budget. The focus of the meeting would be to share the division's strategic vision and to encourage support of that vision before the realities of the budget process.

The assistant superintendent of Administration and Finance should add a meeting of the Budget Review Committee to the annual budget calendar. The meeting should be held prior to the start of the formal budget process and serve as a means of creating support for the division's next budget by building upon the past year's results.

BUDGET DOCUMENT AND REVIEW PROCESS

Recommendation 5-3: Simplify the current budget document to increase understanding and ease of use.

The current budget document format and review process has been in place for a number of years and has changed little over that time. The Level 1 budget is the first budget submitted by the schools and departments for review and consideration by the superintendent, central administration, and the Budget Review Committee. This budget is developed using the division's

financial software. Compensation accounts (salary and wages) are separated from non-compensation accounts for each organization and complete listings by each account number are provided. This document contains a great deal of detailed information such as the number of glue sticks, towels, and individual titles of instructional items that are needed in a department. Estimated costs are defined in some departments down to individual items for \$2.49 each. Items of greater importance to the budget review process are also shown as one line item with the same amount of explanation such as 120 computers for \$277,906.62. Actual needs and targeted amounts (budgeted amounts from the prior year) are shown for each major line item within a department. Summary listings showing changes from the current year are also provided that can be reconciled back to the supporting detail. Often other documentation is provided in varying formats to provide support for significant purchases.

Once this budget has been reviewed and analyzed, a Level 2 budget or superintendent's budget is developed that is submitted to the School Board for their review. The School Board analyzes this budget with the support of the administration and develops a Level 3 budget which is submitted to the County Supervisors for final approval. Changes to budgets at these levels are made by the Department of Finance staff on the detail account code in the budget system to track changes from Level 1 (Requests) to Level 2 (Superintendent Recommended) to Level 3 (School Board Approved) to Level 4 (School Board Adopted Budget).

The County Supervisors approve a funding level which becomes the Level 4 budget upon approval by the School Board. The adopted budget is shown by major line item at the fund level with function breakdowns for functions such as Transportation and Maintenance and sub function detail for functions such as Instruction and Administration/Attendance/Health.

The current budget documents, in differing amount of detail, present information in a format that is cumbersome and sometimes difficult to follow for administrators not directly involved in developing and modifying the documents. Changes are made to detail sheets and administrators have access to their detail sheets which when added up, should total back to the summary sheets. Changes (additions or deletions) are made with the concurrence of the superintendent. Administrators are informed of the changes but often have difficulty tracking them. The evaluation team observed instances where administrators were unable to determine if specific line items were still included in their budgets and instances where changes to the budget did not match the summary information.

The division should evaluate its current budget document with the intent of simplifying both the budget development process and the review process. The current amount of detail should be carefully considered to determine if it provides any value to the review process. In most, if not all cases, the budget should be developed by major line item for a department with supporting documentation provided for new specific purchases over a specified amount such as \$25,000. Budget items should be linked to the division's strategic plan, where appropriate. These changes to the budget documents will allow the superintendent and administration to quickly identify new items requiring further evaluation to determine their impact on the overall operations of a given department or function and to more easily assess the effect of changes on total department and function budgets. It will also increase the accuracy of budget documents and reduce the amount of time spent by division staff in reconciling budget changes during the budget review cycle.

DEPARTMENTAL STAFFING PLAN**Recommendation 5-4: Restructure the Finance Department around needed roles and responsibilities filling identified gaps with an additional degreed accountant.**

The current Finance Department accounting staff consists of a director of Finance, a business manager, a Payroll unit composed of four clerical positions and an Accounts Payable unit composed of three clerical positions. There are also two department secretaries who support the two administrators. One of the secretaries coordinates the federal fiscal impact study. The department has not added any additional positions in the past five years in the Payroll or Accounts Payable units, even though the division's student enrollment has grown by nearly 21 percent and the number of employees by 20 percent. During this period, a department secretary for the business manager has been added, and the secretary to the director of Finance has been increased from a half-time position to a full-time position. The Purchasing agent was added in 2002 and a secretary was hired for that function in 2003. The director of Finance has a span of control that is limited in comparison to other administrative positions in the division. Currently only two positions report directly to the director of Finance because the internal auditor position has not been filled. Division instructional directors have from four to 18 direct reports.

There are no degreed accountants in the department to perform monthly closings, preparation of journal vouchers, account analysis, or grant administration. Instead these duties are divided between the business manager and the director of Finance. Activities such as monitoring of school activity funds are either not performed or are completed as time allows. The director of Finance serves as the division's budget officer and develops enrollment projections for the division. The business manager functions as the systems administrator for the finance system due to his technology background. Both administrators are experienced and have an in-depth knowledge of the division and its financial operations.

In the *Division Leadership, Organization, and Management* chapter of this report, the evaluation team recommended that the division hire a chief financial officer (CFO) to oversee its financial operations. The superintendent, the CFO, and the assistant superintendent of Administration should evaluate current position requirements and staff capabilities to develop a plan to address staffing needs, both current and long term.

The department currently has two director level positions, the director of Finance and the business manager. The evaluation team recommends that these two positions be combined into one position with the title of controller. This position should preferably be a Certified Public Accountant (CPA) with experience in the financial operations of medium to large school divisions. The controller position would report to the CFO and would be directly responsible for cash management, the general ledger, fixed asset management, and would supervise the Payroll and Accounts Payable units.

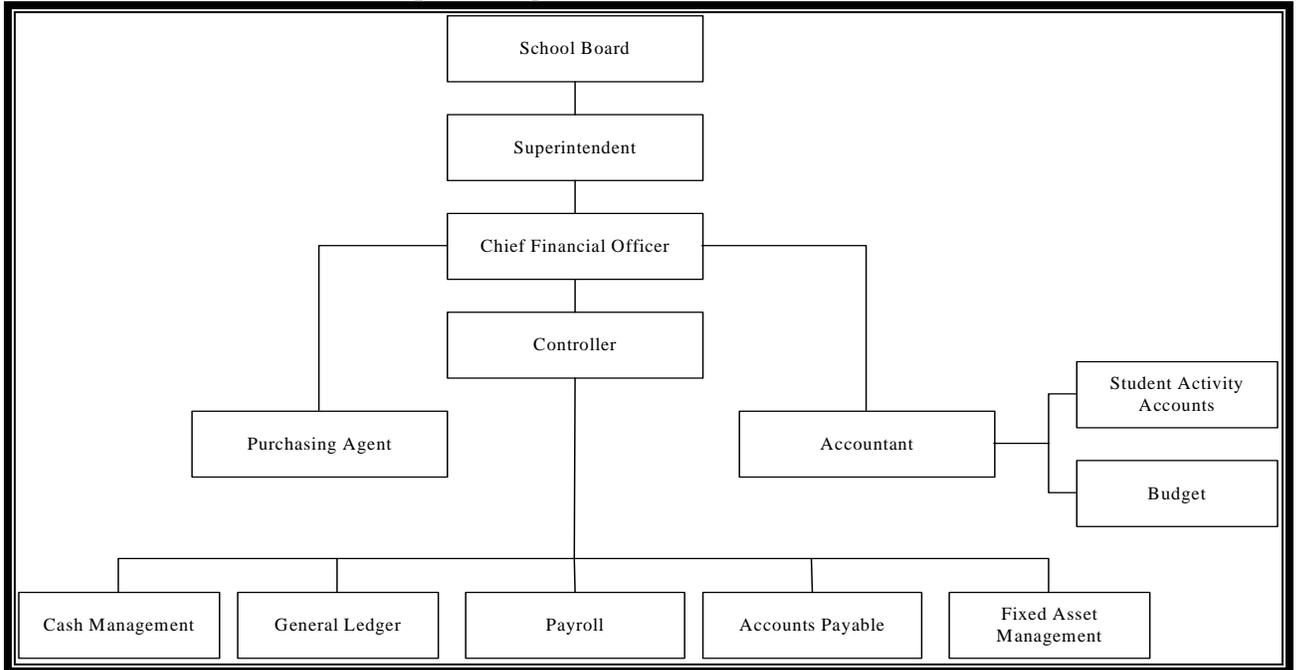
The division, based on a recommendation by its external auditor, funded an internal auditor position in its budget to oversee student activity funds. Although this position was titled internal auditor, the intended duties of this position were more in line with a mid-level accountant. The evaluation team recommends that the division revise the job description created for the internal auditor position and change the position title to accountant. This position will report to the CFO and oversee the student activity accounts, assist in preparing and monitoring the budget, and perform other accounting duties as assigned by the CFO. The CFO will have the ultimate responsibility of the budget process. The assistant superintendent of Administration/Finance stated in interviews that the purpose of adding the internal audit position was to provide a CPA

qualified staff position to the department, experienced in school matters and qualified to be promoted to an upper level administrative position to provide continuity to the department. The title of Accountant and the placement in the Finance Department reporting to the new CFO position defines more appropriately the role and reporting relationship desired by the division for this position.

There will be additional efficiencies resulting from the implementation of the purchasing recommendations in this report that will reduce the number of invoices and the amount of work associated with the current accounts payable process. This should allow the upgrading of one secretary position that functions as a back-up position in the department to a professional accountant position.

These new positions and reporting relationships are described in the proposed organization structure shown in **Exhibit 5-6**. The new accountant position should be added as soon as possible using the funds currently set aside for the internal audit position supplemented by the savings achieved from the elimination of the second secretarial position in the department.

**Exhibit 5-6
Proposed Organization Structure**



Source: Gibson Consulting Group, March 2005.

By restructuring the Finance Department the division will increase the current technical knowledge in the department, provide the resources to effectively perform general accounting duties, and provide continuity for the department in the future.

INTERNAL AUDIT FUNCTION

Recommendation 5-5: Create an internal audit function reporting to the School Board.

Once the Finance Department has been restructured and staff has become familiar with their newly defined roles, there will be a growing need for an independent internal audit function to monitor compliance with School Board policies, regulations or laws, or to conduct internal audits of all identified risk areas on a periodic basis. The current review of internal control and compliance by an independent entity is limited to the external audit.

Internal auditing is an independent appraisal function within the division that evaluates the efficiency and effectiveness of the division's operations and recommends improvements to processes, policies, and procedures to enhance division operations based on the evaluations. The internal audit function monitors compliance with laws, regulations, and policies for the division as well as providing special reports and analyses to the School Board and administration. The superintendent and the School Board will define many of the reviews and evaluations to be performed by this position based upon the needs of the division, usually defined by a formal risk assessment prepared annually by the internal auditor. To be truly independent this position must not report to the superintendent or any other administrator in the organization.

School divisions with an internal audit function usually have a charter or contract adopted by the School Board that spells out the function's general purpose and objective, its authority, and its responsibilities. A primary purpose of this written document is to ensure the independence of the position based upon its reporting relationship to the School Board. Another important purpose is to prevent the position from being used by the School Board to interfere in division operations. This charter generally references the Institute of Internal Auditors Standards for the Professional Practice of Internal Auditing and the Code of Ethics to ensure the internal audit function is appropriately performed. These Standards and the Code of Ethics can be used as part of the evaluation criteria for the function. The internal auditor is generally responsible for:

- reviewing the operations of the division to ensure efficient use of resources;
- reviewing the safeguards in place to protect division assets;
- reviewing the division's activity funds at the schools;
- conducting special reviews requested by the School Board or administration;
- evaluating compliance with laws, rules, regulations, and policies;
- planning and executing the internal audit schedule based on risk assessments; and
- acting as the liaison for the external auditor and coordinating audit activities within the division.

The internal auditor's independence is determined by the auditor's reporting relationship within the division. The independence of the internal audit function increases as the reporting relationship moves upward in the division's organization. Independence is difficult to achieve when the internal audit function reports to a level of management that has responsibility for the daily operations of the division. Since the School Board has no direct responsibility for any operations within the division, the function is most independent when it reports to the School Board. This reporting relationship also enhances the School Board's ability to receive unbiased and unfiltered reports on division operations and special investigations.

Having the internal auditor report directly to the School Board has a major pitfall in that sometimes School Board members can attempt to use this arrangement as an opportunity to

inappropriately insert themselves into division's day-to-day operations. The School Board's role is that of a policy maker and any intrusion into the daily operations oversteps those bounds. However, it is within the School Board's rights and responsibilities to hold the administration accountable for operating the division within School Board policies, as well as state and federal laws, rules, and guidelines. To fail to do so could make the School Board liable for wrongdoing by the administration.

The division should consider creating an independent internal audit function that operates under a School Board approved charter. The auditor should have unrestricted access to upper management and the governing body. Such access should be in form as well as in fact to ensure that the auditor's independence is not impaired. Additionally, the School Board and administration must define the functional and administrative reporting arrangement to ensure that the School Board is very clear about its role and responsibilities and does not take this opportunity to insert itself in the day-to-day division operations.

The addition of a full-time internal auditor position is a major step for a school division, typically resulting in cost savings that significantly exceed the cost of the position over time. It is the type of specialized function that is seen in school systems once they surpass 20,000 students. Unfortunately, in many cases the function is added only after the school division experiences major fraud or other type of financial misuse of funds. By adding a position in the next two years SCPSD can avoid that type of exposure and can proactively address the growing need for an independent evaluation function in a fast growing school system. The division will benefit from expanding this role through the implementation of recommendations resulting from internal audit reviews that will provide cost savings through increased efficiency. The internal auditor can also help to improve division operations by monitoring the division's implementation of recommendations from the external audit or other independent reviews.

TRANSPORTATION

Chapter 6

TRANSPORTATION

BACKGROUND

School divisions in Virginia may, but are not required to, provide transportation for students in the general population between home and school, from school to vocational training, and for extracurricular activities. The federal Individuals with Disabilities Education Act (IDEA) requires a school division to provide transportation for students with disabilities if the school division also provides transportation for students in the general population, or if students with disabilities require transportation to receive special education services. The Transportation Department of the Spotsylvania County Public Schools Division (SCPSD) is responsible for the planning and operation of home to school transportation services for regular, special services, and Head Start programs. In addition, the department provides transportation for career and technical education programs, after school activities, educational field trips, Commonwealth Governor's School, and extracurricular activity trips for all schools in the division. The mission of the Transportation Department is to transport students, as safely and efficiently as possible, to and from school and school activities; and while doing so, to promote an atmosphere of mutual respect and caring among all those individuals involved.

Spotsylvania County is 407 square miles in area. The Transportation Department operated 222 regular home to school bus routes and 56 special services routes in 2003-04. During 2004-05, the number of regular home to school bus routes is 223, and the number of special services routes is 52. Pupil transportation is provided to 16 elementary, seven middle, and five high schools plus two alternative schools, the Career and Technical Center, and the Commonwealth Governor's School. Special services transportation is provided to five programs housed in facilities other than SCPSD schools. Two of the facilities are in Spotsylvania County, and the remaining three are in Fredericksburg and Manassas in Stafford County. SCPSD's average daily riders total 20,451 or 89 percent of the 22,948 students enrolled in 2004-05. School buses and general service vehicles are maintained and serviced at the SCPSD transportation garage.

The Transportation Department is well-respected and recognized for doing a good job providing student transportation. In particular, the managers in the Transportation Department have performed well given the challenges to recruit and retain a full complement of drivers and aides and to provide transportation services for 275 bus routes (2004-05) each day without sufficient supervisory staff for operations. The department staff and drivers were complimented in focus group discussions with principals, teachers, and parents. A number of principals and other division staff as well as the drivers in the focus groups said the performance of the Transportation Department has improved significantly in the last five years.

A. ACHIEVEMENTS

- Two-way radios are provided to campus principals to ensure priority communication with the Transportation Department. A channel is dedicated that allows principals to communicate with the Transportation Department and with each other about student transportation. During the focus group discussion, principals said the radios are effective and provide them first hand knowledge of the status of transportation routes every day.

- A new driver training class is scheduled every month, allowing the opportunity for newly recruited driver candidates to be trained and qualified on a regular basis, throughout the year.
- The vehicles in the school bus fleet are well maintained by a small group of mechanics. On average, each mechanic maintains 40 buses, about two times the industry standard.
- The division is planning to build a joint transportation complex with Spotsylvania County to maintain and service county and school vehicles. The facility is proposed to include adequate space for school bus parking, employee parking, and a maintenance facility. The complex will also include an operations and administration building with office space for transportation personnel and a bus driver training area.
- The Transportation Department implemented guidelines for location of bus stops including a requirement for students to walk to bus stops (rather than providing curb service). The impact was to reduce about one-third of the total number of bus stops and reduce the time required for many bus runs.
- The SCPSD website provides a tool that makes it possible for parents, teachers, and school administrators to investigate and determine which school bus stop is most convenient to a student's home without calling the Transportation Department directly.

B. RECOMMENDATIONS

Recommendation 6-1 (p. 6-8): Revise the Transportation Department's organizational structure. The Transportation Department's organizational structure reflects an excessive span of responsibility for the manager of operations, confusing position titles, unclear lines of authority and responsibility, fragmented oversight of driver training, and insufficient supervisory staffing levels. As a result, the department's management staff spends excessive time on day-to-day problems and not enough time devoted to improving the quality of service and monitoring performance for effectiveness and efficiency. The organization structure of the Transportation Department should be revised to add mid-level management positions to provide an appropriate span of responsibility to supervise operations and to dedicate personnel to safety and training. Recommended positions include three bus route service coordinators, a special services transportation coordinator, and a full-time safety/trainer. An overall goal of the revised organization is to improve service quality; achieve timely and responsive communications with drivers, principals, and parents; and to clarify lines of authority and responsibility.

Recommendation 6-2 (p. 6-13): Establish a referral bonus to encourage employees to recruit new drivers and aides and fill vacant positions created by long-term absences. Providing enough drivers and aides to operate school bus routes each day is a major issue facing the Transportation Department. A full complement of bus drivers and aides is essential for pupil transportation to operate efficiently and effectively each day. More aggressive recruitment techniques such as a referral bonus plus filling vacant positions created by long-term absences could help address problems created by the lack of enough drivers and aides.

Recommendation 6-3 (p. 6-15): Use the existing automated routing and scheduling system to produce driver pay schedules. The existing procedure for each bus driver to self-report time lacks controls to verify accuracy and to monitor hours over contract and hours of overtime. The

result is significant hours above contract and an increasing number of overtime hours paid. The evaluation team recommends using the existing automated routing and scheduling system to create individual bus driver weekly schedules that include the approved pay time for all routes, activity runs, and supplementary work assigned to each driver. Contracts should be based on the automated routing schedules plus a specified time for pre-trip inspections and rounded to the nearest quarter hour. Any exceptions to the approved schedule should be verified by a supervisor before additional time is authorized to be paid. Extra assignments should not be designated for a driver that will require overtime to do the work. Revising how time is reported and developing control procedures should reduce hours over the contracted amount and overtime hours.

Recommendation 6-4 (p. 6-15): Implement a performance-monitoring program to compare SCPSD's pupil transportation against established benchmarks and to set goals for improved efficiency and effectiveness. The SCPSD Transportation Department does not have formal management reports that provide efficiency and effectiveness measures to school administrators or the public. The performance of the SCPSD pupil transportation function is not compared against peer divisions. The Transportation Department can use benchmarks to gauge performance and identify areas of improvement related to cost-efficiency, routing and scheduling effectiveness, staffing levels, on-time performance, and safety.

Recommendation 6-5 (p. 6-18): Develop and distribute Transportation Department standard operating procedures. The Transportation Department has not documented standard operating procedures for distribution to employees. There is a driver/attendant handbook but the handbook does not include procedures specific to the operation and administration of student transportation. The absence of operational procedures creates inconsistencies in day-to-day operations. The purpose of the procedures manual is to provide standard and consistent information to all persons associated with transporting SCPSD students.

Recommendation 6-6 (p. 6-18): Investigate revising division policies and standard practices to increase regular school transportation route efficiencies and achieve cost savings. The Transportation Department can use the existing automated routing and scheduling system to help design more efficient student transportation routes and schedules. However, a more efficient operation will require revised policies and practices that may impact school bell times, program schedules, and the way school bus routes are designed. Examples of revised policies or standard practices that can lead to more efficient routing and cost savings include: establishing walk to school zones, increasing the maximum distance for walk to bus stop, purchasing school buses with additional seating capacity, scheduling morning and afternoon bus runs independently, increasing the span of time between school bell times, revising the staggered bell schedule to consider the location of schools as well as grade level, and revising the times breakfast is served for some schools. Pursuing changes to these policies and standard practices can lead to improved efficiency and result in annual cost savings.

Recommendation 6-7 (p. 6-23): Implement the automated routing and scheduling system for special services transportation to improve route efficiencies and establish a cooperative planning effort to improve service quality. Using automated routing for special services transportation should achieve an 8 percent reduction in cost based on the implementation of similar software in other school divisions. Additional cost savings are possible through better coordination of transportation schedules with special services programs schedules. A cooperative effort over several years can reasonably result in an additional 5 percent in cost savings per year for each of four years (after implementation of automated routing and scheduling).

Recommendation 6-8 (p. 6-26): Increase the number of hours for in-service training for drivers and aides. Drivers and aides are provided only four hours of in-service training per year. Four hours is not sufficient time to devote to personnel development. The evaluation team recommends the Transportation Department expand the number of hours of in-service training per year from four hours to 12 hours. The additional time should involve drivers and aides in team building exercises and provide advanced skills training.

Recommendation 6-9 (p. 26): Adopt a written procedure with defined roles and responsibilities for student discipline on school buses. The Transportation Department can address the need for more clearly defined procedures by developing a student discipline management plan to establish guidelines for bus drivers and school administrators when processing a referral for student conduct on a school bus. The plan should be presented to bus drivers at an in-service training and sent to each school administrator prior to each school year.

Recommendation 6-10 (p. 27): Adopt a vehicle purchase and replacement policy and establish guidelines for annual purchase of school buses. The school division does not have a formal bus purchase and replacement policy. By adopting a policy and establishing implementation guidelines, the School Board will be able to anticipate needed capital outlay and provide for a regular introduction of a similar number of school buses into the fleet each year. The guidelines should consider years of service, miles of service, type of service, annual repair cost, and maintenance condition. The implementation of the guidelines should be reflected in the five-year and annual capital budget. There is no direct cost of implementation for this recommendation, as the division has been purchasing buses regularly but without an appropriate strategy to balance the number of buses purchased and the dollars required each year.

Recommendation 6-11 (p. 6-28): Implement an automated parts inventory system and hire a part-time employee to support vehicle maintenance. The Transportation Department should implement an automated parts inventory system. An existing employee (driver or aide) who has experience working with databases should be employed to support the maintenance supervisor and parts manager part-time.

C. FINANCIAL IMPACT OF RECOMMENDATIONS

This chapter contains recommendations to improve the efficiency of SCPSD pupil transportation operations. Once all recommendations are fully implemented in 2009-10, they will result in savings of \$945,210 each year, representing 0.54 percent of the division’s annual operating budget. The major savings opportunities are presented in **Exhibit 6-1**. Details of how the financial impact was calculated can be found in Appendix B.

**Exhibit 6-1
Summary of SCPSD Savings Opportunities**

Functional Area	Recommendation	Annual Savings
Transportation	Investigate revising division policies and standard practices to increase regular route efficiencies and achieve cost savings.	\$458,326
	Implement the automated routing and scheduling system for special services transportation to improve route efficiencies.	\$155,396
	Establish a cooperative planning effort to improve service quality for special services transportation.	\$331,488
Total Annual Savings		\$945,210
Percent of annual operating budget		0.54%

Source: Gibson Consulting Group, Inc.

This chapter contains recommended investments by SCPSD intended to achieve best practices or to generate subsequent future savings. If savings cannot support these investments in the short-term, then the division should request additional investment funds from the county or delay the implementation if the investment does not yield future savings.

