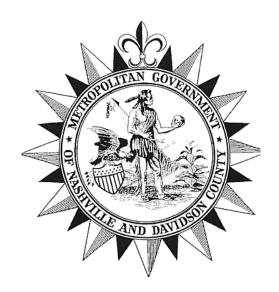
Internal Audit Section

Report on Metropolitan Nashville Public Schools

January 26, 2001



Report Issue Date: January 31, 2001

Internal Audit Section

Report on Metropolitan Nashville Public Schools

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Report on Metropolitan Nashville Public Schools

Section I Report of Internal Audit Section

January 26, 2001

Dr. Bill Wise, Director of Schools Members of the Metropolitan Board of Education 2601 Bransford Avenue Nashville, TN 37204

Report of Internal Audit Section

Dear Dr. Wise and Metropolitan Board of Education Members:

We have recently completed a performance audit of the Metropolitan Nashville Public Schools. According to the *Government Auditing Standards* issued by the Comptroller General of the United States, "a performance audit is an objective and systematic examination of evidence for the purpose of providing an independent assessment of the performance of a government organization, program, activity, or function in order to provide information to improve public accountability and facilitate decision-making by parties with responsibility to oversee or initiate corrective action." A performance audit is different than financial statement audits, which are limited to auditing financial statements and controls, without reviewing operations and performance. In performing this audit, we retained MGT of America to work under our direction. Their final report dated January 2001, *Long-Range Implementation Plan Resulting From a Performance Audit of Metropolitan Nashville Public Schools*, has been provided to you under separate cover. The MGT Executive Summary of that final report, including a summary of the financial impact of their recommendations, is included with this report.

Objectives, Scope, and Methodology

This audit represents the first comprehensive performance audit of the Metropolitan Nashville Public Schools. The school system is governed by nine Metropolitan Board of Education members elected from nine districts within the Metropolitan Government of Nashville and Davidson County. The Board appoints a Director of Schools to manage the school system. There are 129 schools and approximately 70,000 students in Metropolitan Nashville Public Schools. The school system has approximately 8,500 employees, including 4,500 teachers, and has a general fund operating budget exceeding \$407 million.

The overall objectives of this performance audit were as follows:

- Assess all major operations for strengths, weaknesses and inefficiencies, and make recommendations for improvements, citing any financial impacts.
- Evaluate planning and research surrounding services provided to students, and evaluate the execution of programs designed to enhance student performance.
- Evaluate the school system's overall effectiveness in the community in terms of outreach and service to students, supporters and others.
- Develop a long-range planning model to help the school system achieve goals to fulfill its educational mission and to enhance its overall effectiveness in the community.
- Develop findings and recommendations for any areas where performance should be improved, including financial impacts and measurable implementation goals, where possible.
- Describe any instances of non-compliance with laws and regulations or any instances of fraud, abuse or illegal acts noted.

The scope of the work included all aspects of operations related to Metropolitan Nashville Public Schools, including education service delivery, personnel and financial management, technology, facilities management, transportation and food services. The audit was largely focused on fiscal year 2000 financial results and on the policies, procedures, practices and operations in place during the time the audit was being conducted. Certain analyses required the consideration of financial results and operations outside of that time period.

The methodology employed throughout this audit was one of objectively reviewing various forms of documentation, including written policies and procedures, financial information, Board minutes and various other forms of data, reports and information maintained by the school system. Board members, administrative personnel, teachers, principals and other stakeholders were interviewed, and various aspects of school system operations were directly observed. Data obtained from the school system was analyzed for the current period and over time, and various aspects of school system data and practices were compared to those of selected peer districts and to best practices.

We performed the audit procedures in accordance with generally accepted government auditing standards.

Findings and Recommendations

The MGT Long-Range Implementation Plan includes over 200 findings and recommendations in detail, including numerous practices that were found to be commendable. The major findings and recommendations, including the related financial impacts, are in MGT's Executive Summary included with this report. Major commendations address:

- The *Pupil Assignment Plan* that resulted in the federal court declaring the school system's unitary status,
- A program initiated for teachers to share effective lesson plans to improve student achievement.
- The Back-to-School Festival held this year to get students excited about returning to school and to encourage parent and community involvement in schools.
- A teacher mentoring program where experienced, outstanding teachers assist new teachers and teachers experiencing difficulties, and
- The school system's web site.

Following is an overview of the more significant findings and recommendations included in MGT's Executive Summary. Financial impacts of the major recommendations, if applicable, are included. The financial impact of recommendations affecting positions includes estimated salaries and benefits. The findings and recommendations are grouped into two categories, those impacting educational and student support services and those impacting the overall management of the school system and its resources.

Educational and Student Support Services

1. Coordination and communication of system-wide strategic plans need to be enhanced and the related linkages need to be strengthened. There was not an effective system in place to link individual school and cluster plans to the school system's two primary plans. Additionally, there was a lack of communication and coordination on curriculum and instructional services between the K-8 and 9-Adult divisions, and there were no written plans to manage performance to meet Accountability Framework goals. Finally, there was a lack of adequate central guidance and assistance in developing individual school improvement plans. To address these weaknesses, written objectives and strategies should be developed to direct personnel toward common curriculum goals, and the individual school improvement plan process should be enhanced. System-wide planning should be coordinated through a director of planning and budgeting, and the existing K-8 and 9-Adult