The recommended investments are listed below:

1. Revise the Transportation Department’s organizational structure, roles, and responsibilities plus add new mid-level management positions. The revised organization should achieve appropriate span of responsibility; timely and responsive communications with drivers, principals, and parents; and clarify lines of authority and responsibility. Annual Investment: \$269,490
2. Establish a referral bonus to encourage employees to recruit new drivers and aides and discontinue the practice of not filling vacant positions created by long-term absences. More aggressive recruitment techniques such as a referral bonus plus promptly filling vacant positions created by long-term absence could help address the Transportation Department’s understaffing problems. Annual Investment: \$19,000.
3. Increase the number of hours for in-service training for drivers and aides from four hours to 12 hours. The additional time should involve drivers and aides in team building exercises and provide advanced skills training. The cost of additional in-service training is for eight additional hours annually for approximately 400 drivers and aides at the average annual driver pay rate of \$16.64 per hour plus 7.65 percent employee benefits. Annual Investment: \$57,321.
4. Implement an automated parts inventory system and hire a part-time employee to support vehicle maintenance. The investment to set-up an automated parts inventory system is a one-time cost of \$3,866 for software and the time to enter the parts inventory into the

database. The investment to maintain the automated parts inventory database and to transition to a fully automated vehicle management information system is \$17,913 annually through year three.

If the recommendations discussed in this chapter are implemented, the net annual savings to SCPSD in 2009-10 will be \$599,399 or 0.34 percent of the division's annual operating budget. The net annual savings does not include the one-time investment of \$3,866 and the investment of \$17,913 for the part-time clerk assigned to maintain the vehicle parts through fiscal year 2007-08.

D. DETAILED ACHIEVEMENTS

Two-way radios ensure priority communication between the Transportation Department and campus principals.

Two-way radios are provided to campus principals to ensure priority communications with the Transportation Department. SCPSD received two-way hand held radios from the Spotsylvania County Fire Department when the Fire Department acquired new radios with enhanced features. SCPSD put the radios to use by distributing them to the principals allowing them direct access to the Transportation Department's management staff and dispatch function. The radios provide an effective communication tool for principals to inquire and receive immediate response regarding pupil transportation inquiries such as the status of a bus if it is not on schedule. During the focus group discussion, principals said the radios are effective and provide them first hand knowledge of the status of transportation routes every day.

A new school bus driver training class is scheduled every month.

A new school bus driver training class is scheduled every month, allowing an opportunity for newly recruited driver candidates to be trained on a regular basis. The training classes are taught by experienced drivers who train part-time, during the middle of the day between school bus route schedules. Bus drivers are recruited year round to fill vacant driver positions, and promising candidates are scheduled for the next monthly training class.

The school bus fleet is well maintained by a small number of mechanics compared to industry standards.

The vehicles in the school bus fleet are maintained by a team of skilled and experienced workers including the foreman, a parts clerk, eight mechanics and a mechanics' helper. Each mechanic maintains an average of 40 buses or about two times the industry standard. Preventive maintenance inspections are scheduled and completed for each bus every 30 school days. Bus drivers who participated in the drivers' focus group said the mechanics are responsive to maintenance requests and the work is completed timely.

The school division is planning to develop a joint county and school transportation complex to service county and school vehicles.

The SCPSD transportation facility is too small for the operation. The offices for administrative personnel and driver training are temporary buildings, and there is not sufficient space for staff to work efficiently. The building for offices is 864 square feet and houses 13 administrative staff. A second building provides 336 square feet as a rest area for drivers and aides during midday and 528 square feet as a training room for monthly classes of as many as 15 trainees. The garage is

too small for the fleet of school buses; there are eight maintenance bays for a fleet of 332 buses as of the 2003-04 school year. The division is planning to build a joint transportation complex with Spotsylvania County to maintain and service county and school vehicles on property owned by the school division. The facility is proposed to include adequate space for school bus parking, employee parking, and a maintenance facility with 24 stalls to maintain school buses, light trucks, service cars, and fire trucks. The complex will also include an operations and administration building with office space for transportation personnel and a bus driver training area. The capital budget includes the \$7.7 million funding required for this joint venture.

Bus stops are located using defined guidelines based on distance and safety.

Beginning with the 2000-01 school year, SCPSD implemented guidelines for location of bus stops that defined the maximum distance for students to walk to bus stops. The walk to bus stop distance is one-tenth of a mile for elementary students (K -5) and three-tenths of a mile for middle and high school students (6 -12). Prior to establishing the walk to bus stop guidelines many buses stopped at the rider's residence. Locating bus stops according to the guidelines resulted in approximately a one-third reduction in the number of bus stops over a two-year period. Reducing the number of bus stops decreased the time required for many bus runs. In addition to distance guidelines, bus stop locations are determined based on safety. The Transportation Department developed a school bus stop evaluation procedure to rate the desirability of a bus stop based on safety criteria. Each stop is rated on each of eight criteria that include:

- students' route to bus stop;
- student bus stop waiting area;
- accommodation of student population at bus stop;
- bus turn around requirements;
- bus route to and from the bus stop;
- approaching motorists view of bus stop and stopped school bus;
- road/street usage at bus stop; and
- attractive nuisance or other potential hazard near or along path to bus stop.

Statements are defined that describe the best/worst conditions for each criterion. A cumulative numeric value is calculated for each stop using a four-point scale across all criteria. The ratings describe the stop under normal operating conditions.

School bus stops can be located using the school division website.

The Transportation Department link on the SCPSD website provides a tool to identify bus stop locations. By entering an address the Web query function displays the two bus stops closest to that address. The tool makes it possible for parents, teachers, and school administrators to investigate and determine which school bus stop is most convenient to a student's home without calling the Transportation Department directly.

E. DETAILED FINDINGS AND RECOMMENDATIONS

ORGANIZATION AND STAFFING

Recommendation 6-1: Revise the Transportation Department's organizational structure.

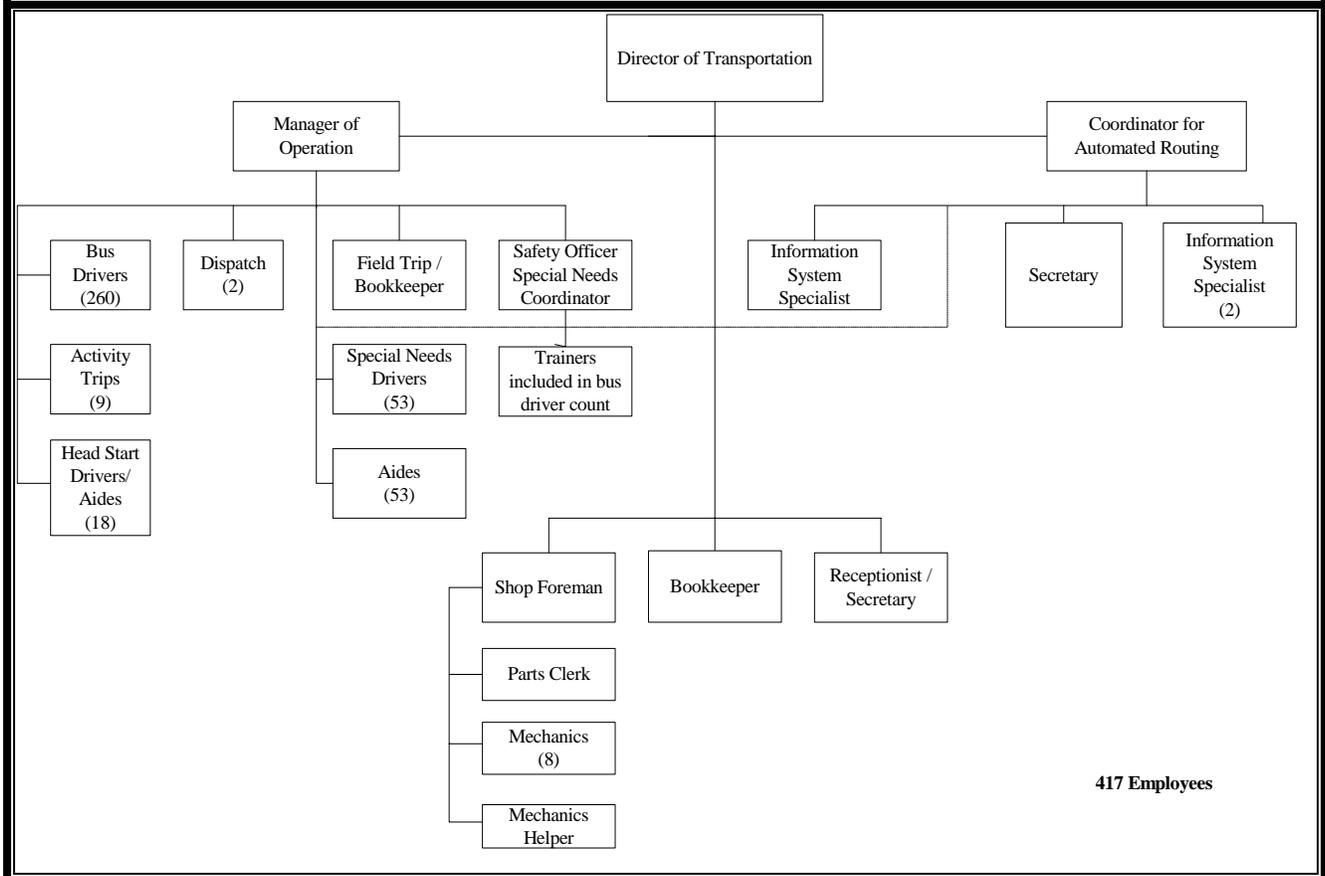
The Transportation Department's organizational structure reflects excessive span of responsibility, confusing titles, unclear lines of authority and responsibility, fragmented training oversight, and insufficient supervisory staff levels. As a result, the department's management staff spends excessive time on day-to-day problems and not enough time towards resolving processes that need improving. The organization chart indicates all drivers, 322 authorized positions, report to the manager of operations. This is an excessive span of control for one person. Lines of authority and reporting relationships are confused by unclear titles and assignment of responsibilities. The position responsible for supervising routing and scheduling is titled "coordinator for automated routing." This title does not clearly describe the responsibilities of this position. A full-time position for training does not exist. The four trainers are part-time drivers who train between bus routes.

The Transportation Department employs 417 staff members. The director of Transportation reports to the assistant superintendent for Administration and Finance. The Transportation Department core leadership team includes the director, the manager of operations, and the coordinator for automated routing. The field trip coordinator, two dispatchers, and the safety officer special needs coordinator report to the manager of operations, as well as 322 drivers (260 regular route, 53 special services, and nine Head Start), nine field trip drivers, and 62 aides (53 special services and nine Head Start). Three information system specialists, two for regular routes and one for special needs routes, and a secretary report to the coordinator for automated routing. The support staff positions include the bookkeeper and the receptionist/secretary. All administrative and support staff positions are filled. The shop foreman, eight mechanics, a parts clerk and a mechanics' helper are responsible for servicing and maintaining the bus fleet plus other general service vehicles.

Driver/attendant positions are classified as contracted or non-contracted. A contracted position is based on a 20 hour work week. A contracted employee is eligible for benefits that include paid personal/sick leave, subsidized health insurance, and an annual annuity in lieu of retirement benefits. There are 322 contracted driver positions and 62 contracted bus aide positions. A non-contracted position is not guaranteed a minimum number of hours per week and is not eligible for benefits. There are nine non-contracted field trip drivers. As of January 2005, 24 contracted driver and 10 contracted aide positions (9 percent) were vacant. In addition to the 34 vacant positions, 15 staff members are on long-term leave.

Exhibit 6-2 illustrates the organizational chart of the SCPSD Transportation Department.

**Exhibit 6-2
SCPSD Transportation Department
Organization Chart
2004-2005**



Source: SCPSD, Transportation Department, February 2005.

According to the departmental organization chart, all drivers report to the manager of operations. Driver categories include regular and special need drivers, activity trip or field trip drivers, and Head Start drivers. Head Start is a national child development program with the goal of increasing the school readiness of young children in low income families. The chart shows special needs drivers and attendants reporting to both the manager of operations and the safety officer special needs coordinator. Mid-level management positions such as lead drivers or field supervisors do not exist. Supervisory resources are insufficient to effectively monitor and manage the number of drivers. The difficulty of managing the daily operations and supervising 400 plus employees without more mid-level management positions is a primary concern of the director of Transportation. Concerns expressed during interviews with the director and staff include:

- insufficient resources to monitor and validate hours reported by drivers compared to route times;
- intense efforts required during the first six to eight weeks of school “putting out fires”;

- inquiries and customer service calls must be handled by the routers which hinders their ability to continually review and analyze routes for improvement; and
- inability to dedicate time to stay current with trends, new laws, and best practices.

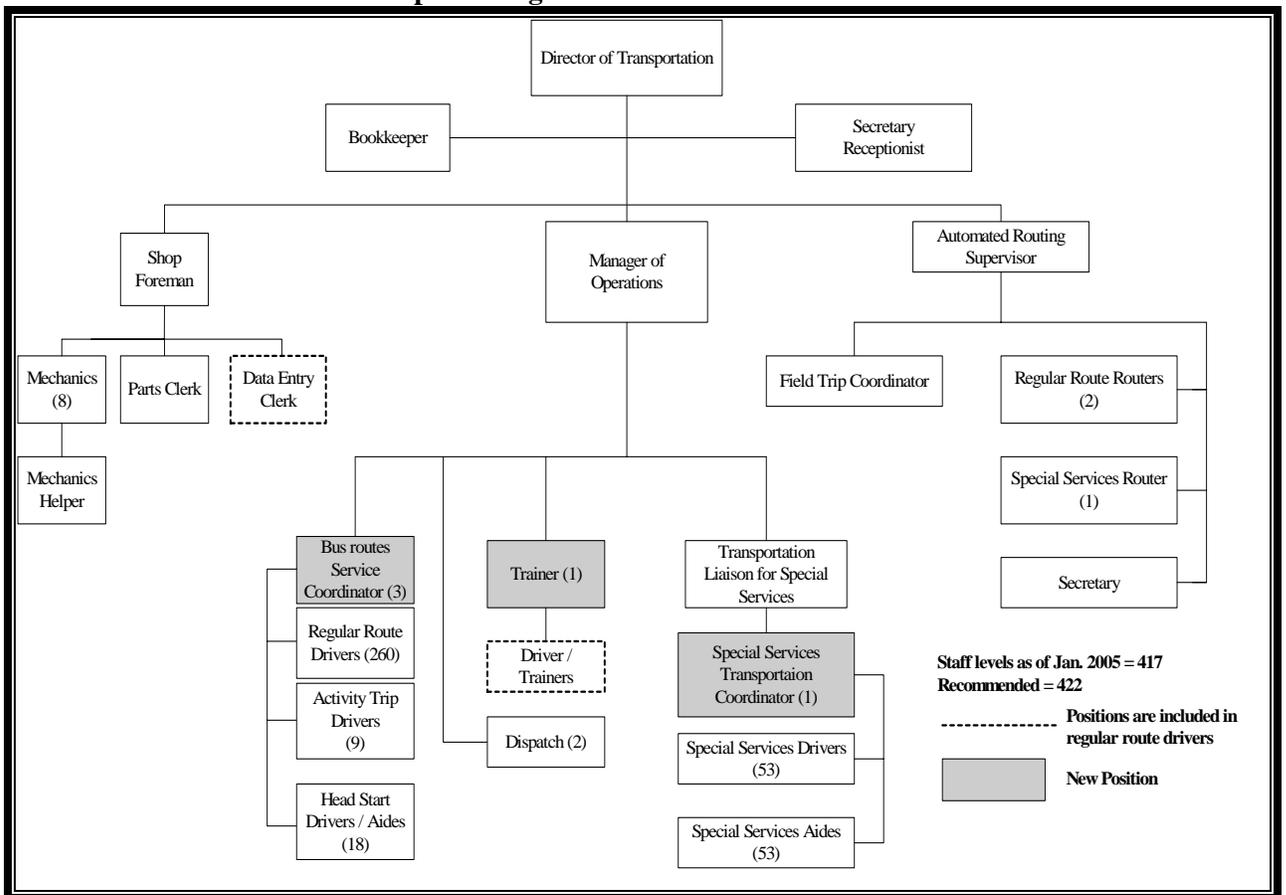
The position titled safety officer special needs coordinator is assigned key functions commonly aligned with three positions. These functions include: safety/training; coordinator of special needs drivers and aides; and liaison to the Special Services Department, school administrators, and parents. Staff assigned to training includes a substitute driver who coordinates the training classes plus experienced contract drivers who train during hours between school bus routes. These functions assigned to one position results in an excessive scope of responsibility, as evidenced by a recent decision to reassign the training responsibilities to the manager of operations.

Exhibit 6-3 illustrates the recommended organizational structure designed to meet the following objectives:

- reduce the span of control for the manager of operations;
- create mid-level supervisory staff for operations by creating service coordinators;
- define clear reporting relationships for all drivers;
- designate full-time responsibility for safety and training;
- realign customer service activities to area supervisors;
- provide area supervisors as the primary point of contact for drivers and minimize the direct access of drivers to the automated routing supervisor and the routers;
- focus the time of routers on efficient route design and route revisions;
- focus attention on special services planning and management; and
- free management resources to focus on process improvements.

Titles have been revised to reflect “special services” in lieu of “special needs” to be consistent with the Special Services Department.

**Exhibit 6-3
SCPSD Transportation Department
Proposed Organization Structure**



Source: Gibson Consulting Group, Inc.

Specifically, the evaluation team recommends adding five new positions under the manager of operations. Three new positions are proposed as bus route service coordinators to be responsible

for supervising field operations for the regular route program, including activity trips and the Head Start drivers and aides. Each service coordinator is assigned to oversee operations in a geographical area (zone) of the county and will be responsible for overseeing field operations for approximately 100 drivers and aides. Primary responsibilities for the recommended service coordinators include:

- supervise, monitor, and observe the activities and overall performance of drivers;
- conduct annual and periodic review of driver skills and safety performance;
- provide information from the field to assist routers in designing and scheduling effective and efficient routes;
- assist in the resolution of bus driver/aides issues and concerns;
- ensure effective communication between students, parents, and school administrators to resolve student disciplinary issues on school buses;
- investigate concerns related to the quality of operations based on inquiries from parents and principals;
- serve as a mentor for drivers/aides;
- review and monitor requests for additional time over scheduled time;
- ensure standard operating procedures are followed; and
- serve as a communication link between bus drivers, aides, and transportation administrators.

A similar position is recommended as the special services transportation coordinator. The responsibilities are similar to the bus route service coordinator except this position is responsible for the special services drivers and aides. The coordinator for special services will be responsible for overseeing field operations for over 100 drivers and aides assigned to special services routes.

The positions should be filled as soon as physical space can be configured to accommodate the additional staff. Four of the five positions are specifically responsible to supervise daily operations – the majority of their time will be in the field and working with drivers, not in an office environment. The fifth position is a full-time trainer and will work in the existing training room. The purpose of the five positions is to assist in reducing the chaos in the existing administrative offices by moving supervision of operations to the field.

The proposed full-time trainer position will direct and schedule drivers who also provide driver training part-time. There are currently four drivers that provide training part-time. Primary responsibilities for the recommended trainer position include:

- plan and schedule all classroom and behind the wheel training sessions for bus drivers and aides;
- update curriculum to respond to current training needs using the most effective training materials available;
- adapt training materials to reflect pertinent references to SCPSD policies and practices;
- ensure all drivers comply with applicable certifications and licenses required by the Virginia Department of Education and the Virginia Department of Motor Vehicles;
- identify, develop, design, and schedule in-service training sessions;
- investigate accidents and lead an accident review board; and
- determine training needs based on school bus incidents or accidents.

The focus of the safety officer special needs coordinator should be revised. A new role is recommended for this position, which emphasizes an outwardly focus to serve as a liaison for the Transportation Department to work with the Special Services Department, the school administrator responsible for special services at each school, and the teachers and parents of children in special services programs. A liaison is needed to improve the planning of transportation services and to serve as a facilitator to ensure superior customer service for children who participate in special services. A similar position in another school division in Virginia is titled "ombudsman for special services." The ombudsman attends conferences for children who require transportation services to participate in special services programs; investigates the best ways to provide transportation for a particular student's needs; serves as the mediator for disagreements between drivers, school care providers, school administrators, and parents; and develops training curricula for drivers and aides transporting special services students. (*Recommendation 6-7 discusses additional roles and responsibilities of this position.*)

The field trip coordinator is realigned under the supervision of the automated routing supervisor because an automated scheduling and billing system for field trips is being implemented. The responsibility for scheduling field trip assignments for drivers appropriately lies with the staff responsible for scheduling daily route assignments.

An overall goal of the revised organization is to improve customer service by providing better supervision of operations; improving communications with drivers, principals, and parents; and clarifying lines of authority and responsibility.

Recommendation 6-2: Establish a referral bonus to encourage employees to recruit new drivers and aides and fill vacant positions created by long-term absences.

Providing enough drivers and aides to operate school bus routes each day is a major issue facing the Transportation Department. A full complement of bus drivers and aides is essential for pupil transportation to operate efficiently and effectively each day. Twenty-four of the 322 contracted driver positions are vacant. Absences, due to sickness and personal leave, average 10 drivers per day, based on 2003-04 absentee reports. In addition, on average 12 drivers are on long-term leave. Therefore, on an average day 46 or more drivers are not available for their assigned routes.

Ten of the 62 contracted aide positions are vacant. Absences, due to sickness and personal leave average four aides per day, based on the 2003-04 absentee reports. In addition, an average of three aides are on long-term leave meaning an average of 17 aides are not available for their assigned routes. When an aide is absent a bus driver must fill the vacancy since an aide is required to be on the special services and Head Start buses.

Fourteen substitute drivers are intended to cover daily absences. The average number of drivers absent per day usually consumes all the resources designated as substitutes. Not having a full complement of bus drivers, aides, and substitutes result in problems such as:

- trips operate behind schedule because there are not enough drivers to adequately cover routes;
- student riders may arrive at school late or return home late;
- the quality of service is compromised;
- hours over the 20 hour contract and overtime hours increase;
- requires the division to pay once for the employee out on personal/sick time and once for the employee who fills their own assigned run and covers the vacant run; and

- disrupts normal operations for administrative staff, especially for supervisors, dispatchers, and routers who must find drivers and reschedule runs.

The long-term leave policy for contracted transportation employees allows 180 days of absence. The SCPSD practice is to not fill a vacant position created by a long-term absence but to hold the route open until the employee returns from long-term leave. Substitute drivers are assigned to the open position. The number of employees on long-term leave is a major contributor to high absentee rates.

Recruiters in the Human Resources Department work diligently to recruit applicants for transportation driver and attendant positions. The 2004-05 bus driver recruitment plan includes the following strategies to recruit applicants:

- placing cold calls to inform individuals of opportunities in the Transportation Department;
- running continuous ads in the local newspaper;
- posting open positions on the SCPSD website; and
- mailing letters prior to the start of each new driver training class to all applicants in the SCPSD applicant database that have not been offered a position at SCPSD.

Also, to be competitive in the local market to attract and retain staff, the SCPSD contracted bus driver and attendant positions qualify for benefits including paid personal/sick days, health insurance benefits, and a \$500 annuity retirement benefit.

More aggressive recruitment techniques and changes to the SCPSD practice of holding contracted positions open when an employee is on long-term leave could help address the driver/aide shortage. The evaluation team recommends SCPSD consider offering financial incentives such as providing a referral bonus or “finders fee” when an employee refers an applicant hired for a bus driver or attendant position.

At least one school division in Northern Virginia uses a referral bonus as an incentive to recruit drivers. Their program offers a \$1,000 incentive to a bus driver recruiter. The bus driver recruiter receives \$200 after the referred applicant completes driver training. The remaining \$800 is paid to the recruiter after the new driver completes 90 days of employment. The new driver also receives \$500 after passing training and driving for 90 days.

Also, the evaluation team recommends the division fill route assignments that are vacated by employees out on long-term leave. The positions should be filled with a contract driver that is available to work daily. The individual returning from long-term leave would then be assigned to new or vacant route assignments. The suggested change is not intended to increase the total number of staff or to restrict the ability of drivers on long-term leave to return-to-work. The average turnover of drivers/aides should create enough open positions to provide an employee on long-term leave a position when he/she returns-to-work.

MANAGEMENT POLICIES AND PROCEDURES

Recommendation 6-3: Use the existing automated routing and scheduling system to produce driver pay schedules.

The process for bus driver time reporting lacks controls to verify accuracy and to limit reporting of hours over contract and overtime, resulting in significant hours above contract and overtime hours to be paid. The pay for contracted hours for drivers and aides (20 hours per week), the pay for time above contracted hours (in excess of 20 hours per week), and the pay for overtime hours totaled \$5,379,472 for the 2003-04 school year. The pay for time above contracted hours equaled \$1,321,159 or 24.6 percent of total pay, while driver and aide overtime pay equaled \$60,695 or 1.1 percent of total pay for the same time period. Overtime paid for drivers and aides increased 95.5 percent from 2002-03 to 2003-04. Each driver self-reports time worked. All regularly scheduled routes and times are recorded on a daily log sheet and summarized on a weekly time sheet. The bus driver reports the actual time worked. Time spent on activities other than the scheduled bus route requires a description of the activity on the daily log sheet. The time sheets are submitted to the Transportation Department where the bookkeeper enters the time into the payroll system. No standard procedure is in place to audit time sheets on a regular basis, primarily due to insufficient staff time. Also, management controls such as an overtime policy requiring advanced approval for overtime hours have not been developed.

The evaluation team recommends using the automated routing and scheduling system to create individual bus driver weekly schedules that include the approved pay time for all routes, activity runs, and supplementary work assigned to each driver. Contracts should be based on the automated routing schedules plus a specified time for pre-trip inspections and rounded to the nearest quarter hour. Any exceptions to the approved schedule must then be verified by a supervisor before additional time is authorized to be paid. Extra assignments should not be designated for a driver that will require overtime to do the work. Also, the evaluation team suggests adopting an overtime management control policy that limits pay to 40 hours per week or less. Exceptions should require management approval. Revising how time is reported and developing control procedures in conjunction with the recommendation to hire contracted drivers to fill vacancies due to long-term leave should reduce hours over contracted amount and overtime hours.

Recommendation 6-4: Implement a performance-monitoring program to compare SCPSD's pupil transportation against established benchmarks and to set goals for improved efficiency and effectiveness.

The SCPSD Transportation Department does not have formal management reports that provide efficiency and effectiveness measures to school division administrators or the public. The performance of the SCPSD transportation function is not compared against established peer divisions. No benchmarks have been defined to gauge performance and identify areas of improvement related to cost-efficiency, routing and scheduling effectiveness, staffing levels, on-time performance, and safety. Many public transit agencies and private fleet managers use performance measures to identify improvement opportunities for employees, to measure customer satisfaction, and to reduce cost.

Key elements of a performance measurement system include measurable goals and objectives, performance indicators, and measures used to gauge benchmarks or standards against which performance will be assessed. Performance measures include both short-term internal measures to evaluate and improve day-to-day transportation operations, such as driver absentee rates and

long-term measures for criteria such as the operating cost per mile, student riders per bus route, the number of runs per bus in service, and on-time performance of buses.

The performance monitoring system for Transportation can also be used to assist in reviewing the transportation related costs of other programs. For example, about 20 percent of Limited English Proficient (LEP) students attending SCPSD are transported to centers for English as a Second or Other Language (ESOL) services. As of January 2005, the division reported 129 LEP students are bused from the home school to schools with ESOL centers. The cost of transportation includes operating expenses and lost instructional time for LEP students; however, neither Transportation nor the Department of Instruction track the lost instructional time. The Transportation Department could use the automated routing and scheduling system to measure and report the time devoted to transportation between schools for ESOL students. The information could then be shared on a regular basis with school administrators to consider program cost as a determining factor in the decision of where programs should be located.

The cost data were calculated by the evaluation team from data reported by SCPSD to the Virginia Department of Education (DOE) for 2002-03 and to the evaluation team for 2003-04 and 2004-05. The evaluation team has also proposed targets for each performance indicator; however, the Transportation Department is encouraged to review these recommendations and adopt targets that are deemed appropriate for the division.

Exhibit 6-4 shows some standard transportation performance indicators and the SCPSD performance statistic for each performance indicator (if available from SCPSD).

**Exhibit 6-4
Transportation Performance Indicators and
SCPSD Performance Statistics and Proposed Targets**

Performance Indicator	SCPSD 2004-05 2002-03 Cost	Target	Reporting Frequency
<i>Personnel Management As of 01/05</i>			
Number of route driver positions vacant	24	0	Weekly as long as > goal
Number of drivers absent average day	10	≤15	Monthly
Number of drivers on long-term leave	12	--	Monthly
Total drivers out	46	≤15	Monthly trend analysis
Number of available substitute drivers	0	15	Monthly trend analysis
Routes to cover	46	0	Monthly trend analysis
Number of drivers in training	13	As required	Monthly
Percent of trainees employed as drivers	Not available	>75%	Monthly trend analysis
Percent of new drivers > 90 days	Not available	>90%	Monthly trend analysis
Number of aide positions vacant	10	0	Weekly as long as > goal
Number of aides absent average day	4	≤5	Monthly
Number of aides on long-term leave	3	--	Monthly
Total aides out	17	≤5	Monthly trend analysis
Number of aide positions in training	Not available	As required	Monthly
Percent time over scheduled hours	36%	<30%	Monthly trend analysis
Annual turnover rate for drivers	10%	≤10%	Annual/Monitor monthly
<i>Cost-Efficiency (Annual Costs 2002-03)</i>			
Operations cost per mile – Regular	\$1.79	\$1.79	Annual with trend analysis
Operations cost per mile – Special	\$3.10	\$2.76	
<i>Cost-Effectiveness (Annual Costs 2002-03)</i>			
Operations cost per rider – Regular	\$133	\$120	Annual with trend analysis
Operations cost per rider – Special	\$4,581	<\$3,433	
<i>Service Effectiveness</i>			
Runs per bus – Regular (2003-04)	1.89	2.08	Annual as part of route design and included with cost reports
Route riders per bus – Regular (2002-03)	91	100	
Route riders per bus – Special (2002-03)	9	11	
<i>Service Quality</i>			
On-time performance (bus arrival)	Not available	≥90%	Monthly trend analysis
Special services trips > one hour	Not available	<5%	Monthly with explanation
Time between schools, such as - Special Services - ESOL Program	Not available	Set target with user Dept.	Annual
<i>Maintenance Performance As of 1/05</i>			
Miles between breakdowns in service	Not available	10,500	Monthly
Percent PMs completed on-time	Not available	≥95%	Monthly
Spares ratio as percent of route buses	19%	<20%	Annual
<i>Safety</i>			
Accidents per 100,000 miles	Not available	0.21	Monthly

Sources: Virginia Department of Education Pupil Transportation report, 2002-03; Spotsylvania County Public Schools Transportation Department for 2004-05 data; Targets proposed by Gibson Consulting Group, Inc.

Recommendation 6-5: Develop and distribute Transportation Department standard operating procedures.

The Transportation Department has not documented formal standard operating procedures. Although there is a driver/attendant handbook, it does not include procedures specific to the operation and administration of student transportation. The absence of written operational procedures creates inconsistencies in day-to-day operations. During a focus group discussion, several drivers said different supervisors provide guidance and interpret rules differently at different times. The drivers said the director of Transportation needs to clarify procedures in writing so that everyone has the same information and so that the rules are enforced consistently.

The evaluation team recommends developing an operating procedures handbook to provide standard and consistent information to all persons associated with transporting SCPSD students. Written standard operating procedures are a common practice in student transportation departments to ensure accurate communication with staff. A procedures handbook provides staff with an easy reference. In addition, the director of Transportation can ensure that staff reads and understands the standard operating procedures in the handbook by providing in-service training and then requiring all employees to sign a statement acknowledging the material.

The procedures handbook should include information on department organization and staffing, job descriptions and responsibilities, staff personnel rules, reporting procedures and forms, discipline management, fleet maintenance descriptions and responsibilities, and operations. The operations section should provide a sufficient level of detail to cover operations and practices in the field such as procedures to check-in each day and conduct a pre-trip inspection, radio use, safe practices for loading and unloading students, bus line-up procedures for student pick-ups at schools, accident reporting procedures, and steps to follow in situations where a child is reported lost. The handbook should also cover such areas as employee dress code and conduct, guidelines for parent conferences, procedures for extracurricular trip assignments, and drug and alcohol testing procedures.

ROUTING AND SCHEDULING**Recommendation 6-6: Investigate revising division policies and standard practices to increase regular school transportation route efficiencies and achieve cost savings.**

Routing is one of the most important factors in establishing an effective and cost-efficient student transportation system. Performance indicators to measure service effectiveness and efficiency are riders per bus route and bus runs per bus route. Riders per bus route is determined by dividing the average daily riders by the number of route buses.

Exhibit 6-5 compares the 2002-03 measure of service effectiveness for SCPSD with the peer school divisions in the cluster group. When compared to peers, SCPSD had the lowest number of riders per bus for regular routes in 2002-03 (91 riders per bus).

**Exhibit 6-5
SCPSD and Peer Divisions Regular Route
Riders per Bus
2002-03**

School Division	Daily Riders	Route Buses	Riders/Bus
Arlington	9,863	73	135
Chesapeake City	28,795	299	96
Chesterfield	40,220	389	103
Fairfax County	118,500	899	132
Henrico	41,265	339	122
Prince William	43,613	408	107
Stafford County	15,947	152	105
Virginia Beach	67,031	435	154
Peer Average	45,654	374	119
Peer Avg Excluding Arlington/Fairfax Co	39,479	337	115
Spotsylvania	18,630	204	91
Percent Different from Peer Average			(24%)
Percent Different from Peer Avg Excluding Arlington/Fairfax Co			(21%)

*Source: Virginia Department of Education Pupil Transportation Report, 2002-03.
* Peer average is calculated using riders/bus with infinite decimals.*

Arlington and Fairfax County school divisions are in or very near the Washington, D.C. metropolitan area. The operating environment for these two divisions is more urbanized than the other divisions in the cluster group; therefore, they were not included in the second peer average comparison shown in **Exhibit 6-5**. Spotsylvania is 24 percent below the peer average for all divisions in the cluster group and 21 percent below the peer average for the divisions in similar operating environments.

SCPSD provides transportation to 89 percent of enrolled students. As shown in **Exhibit 6-6**, the peer average student riders for school divisions in similar operating environments to Spotsylvania County is 82 percent of enrolled students.

**Exhibit 6-6
Percent of Enrolled Students Riding the Bus
2002-03**

Division	Enrollment	Average Daily Student Riders		Riders as % of Enrolled
		Regular	Special Services	
Chesapeake City	39,380	28,795	1,148	76%
Chesterfield	54,006	40,220	1,149	77%
Henrico	43,698	41,265	1,672	98%
Prince William	60,541	43,613	1,463	74%
Stafford	24,003	15,947	615	69%
Virginia Beach	75,902	67,031	2,354	91%
Peer Average	49,588	39,479	1,400	82%
Spotsylvania	21,391	18,630	503	89%

Source: Virginia Department of Education Pupil Transportation Report, 2002-03.

Any peer comparison must take into account the service area for each school division. As shown in **Exhibit 6-7**, Spotsylvania County comprises a land area of 407 square miles, the second largest in the cluster group of peer school divisions (Chesterfield County is 426 square miles). The population of Spotsylvania County was 107,838 persons in 2003, the smallest of any school division in the peer group. With a large land area but smaller population, SCPSD has the lowest density of population in the peer group, just 265 persons per square mile. For transportation, this means that routes may be longer and the number of students transported per mile may be smaller than peer school divisions. However, SCPSD can continue to evaluate the trend of the service effectiveness measures and investigate ways to increase riders per bus. SCPSD reported 91 riders per bus for regular routes in 2002-03. The riders per bus were 88 in 2003-04 and 90 in 2004-05.

**Exhibit 6-7
SCPSD and Peer Divisions Population Density/Square Mile
2003**

Division	Area in Square Miles	Population 2003	Population Density/ Square Mile
Chesapeake City	341	210,834	618
Chesterfield	426	276,840	650
Henrico	238	271,083	1,139
Prince William	338	325,324	962
Stafford	270	111,021	411
Virginia Beach	248	439,467	1,772
Peer Average	310	272,428	925
Spotsylvania	407	107,838	265
Percent Different from Peer Average	31%	(60%)	(71%)

Source: U.S. Bureau of the Census.

A measure of the route design efficiency is the number of runs included as part of one bus route. A run is the trip a bus makes to pick-up students and to drop them off at one school. Staggered bell times allow more than one run to be scheduled for each bus. One school division in the cluster group schedules most regular buses for triple runs: high school, middle school, and then elementary school. SCPSD averages less than two runs per bus route as illustrated in **Exhibit 6-8**.

Exhibit 6-8
SCPSD Regular Route Efficiency
Average Runs per Bus Route
1999-2000 through 2003-04

Regular Bus Assignments	1999-2000	2000-01	2001-02	2002-03	2003-04
Average Daily Riders	16,417	17,370	18,417	18,630	19,487
Regular Routes	207	201	199	204	222
Regular Runs					
High Schools	84	85	91	99	108
Middle Schools	104	104	109	120	130
Elementary Schools	162	162	165	176	182
Total Regular Runs	350	351	365	395	420
Regular Runs per Route	1.69	1.75	1.83	1.94	1.89

Source: Spotsylvania Department of Transportation.

The existing automated routing and scheduling system can be used to help design more efficient student transportation routes and schedules. However, a more efficient operation will require revised policies and practices that may impact school bell times, program schedules, and the way school bus routes are designed. Efficient bus routes incorporate features such as having fewer bus stops that serve larger numbers of students. Examples of policies that can support more efficient bus routing are discussed below.

- Identify and establish walk zones near neighborhood schools to avoid transporting students who can safely walk to school. The school division can also work with governmental agencies to provide crossing guards, reduce speed limits, install sidewalks, and take other safety measures to expand the number of schools with walk zones over time. The walk distance should be discussed with the community to determine an acceptable distance. In other states, the distance from school within the required walking zone is one to two miles, depending on the state.
- Increase the maximum distances for walk to bus stops. SCPSD realized increased routing efficiencies by establishing guidelines for walk to bus stop distances in 2000-01. The Transportation Department reduced the number of route buses required despite an increase in annual student riders the following two school years (see **Exhibit 6-8**). The guidelines for walk to bus stops represented a change in school division policy. Prior to establishing the walk to bus stop guidelines many buses stopped at the rider’s residence. The maximum walk distances adopted in 2000 were appropriately conservative to transition from a practice of providing curb service to requiring students to walk to a bus stop. The walk to bus stop distance is now one-tenth of a mile for elementary students and three-tenths of a mile for middle and high school students. Since walking to bus stops is now an accepted practice, SCPSD

could consider increasing the maximum walk distance to gain additional routing efficiencies. For example, a school division in another state uses a guideline for walk to bus stop of a maximum of one-quarter mile for elementary students, one-half mile for middle school and three-quarters of a mile for high school students, except for bus stops with hazardous walking conditions.

- Purchase school buses with larger seating capacity. Improved routing efficiencies should lead to a higher ratio of student riders per bus run. Most regular route buses in the SCPSD fleet now are 64 passengers for elementary students and typically 42 passengers for middle and high school students. To ensure efficiencies are not constrained by bus capacity, SCPSD should consider purchasing buses with additional seating capacity when making new vehicle purchases. Larger buses do not require that maximum seating capacity be utilized but will provide the SCPSD routers the flexibility to improve service effectiveness by adjusting loads on some runs, especially for middle school and high school runs.
- Schedule morning and afternoon bus routes independently, eliminating the practice of duplicating the morning assignments for the afternoon (mirroring routes). If routes are not mirrored, a student could be assigned to a different bus and bus driver for the afternoon route than the morning route. The practice of designing the afternoon runs and routes to mirror the morning typically does not result in the most efficient routing. Morning and afternoon routes should be designed independently and each run designed to achieve the greatest efficiency, requiring the fewest number of buses. At a minimum, bus runs for middle and high school students do not need to be mirrored.
- Revise the staggered bell schedule to use school starting and ending times that allow more individual buses to have separate bus runs for elementary, middle, and high schools (“three-tiered routing”), and provide sufficient time between school starting and ending times to allow most buses to get from the end of one bus run to the beginning of another. The existing staggered bell times do not allow sufficient time for many buses to make three or even two bus runs within the time available.
- Develop a schedule for staggered bell times that is based on the location of a school to increase the opportunities for three-tiered routing. The current practice is to stagger bell times by only one criterion - grade level. Elementary schools have the same bell times, middle schools have the same bell times, and high schools have the same bell times. SCPSD should analyze opportunities to achieve routing efficiencies by setting bell times based on geographical location as well as grade levels to achieve savings in student transportation. By changing the criteria for setting bell times, schools serving different grade levels might have the same bell time.
- Expand the window for student drop off times at school in the morning by adjusting time for the breakfast program. Bus runs that serve schools with a breakfast program are constrained not only by bell times but also by the window of time when students can participate in the meal service. If the times for meal service can be adjusted to reflect the schedule for bus service for a particular school, additional route efficiencies are possible.

Each of these suggestions for a change in policy or practice can improve the ability to plan and schedule regular bus routes more effectively and improve cost-efficiency. If used in combination, significant savings are feasible. The evaluation team suggests that the Transportation Department evaluate each opportunity and other similar ideas to determine specific savings. Changes in practice and (especially) policy will require sufficient time for the concepts to be discussed in the community and accepted by those affected. A good example for a successful process to change policy for transportation was shown by the adoption of walk to bus stop guidelines. The evaluation team suggests setting minimum goals for improvement in route efficiency. For example, a reasonable goal is to improve service effectiveness 11 percent, from 90 riders per route bus in 2004-05 to 100 riders per route bus in 2009-10. This will result in an estimated annual savings of \$458,326 in route related bus costs.

Recommendation 6-7: Implement the automated routing and scheduling system for special services transportation to improve route efficiencies and establish a cooperative planning effort to improve service quality.

Automated Routing and Scheduling System

The SCPSD 2002-03 cost per student rider for special services transportation of \$4,581 was higher than the average for peer school divisions and the second highest of all school divisions. The number of special services riders per bus reported by SCPSD was nine compared to the peer average of 15 riders per bus. SCPSD has the lowest number of special services riders per bus of all school divisions in the peer cluster group.

Exhibit 6-9 compares the riders per bus and the annual cost per rider of SCPSD with the peer school divisions for 2002-03. Riders per bus is determined by dividing the average daily riders by the number of route buses. Annual cost per rider is determined by dividing total annual operations for special services transportation cost less capital outlay by average daily riders. Cost, mileage, and ridership data for special services transportation, as reported on the Virginia DOE pupil transportation report, are used for these calculations.

**Exhibit 6-9
SCPSD and Peer Divisions
Special Services Transportation
2002-03**

Division	Daily Riders	Route Buses	Riders per Bus	Cost per Rider
Chesapeake City	1,148	80	14	\$2,951
Chesterfield	1,149	86	13	\$2,741
Henrico	1,672	89	19	\$1,345
Prince William	1,463	135	11	\$5,054
Stafford	615	38	16	\$2,115
Virginia Beach	2,354	130	18	\$2,789
Peer Average	1,400	93	15	\$2,833
Spotsylvania	503	59	9	\$4,581
Percent Different from Peer Average			(40%)	62%

*Source: Virginia Department of Education Pupil Transportation Report, 2002-03.
* Peer average is calculated using actual numbers with infinite decimals.*

SCPSD provides transportation to a low number of special services students. Of 21,391 students enrolled in SCPSD in 2002-03, the number of students requiring special services transportation was 503, less than 3 percent of enrolled students. Other students receiving special services were transported on regular route buses. In 2004-05 the number of students requiring special services transportation services is 424 of 22,948 enrolled students, less than 2 percent.

The opportunity to reduce the cost of providing special services transportation requires more efficient routing and improved communication between the Transportation and Special Services Departments to better coordinate scheduling. The Transportation Department has not used the automated routing and scheduling system to optimize special services routes and schedules to improve cost efficiency. In 2003-04, SCPSD transported 411 special services students on 56 route buses for an average of seven riders per bus, down from nine riders per bus in 2002-03. The evaluation team recommends that SCPSD implement automated routing and scheduling for special services transportation for the 2005-06 school year. The coordinator of automated routing told the evaluation team that the software program is modified to include special services, and the department is ready to transition from a manual to an automated system. Special services routes change daily and an automated routing and scheduling system is designed to simplify route changes and to be more efficient than manual routing and scheduling. Using automated routing for special services should achieve an 8 percent reduction in cost based on the implementation of similar programs in other school divisions, an annual operating savings of \$155,396.

Cooperative Planning Effort to Improve Service Quality

Additional cost savings may be possible through better coordination of transportation schedules with special services programs schedules. A representative of the Special Services Department provided four examples of the transportation services that are required for special services students due to program availability.

- One elementary school has a preschool special education program and two teachers. There are more eligible students than the two teachers can serve. The school offers services to these students on a staggered schedule, with five students arriving and five leaving every two or three hours.
- Students attending a private or public day school and who are going to be transitioned to their home school (usually a high school) may spend one-half day at the private or public day school and the remaining one-half day at their home school. This transition period usually lasts for a few months.
- There are several self-contained programs for students with more severe and profound disabilities. For example, some students with autism are attending general education classes, while others need more restricted services. Three elementary schools have self-contained programs. One is centrally located, one is north, and one is south. Students are assigned geographically to the extent possible. However, there are state staffing guidelines that are very strict. So if one school is at the limit in terms of staffing, but another is not, a new student to the program will be placed at the school that has availability.
- Preschool special education students needing speech services are transported to the speech therapist. Speech therapists are assigned a case load and most of the time travel to two or three different schools. Preschoolers needing speech therapy are

transported by the division to another school if the student's school does not offer speech therapy and the speech therapist located at the other school has availability in his or her caseload.

Staff responsible for special services transportation told the evaluation team that the department is not usually involved in discussions with the Special Services Department to plan these services. Requirements are sent to the Transportation Department in August each year and the department responds. During the school year, as student transportation requirements change; students move to different home addresses; new students transfer to the county; or current students become eligible for transportation to participate in special services programs, the routes and schedules must be revised. Changes occur at least weekly and sometimes daily.

In 2002-03, the Transportation and Special Services Departments collaborated in changes to preschool program times. Meetings are scheduled on a monthly basis to discuss any issues either department brings forward. The evaluation team recommends the Transportation Department make a proactive effort to significantly expand the cooperative effort with the Special Services Department and school administrators responsible for special services students to plan and coordinate transportation services. The goal of the cooperative effort will be to find ways to improve the cost efficiency of providing transportation for special services students. Examples of initiatives for cooperation are described as follows:

- Designate a representative from the Transportation Department to serve as a liaison to work with the Special Services Department, the school administrator responsible for special services at each school, and the teachers and parents of children in special services programs. (*See Recommendation 6-1 proposed changes for the special needs coordinator position*).
- Request an opportunity for "executive loan" of the liaison from Transportation Department to the Special Services Department for a few weeks to provide a learning experience for better understanding of the user department requirements.
- Request that the Special Services Department designate one staff member to attend the annual Special Needs Transportation Symposium.
- Use the implementation of automated routing and scheduling for special services transportation as an opportunity for a training session to inform Special Services representatives of the process and the challenges of routing and scheduling. Emphasize the new tools provided through the automated process.
- Schedule a workshop in the spring to review transportation needs and improve the planning of transportation services for the next school year.
- Request permission for the liaison from Transportation to observe special services conferences for children who need transportation services and learn about regulatory requirements.
- Encourage discussion and idea sharing between Transportation and Special Services to find the best ways to provide transportation for a particular student's needs.

- Develop in-service training programs to allow special services bus drivers and the school administrators for special services to share experiences and learn from one another the best ways to assist students.

Improved communication and cooperation between the Transportation and Special Services Departments, as well as more proactive involvement with the school administrators responsible for special services students will provide two benefits: enhance service quality and increase operating efficiency, thereby reducing costs. A cooperative effort over several years can reasonably result in an additional 5 percent improvement in riders per special services bus per year for each of four years (after implementation of automated routing and scheduling). By achieving these annual goals, the average riders per special services bus can increase to 11 riders per bus for an annual savings of \$331,488. With a fully cooperative effort and automated routing and scheduling, the total savings for special services transportation is \$486,884.

SAFETY AND TRAINING

Recommendation 6-8: Increase the number of hours for in-service training for drivers and aides.

Drivers and aides are provided only four hours of in-service training per year. This time is usually provided at the beginning of each year as an orientation session. Four hours is not a sufficient amount of time to devote to personnel development relative to best practices. During a focus group discussion with the evaluation team, drivers and aides said they were interested in additional opportunities for training. A specific need was identified for training to transport special services students, since all drivers may be assigned as a substitute to a special services route as a driver or an aide. The evaluation team recommends that the Transportation Department expand the number of hours of in-service training per year from four hours to 12 hours. The additional time should involve drivers and aides in team building exercises and provide advanced skills training.

Recommendation 6-9: Adopt a written procedure with defined roles and responsibilities for student discipline on school buses.

During a focus group discussion with the evaluation team, principals and assistant principals said there is a need for drivers to be more consistent in how they handle student discipline on buses. On the other hand, drivers told the evaluation team that there is not always good support and follow through from school administrators when a driver needs assistance to resolve a student discipline issue. Drivers also told the evaluation team that written guidelines are needed to clarify many operating procedures.

The Transportation Department can address the need for more clearly defined procedures by developing a student discipline management plan to establish guidelines for bus drivers and school administrators when processing a referral for student conduct on a school bus. The plan should be presented to bus drivers at an in-service training and sent to each school administrator prior to each school year. The documented plan should define and explain discipline responsibility, discipline referral procedure, suspension of riding privileges, responsibilities of the student, responsibilities of the school bus driver, and responsibilities of the school administrator. The plan can list practical suggestions for good discipline. Another school division in Virginia credited a student discipline management plan with a significant improvement in management of student behavior on the bus and a reduction in the number of incidents.

FLEET MANAGEMENT

Recommendation 6-10: Adopt a vehicle purchase and replacement policy and establish guidelines for annual purchase of school buses.

Although the School Board has not adopted a formal bus purchase and replacement policy, the division regularly invests capital dollars to buy and replace school buses, as shown in **Exhibit 6-10**. Buses are purchased and not leased. Purchases are made based on low bid procurement or through a state contract. The division does not lease buses due to the additional cost of financing. The director of Transportation told the evaluation team he would like to replace buses after 12 years of service, as suggested by Virginia DOE guidelines.

**Exhibit 6-10
Annual SCPSD Capital Outlays for School Buses
1997-98 through 2003-04**

Year	Buses Purchased	Dollars
1997-98	27	\$720,159
1998-99	12	\$748,700
1999-2000	19	\$717,079
2000-01	28	\$1,237,254
2001-02	22	\$767,299
2002-03	17	\$829,614
2003-04	22	\$1,150,278
Average Annual	22	\$881,483

Source: Virginia Department of Education Pupil Transportation Report, 1997-98 through 2002-03 and Spotsylvania County Schools Transportation Department for 2003-04.

As of 2003-04, the SCPSD school bus fleet included 65 special services buses and 267 regular route buses, for a total fleet of 332 buses. The average age of the special services fleet is 7.2 years, with average annual miles per bus of 17,132, while regular route buses average 9.7 years in age with average annual miles per bus of 11,591.

The expected service life of a school bus is 200,000 miles. At the current average annual miles, a SCPSD special services bus should be replaced at approximately 12 years. With a fleet of 65 special services school buses, SCPSD should purchase on average six replacement buses annually. The regular route buses average fewer annual miles. A well-maintained regular needs bus can operate safely and efficiently for more than 12 years. If a regular route school bus is replaced after 200,000 miles of service, the average service life would be 15 to 17 years. This is a longer life per bus than recommended by the Virginia DOE but takes into consideration the type of service, typical service miles, and the quality of the maintenance throughout the life of the bus.

With a fleet of 267 regular route school buses, SCPSD should purchase on average a minimum of 15 regular buses for replacement annually. Assuming a regular replacement schedule, SCPSD will need to replace at least 21 buses (6 special services and 15 regular routes) each year. If not, the number of buses purchased in some years will exceed 21 buses in order to catch up for vehicles that were scheduled but not replaced in the prior year(s).

From 1999-2000 through 2003-04, SCPSD purchased on average 22 school buses per year. An average of six special services buses were purchased each year for an average unit cost of \$45,582. During the same period, an average 16 regular route buses were purchased each year for an average unit cost of \$44,478. Beginning in 2003-04, SCPSD began purchasing school buses with automatic transmissions (previously all buses purchased were manual transmission) for a unit cost of \$52,370. As of October 2004, eight special services buses and 10 regular route buses in the fleet were over 200,000 miles of service. A total of 18 buses in the fleet were still in service beyond the expected 200,000 miles of service.

The evaluation team recommends that the School Board adopt a policy and establish guidelines for an annual bus purchase and replacement schedule to ensure funds are provided to replace buses when needed, usually at 200,000 miles of service. Other guidelines that should be considered as factors for replacement are years of service, type of service, annual repair cost, maintenance condition, and structural integrity of the bus. The implementation of the guidelines should be reflected in the five-year and annual capital budget. There is no direct cost of implementation for this recommendation, as the division has been purchasing buses regularly; however by adopting guidelines and planning ahead, the school division will be able to anticipate needed capital outlay and provide for a regular introduction of a similar number of school buses into the fleet each year.

Recommendation 6-11: Implement an automated parts inventory system and hire a part-time employee to support vehicle maintenance.

The Transportation Department has a well organized and orderly small parts room. The parts clerk and foreman told the evaluation team that only they have access to the parts room. One mechanic who works after normal parts room hours is entrusted with a key and is required to record all parts used.

The vehicle maintenance parts inventory is not maintained using an automated system. The parts clerk manually records the vehicle maintenance parts inventory using a card file system. The value of the parts inventory is not formally known, although the parts clerk estimated the value is approximately \$100,000. The SCPSD vehicle parts purchases in 2003-04 totaled \$260,998. There are no annual parts inventory audits.

Vehicle maintenance work orders are entered into a database by an administrative staff member. The database is not used for fleet management by the foreman and mechanics and is not used for maintaining parts inventory. However, the practice of entering each work order provides a rich history of information on repair work done to each school bus.

The evaluation team recommends that the Transportation Department implement an automated parts inventory system, and consider using a module from the same database currently used for the vehicle maintenance work orders. The director of Transportation should identify an existing employee (driver or aide) who has experience working with databases and is available to support the maintenance supervisor and parts manager part-time. By implementing an automated parts inventory system now, the Transportation Department will be prepared to transition to a fully automated vehicle information management system when the new facility is opened.

***COMPUTERS
AND
TECHNOLOGY***

COMPUTERS & TECHNOLOGY

BACKGROUND

The development of an effective, integrated network of software, hardware, and telecommunications is a significant and technically complex endeavor. A successful information technology network requires visionary leadership, clear organizational goals, effective assignment of responsibilities, and the commitment of sufficient financial and human resources. If any one of these key ingredients is missing, substantial resources can be expended without achieving the desired improvement in student skills and knowledge, staff skills, or administrative efficiency.

Some divisions divide technology responsibilities between administrative and instructional departments, while other divisions manage the technology functions under one organizational structure. Regardless of their size and organizational structure, most divisions include the following technology functions: management and oversight of the entire division's instructional and administrative applications; hardware and software maintenance of these applications; planning, implementation, and oversight of the Local Area Networks (LAN) and a Wide Area Network (WAN); and training and technical support for computer applications and networks.

Spotsylvania County Public Schools Division (SCPSD) technology functions are currently distributed among two separate departments: the Office of Technology and the Management Information Systems (MIS) Department.

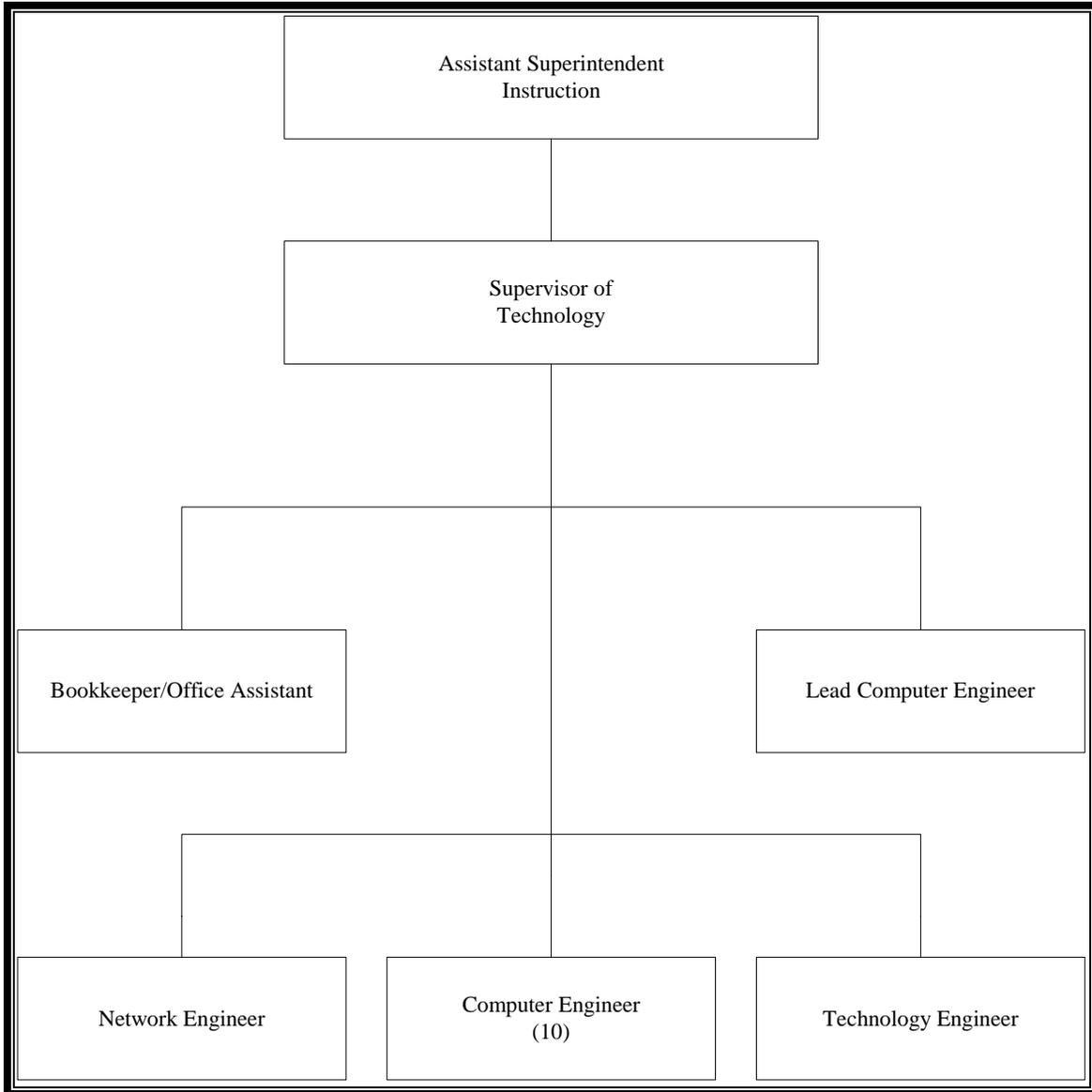
The Office of Technology is responsible for:

- designing, installing, managing and supporting LAN and the WAN;
- installing, maintaining, and supporting division-wide servers; and
- installing and supporting all computers, peripherals, and software except the student and administrative systems.

After the Office of Technology director passed away in March of 1999, no qualified candidates could be found to fill the position. The position was then re-advertised as a supervisor of Technology, with the primary responsibility being to oversee the division's technology infrastructure, reporting to the assistant superintendent of Instruction. The Professional Development unit, within the Department of Instruction, took over providing limited instructional technology support for teachers.

Exhibit 7-1 provides the organization chart for the Office of Technology.

Exhibit 7-1
SCPSD Office of Technology
Organization Chart
2004-05

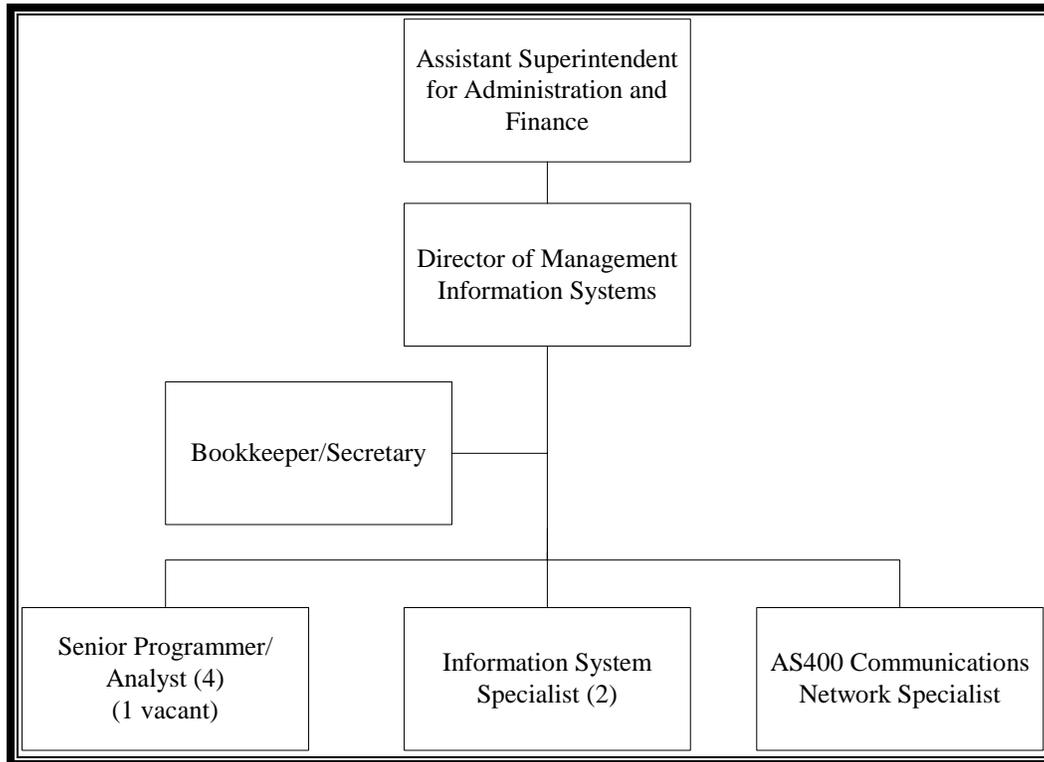


Source: SCPSD, Office of Technology, January 2005.

The Management Information Systems Department (MIS) reports to the assistant superintendent for Administration and Finance. The department consists of programmer analysts, information system specialists, an AS400 communications network specialist, and a director. The MIS Department is responsible for maintaining, customizing, and supporting the division's student and administrative systems.

Exhibit 7-2 presents the organization chart for the Management Information Systems Department.

Exhibit 7-2
SCPSD Management Information Systems Department
Organization Chart
2004-05



Source: SCPSD, Management Information Systems Department, January 2005.

The division’s instructional technology activities are spread across the organization. The Professional Development unit provides limited instructional technology training. According to the 2003-2008 Spotsylvania County Schools Technology Plan, the Technology Leadership Cadre is responsible for creating, practicing, and sharing instructional technology activities. The current and proposed leadership structure for the division’s technology functions and the limited instructional technology support is discussed in the *Division Leadership, Organization, and Management* chapter of this report, while more specific recommendations related to instructional technology can be found in the *Educational Services Delivery* chapter.

In addition to the Office of Technology and the Management Information Systems Department, SCPSD has campus-based staff that assists with technology-related functions. Eight Technology Resources Teachers (TRT) have been placed in various campuses and are primarily engaged in instructional technology-related functions. The division also has an Education Technology Contact (ETC) person in every school. The ETC’s are generally paraprofessionals that have other job responsibilities in addition to their duties related to supporting technology in the schools. The division pays them a \$500 yearly stipend for their ETC-related activities. Depending upon the school, lab technicians, and library media specialists are also engaged in technology support activities.

SCPSD established a Technology Advisory Committee (TAC) in 2003 to provide coordination and direction to the division's technology programs. The committee has a diverse composition of representatives from various functional areas within SCPSD. Division-wide technology initiatives currently underway or in the planning phase include data warehousing, an automated dialing attendance system, a media retrieval /media management system, video streaming, and an imaging system to be shared with the county.

The division uses Comprehensive Information Management for Schools (CIMS) for both the student and administrative systems. The CIMS system resides on an IBM i-series server and includes the following modules:

- Student Management System (SMS);
- Student Grading System (SGS);
- Student Attendance System (SAS);
- Student Scheduling System (SCH);
- Employee Management System (EMS);
- Financial Management System (FMS); and
- Fixed Asset System (FAS).

The division did not purchase the remaining two modules available in the CIMS suite; Warehouse Management (WHS) and Human Resources Management (HMS). Centralized Purchasing and Warehouse Management modules were evaluated by the division in 2000, but determined not to be cost-effective. Implementation of the Human Resources Management module was studied and placed in the budget in 2001. The project was downsized to only cover electronic applicant tracking due to funding and staffing restrictions.

SCPSD is a member of a consortium led by Education Technology Labs (Ed Tech) and Timpanogos Technologies. The goal of the consortium is to support its member organizations with their current CIMS systems, while at the same time developing a new web-based student and administrative system that can work within the CIMS infrastructure. The division pays an annual fee to be a member of this consortium.

In addition to the modules that are directly under the umbrella of the CIMS system, the division has several other major systems that receive data from the central system. The Edulog™ system used by Transportation, the Chartwell POS cafeteria system, and *IEP.Online* all receive nightly uploads of student activity and demographic data to keep the systems current. Additionally, the ACT 1000 work-order system is used by the Maintenance Department, HEAT helpdesk call tracking system is used by the Office of Technology, and the WinOcular™ application tracking system is used by the Human Resources Department.

The division has instituted a five-year replacement plan for computers. Each year the oldest computers from various schools are replaced with new computers that meet the division's computer standards in accordance with the division's replacement plan. The plan's goals are to ensure all schools have computers that can interface with current instructional software and hardware, as well as connect to the division's network to access other technology resources.

One of the goals for the state's six-year education technology plan is to achieve a 5 to 1 student-to-computer ratio in Virginia school divisions. With more than 5,600 computers, SCPSD has a 3.8 student-to-computer ratio in its high schools, 3.3 in its middle schools and 5.4 in its elementary schools.

The division has a robust network which provides network connection to all division schools and sites. Most schools have at least T1 (1.5 Megabyte per second) connections that allow access to Internet, email, anti-virus, and division student and administrative systems.

Although the division has addressed the issues related to the network infrastructure and the number and age of computers, areas of improvement exist, especially with respect to administrative and instruction technology applications.

A. RECOMMENDATIONS

Recommendation 7-1 (p. 7-6): Conduct a process reengineering study to assist in evaluating and implementing automated solutions to reduce manual administrative and clerical processes. The division has not taken full advantage of the administrative capabilities of its business and student systems. There are modules available that have either not been purchased or have not been implemented. Although the division is investigating technology solutions to reduce the number of manual, out-of-date, and duplicative administrative and school processes, there has not been a division-wide coordination of effort. The evaluation team recommends that the division consider conducting a process re-engineering study to better understand how technology can provide the best benefit on a division-wide basis.

Recommendation 7-2 (p. 7-8): Require all technology purchases to have the written approval from the Technology Advisory Committee before placing orders. Although schools and departments generally coordinate technology purchases with either the Technical Advisory Committee (TAC) or the supervisor of Technology, it is not required. The evaluation team recommends that the division require TAC approval of all technology-related purchases in order to ensure that the division's technology standards are met and maintained. In order to accomplish this, the division needs a written policy requiring all technology-related purchases be reviewed and approved by the Technology Advisory Committee (TAC).

Recommendation 7-3 (p. 7-9): Develop and provide technology training and periodic meetings for the campus-based Technology support staff. SCPSD does not provide ongoing technical training to its campus-based technical staff. In addition, there is insufficient formal communication and coordination between the central technology staff and the campus-based technology staff. The evaluation team recommends that the division provide ongoing training to campus based staff and schedule regular meetings between campus based and central office technology support staff.

Recommendation 7-4 (p. 7-10): Leverage the full capabilities of the division's work-order system to improve the technical support function. The division is not using the full capacity of its work-order system (HEAT). In order to accomplish this, the evaluation team has provided a number of recommendations that will result in the overall improvement of the technical support function.

B. FISCAL IMPACT OF RECOMMENDATIONS

This chapter contains recommended investments by SCPSD intended to achieve best practices or to generate subsequent future savings. If savings cannot support these investments in the short-term, then the division should request additional investment funds from the county or delay the implementation if the investment does not yield future savings. The recommended investment is listed below:

1. In order to improve the efficiency of both school-based and departmental clerical administrative processes, the evaluation team recommends that the division conduct a process reengineering study to remove any duplicative process and automate existing processes where appropriate. As a means of spreading out the cost of the study, the evaluation team recommends that the division identify critical processes to map initially and phase in other processes over the next five years. Annual investment: \$90,000.

If all recommendations found in this chapter are implemented, the net annual cost to SCPSD will be \$90,000 or 0.05 percent of the division's operating budget. The calculations related to the required investment can be found in Appendix B.

C. DETAILED FINDINGS AND RECOMMENDATIONS

ADMINISTRATIVE TECHNOLOGY

Recommendation 7-1: Conduct a process reengineering study to assist in evaluating and implementing automated solutions to reduce manual administrative and clerical processes.

The division has not taken full advantage of the administrative capabilities of its business and student systems. There are modules available that have not been purchased, such as the Warehouse Inventory System (WHS) and the Human Resources Management (HMS) module. In addition, several features of the finance system have not been implemented, such as the automated purchase order approval process. As a result, the division continues to use human resources, finance, and purchasing processes that are manual, out-of-date, and duplicative.

By its nature, school clerical processes have traditionally been paper-intensive. Managing a school and ensuring that the appropriate records are maintained for every student in the division often creates the need for duplicative processes, as the same paper record may be needed in multiple locations within the school. For example, a counselor may have information on a student in his/her file that is also contained in the file maintained in the registrar's office. The division has identified a number of areas where technology could reduce the need for paper trails, reduce duplicative processes, and increase efficiencies in the school offices. The technology plan and TAC are reviewing the following systems intended to improve the efficiency of school administrative operations: a textbook inventory system to manage the distribution and inventory of textbooks, an automated dialing system to manage attendance for students, and implementing an electronic records management system. The MIS Department is in the process of implementing web-based tools that will allow administrators and staff to view data from their desktops. Although these new applications will certainly assist school staff in performing their duties, there are other areas where automation could be implemented to further improve the efficiency and effectiveness of school clerical staff.

Division staff is using non-integrated, independent databases or electronic files such as Microsoft Access or Microsoft Excel to automate some of the manual processes. Some of the problems that have arisen as a result of using these databases and files include:

- duplicative data entry;
- lack of sufficient security;
- lack of control over data integrity;
- lack of centralized back-up; and
- lack of documentation.

It is important for the division to understand what processes are conducive to automation and what processes are not. Manual processes are often time consuming and resource intensive, they are difficult to control and are vulnerable to errors. In order to understand what solutions could be available, the division needs to understand what the current processes are. It is important that users be involved in identifying existing processes and articulating the desired outcome of each process. Technology management should play a key role by evaluating whether existing technology can be improved or whether new technology solutions must be found. It is also important that the division engage in a coordinated effort. The division's technology standards and existing platforms must be considered when evaluating alternatives. Therefore, the evaluation team recommends that the Technology Department, under the supervision of the newly created assistant superintendent of Technology, lead any effort to adopt technology solutions to re-engineer administrative processes to ensure the global needs of the division are addressed.

As a first step, the division should create an evaluation matrix for all its manual or cumbersome administrative processes. With this matrix, division staff can evaluate whether the current system is capable of automating the identified manual processes; can be customized by division programmers to provide the necessary automation functionality; the division should purchase additional existing or planned modules through its Timponogas consortium; or ultimately, whether a particular process can be automated given the available division resources. The matrix will also be helpful in evaluating whether or not the current system and current engagements such as Timponogas consortium will continue to meet the future needs of the division or whether to investigate other options.

Exhibit 7-3 provides a template with sample entries that the evaluation team has created for the division to use as an evaluation matrix.

Exhibit 7-3
Evaluation Matrix Template

Process	Existing Module	Existing Module with Customization	Current system's module (they don't have)	Existing module from Timponogas and Ed Tech Consortium	Planned module from Timponogas and Ed Tech Consortium	Cannot be done with current system or resources
Electronic Requisition routing		X				
Online Attendance Capturing	X					

Source: Gibson Consulting Group, March 2005.

The division should consider hiring a consultant to help staff conduct a process re-engineering study to ensure that the division establishes an integrated solution. This would prevent expending valuable resources on a single administrative area that results in a stand-alone solution that does not communicate with the other administrative systems. The evaluation team recommends that the division prioritize the processes to be mapped, beginning with the most critical processes, and phase in the mapping of less critical processes over the next five years.

During the re-engineering effort, each major step in a process should be reviewed and modeled in order to document how that process is currently being performed. Obsolete activities should be documented and then eliminated, and a plan established to implement changes that will improve the overall process. The costs of the process, both direct and indirect, can be determined so that division management can clearly understand them and their impact on the division's budget. Activities will be simplified, the number of steps reduced, and a decision made on the degree of automation support that will be needed for success.

Although the initial costs associated with process reengineering can be high, the potential savings that can be realized over time make the investment worthwhile. Staff can be redirected more effectively and often less staff is needed. This will allow the division to reduce staff through attrition and develop staffing formulas that meet their changing needs.

POLICIES AND PROCEDURES FOR TECHNOLOGY PURCHASES

Recommendation 7-2: Require all technology purchases to have the written approval from the Technology Advisory Committee before placing orders.

The division has established technology hardware and software standards. These standards were created to ensure that the division procures approved, supportable, and compatible technology. The Technology Advisory Committee (TAC) is tasked with reviewing, evaluating, and recommending for approval or denial, software and hardware purchase requests from division users. Most schools and departments either consult with the technology office and the TAC, or use established standards, prior to acquiring hardware and/or software products. In a memorandum to staff, the superintendent explained that one of TAC's responsibilities is to

review the hardware and software purchases of the division. However, no written policy exists that would require staff to receive formal approval from the TAC prior to submitting a purchase requisition for a technology-related purchase. The Purchasing Department does not require a TAC member's signature on a technology-related purchase requisition. Therefore, there is no mechanism in place to ensure that every technology-related purchase has been reviewed and approved by the TAC. For example, one division high school purchased an automated dialing attendance system. Neither the division technology departments nor the TAC knew about this purchase until the school discovered that the software would need data from the division's main student system.

The division's purchasing policy should be modified to require written approval from the TAC designee for all technology-related purchases. A formal approval process will ensure that all technology purchases meet specific determining factors including, but not limited to:

- compatibility with the division's existing hardware and software infrastructure;
- supportability by the division's technical support team; and
- non-duplication of existing software or hardware that serves the same purpose, or is intended to serve the same purpose if fully utilized ("redundant technology").

CAMPUS-BASED SUPPORT STAFF

Recommendation 7-3: Develop and provide technology training and periodic meetings for the campus-based Technology support staff.

SCPSD does not provide technical training on an ongoing basis to its campus-based technical staff. Furthermore, there is often insufficient planned and organized communication and coordination between the central office Technology staff and the campus-based Technology staff.

The first line of technical support at the schools is primarily the responsibility of the ETC's, one of which resides in each school. Most ETCs are paraprofessionals that have other responsibilities and perform the ETC function part-time. Their backgrounds vary, as do their technical skills, resulting in inconsistent levels of technical expertise from school to school thus creating inequities among schools in terms of the delivery of technical support. A school having an ETC with limited technical expertise may need to rely more heavily on the division's central technical resources than another school with an ETC with greater technical expertise. As a result, the level of support provided by the Office of Technology varies across schools and departments.

Despite the fact that there are ETCs with adequate technical knowledge, it is exceedingly difficult to keep technical skills current given the fluidity of change within the technology environment. Unless technical training is regularly provided and updated, skill levels can easily fall behind and, as a result, limit the value of the support provided. To combat this, the division should establish regular technology training courses for its campus-based Technology staff. The courses should be offered at different times of the day to maximize participation, and the training content should be based on the technical needs of the ETCs relative to the technology initiatives of the division.

In addition to technical training, it is important for ETCs and division technical support staff to meet regularly. These meetings would allow the ETCs and the division technical staff to exchange ideas, solutions, best practices, and to disseminate information about the goals, objectives, and strategies of the division technology plan. These campus-based ETCs could be

instrumental in letting users know what the division is trying to achieve regarding future technology. Minutes of the meetings should be maintained and published on the division's website for any ETC s not attending the meetings and as a future resource. Establishing an online user forum among all technology staff in the division would also improve cooperation and collaboration.

TECHNICAL SUPPORT

Recommendation 7-4: Leverage the full capabilities of the division's work-order system to improve the technical support function.

During the site visit, the evaluation team identified the following issues with the Office of Technology's work-order tracking system (HEAT):

- The reporting capabilities of the work-order system are not being maximized to allow for better analysis and management of the technical support function.
- The division does not have the module of the work-order system that allows greater access to individual users.
- There is no expected time frame associated with any of the five priority levels in the work-order system.

HEAT is capable of producing a wide variety of reports to better manage the division's technical support function. For example, the number of work-orders and the average closing time per work-order gives the technical support manager the ability to objectively evaluate each technician's work load and performance. The number of work-orders by location and by computer can provide clues to identify who or which location may need more user training or if there is a division-wide failure of certain computer parts or brands within the division. These reports should not serve as the sole source of performance evaluation information for staff, but they can be extremely helpful in identifying emerging trends and potential problems before they escalate.

Currently, only the staff of the Office of Technology can enter and check the status of work-orders in the HEAT system. This causes an increase in the number of telephone inquiries and unnecessary anxiety among users. ETCs can only react when users complain about delays in work-order responses. To combat this, some ETCs have created their own databases to track work-orders and respond to their users.

Priority levels within the HEAT work-order system help support staff assess the urgency of the work-order. For example, they know that Priority I work-orders are extremely important and they need to respond right away. However, no acceptable response times have been established for Priority I or any other priority level work-order. This may create inconsistency among support staff performance and, as a consequence, dissatisfaction among users.

In response to these issues, the evaluation team recommends the following:

- Create management reports that will allow the department to better manage their technical support function. The reports should include, at a minimum, the number of open work-orders by technician and by priority type; the average work-order closing time by technician and by priority level; and the number of work-orders by technical category, location, user, and asset.

- Give all users access to the work-order system and allow them to enter and monitor their work-order status. Access to this system should be granted to as many employees as possible. This would allow the division to use the automatic issue routing functionality and alleviate the phone-intensive process currently in place.
- Establish expected response times for each of the priority levels in the work-order system. For example, the average response time for a Priority I issue is one hour. Developing written explanations and expected response times for technical support priorities and communicating them to the users will improve the accountability of the Office of Technology. In addition, management can use the established response times to better assess and manage their support personnel's performance.

***PURCHASING
AND
WAREHOUSING***

Chapter 8

PURCHASING AND WAREHOUSING

BACKGROUND

The mission of Spotsylvania County Public School Division’s (SCPSD) purchasing function is to coordinate procurement and contractual transactions for the school division to ensure that supplies, equipment, and services needed to support the division’s mission comply with the proper method prescribed by law and are purchased from the right source, in the right quantity, and at the lowest price without sacrificing quality. The textbook management function ensures that the division acquires the appropriate textbooks, has sufficient textbooks for all students, and safeguards them throughout their use.

In acquiring goods and services, SCPSD must comply with the Virginia Public Procurement Act (VPPA). The VPPA identifies the procedures and processes to be followed when procuring goods or services. It also allows any public body empowered by law to implement ordinances, resolutions, or regulations consistent with the VPPA. The School Board of Spotsylvania County has developed by ordinance, policy DJ-R1, which outlines the policies and procedures that all schools and departments, must follow. **Exhibit 8-1** identifies the processes and requirements for SCPSD procurements.

Exhibit 8-1
Spotsylvania County Public Schools Division
Purchasing Requirements

Description	Thresholds	Process/Procedure
Small Purchases (supplies and non-professional services)	Less than \$500	Competition not required
	\$500 to \$5,000	Solicit two sources (verbal quotes)
	\$5,000 to \$15,000	Solicit three sources (written quotes)
Professional Services	Less than \$15,000	Negotiated
Competitive Procurements (all supplies and services)	Greater than \$15,000	Competitive sealed bids (Invitation For Bid (IFB)) Competitive proposals (Request For Proposal (RFP))
Emergency Purchases	No specific limits	Competition as practicable, written justification
Sole Source	No specific limits	No competition, written justification

Source: Spotsylvania County Public Schools Division Policy DJ-R1, revised April 28, 2003.

SCPSD’s centralized Purchasing Department was established in December 2002. The Purchasing Department is organized within the Administration and Finance Department and consists of a Purchasing agent and bookkeeper/secretary who functions as a buyer. The Purchasing agent reports to the director of Finance.

The purchasing function at SCPSD is a combination of centralized and decentralized purchasing. All formal solicitations that are greater than \$15,000 are conducted by the Purchasing Department. End user departments have purchasing authority for up to \$15,000 as described in the policy manual. End users process their own requisitions into purchase orders for items less than \$500, and are responsible for obtaining quotes for items between \$500 and \$15,000. SCPSD uses two separate systems to process requisitions: the Comprehensive Information Management for Schools (CIMS) system, which is a division-wide system located on the division's mainframe, and Manatee, which is a school activity fund accounting package.

The division uses a combination of approaches to purchase goods and services. These approaches include local bids and quotes, catalog purchases, state contracts, cooperative contracts such as the Metropolitan Washington Council of Governments (COG) and the U.S. Communities. The division also monitors members of the COG and uses their contracts, as well as Virginia's web-based e-procurement tool (eVA) to solicit quotes for items up to \$15,000.

SCPSD has discount catalog agreements with national vendors for items such as art and instructional supplies and science and health materials. Items purchased from state contracts include office supplies, school furniture, and audio visual supplies as well as technology purchases and vehicles. Examples of items purchased from local and national cooperatives include playground equipment components and library books.

SCPSD does not have a centralized warehouse for receiving and storing bulk shipments of consumable goods and supplies such as paper, office supplies, and instructional supplies. The Maintenance and Operations Department maintains a small warehouse function for cleaning supplies. Individual departments order supplies as needed from vendors on a just-in-time basis rather than maintaining running inventories.

Textbooks are coordinated centrally through the supervisor of Title I Program unit. The bookkeeper/secretary for the Title I program orders textbooks in addition to her other duties. Textbook coordinators are designated at each school and are responsible for managing the inventory at their respective schools. Textbooks are inventoried annually.

A. ACHIEVEMENTS

- The Purchasing Department uses the quick quote feature of the state's web-based e-procurement tool, eVA, to save staff time, expand its access to vendors, and achieve savings.
- The division has created a purchasing website to improve communications with the public and reduce advertising costs.
- The division uses just-in-time delivery for its consumable supplies, eliminating unnecessary warehouse costs.

B. RECOMMENDATIONS

Recommendation 8-1 (p. 8-7): Increase centralization of purchasing to achieve better pricing and ensure compliance with VPPA. The evaluation team recommends that the division's policy be revised to redefine the role of the Purchasing agent. The Purchasing agent's role should be strengthened leading to increased compliance and savings due to better pricing. The policy should also require the Purchasing Department's participation in the review and approval of procurements requiring written quotes, regardless of the source of funds.

Recommendation 8-2 (p. 8-8): Develop and implement procedures to maintain quote documentation to support compliance and periodically audit to verify compliance. The division's procedures are high level and subject to interpretation. Contract files tested by the evaluation team were incomplete. The evaluation team recommends that the SCPSD establish a committee with representatives from the user departments, the Purchasing Department, and the Finance Department to develop standards for documentation and that the Purchasing agent uses these standards to periodically audit contract files to ensure compliance with the VPPA.

Recommendation 8-3 (p. 8-9): Require all schools and departments to work with the Purchasing Department to implement copier agreements based on use rather than fixed lease costs. The division has implemented a use-based copier agreement that has reduced the schools' cost for copying by eliminating fixed lease and maintenance costs. Several schools and departments continue to use agreements with lease costs and copier maintenance fees that apply even if the machine is not being used. The evaluation team recommends that SCPSD require all schools and departments to work with the Purchasing Department to implement use-based copier agreements to reduce copying costs.

Recommendation 8-4 (p. 8-10): Develop strategies and implement tools that increase staff efficiency. The division currently has many high volume, low dollar purchases. These purchases have high transaction costs in terms of staff time and administrative paperwork. The evaluation team recommends that the SCPSD extract information from the purchasing system to identify expenditure trends and purchase order workload by user department to develop the best strategies for each user. The SCPSD should consider implementation of tools such as consolidated purchase orders, online catalogs, and procurement cards to reduce costs. Strict controls should be established for tools that the division decides to implement such as procurement cards.

Recommendation 8-5 (p. 8-12): Identify and implement purchasing system features to improve compliance and streamline processes. The evaluation team recommends that the division implement the approval path feature in the existing system as well as eliminating color copies of the purchase orders to save staff time. To identify additional improvements for implementation, the evaluation team also recommends that SCPSD establish a committee with representatives from user departments, Purchasing, Finance, and Technology to define its functional requirements, system data elements, and how the data should flow from one area to another. The Technology staff can then evaluate the improvements and determine the most effective implementation.

Recommendation 8-6 (p. 8-14): Implement a centralized contract management process. The evaluation team recommends that the division implement a centralized contract management process that is overseen by the Purchasing Department. By immediately transferring all contract files to the Purchasing Department, developing a comprehensive list, and developing monitoring and notification procedures, the division will ensure consistent division-wide contract monitoring,

maintain copies of all legal documents, and streamline responses to outside requests for contract information.

Recommendation 8-7 (p. 8-15): Complete a study to determine optimal warehouse design and incorporate the division’s current just-in-time delivery practice into the design of the proposed central warehouse complex to minimize ongoing warehouse operations costs. The division’s proposed joint warehouse complex project with the county has had limited design and cost analysis to determine its feasibility and use. The division currently does not maintain supplies of consumable items such as paper, office supplies, and instructional materials. It maintains limited custodial and maintenance parts. The division uses a just-in-time delivery practice, which is recommended to minimize warehouse operating costs. The evaluation team recommends that the division perform a study to determine optimal warehouse design and layout, requiring the continued use of just-in-time delivery as a design principle for its consumable items, and incorporate the study results in the warehouse design.

Recommendation 8-8 (p. 8-15): Overhaul the textbook management function. The division does not have a dedicated position and level of automation to adequately monitor and control its textbook inventory. The textbook function should be reorganized by adding a textbook coordinator position and acquiring an automated textbook management system to effectively oversee textbook inventories. The evaluation team recommends that the job description requirements for the newly created textbook coordinator position include strong organizational, computer, and communication skills. The evaluation team also endorses the division’s plan to purchase and implement an automated textbook management system. The textbook management system should link with the student management system to provide the ability to shift resources as enrollments shift.

C. FISCAL IMPACT OF RECOMMENDATIONS

This chapter contains recommendations to improve the efficiency of SCPSD purchasing and warehousing operations. Once fully implemented, these recommendations will result in a savings of \$96,371 each year, representing 0.06 percent of the division’s annual operating budget. The major savings opportunities are presented in **Exhibit 8-2**. Details of how the financial impact was calculated can be found in Appendix B.

**Exhibit 8-2
Summary of SCPSD Savings Opportunities**

Functional Area	Recommendation	Annual Savings
Purchasing and Warehousing	Increase centralization of purchasing.	\$23,821
	Require all departments and schools to use per-copy copier agreements.	\$45,000
	Overhaul textbook management system.	\$27,550
Total Annual Savings		\$96,371
Percent of annual operating budget		0.06%

Source: Gibson Consulting Group, Inc.

This chapter also contains recommended investments by SCPSD intended to achieve best practices or to generate subsequent future savings. If savings cannot support these investments in

the short-term, then the division should request additional investment funds from the county or delay the implementation if the investment does not yield future savings.

The evaluation team recommends the following investments:

- There has been limited design and analysis in the development of the warehouse capital improvement project. The evaluation team recommends that SCPSD hire a warehouse consultant to assist in the design of the warehouse. The one-time investment is estimated to be \$7,000.
- The division's textbook management function is performed on an ad hoc basis by the bookkeeper/secretary to the Title I funds coordinator. The division is managing its inventory manually, with limited results. The evaluation team recommends that the division hire a full-time textbook coordinator and endorses the division's plan to acquire a textbook management system to improve its textbook ordering and inventory management. There is no one-time investment estimated to purchase the system because the division has included \$85,000 in funding for a textbook management system in its proposed budget for 2005-06. The annual investment for the textbook coordinator and ongoing textbook management system support is \$51,819.

If all recommendations are implemented, the net annual savings to SCPSD will be \$44,552 or 0.03 percent of the division's operating budget. The net annual savings do not include the one-time investment of \$7,000.

D. DETAILED ACHIEVEMENTS

eVA SYSTEM USE

The Purchasing Department uses Virginia's web-based e-procurement tool (eVA) to solicit quotes for items from \$5,000 to \$15,000, which expands its access to vendors, saves staff time, and increases savings. The department began using eVA in December 2004. The quick quote system feature allows the division to enter the specification, including any division specific terms and conditions. The division can set the length of time for vendors to respond to the quote. Once a quote is received, the system is flexible and allows the division to award the item(s) quoted by line item, lot, or grand total.

By using eVA, the division has saved staff time while increasing its vendor pool. Before using eVA, the staff would research vendors on the Internet or in the phone book and call each vendor to determine their interest and product availability. With eVA, the purchasing staff simply inputs the specification and it is electronically sent to registered vendors. The eVA provides access to more than 17,000 suppliers and 860 catalogs.

With eVA quick quotes, SCPSD has realized cost savings through accessibility of unknown vendors that have provided more competitive pricing than known, local vendors that the division previously used. As an example, the division used quick quotes for office furniture. There were more than 100 vendors solicited. Price-competitive responses were received from five vendors that were previously unknown to the division. These vendors met the specifications and were lower cost providers than those vendors that were normally solicited by the division.

The division achieved cost savings when purchasing a bass drum. The price of a bass drum for a middle school previously purchased locally was \$1,165. Through eVA, the same drum was priced at \$1,027. For quotes for portable stage components, the use of eVA expanded the vendor pool from one to 22, and the cost was reduced from a projected \$25,000 to approximately \$15,000.

Since SCPSD began using eVA, it has generated seven separate quotes for \$106,709. The Purchasing agent's goal is to expand the use of eVA by providing access to the quick quotes function to all bookkeepers during spring 2005.

DIVISION PROCUREMENT WEBSITE

The division's Purchasing website, implemented in November 2004, allows the Purchasing Department to improve communications with the public and reduce costs. It contains solicitations for invitations to bid, requests for proposal, and request for information. For requests for quote, vendors are directed to become registered with the eVA system. The website also contains Purchasing Department contact information as well as contract terms and conditions.

By advertising the solicitations on the website, vendors nation-wide can efficiently search and access the information without contacting the Purchasing Department. It also is more cost effective for the division, saving approximately \$2,700 in advertising costs. In addition, the website increases communication to prospective vendors and the public. Prospective vendors can view contract terms and conditions to assist them in determining whether or not to submit proposals for division contracts. They can also obtain bid results to assist them in developing future proposals.

JUST-IN-TIME DELIVERY

The division uses the just-in-time delivery practice for receiving consumable supplies such as paper and office supplies. Instead of maintaining large inventory stocks and a centralized warehouse function, the division saves costs by ordering supplies in smaller quantities that are delivered directly to the user from the vendor.

With this practice, the division avoids increased personnel and transportation costs associated with maintaining a central warehouse to receive, store, and distribute bulk orders of consumable supplies. In addition, the vendor who is delivering the supplies is responsible for any damages until SCPSD receives it. Many organizations reduce their warehouse costs through direct vendor or just-in-time delivery of supplies and materials.

E. DETAILED FINDINGS AND RECOMMENDATIONS

PURCHASING DEPARTMENT ROLES AND RESPONSIBILITIES

Recommendation 8-1: Increase centralization of purchasing to achieve better pricing and ensure compliance with VPPA.

SCPSD has not defined the role of the Purchasing Department to ensure compliance with state law and School Board policy. According to School Board policy DJ-R1, purchases valued at \$15,000 or more in the aggregate must be made using a competitive procurement method. Purchases of goods and services between \$500 and \$15,000 require use of a competitive procurement method or obtaining quotes from vendors.

The purchasing policy (DJ-R1) specifies the method of procurement to be used, but does not define the roles and responsibilities of users with each method. Because SCPSD's purchasing philosophy is decentralized, the division does not require that the Purchasing agent be involved in all procurement aspects although the Purchasing agent's job description lists responsibility for preparing bidding documents, obtaining quotes, and assisting division personnel with purchasing services and materials. Users are encouraged, but not required, to coordinate with the Purchasing Department.

The division's decentralized process allows purchases to be made in user departments without Purchasing Department review or oversight to ensure compliance. Campus and department users requisition, approve, and generate purchase orders for all requisitions—both activity funds and division funds. They also obtain their own quotes for open market purchases of all items between \$5,000 and \$15,000 for all funds, and they are responsible for keeping appropriate documentation supporting the quotes at their campus or department. Electronic purchase requisitions for items between \$5,000 and \$15,000 are not required to be routed to the Purchasing agent for approval to ensure compliance.

Without Purchasing Department review and oversight, the division cannot ensure that it complies with VPPA requirements. To test compliance, the evaluation team presented a list of aggregate vendor payments of more than \$15,000 to the Purchasing agent to confirm the purchasing method used. Aggregate purchases are the sum total of purchases of similar groups of like items or commodities, such as office supplies. The Purchasing agent could not verify compliance for the purchases because she does not review or approve the purchase orders.

For example, in the maintenance area, the evaluation team identified multiple purchase orders to several vendors that in aggregate exceeded \$15,000 for 2003-04, although most individual orders were under \$15,000. They included: Aireco Supply, Duron Paints, Sherwin Williams, Eck Supply Company, Electrical Equipment Company and VAMAC Incorporated. The Purchasing agent could not verify that the division had formally competed contracts with these vendors. If the aggregate purchases were for similar commodities, then competitive procurement is required by the VPPA.

Purchasing Department participation in the procurement process provides benefits and protection to the school division end users by ensuring compliance with the VPPA. End users can benefit from the market research and comparative analysis that Purchasing Department staff can provide. Purchasing Department staff often has access to many procurement databases and experience in identifying competitive market prices for similar goods that end users do not. The Purchasing Department staff is also experienced in identifying and negotiating the best value from available

and comparable vendors. In addition, centralized purchasing can provide savings due to better prices obtained from acquiring larger quantities.

In implementing this recommendation, the evaluation team recommends that SCPSD develop a process that requires increased centralization of purchasing through the Purchasing Department to achieve savings and strengthen procurement compliance. The process should include a policy and procedures defining a centralized purchasing process for all types of procurements, regardless of whether they are funded by activity funds or division funds. The process should outline the Purchasing Department's roles and responsibilities as well as the user department's roles and responsibilities for each type of procurement. The policy and procedures should also outline how quotes should be obtained and routed to the Purchasing Department for verification and confirmation before a purchase order is approved. The evaluation team recommends that the division revise its policy DJ-R1 to include this process.

CONTRACT DOCUMENTATION PROCEDURES

Recommendation 8-2: Develop and implement procedures to maintain quote documentation to support compliance and periodically audit to verify compliance.

SCPSD does not have detailed purchasing procedures that specify the process to be followed and types of documentation to be maintained to support compliance. The division's procedures are high level and communicated through purchasing memoranda or the pamphlet from the Finance Department *How to Get What You Want When You Need It... With the Help of Your Purchasing Department*.

The brochure identifies the methods of procurement and specifies the use of the quote request summary form to document quotes. The quote request summary form indicates that the form is to be used for purchases greater than \$500 and less than \$15,000 and that it must be kept with the original purchase order and invoice.

The procedures and use of the form as documentation are interpreted inconsistently throughout the division, and documentation is not readily available to easily monitor compliance. The evaluation team visited three division locations and viewed documentation for purchases requiring written quotes. At all three locations, the quote request summary forms identifying that quotes were obtained were not filed with the purchase orders and copies of the invoices. At two of the locations, staff said that the quote request summary form was retained by the individual requestor who obtained the quote. At the third location there were three items of 10 procurements tested that did not have appropriate documentation supporting the procurement method used.

Detailed procedures that specify the use of the form and how the bid files should be maintained would provide consistent documentation division-wide. A sample checklist of items that should be maintained includes:

- original specification for quoted item;
- documentation showing vendors contacted for quotes (fax/telephone log);
- documentation of quotes received with time/date stamp on document (written) or time/date received (verbal);
- quote summary form with responses received;
- documentation of any additional contact with vendors (clarification); and
- copy of purchase order awarded to selected vendor.

Random audits by the Purchasing agent would ensure that appropriate documentation is maintained to support the procurement. Random audits would also identify staff that may require additional training or assistance to strengthen compliance.

To implement this recommendation, SCPSD may wish to establish a working group consisting of the Purchasing agent, Finance Department and user department staff. The evaluation team recommends that division staff assigned to the committee develop detailed procedures and an audit process to strengthen compliance. The Purchasing agent should work with the division webmaster to place the procedures on the division's website, provide training to user department staff on the new procedures, and conduct random audits of files to verify compliance.

COPIER CONTRACTS

Recommendation 8-3: Require all schools and departments to work with the Purchasing Department to implement copier agreements based on use rather than fixed lease costs.

The division does not have standard copier agreements that are used by all schools and departments to control copier costs. The Purchasing Department has worked with several schools to implement local copier support agreements based on a cost per copy which has reduced copier costs. These agreements have a \$0.0125 cost per copy, with the cost of maintenance and toner included in the per copy price. Under the terms of the agreements, there is no long-term lease, no capital outlay, and no maintenance fees. In addition, there is no fee for the equipment when it is not being used.

However, not all schools and departments utilize the per-copy agreements. Several schools are continuing to use individual copier agreements that were negotiated between the school and the vendor. These agreements increase copier costs because they include a lease cost as well as maintenance fees for the copier. The maintenance fees and lease costs are for 12-month periods and apply even if the machine is not being used.

Twenty-one schools that are using the new agreement have achieved significant savings. For example, Wilderness Elementary School, which was the first school that converted to the new agreement, reduced its costs from \$600 a month or \$7,200 annually to \$75 a month for 10 months or \$750 annually, a 90 percent annual reduction. In another example, Massaponax High School spent \$2,007 a month for 12 months on copier leases and maintenance under its old agreement. The cost for the same number of copiers with identical features under the current agreement is \$902 a month for 10 months.

The evaluation team recommends that SCPSD require all schools and departments to work with the Purchasing Department to implement use-based copier agreements to reduce copier costs. The schools and departments should provide the Purchasing agent with all copies of existing agreements to be analyzed. The Purchasing agent should analyze the copier use and work with the remaining schools and departments to re-negotiate or terminate existing agreements and transition to use-based agreements.

PROCUREMENT TOOLS AND STRATEGIES

Recommendation 8-4: Develop strategies and implement tools that increase staff efficiency.

The division currently has many high volume, low dollar purchases. SCPSD is issuing significant numbers of individual purchase orders in small dollar amounts (<\$150) that are considered below the “break even” cost of handling these orders. To assess the division’s purchasing efficiency, the evaluation team reviewed two years of purchasing activity. Data were obtained from the CIMS system for 2003-04 and through the first six months of 2004-05. A total of 14,075 purchase orders were reviewed. In assessing the data, the evaluation team found the following:

- Forty-one percent of all orders processed in the period were below the \$150 industry standard “break-even” cost of processing a paper order. This means that the cost to process the order was greater than the value of the order itself. Seven percent (991 of 14,075) were for orders less than \$25.
- The types of items most frequently procured on individual purchase orders that were less than \$150 included: school and office supplies (Office Depot, Supply Room Companies, Kurtz Brothers), miscellaneous (Wal Mart), food (Food Lion, Ukrops Supermarkets), and cell phone/wireless services (Cingular and Verizon).
- Office supplies purchases from Office Depot represent 7 percent of the purchase orders issued and 0.4 percent of total contract dollars expended.
- One department, Maintenance and Operations, is responsible for 21.4 percent of the orders processed in the period (3,012 of 14,075) and almost 70 percent of the dollars awarded on contracts (\$40.7 million). The Special Services and Federal Programs (textbook purchases) areas are the next largest users with a combined total of 1,693 orders (12 percent) representing \$4.4 million in purchases.
- There are opportunities to increase the efficiencies by consolidating individual repetitive orders in the maintenance area into larger orders. Ten vendors accounted for 22 percent of the orders issued during the period.
- SCPSD has a large number of vendors that receive low dollar orders from the division. Of the 2,037 separate vendors awarded division business during the period, 45.4 percent of vendors received orders of less than \$500.

High volume, low dollar purchase orders have high transaction costs for an organization in terms of user department, purchasing, and accounts payable staff time to handle these orders. The same amount of time is used to process a purchase order whether it is for \$10 or \$10,000. The use of online catalog orders and procurement cards for small purchases can significantly reduce transaction processing time and costs.

A 1999 Purchasing Process and Automation Study conducted by American Express and Ernst & Young studied the use of purchase order, procurement cards, and electronic purchasing. This study revealed that the use of procurement cards could significantly lower the average purchasing process costs by 75 percent per transaction. By integrating an electronic purchasing system with a procurement card for payment and reconciliation, companies could reduce the average cost per transaction by up to 96 percent.

To implement this recommendation, SCPSD may wish to consider multiple strategies and tools such as procurement cards to minimize its transaction costs associated with small dollar value purchase orders. **Exhibit 8-3** provides strategies and tools for SCPSD to consider for improving efficiency and reducing transaction costs.

**Exhibit 8-3
SCPSD Opportunities to Improve Efficiency in Purchasing**

Finding	Strategies to Increase Efficiency
<p>Forty-one percent of all orders processed in the period were below the \$150 industry standard “break-even” cost of processing a paper order.</p> <p>The types of items most frequently procured on individual purchase orders that were less than \$150 included: office supplies (Office Depot, Supply Room Companies, Kurtz Brothers), miscellaneous (Wal Mart), food (Food Lion, Ukrops Supermarkets), and cell phone/wireless services (Cingular and Verizon).</p> <p>Office supplies purchases from Office Depot represent 7 percent of the purchase orders issued and 0.4 percent of total contract dollars expended.</p>	<p>Promote procurement card use for small contract and non-routine items such as books, food, and office supplies.</p> <p>Establish online catalog with vendors. Minimize Purchasing staff workload by allowing users to directly order from negotiated contract once annual order has been established by Purchasing. Use incrementally funded annual orders to set-up accounts with catalog vendors.</p> <p>Research and negotiate online catalog contracts for as many small unit cost items as possible (e.g. small maintenance items and repair parts). Allow users to order online using negotiated contracts and large annual orders established by the Purchasing Department. Use procurement cards or annual orders to fund these purchases as appropriate.</p>
<p>One department, Maintenance and Operations, is responsible for 21.5 percent of the orders processed in the period (3,012 of 14,075) and almost 70 percent of the dollars awarded on contracts (\$40.7 million). The Special Services and Federal Programs (textbook purchases) areas are the next largest users with a combined total of 1,693 orders (12 percent) representing \$4.4 million in purchases.</p>	<p>Profile purchases with these users and establish annual buying plans using the most effective procurement method(s).</p>
<p>There are opportunities to increase the efficiencies by consolidating individual repetitive orders in the maintenance area into larger orders. Ten vendors accounted for 25 percent of the orders issued during the period.</p>	<p>Work with Maintenance and Operations Department staff to revise current process and consolidate individual bi-weekly orders into larger orders. Develop size of purchase orders based on two-year average spend rates. Fund orders initially at 75 percent of spend rate and adjust funding incrementally as appropriate.</p>
<p>SCPSD has a large number of vendors that receive low dollar orders from the division. Of the 2,037 separate vendors awarded division business during the period, 45.4 percent of vendors received orders of less than \$500.</p>	<p>Analyze spend rates for vendors by commodity. Consolidate suppliers where possible and use procurement cards for small dollar value purchases.</p>

Source: Gibson Consulting Group, Inc.

Information will be required to identify expenditure patterns or spend rates in order to implement some of these strategies. The Purchasing agent should work with the technology staff to extract information from the purchasing system to identify expenditure trends and purchase order workload by user department to develop the best strategies for each user.

If the division elects to use procurement cards as one of the strategies, strict standards and controls such as the number of authorizations per day, number of cards/authorized users, spending limits, and restricted commodities, should be established. The division should contact other divisions that use procurement cards to identify “lessons learned” during implementation of procurement cards. The division may wish to test the cards on a pilot basis for a period of time before implementing division-wide.

TECHNOLOGY EFFICIENCIES

Recommendation 8-5: Identify and implement purchasing system features to improve compliance and streamline processes.

The division’s automated purchasing system does not have features to ensure compliance, maintain appropriate control, and streamline processing. The current process is cumbersome and has limited controls during requisition processing. To process requisitions for items, SCPSD users currently review a paper copy of the contract or quotes and may enter the item description and pricing information along with funding information for each item ordered. If staff is purchasing a number of different items, they may enter a description “see attached list” along with a total amount and funding information. The user must use several screens to enter the data.

The requisition is forwarded to the principal or department head, who reviews and approves it. Purchasing Department review or oversight for compliance does not occur unless the individual purchase exceeds \$15,000. Once the department head approves the requisition, the user generates and prints a purchase order.

To print a purchase order, the user must exit from the purchasing module to the print module. The system does not have the capability to print the purchase order in a prescribed format. So users either print the purchase order language and then copy it onto a pre-printed form or will load the pre-printed form into their printer and print the purchase order language.

Users are required to have a pink and a white copy of the purchase order. The white copy is faxed or mailed to the vendor and the pink copy is retained for accounts payable to match with the invoice.

Since the system does not have online receiving of items, when the invoice arrives the user pulls the pink copy of the purchase order and checks off the items that have been received. The user puts together a payment packet, which includes the pink copy of the purchase order with items that have been checked off as received, the invoice and supporting documentation, and the invoice set-up form. The user obtains department approval and forwards the packet to accounts payable for payment.

The lack of certain system features and independent reviews and approvals during the process, affects staff productivity and does not provide the ability for the division to track aggregate purchases to ensure its compliance with the VPPA.

Exhibit 8-4 identifies system control features and their effect on productivity or compliance.

**Exhibit 8-4
Effects on SCPSD Staff Efficiency and Internal Controls
Caused By Existing Purchasing Technology**

Current Situation	Effect on Staff Productivity/Internal Control
Requisition cannot be routed online through multiple approval paths that are specifically configured depending on the type of purchase (contract or open market), dollar value of purchase (less than \$500 requiring no competition or >\$500 requiring price quotes).	<ol style="list-style-type: none"> 1. Purchase is not independently reviewed by Purchasing Department for compliance with VPPA. 2. Technical approvals for budget (appropriate line item used) cannot occur before purchase is made. 3. Technical approvals for items such as technology cannot occur to ensure that standards are followed.
System does not aggregate and track purchases by commodity code.	<ol style="list-style-type: none"> 1. Staff cannot ensure compliance with VPPA thresholds for competitive bidding.
System does not have pre-loaded items with pricing and account information for contract purchases.	<ol style="list-style-type: none"> 1. User must enter descriptive and pricing information for each item resulting in increased staff time and risk of error in pricing. 2. Items not always entered – users enter “see attached list” which limits review and tracking of items and pricing until payment occurs.
System does not have vendor file and history allowing multiple addresses. Multiple vendor records must be set up.	<ol style="list-style-type: none"> 1. Additional staff time is required to key and maintain multiple vendors because of different billing and headquarters addresses. 2. Additional risk that incorrect vendor will be selected for payment.
System does not allow users to electronically “receive” items and allow electronic matching of invoices to receipt.	<ol style="list-style-type: none"> 1. Staff must manually check items off the purchase order and forward a copy of the purchase order to accounts payable. 2. Accounts payable staff must verify items manually to match to the invoice and key this matching information into the system.
System cannot automatically generate purchase order in a prescribed format.	<ol style="list-style-type: none"> 1. Staff must access purchase order form (Microsoft Word) from drive, modify form with department and shipping information. 2. Staff must either copy or load pre-printed form in printer to generate purchase order.
System does not have the capability to electronically send purchase order to vendor.	<ol style="list-style-type: none"> 1. Staff must fax or mail paper copy of purchase order to vendor.
System does not have capability of tracking contract purchases versus open market purchases.	<ol style="list-style-type: none"> 1. SCPSD cannot verify VPPA compliance or monitor trends to compare pricing.
System does not have ability to track contracts by vendor.	<ol style="list-style-type: none"> 1. Contract information is maintained in offline spreadsheets so there is no mechanism to trigger re-bidding to ensure there are no gaps in service.

Source: SCPSD Purchasing Agent and Field Observations, January 2005.

An integrated purchasing system with features such as multiple approval paths, tracking aggregate purchases by commodity, and electronic receiving and invoice matching improves efficiency and internal controls.

Immediate improvements that the division can implement at no cost will assist in strengthening compliance and streamlining the process. The first improvement would be to activate the existing

approval path to require all requisitions greater than \$500 to route to the Purchasing agent for approval. This will allow the Purchasing agent to monitor requisitions for compliance and to begin to assemble aggregate purchasing information. The second improvement would be the elimination of colored forms for invoice processing.

For additional improvements, the evaluation team recommends that SCPSD establish a committee with representatives from user departments, Purchasing, Finance, and Technology to define its functional requirements, system data elements, and how the data should flow from one area to another. Before implementing various features, the committee should evaluate existing policies and recommend changes to support the features. Once the features have been identified, the Technology Department staff should evaluate the most cost efficient means to implement the features and the expected timetable for implementation.

CONTRACT MANAGEMENT

Recommendation 8-6: Implement a centralized contract management process.

The division does not have a comprehensive contract list, centrally located contract files, or a consistent contract monitoring process with accountability methods to document performance problems or issues of contract non-compliance. The Purchasing agent said that the Purchasing Department relies on the various user departments to provide first line vendor performance monitoring. Departments are to forward all vendor concerns/complaints in writing to the Purchasing Department for resolution and documentation, but there is no documented procedure to ensure this occurs.

In addition, the division does not have a central file location or a comprehensive contract list, making it difficult for Purchasing Department staff to determine which contracts are in effect, answer outside contract-related questions, review contract terms and conditions, and assess overall contractor performance.

The evaluation team recommends that the division establish centralized contract files, a master contract list, and monitoring and notification procedures. In implementing this recommendation, the division should develop a comprehensive master list of all contracts currently in effect, with the contractor's name, date of the contract, a brief description of the goods and/or services being provided, the amount and payment terms of the contract, the contract expiration date, and the name and title of the SCPSD employee in charge of administering and monitoring the contract.

Purchasing Department staff should also provide training to user departments and develop written steps to ensure proper monitoring and documentation of contractor performance, including the notification procedure for instances of contract non-compliance.

WAREHOUSE DESIGN

Recommendation 8-7: Complete a study to determine optimal warehouse design and incorporate the division's current just-in-time delivery practice into the design of the proposed central warehouse complex to minimize ongoing warehouse operations costs.

SCPSD does not have a warehouse for consumable supplies such as paper, office supplies, and instructional supplies. It currently maintains minimum inventory levels of custodial supplies and maintenance parts and for all other supplies, the division uses the just-in-time delivery system. A just-in-time system is one in which supplies are ordered as needed from approved vendors and delivered directly to the user. The division's 2005–2011 Capital Improvement Plan lists a joint county and school division warehouse complex for maintenance, food service, and records management. The proposed warehouse complex has a budget of \$7,060,000 and is anticipated to be completed in fall 2006. The projected warehouse size is 52,000 square feet. Construction costs for the warehouse are budgeted at \$100 per square foot for a total construction cost of \$5.2 million.

The proposed complex has had limited design and cost analysis to determine its feasibility in terms of size and function. The assistant superintendent for Administration and Finance said that there had been preliminary discussions, but no definitive designs. The project schedule shows that the division anticipates selecting an architect in February 2005 to design the warehouse.

In its *Feasibility Study for Shared Services Between Spotsylvania County Government and Spotsylvania County Schools Draft Report* of February 22, 2005, Maximus recommended that the division and county continue their current practices of maintaining minimum inventory levels of custodial and maintenance supplies by ordering supplies as needed. By continuing this practice, the division and county can eliminate the additional space needed and associated costs of storing supplies and materials in a central warehouse. It also eliminates new costs for vehicles, fuel, and staff that would be required if just-in-time, direct shipment were discontinued.

The evaluation team recommends that the division contract with a warehouse consultant to assist in defining warehouse use and optimizing space before the architect begins design of the warehouse. The warehouse consultant can assist the division in identifying how much space is needed and the layout that will best optimize space using a just-in-time delivery method. The consultant can also assist the division in performing a cost benefit analysis to balance the additional costs of maintaining a warehouse against the anticipated savings for increased volume purchases. The results of the study can be provided to the architect for use in finalizing the warehouse design.

TEXTBOOK MANAGEMENT

Recommendation 8-8: Overhaul the textbook management function.

SCPSD does not have sufficient resources and technology to effectively allocate and monitor its textbook inventory. The division does not have a dedicated resource assigned to textbook management. The bookkeeper/secretary for the Title I Programs supervisor performs the textbook function on an ad hoc basis in addition to supporting Title I and Student Assistance programs full-time.

The division uses a manual textbook inventory system, making it difficult to account for textbooks. This manual process is cumbersome and time-consuming, and does not provide for

adequate accountability of textbooks in the division. For example, there is not a consolidated list of textbooks by campus or a consistent format. Inventories are completed manually by textbook coordinators at each campus and forwarded to the bookkeeper/secretary. The inventories are not automated to allow the bookkeeper/secretary to monitor inventories division-wide and reallocate inventory in a timely manner. In addition, the textbooks are not bar coded to facilitate annual inventories, so that they can be easily verified. At the school level, textbooks are numbered and are manually checked in and out to students and manually logged.

Without an automated system to track total inventory, the division may be incurring additional textbook and freight costs. Because the inventory is not automated and not integrated on a real-time basis, the bookkeeper/secretary cannot identify the total inventory and which schools may be able to share books. The evaluation team compiled manual inventory sheets from 16 elementary schools, seven middle schools and two high schools and compared reported textbook levels against enrollments. The evaluation team specifically looked at textbook charges for the middle school and elementary schools grades 3-5. The evaluation indicated the following:

- Elementary (Grades 3-5): division had 277 surplus science texts (5.4 percent), 663 surplus math texts (13 percent), 170 surplus social studies texts (3.3 percent) and 200 surplus reading/language arts texts (3.9 percent).
- Middle School: The sample size for middle schools was six because of incomplete inventory reports from one middle school that reported. The division had 38 surplus science texts (0.8 percent), 467 surplus social studies texts (9.7 percent) and was short 26 writing texts (0.5 percent).

The high school was not included in the analysis because courses are offered at multiple grade levels.

Adequate textbook tracking is also essential in assigning student accountability for lost and damaged books. In 2003-04, the division had almost \$39,000 in lost and damaged book fees.

The evaluation team recommends that the division hire a full-time textbook coordinator and endorses the division's plan to acquire an automated textbook inventory management system using the \$85,000 in funding identified in the 2005-06 proposed budget. Since the textbook function consists of ordering and monitoring inventory, the division may wish to consider moving the function from the Title I Program unit to the Purchasing Department.

If the division considers moving the textbook function to the Purchasing Department, the current adoption process should remain the same with the adoption coordinated by the supervisors of each subject area. Once the adoption has been confirmed, the supervisors should provide the list of adopted textbooks to the Purchasing agent for ordering. In implementing the textbook management system, the division should consider the following:

- designation of the division textbook system administrator and implementation manager;
- identification of textbook managers at each school;
- assignment of individual entering title records for new textbooks;
- process for implementing bar codes to existing and new textbook inventory;
- location of bar codes on textbooks;
- funding for initial and ongoing barcode purchase;
- integration of system with division's current student management system;
- assignment of individual designated to link bar codes to titles and verify their accuracy;

- method of textbook distribution to students;
- assignment of a bar code label to students to link textbook to unique student; and
- items to be bar coded (textbooks, workbooks, or both).

To implement this recommendation, SCPSD may wish to assign an action item to the existing textbook committee along with representatives from Finance, Purchasing, and Technology. The evaluation team recommends that division staff assigned to the committee develop a proposal for acquiring and implementing a textbook management system and work with appropriate Technology staff to identify and resolve any technical implementation issues. It may also consider bringing the textbook management system up in phases to minimize implementation issues. The division may wish to consider piloting the system at three sites (one at each level) and then phasing in the remaining implementations over a two-year period.

APPENDIX

A

Appendix A: Cluster Data

List of Rankings in Comparison to its Cluster (total of 10 divisions)

These rankings are based on per-pupil expenditures and revenue. The data is taken from Tables 13 and 15 of the 2002-03 Annual Superintendent report from the VDOE.

Spotsylvania County Public Schools Compared to Peers within Its Cluster Expenditures by Function per Pupil (2002-03)

Function	Amount Per Pupil	Rank*
Administration	\$113.11	2
Attendance & Health	\$119.72	6
Instruction	\$5,269.05	4
Transportation	\$455.17	7
Ops and Maintenance	\$617.04	2
Total Operations Regular School Day	\$6,574.09	4
Food Services	255.33	3
Summer School	\$14.87	1
Adult Education	\$36.59	6
Other Educational Services	\$24.46	1
Facilities	\$1,437.93	9
Debt Service and Transfers	\$979.90	7
Technology	\$198.68	1
Total Disbursements	\$9,521.85	6
Local Revenue	\$3,236.55	4
State Revenue	\$3,508.01	6
Federal Revenue	\$311.13	5

Source: Virginia Department of Education 2002-03 Annual Superintendent Report, Table 13 Disbursements by Division and Table 15 Sources of Financial Support for Expenditures, Total Local Expenditures for Operations.

**Note: 1st is the lowest in amount per pupil and 10th is the highest.*

The following pages present a list of expenditures or revenues sorted by school division, peer average and the Commonwealth. The data is sorted by expenditures (or revenue) per pupil. The table also includes total expenditures (or revenues) and expenditures as a percentage of the total budget.

Note that these data are self-reported and unverified, and are known to contain variations in expenditure classification.

Administration Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Administration represents expenditures for activities related to establishing and administering policy for division operations including, Board Services, Executive Administration, Information Services, Personnel, Planning Services, Fiscal Services, Purchasing, and Reprographics.

Division	Cluster	Administration	Administration/ Pupil	Administration %
Arlington	3	\$10,032,366.89	\$550.08	3.2%
Chesapeake	3	\$5,380,860.50	\$137.59	1.7%
Chesterfield	3	\$7,723,938.34	\$144.24	1.7%
Fairfax*	3	\$30,337,461.24	\$188.52	1.7%
Henrico	3	\$7,063,221.00	\$163.39	1.9%
Prince William	3	\$10,614,590.77	\$179.99	1.8%
Spotsylvania	3	\$2,399,779.19	\$113.11	1.2%
Stafford	3	\$2,388,089.38	\$100.95	1.2%
Virginia Beach	3	\$10,321,105.78	\$137.32	1.7%
Peer Average	3	\$10,482,704.24	\$200.26	1.8%
State		\$226,932,438.54	\$197.01	2.1%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Attendance and Health Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Attendance & Health expenditures are for activities that promote and improve attendance at school and those activities relating to health services for public school students and employees. Medical, dental, psychological, psychiatric, and nursing services are included in this category.

Division	Cluster	Attendance and Health	Attendance and Health / Pupil	Attendance and Health %
Arlington	3	\$2,302,245.03	\$126.23	0.7%
Chesapeake	3	\$4,072,570.57	\$104.14	1.3%
Chesterfield	3	\$4,285,523.56	\$80.03	0.9%
Fairfax*	3	\$26,934,989.15	\$167.37	1.5%
Henrico	3	\$3,787,299.00	\$87.61	1.0%
Prince William	3	\$6,795,030.38	\$115.22	1.2%
Spotsylvania	3	\$2,540,010.90	\$119.72	1.3%
Stafford	3	\$4,278,379.04	\$180.87	2.2%
Virginia Beach	3	\$7,599,385.36	\$101.11	1.3%
Peer Average	3	\$7,506,927.76	\$120.32	1.3%
State		\$157,494,344.41	\$136.73	1.4%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Instruction Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Instruction represents expenditures for classroom instruction, guidance services, social work services, homebound instruction, improvement of instruction, media services, and office of the principal. This column does not include expenditures for technology instruction, summer school, and adult education.

Division	Cluster	Instruction	Instruction / Pupil	Instruction %
Arlington	3	\$190,864,018.41	\$10,465.18	61.1%
Chesapeake	3	\$216,670,100.27	\$5,540.30	69.8%
Chesterfield	3	\$263,177,629.81	\$4,914.61	56.7%
Fairfax*	3	\$1,124,362,960.70	\$6,986.79	62.3%
Henrico	3	\$220,469,526.00	\$5,099.92	60.5%
Prince William	3	\$334,392,911.94	\$5,670.27	58.0%
Spotsylvania	3	\$111,788,276.08	\$5,269.06	55.3%
Stafford	3	\$118,732,652.46	\$5,019.35	61.1%
Virginia Beach	3	\$403,028,239.54	\$5,362.20	67.6%
Peer Average	3	\$358,962,254.89	\$6132.33	62.1%
State		\$6,855,472,905.28	\$5,951.48	62.3%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Transportation Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Transportation expenditures are related to transporting students between home and school, and to and from school activities, as provided by state and federal law. Costs related to vehicle maintenance and the management and monitoring of the transportation process are included in this category.

Division	Cluster	Transportation	Transportation / Pupil	Transportation %
Arlington	3	\$7,606,440.67	\$417.07	2.4%
Chesapeake	3	\$15,066,381.82	\$385.25	4.9%
Chesterfield	3	\$18,187,577.83	\$339.64	3.9%
Fairfax*	3	\$75,281,838.46	\$467.80	4.2%
Henrico	3	\$16,540,153.00	\$382.61	4.5%
Prince William	3	\$32,168,390.75	\$545.48	5.6%
Spotsylvania	3	\$9,656,946.07	\$455.17	4.8%
Stafford	3	\$8,485,706.03	\$358.73	4.4%
Virginia Beach	3	\$22,017,639.85	\$292.94	3.7%
Peer Average	3	\$24,419,266.05	\$398.69	4.2%
State		\$490,567,171.73	\$425.88	4.5%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Operations and Maintenance Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Operations and Maintenance represents expenditures incurred to keep grounds, buildings, and equipment safe for use and in effective working condition. Costs related to operations management are included in this category.

Division	Cluster	Ops and Maintenance	Ops and Maintenance / Pupil	Ops and Maintenance %
Arlington	3	\$22,353,114.51	\$1,225.63	7.2%
Chesapeake	3	\$30,291,260.45	\$774.55	9.8%
Chesterfield	3	\$42,698,121.29	\$797.35	9.2%
Fairfax*	3	\$135,403,202.64	\$841.40	7.5%
Henrico	3	\$30,322,152.00	\$701.41	8.3%
Prince William	3	\$47,848,691.70	\$811.37	8.3%
Spotsylvania	3	\$13,091,088.38	\$617.04	6.5%
Stafford	3	\$13,746,389.77	\$581.12	7.1%
Virginia Beach	3	\$61,306,062.94	\$815.66	10.3%
Peer Average	3	\$47,996,124.51	\$818.56	8.3%
State		\$910,247,078.23	\$790.22	8.3%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Food Services Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Food Services represent expenditures for providing food to students and staff, including preparing and serving meals for school-related activities.

Division	Cluster	Food Services / Pupil	Food Services	Food Services %
Arlington	3	\$5,741,839.53	\$314.83	1.8%
Chesapeake	3	\$8,789,257.65	\$224.74	2.8%
Chesterfield	3	\$13,163,879.12	\$245.82	2.8%
Fairfax*	3	\$48,696,478.68	\$302.60	7.5%
Henrico	3	\$11,516,764.00	\$266.41	3.2%
Prince William	3	\$18,425,436.15	\$312.44	3.2%
Spotsylvania	3	\$5,416,978.57	\$255.33	2.7%
Stafford	3	\$6,405,956.02	\$270.81	3.3%
Virginia Beach	3	\$19,800,020.59	\$263.43	3.3%
Peer Average	3	\$16,567,453.97	\$275.14	2.9%
State		\$346,148,307.36	\$300.50	3.1%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Summer School Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Summer School represents expenditures incurred for the delivery and improvement of summer school programs.

Division	Cluster	Summer School	Summer School / Pupil	Summer School %
Arlington	3	\$2,302,245.03	\$126.23	0.7%
Chesapeake	3	\$2,238,486.61	\$57.24	0.7%
Chesterfield	3	\$1,712,623.87	\$31.98	0.4%
Fairfax*	3	\$12,331,597.75	\$76.63	7.5%
Henrico	3	\$1,116,754.00	\$25.83	0.3%
Prince William	3	\$2,139,599.61	\$36.28	0.4%
Spotsylvania	3	\$315,568.04	\$14.87	0.2%
Stafford	3	\$958,212.96	\$40.51	0.5%
Virginia Beach	3	\$2,952,936.86	\$39.29	0.5%
Peer Average	3	\$3,219,057.09	\$54.25	0.6%
State		\$50,942,979.44	\$44.23	0.5%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Adult Education School Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Adult Education represents expenditures incurred for the delivery and improvement of adult education programs.

Division	Cluster	Adult Education	Adult Education / Pupil	Adult Education %
Arlington	3	\$6,881,267.70	\$377.30	2.2%
Chesapeake	3	\$521,996.27	\$13.35	0.2%
Chesterfield	3	\$520,121.73	\$9.71	0.1%
Fairfax *	3	\$14,525,392.36	\$90.26	0.8%
Henrico	3	\$1,647,345.00	\$38.11	0.5%
Prince William	3	\$789,466.51	\$13.39	0.1%
Spotsylvania	3	\$776,340.64	\$36.59	0.4%
Stafford	3	\$14,577.56	\$0.62	0.0%
Virginia Beach	3	\$1,649,483.97	\$21.95	0.3%
Peer Average	3	\$3,318,706.39	\$70.59	0.6%
State		\$50,693,078.85	\$44.01	0.5%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Other Educational Services Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Other Educational Services represents expenditures for activities sponsored by the school division that do not involve the delivery of instruction or other ancillary activities for K-12 students (such as Head Start and other preschool programs). These activities also include enterprise operations, community service programs, and other non-LEA programs.

Division	Cluster	Other Educational Services	Other Educational Services / Pupil	Other Educational Services %
Arlington	3	\$11,957,620.01	\$655.64	3.8%
Chesapeake	3	\$3,514,955.64	\$89.88	1.1%
Chesterfield	3	\$3,979,917.57	\$74.32	0.9%
Fairfax*	3	\$32,768,499.09	\$203.62	1.8%
Henrico	3	\$1,816,751.00	\$42.03	0.5%
Prince William	3	\$2,603,748.32	\$44.15	0.5%
Spotsylvania	3	\$519,047.12	\$24.46	0.3%
Stafford	3	\$1,792,211.17	\$75.76	0.9%
Virginia Beach	3	\$3,801,600.00	\$50.58	0.6%
Peer Average	3	\$7,779,412.85	\$154.40	1.3%
State		\$154,711,542.60	\$134.31	1.4%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Facilities Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

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.

Division	Cluster	Facilities	Facilities / Pupil	Facilities %
Arlington	3	\$22,583,946.57	\$1,238.29	7.2%
Chesapeake	3	\$13,595,827.98	\$347.65	4.4%
Chesterfield	3	\$30,283,680.05	\$565.52	6.5%
Fairfax *	3	\$157,327,825.59	\$977.63	8.7%
Henrico	3	\$30,944,013.00	\$715.80	8.5%
Prince William	3	\$70,016,074.86	\$1,187.26	12.1%
Spotsylvania	3	\$30,507,050.62	\$1,437.93	15.1%
Stafford	3	\$9,560,184.54	\$404.15	4.9%
Virginia Beach	3	\$34,938,498.20	\$464.85	5.9%
Peer Average	3	\$46,156,256.35	\$737.64	8.0%
State		\$826,002,645.31	\$717.08	7.5%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Debt Service and Transfers Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Debt Service and Transfers represents expenditures related to paying the school division's debt, including payments of both principal and interest. This column includes transactions that account for transfers between funds or local government entities.

Division	Cluster	Debt Service and Transfers	Debt Service and Transfers / Pupil	Debt Service and Transfers %
Arlington	3	\$18,213,389.93	\$998.65	5.8%
Chesapeake **	3	\$531,890.69	\$13.60	0.2%
Chesterfield	3	\$62,652,417.01	\$1,169.98	13.5%
Fairfax*	3	\$42,933,368.43	\$266.79	2.4%
Henrico	3	\$21,296,365.00	\$492.63	5.8%
Prince William	3	\$33,930,247.45	\$575.35	5.9%
Spotsylvania	3	\$20,789,621.49	\$979.90	10.3%
Stafford	3	\$19,884,486.75	\$840.60	10.2%
Virginia Beach **	3	\$0.00	\$0.00	0.0%
Peer Average	3	\$28,491,737.86	\$622.51	4.9%
State		\$524,480,815.60	\$455.32	4.8%

*Fairfax includes Fairfax County and Fairfax City Public Schools.

**The City pays the debt service.

Technology Expenditures: Total Expenditures, Per-Pupil, and as a Percentage of the Total Budget

Technology represents expenditures incurred for all technology-related activities, including instruction, administration, and technical development and support, as well as software, hardware, and infrastructure purchases.

Division	Cluster	Technology	Technology / Pupil	Technology %
Arlington	3	\$10,456,571.12	\$573.34	3.3%
Chesapeake	3	\$9,721,892.55	\$248.59	3.1%
Chesterfield	3	\$15,767,051.79	\$294.44	3.4%
Fairfax*	3	\$102,951,035.86	\$639.74	5.7%
Henrico	3	\$17,861,821.00	\$413.18	4.9%
Prince William	3	\$17,180,808.55	\$291.33	3.0%
Spotsylvania	3	\$4,215,275.60	\$198.68	2.1%
Stafford	3	\$8,055,419.29	\$340.54	4.1%
Virginia Beach	3	\$29,064,879.67	\$386.70	4.9%
Peer Average	3	\$26,382,434.98	\$398.48	4.6%
State		\$415,617,642.32	\$360.81	3.8%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Local Revenue: Per-Pupil and Total Amount

Local Revenue represents revenues produced within the boundaries of a school division primarily derived from property taxes and is available to such division for such school division's use.

Division	Cluster	Local Revenue Per Pupil	Local % of Total
Arlington	3	\$12,198	82.9%
Chesapeake	3	\$3,200	42.6%
Chesterfield	3	\$3,328	47.6%
Fairfax*	3	\$7,860	77.4%
Henrico	3	\$3,970	56.0%
Prince William	3	\$3,927	50.0%
Spotsylvania	3	\$3,237	45.9%
Stafford	3	\$3,051	44.0%
Virginia Beach	3	\$3,192	43.1%
Peer Average	3	\$5,091	55.5%
State		\$4,232	51.7%

* Fairfax includes Fairfax County and Fairfax City Public Schools

State Revenue: Per-Pupil and Total Amount

State Revenue represents the amount of funding that divisions receive based on Standards of Quality and other formulas approved by the Commonwealth of Virginia General Assembly.

Division	Cluster	State Revenue Per Pupil	State % of Total
Arlington	3	\$1,866	12.7%
Chesapeake	3	\$3,832	51.0%
Chesterfield	3	\$3,352	48.0%
Fairfax*	3	\$1,885	18.6%
Henrico	3	\$2,808	39.6%
Prince William	3	\$3,631	46.2%
Spotsylvania	3	\$3,508	49.7%
Stafford	3	\$3,597	51.8%
Virginia Beach	3	\$3,502	47.2%
Peer Average	3	\$3,059	39.4%
State		\$3,391	41.4%

* Fairfax includes Fairfax County and Fairfax City Public Schools

Federal Revenue: Per-Pupil and Total Amount

Federal Revenue represents the amount of funding received from the federal government for educational programs such as Title I, Title II, and National School Lunch and Breakfast Programs.

Division	Cluster	Federal Revenue Per Pupil	Federal % of Total
Arlington	3	\$653	4.4%
Chesapeake	3	\$478	6.4%
Chesterfield	3	\$310	4.4%
Fairfax*	3	\$408	4.0%
Henrico	3	\$306	4.3%
Prince William	3	\$304	3.9%
Spotsylvania	3	\$311	4.4%
Stafford	3	\$289	4.2%
Virginia Beach	3	\$720	9.7%
Peer Average	3	\$434	5.2%
State		\$564	6.9%

* Fairfax includes Fairfax County and Fairfax City Public Schools

APPENDIX
B

Appendix B Fiscal Impacts

Chapter 1: Division Leadership, Organization, and Management

FISCAL SUMMARY

	RECOMMENDATION	2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
1-1	Reorganize division administration.	(\$350,482)	(\$350,482)	(\$350,482)	(\$350,482)	(\$350,482)	(\$1,752,410)	\$0
1-5	Create a Balanced Scorecard.	\$0	\$0	\$0	\$0	\$0	\$0	(\$50,000)
Total		(\$350,482)	(\$350,482)	(\$350,482)	(\$350,482)	(\$350,482)	(\$1,752,410)	(\$50,000)

Recommendation 1-1 (p. 1-15): Reorganize division administration to be better aligned with the division's strategic goals.

The costs associated with implementing this recommendation are based on the following:

- Create an assistant superintendent of Technology.
The salary is based on Step 15 of the 2004-05 adopted salary schedules for an assistant superintendent position (\$98,704 salary x 19.82 percent variable benefit rate + \$6,484 annual fixed benefit rate) = \$124,751.
- Create a chief financial officer.
The salary is based on Step 15 of the 2004-05 adopted salary schedules for an assistant superintendent position [(\$98,704 salary x 19.82 percent variable benefit rate + \$6,484 annual fixed benefit rate) = \$124,751] less [salary savings from combining the director of Finance and business manager positions (\$89,351 salary x 19.82 percent benefit rate + \$6,484 fixed benefit rate) = \$113,544] = \$11,207.
- Create a director of Instructional Technology.
The salary is based on Step 15 of the 2004-05 adopted salary schedules for a level 1 director position (\$89,423 salary x 19.82 percent variable benefit rate + \$6,484 annual fixed benefit rate) = \$113,631.
- Upgrade supervisor of Technology to director of Technology Services.
The salary is based on Step 15 of the 2004-05 adopted salary schedules for a level 1 director position [(\$89,423 salary x 19.82 percent variable benefit rate) = \$107,147] less [(the current supervisor salary of \$74,014 x 19.82 percent variable benefit rate) = \$88,684] = \$18,463.

- Create one administrative assistant position to report to the newly created assistant superintendent of Technology.
The salary is based on Step 5 of the 2004-05 adopted salary schedules for an administrative assistant position (\$31,965 salary x 17.65 percent variable rate + \$6,484 annual fixed benefit rate) = \$44,091.
- Create one secretarial position to report to the newly created director of Instructional Technology.
The salary is based on Step 5 of the 2004-05 adopted salary schedules for a secretarial position (\$27,076 salary x 17.65 percent variable rate + \$6,484 annual fixed benefit rate) = \$38,339.

The total annual cost of implementing this recommendation is \$350,482 (\$124,751 + \$11,207 + \$113,631 + \$18,463 + \$44,091 + \$38,339).

The five-year cost of implementing this recommendation is \$1,752,410.

Recommendation 1-5 (p. 1-29): Create a Balanced Scorecard to provide the division with a strong monitoring and measurement tool.

The cost associated with implementing this recommendation is a one-time cost of \$50,000 to hire a strategic planning consultant to facilitate the creation of a Balanced Scorecard to incorporate into the division's strategic planning process.

Chapter 2: Education Service Delivery

FISCAL SUMMARY

RECOMMENDATION		2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
2-2	Reorganize the Department of Instruction.	(\$238,774)	(\$238,774)	(\$238,774)	(\$238,774)	(\$238,774)	(\$1,193,870)	
2-8	Increase Medicaid and FAMIS reimbursements.	\$277,216	\$277,216	\$277,216	\$277,216	\$277,216	\$1,386,080	
2-11	Expand the job responsibilities of the high school SCOPE teachers.	\$70,786	\$70,786	\$70,786	\$70,786	\$70,786	\$353,930	
Total		\$109,228	\$109,228	\$109,228	\$109,228	\$109,228	\$546,140	

Estimated costs and savings shown in the above chart use the following assumptions:

Recommendation 2-2 (p. 2-8): Reorganize the Department of Instruction by reassigning content supervisory staff and realigning other responsibilities within the department.

The financial impact is based on the addition of 3 division specialists and one secretarial position.

- Specialists: Salaries are based on a 12-month MA teacher contract at step 12 totaling \$202,543 per year (\$50,935 base salary x 19.82 percent benefit rate + \$6,484 for health insurance x 3 positions). It was assumed that salaries for any downgraded positions would be frozen.
- Secretary: The salary is based on a Step 0 secretarial position being added to support Curriculum and Instruction. The additional salary cost totals \$36,231 (\$25,284 salary x 17.65 percent benefit rate + \$6,484 for health insurance).
- The annual cost of implementing this recommendation is \$238,774 (\$202,543 + \$36,231).

Recommendation 2-8 (p. 2-19): Increase Medicaid and FAMIS reimbursements.

The direct service billing portion of the fiscal impact is based on the per student average of \$843 for Virginia’s divisions who filed for Medicaid in 2003–04 because the division’s average per student does not include reimbursements for FAMIS or all Medicaid eligible services. According to the Virginia Medicaid Special Education Student Estimates by School Division, between an estimated 215 and 430 SCPSD special education students receive health services and are the only students for whom reimbursement may be filed. Using the midpoint of 323 and subtracting the 12 students for whom reimbursement is currently filed, it is estimated that there are 311 students for whom the division is not filing. The per-student amount was multiplied by the estimated number of eligible students to obtain the estimated savings of \$262,173 for 2005-06 (\$843 x 311 =

\$262,173). No annual adjustment was made because the number of special education students in Spotsylvania has remained relatively stable over the last three years.

The administrative claiming portion of the fiscal impact is based on the average amount of administrative claiming reimbursement received by school divisions in Virginia for 2003–04, \$66,979. Spotsylvania received \$24,957 for administrative claiming reimbursement during the same time period. The mean number of special education students in Virginia for the same time period was 1,292; Spotsylvania had 3,235 special education students. Therefore, it is estimated that administrative claiming reimbursement for Spotsylvania should be approximately \$40,000. The amount of Spotsylvania’s administrative claiming reimbursement was subtracted from \$40,000 ($\$40,000 - \$24,957 = \$15,043$).

The total was calculated by summing the direct service billing and administrative claiming fiscal impacts. The total was \$277,216 ($\$262,173 + 15,043 = \$277,216$).

Recommendation 2-11 (p. 2-23): Expand the job responsibilities of high school SCOPE teachers when time block scheduling is implemented.

The fiscal impact is based on a teacher’s salary with 0 years of experience. If each SCOPE teacher teaches four classes in addition to their other SCOPE duties, nine classes would be added to their schedules. A teacher on the block schedule will teach six of eight blocks; nine classes is equivalent to 1.5 teacher positions. The beginning salary for a teacher is \$33,973. The benefit rate is 19.82%, plus \$6,484 for health insurance. The total savings per year for one teacher is \$47,190 ($\$33,973 \times 1.1982 + \$6,484 = \$47,190$). Multiplying this amount by 1.5 positions yields an annual savings of \$70,786.

Chapter 3: Human Resources Management

FISCAL SUMMARY

RECOMMENDATION		2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
3-3	Purchase substitute management system.	\$0	(\$6,378)	(\$6,378)	(\$6,378)	(\$6,378)	(\$25,512)	(\$28,345)
3-4	Purchase document management module of online applicant system.	\$0	\$0	\$0	\$0	\$0	\$0	(\$8,500)
3-5	Purchase automated timekeeping system.	\$0	\$0	\$0	\$0	\$0	\$0	(\$77,770)
3-7	Update job classifications and consider adoption of alternative pay schedules.	\$0	\$0	\$0	\$0	\$0	\$0	(\$35,000)
Total		\$0	(\$6,378)	(\$6,378)	(\$6,378)	(\$6,378)	(\$25,512)	(\$149,615)

Estimated costs and savings shown in the above chart use the following assumptions:

Recommendation 3-3 (p. 3-10): Acquire and implement technology to efficiently locate substitutes and track their use.

The financial impact includes a one-time cost for the software of \$28,245 plus an annual license renewal of \$6,378.

Recommendation 3-4 (p. 3-10): Purchase the document management module of the division’s online applicant system to efficiently collect and analyze recruiting and retention data.

The financial impact includes a one-time cost of \$6,000 for the software module and \$2,500 to customize forms to capture the turnover data in an exit survey.

Recommendation 3-5 (p. 3-11): Develop procedures and implement an automated timekeeping system to reduce the division’s risk of non-compliance with FLSA.

The financial impact includes an estimated one-time cost of \$77,770 for software and hardware to implement the automated timekeeping system.

Recommendation 3-7 (p. 3-13): Update job classifications and consider adoption of alternative pay schedules.

The financial impact includes a one-time cost of \$35,000 to perform a classification compensation study by an outside firm to update the results of the 1999 study.

Chapter 4: Facilities Use and Management

FISCAL SUMMARY

RECOMMENDATION		2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
4-2	Develop Educational Specifications						\$0	(\$100,000)
4-3	Add Dedicated Planning Position	(\$90,612)	(\$90,612)	(\$90,612)	(\$90,612)	(\$90,612)	(\$453,060)	
4-4	Outsource Custodial Operations	\$162,000	\$828,000	\$1,688,000	\$1,722,000	\$1,757,000	\$6,157,000	
4-5a	Energy Policy (Behavioral Changes)	\$262,000	\$535,000	\$545,000	\$556,000	\$567,000	\$2,465,000	
4-5b	Energy Policy (Capital Improvement)	\$37,000	\$148,000	\$171,000	\$194,000	\$217,000	\$767,000	
4-6	Facilities Assessment and Long-Range Plan						\$0	(\$268,000)
4-8	Add Maintenance Staff	\$(175,686)	\$(175,686)	\$(175,686)	\$(175,686)	\$(175,686)	(\$878,430)	
Total		\$194,702	\$1,244,702	\$2,137,702	\$2,205,702	\$2,274,702	\$8,057,510	(\$368,000)

Estimated costs and savings shown in the above chart use the following assumptions:

Recommendation 4-1 (p. 4-11): Review cost of new facilities construction compared to peers and state averages.

In addition to the annual savings indicated in the above exhibit, the division may achieve savings through the revision of its policies and procedures for new construction. Any such savings would depend on the division's willingness to consider the adjustment of its facilities construction standards and/or practices. On average, the last six schools built or contracted by the division were 23 percent above state average construction costs, calculated based on average total cost per student station. Future schools are budgeted at 28 percent above average. If the division were to build the new schools in its current capital improvement plan at the state-wide average costs per student station rather than at currently budgeted division costs, savings would be \$31 million over the next five years (detailed calculations are shown in **Exhibit 4-8** included in Recommendation 4-1).

Recommendation 4-2 (p. 4-16): Consider the development of detailed facilities educational specifications.

The cost of educational specifications development is based on a rough estimate provided in a telephone interview with William DeJong, the CEO of DeJong, Inc., an educational planning firm based in Dublin, Ohio firm that routinely develops educational specifications. DeJong has completed 248 educational specification projects in 18 states, the District of Columbia and 2 foreign countries. The estimated cost of developing the educational specifications is \$100,000.

Recommendation 4-3 (p. 4-17): Consider adding a dedicated staff position responsible for planning.

The cost of adding a supervisory position for facilities planning is \$90,612. This financial impact is based on the salary of a supervisor at step 0 [(\$70,212 (2004-05 salary) x 19.82 percent variable benefit rate + \$6,484 for annual fixed benefit rate) = \$90,612.]

Recommendation 4-4 (p. 4-19): Consider outsourcing custodial operations

Potential savings are based on data and calculations presented in **Exhibit 4-11** included in Recommendation 4-4, showing potential savings of \$1,591,076. The above analysis is based on the assumption that 10 percent of potential savings could be achieved in 2005-06, 50 percent in 2006-07, and 100 percent thereafter. Potential savings are escalated at 2.0 percent per year and rounded to the nearest thousand. For example, \$1,591,076 x 1.02 escalation x 10% = \$162,290 rounded = \$162,000 in 2005-06.

Recommendation 4-5a (p. 4-20): Design and implement a division-wide energy management policy (Energy Management Behavioral Changes).

Potential savings are based on a telephone interview with a Rebuild America representative who believed that 10 to 15 percent savings were possible from behavioral changes alone. The division's 2004-05 budget for energy use is \$5,136,590. Initial calculations indicate possible savings of \$514,000 (10 percent of the 2004-05 budget) based on behavioral changes alone. The above analysis is based on the assumption that 50 percent of savings could be achieved in 2005-06 and 100 percent thereafter. Potential savings are escalated at 2.0 percent per year. For example, \$5,136,590 x 10% x 1.02 escalation x 50% = \$261,966 rounded = \$262,000 in 2005-06.

Recommendation 4-5b (p. 4-20): Design and implement a division-wide energy management policy (Capital Improvements).

Potential energy savings will be based on the actual capital improvements made—a detailed design analysis will be required in order to make an accurate determination of costs and benefits. However, a rough estimate of fiscal impact can be made based on general assumptions. The figures in the analysis above are based on the assumption that the division would invest \$10,000,000 over a two-year period, targeting a 10 percent annual rate of return on improvements that would last 15 years. Further, the assumptions include a 5 percent cost of funds, a \$75,000 per year additional cost of analysis and monitoring, and a 2 percent escalation factor. The cost of financing the improvements is deducted from the annual cash flow rather than treated as a one-time expenditure. Calculations are shown below:

Energy Capital Improvements Savings

Year	Program Savings ¹	Debt Service or Lease Payments ²	Program Costs ³	Net Cash Flow	Net Cash Flow Rounded
2005-06	\$593,712	(\$481,711)	(\$75,000)	\$37,000	\$37,000
2006-07	\$1,211,172	(\$986,831)	(\$76,500)	\$147,840	\$148,000
2007-08	\$1,235,395	(\$986,831)	(\$78,030)	\$170,534	\$171,000
2008-09	\$1,260,103	(\$986,831)	(\$79,591)	\$193,681	\$194,000
2009-10	\$1,285,305	(\$986,831)	(\$81,182)	\$217,291	\$217,000
Total	\$5,585,687	(\$4,429,035)	(\$390,303)	\$766,346	\$767,000

Notes: ¹Program savings are calculated based on a 10% internal rate of return on investment of \$10 million implemented over two years, with a 15 year pro forma period. Savings are escalated 2% per year to account for inflation.

²Debt service or lease payments are calculated using a 5% cost of funds with a 15 year repayment period.

³Program costs are based on a rough estimate of the cost of monitoring the capital improvement program. Costs are escalated 2% per year to account for inflation.

Recommendation 4-6 (p. 4-25): Develop a division-wide facility assessment and integrate the results of the assessment into the division's long-range facilities plan.

The financial impact is based on a rough estimate of one-time cost. Actual cost will depend on the amount of work outsourced rather than performed with existing staff. SCPSD has 1,421,000 square feet of facilities that were built before 1990—analysis for facilities built after 1990 could probably be handled internally or on a very limited basis. Facilities assessments typically range from \$0.12 to \$0.20 per square foot or more, depending on how much work is done by the division, plus fixed costs such as software and project mobilization. The result is a range of \$171,000 to \$284,000. Add \$40,000 in fixed cost and the range is \$211,000 to \$324,000, with an average of \$268,000.

Recommendation 4-7 (p. 4-27): Review the division's historical and planned annual spending on capital renewal items.

Once the division has completed its long-range comprehensive assessment, the division may wish to review its historical and planned spending on capital renewal and capital improvement items and develop a budget strategy that will provide for high-quality sustainable facilities in the long-term. There is no projected savings or additional expense at this time.

Recommendation 4-8 (p. 4-28): Review Operations and Maintenance staffing for possible areas of understaffing.

Actual costs will depend on need and the type of maintenance personnel added, if any. The cost shown in the analysis is based on the average fully loaded cost of skilled maintenance workers in the division and assumes the addition of 4.0 full-time equivalents (FTEs). This amount is in addition to normal growth that would occur with increases in the number and size of facilities maintained. The addition of 4.0 full-time equivalents will cost the division \$175,686 per year (\$31,821 average salary per position x 1.1765 benefit rate, plus \$6,484 per position for health insurance x 4 positions).

Chapter 5: Financial Management

FISCAL SUMMARY

RECOMMENDATION		2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
5-3	Restructure the Finance Department.	\$18,824	\$18,824	\$18,824	\$18,824	\$18,824	\$94,120	\$0
5-4	Add an independent internal audit function to the division.	\$0	\$0	(\$84,367)	(\$84,367)	(\$84,367)	(\$253,101)	
Total		\$18,824	\$18,824	(\$65,543)	(\$65,543)	(\$65,543)	(\$158,981)	\$0

Estimated costs and savings shown in the above chart use the following assumptions:

Recommendation 5-4 (p. 5-9): Restructure the Finance Department around needed roles and responsibilities filling identified gaps with an additional degreed accountant.

The financial impact is based on the following:

- Annual savings based on the net savings of using the funds budgeted for the current internal auditor \$ 60,650 (\$45,206 salary X 19.82 percent benefit rate + \$6,484 fixed benefit rate) plus the savings from the elimination of the second department secretarial position \$36,550 (\$25,556 X 17.65 percent benefit rate + \$6,484 fixed benefit rate) to fund one degreed accountant position at a total salary cost of \$78,376 (\$60,000 X 19.82 percent benefit rate + \$6,484 fixed benefit rate). The net savings are \$18,824.

Recommendation 5-5 (p. 5-11): Create an internal audit function reporting to the School Board.

The financial impact is based on the following:

- Annual investment cost of \$84,367 (\$65,000 x 19.82 percent benefit rate + \$6,484 fixed benefit rate) beginning 2007-08 based on the addition of an internal auditor position in 2007-08. The cost of this position is increased by \$23, 717 based upon the recent experience of the division in advertising the position in December 2004. Through March 2, 2005 SCPSD has received six applications, none of which met the requirements of the position – accounting degree, CPA credentials and school division experience. The division’s external auditors advised that a salary of \$65,000 annually would be needed to recruit a qualified candidate due to the shortage of accountants – particularly CPAs.

Chapter 6: Transportation

FISCAL SUMMARY

RECOMMENDATION		2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
6-1	Revise the Transportation Department's organizational structure.	(\$269,490)	(\$269,490)	(\$269,490)	(\$269,490)	(\$269,490)	(\$1,347,450)	
6-2	Establish a recruitment referral bonus.	(\$19,000)	(\$19,000)	(\$19,000)	(\$19,000)	(\$19,000)	(\$95,000)	
6-6	Revise division policies and practices to improve regular route efficiencies.	\$83,332	\$166,664	\$249,996	\$333,328	\$458,326	\$1,291,646	
6-7	Implement the automated routing and scheduling system for special services transportation.	\$155,396	\$155,396	\$155,396	\$155,396	\$155,396	\$776,980	
6-7	Establish a cooperative planning effort to improve service quality.	\$0	\$89,354	\$174,239	\$254,880	\$331,488	\$849,961	
6-8	Increase the number of hours for in-service training for drivers and aides.	(\$57,321)	(\$57,321)	(\$57,321)	(\$57,321)	(\$57,321)	(\$286,605)	
6-11	Implement an automated parts inventory system and hire a part-time employee to support vehicle maintenance.	(\$17,913)	(\$17,913)	(\$17,913)	\$0	\$0	(\$53,739)	(\$3,866)
Total		(\$124,996)	\$47,690	\$215,907	\$397,793	\$599,399	\$1,135,793	(\$3,866)

Estimated costs and savings shown in the above chart use the following assumptions:

Recommendation 6-1 (p. 6-8): Revise the Transportation Department's organizational structure.

The financial impact is based on hiring five mid-level supervisory positions. The annual salary for each position is based on the goal to place a mid-level management position with supervisory responsibility over drivers. The top rated pay for a driver of \$20.61 per hour was annualized at eight hours per day and 240 days per year ($\$20.61 \times 240 \times 8 = \$39,571$). The cost per position is \$53,898 (\$39,571 salary x 19.82 percent benefit rate plus \$6,484 health insurance benefit). The annual fiscal impact of implementing this recommendation is \$269,490 (\$53,898 x 5 positions).

Recommendation 6-2 (p. 6-13): Establish a referral bonus to encourage employees to recruit new drivers and aides and fill vacant positions created by long-term absences.

The estimated cost to implement the referral bonus is \$19,000 per year. The referral bonus is based on a "finder's fee" of \$1,000 paid after the new driver completes training and drives for 90 days. SCPSD will need to replace an average of 38 driver positions per year due to turnover. This estimate is based on a driver turnover rate of 10 percent for SCPSD (384 budgeted positions

x .10 = 38.4). Assuming 50 percent of the 38 vacancies are filled as a result of the referral program the cost equals \$19,000 per year (19 positions x \$1,000 finder’s fee = \$19,000).

Recommendation 6-6 (p. 6-18): Investigate revising division policies and standard practices to increase regular school transportation route efficiencies and achieve cost savings.

Potential cost savings are based on achieving improved regular route efficiencies using the automated routing and scheduling system in conjunction with revised student transportation policies and standard practices. SCPSD’s average riders per bus is 90 in 2004-05 compared to the 2002-03 peer average, excluding Arlington and Fairfax counties, of 115 riders per bus. If SCPSD established a minimum goal to improve service effectiveness of 11 percent from 90 regular riders per bus in 2004-05 to 100 regular riders per bus by 2009-10, 22 fewer regular route buses would be required.

In 2004-05, 223 regular route buses transport average daily riders of 20,027 or 90 riders per bus ($20,027 \div 223 = 89.81$). An 11 percent improvement equates to 100 average riders per bus ($89.81 \times 1.11 = 99.69$). Achieving 100 regular riders per bus requires 201 regular route buses ($20,027 \div 99.69 = 201$). Therefore, 22 fewer buses would be needed ($223 - 201 = 22$). The Virginia Department of Education (DOE) pupil transportation report for 2003-04 shows transportation costs for regular routes equal \$3,886,137 or \$17,505 per regular route bus [$\$3,886,137 \div 222$ (*regular route buses in 2003-04*) = \$17,505]. Transportation cost by program is not available for 2004-05. To estimate the 2004-05 costs for regular routes the 2003-04 costs for regular routes is increased by the same percentage increase of total transportation expenditures over the same time period. The revised 2004-05 budgeted transportation expenditures increased 19.546 percent from the 2003-04 total transportation costs. Therefore the transportation costs for regular routes in 2004-05 are estimated to be \$4,645,721 ($\$3,886,137 \times 1.19546 = \$4,645,721$). The 2004-05 estimated cost per regular route bus is \$20,833 ($\$4,645,721 \div 223 = \$20,833$). The fiscal impact assumes achieving incremental savings each year, realizing an 11 percent improvement in service effectiveness by 2009-10. The fiscal impact by year is shown in the following table:

Year	Riders per Bus Percent Increase Goal	Riders per Bus [Riders per bus previous year x (1+% increase)]	Buses Required (20,027 riders ÷ riders per bus)*	Cumulative Bus Reduction (223 – buses required)	Cumulative Savings (Bus reduction x \$20,833/bus)
Current 2004-05		89.81	223		
2005-06	2.0%	91.61	219	4	\$83,332
2006-07	2.0%	93.44	215	8	\$166,664
2007-08	2.0%	95.30	211	12	\$249,996
2008-09	2.0%	97.21	207	16	\$333,328
2009-10	3.0%	100.13	201	22	\$458,326

*Rounded up to nearest whole number

Recommendation 6-7 (p. 6-23): Implement the automated routing and scheduling system for special services transportation to improve route efficiencies and establish a cooperative planning effort to improve service quality.

Automated Routing and Scheduling System

Potential cost savings are based on using the automated routing and scheduling system and better coordination of transportation schedules with special need program schedules. Using automated routing for special needs should achieve an 8 percent reduction in cost based on the implementation of similar programs in other school divisions. Annual costs per special needs rider in 2003-04 equaled \$4,581.24. An 8 percent reduction to this cost is \$366.50 per rider ($\$4,581.24 \times .08 = \366.50). Average daily special needs riders in 2004-05 is 424. Estimated annual cost savings for 2005-06 through 2009-10 is \$155,396 ($424 \times \$366.50 = \$155,396$).

Cooperative Planning Effort to Improve Service Quality

Additional cost savings are possible through better coordination of transportation schedules with special need program schedules. A conservative goal as a result of improving service quality and increasing operating efficiency through proactive involvement with the school administrators responsible for special needs students is an additional 5 percent in cost savings per year for each of four years (after implementation of automated routing and scheduling in Year 1).

Year	Annual Percent Cost Reduction Goal	Cost per Student Rider Prior Year	Cost Reduction per Rider (cost per student rider prior year x % cost reduction goal)	Annual Savings (cost reduction per rider x 424 student riders)	Cumulative Savings
<i>Automated Routing and Scheduling System</i>					
2005-06 through 2009-10	8% automated routing and scheduling	\$4,581.24 2003-04 (most recent data available)	\$366.50	\$155,396	\$155,396
<i>Cooperative Planning Effort to Improve Service Quality</i>					
2006-07	5%	(\$4,581.24 - \$366.50 =) \$4,214.74	\$210.74	\$89,354	\$89,354
2007-08	5%	(\$4,214.74 - \$210.74 =) \$4,004.00	\$200.20	\$84,885	\$174,239
2008-09	5%	(\$4,004.00 - \$200.20 =) \$3,803.80	\$190.19	\$80,641	\$254,880
2009-10	5%	(\$3,803.80 - \$190.19 =) \$3,613.61	\$180.68	\$76,608	\$331,488
Cost per Student Rider 2009-10		(\$3,613.61 - \$180.68 =) \$3,432.93			

The automated routing and scheduling system for special needs could be implemented in time to gain efficiencies beginning with the 2005-06 school year. Additional time may be required to coordinate the special need program schedules with transportation schedules to realize improved efficiencies, therefore the savings are estimated to begin in the 2006-07 school year and continue to increase each year thereafter by 5 percent per year. The combined estimated annual savings in 2009-10 is \$486,884 ($\$155,396 + \$89,354 + \$84,885 + \$80,641 + \$76,608 = \$486,884$).

Recommendation 6-8 (p. 6-26): Increase the number of hours for in-service training for drivers and aides. The annual investment for additional in-service training is based on the additional paid time for drivers and aides. The average annual pay rate for a driver was used for all employees as a conservative estimate of cost. The average pay rate per driver is \$16.64 per hour plus 7.65 percent employee benefits. Additional training is proposed for eight hours per employee per year for approximately 400 drivers and aides for a total cost \$57,321 ($\$16.64 \times 1.0765 \times 8 \times 400$). The annual investment should begin with the next school year, 2005-06.

Recommendation 6-11 (p. 6-28): Implement an automated parts inventory system and hire a part-time employee to support vehicle maintenance.

The Transportation Department should implement an automated parts inventory system. The cost to implement an automated parts inventory system includes no more than \$1,000 to purchase simple inventory management software off the shelf (there may no cost for the software if available from the SCPD Maintenance Department). The assumption is made that a driver with computer database skills would work to put the existing inventory in a database. If the implementation project took about four weeks and was done the summer 2005, the cost for labor to implement an automated parts inventory system is the average pay rate per driver of \$16.64 per hour plus 7.65 percent personnel benefit for 40 hours per week for four weeks for a total of \$2,866 ($\$16.64 \times 1.0765 \times 40 \times 4$). The one-time investment for software (\$1,000) and the time to enter the parts inventory into the database (\$2,866) is \$3,866. The implementation project could be completed during the summer 2005.

The investment to maintain the automated parts inventory database and to transition to a fully automated vehicle management information system is based on a part-time driver working between routes 20 hours per week and during summers (when significant school bus maintenance work is accomplished) for 50 weeks a year for an annual cost of \$17,913 ($\$16.64 \times 1.0765 \times 20 \times 50$). Work would begin in 2005-06 and continue until the Transportation Department has moved the vehicle maintenance function into a new facility – assumed to be by 2007-08.

Chapter 7: Computers & Technology

FISCAL SUMMARY

RECOMMENDATION		2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
7-1	Conduct process re-engineering study	(\$90,000)	(\$90,000)	(\$90,000)	(\$90,000)	(\$90,000)	(\$450,000)	\$0
Total		(\$90,000)	(\$90,000)	(\$90,000)	(\$90,000)	(\$90,000)	(\$450,000)	\$0

Recommendation 7-1 (p. 7-6): Conduct a process reengineering study to assist in evaluating and implementing automated solutions to reduce manual administrative and clerical processes.

In order to fully recognize these savings the division will have to conduct a process reengineering study to identify areas where manual clerical processes that are currently in place can be automated and streamlined. The entire cost to conduct this study is estimated to be \$450,000 based on similar process engineering studies for the same size school system, with a comparable number of schools and students. The evaluation team recommends that the division budget \$90,000 per year and map the most critical processes in the first year and add less critical processes in each subsequent year. It is anticipated that the study will span five years.

Chapter 8: Purchasing and Warehousing

FISCAL SUMMARY

RECOMMENDATION		2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL 5-YEAR (COSTS) OR SAVINGS	ONE TIME (COSTS) OR SAVINGS
8-1	Increase centralization of purchasing.	\$23,821	\$23,821	\$23,821	\$23,821	\$23,821	\$119,105	\$0
8-3	Implement copier agreements based on use.	\$0	\$45,000	\$45,000	\$45,000	\$45,000	\$180,000	\$0
8-7	Perform a warehouse optimization study.	\$0	\$0	\$0	\$0	\$0	\$0	(\$7,000)
8-8a	Add a textbook coordinator position and acquire an automated textbook management system.	(\$39,819)	(\$51,819)	(\$51,819)	(\$51,819)	(\$51,819)	(\$247,095)	\$0
8-8b	Savings in textbook acquisitions and estimated collections for lost or damaged books due to implementation of a textbook management system.	\$27,550	\$27,550	\$27,550	\$27,550	\$27,550	\$137,750	\$0
Total		\$11,552	\$44,552	\$44,552	\$44,552	\$44,552	\$189,760	(\$7,000)

Estimated costs and savings shown in the above chart use the following assumptions:

Recommendation 8-1 (p. 8-7): Increase centralization of purchasing to achieve better pricing and ensure compliance with VPPA.

The financial impact is based on the assumption that SCPSD can achieve a 1 percent savings on the amounts paid for goods and services less than \$15,000. The aggregate payments to vendors under \$15,000 in 2003-04 were \$2,382,101. A 1 percent savings is \$23,821 ($2,382,101 \times .01 = \$23,821$).

Recommendation 8-3 (p. 8-9): Require all schools and departments to work with the Purchasing Department to implement copier agreements based on use rather than fixed lease costs.

The financial impact assumes that SCPSD can achieve a \$5,000 per school reduction in copier costs based on actual savings achieved for individual schools that have already converted. There are nine schools that have not converted to the use-based agreements so the savings would be \$45,000 annually ($9 \text{ schools} \times \$5,000 \text{ savings/school} = \$45,000$). The fiscal impact assumes that all schools will convert by 2006-07 if current agreements cannot be re-negotiated or terminated early.

Recommendation 8-7 (p. 8-14): Complete a study to determine optimal warehouse design and incorporate the division’s current just-in-time delivery practice into the design of the proposed central warehouse complex to minimize ongoing warehouse operations costs.

The financial impact is based on the cost of an on-site 2-4 day study for a warehouse size estimated to be between 60,000-120,000 square feet. The fees are \$5,000 plus estimated travel costs of \$2,000 for airfare, hotel, rental car, and meals.

Recommendation 8-8 (p. 8-15): Overhaul the textbook management function.

8-8a. This financial impact is based on the cost of one clerical position and acquiring an automated textbook management system. The clerical salary is based on an administrative assistant at level 0 and totals \$39,819 per year (\$28,334 salary x 17.65 percent benefit rate + \$6,484 health insurance costs). The automated textbook management system’s one time cost for initial hardware and software is \$0 because the division has \$85,000 budgeted in its proposed 2005-06 budget. The ongoing annual support cost is \$12,000 annually. The annual fiscal impact of implementing this recommendation is \$39,819 in salaries and \$12,000 for a total annual cost of \$51,819. The system has a one-year warranty, so annual support costs begin in 2006-07.

8-8b. The costs of implementing this recommendation are offset by savings in textbooks and estimated collections for lost or damaged textbooks. The division could save \$26,576 annually in textbook purchases. Textbook studies show that on average students lose between 5 and 10 percent of textbooks annually. The calculation is based on conservatively estimating a 2.5 percent reduction in textbook losses and in budgeted replacement textbooks. In 2004-05, the division’s textbook budget was \$1,063,034 ($1,063,034 \times .025 = \$26,576$). The division collected an average of \$38,971 in lost and damaged textbooks in 2002-03 and 2003-04. The fiscal impact assumes the division can improve collections by 2.5 percent or \$974 ($\$38,971 \times .025 = \974). Total estimated savings are \$27,550 (\$26,576 reduction in textbook replacements + \$974 lost and damaged textbook collections = \$27,550).

The net annual investments for 2005-06 are \$12,269 (\$39,819 clerical salary - \$27,550 savings from reduction in textbook losses). Net annual investments for the remaining four years will be \$24,269 (\$39,819 clerical salary + \$12,000 textbook management ongoing support - \$27,550 savings from reduction in textbook losses).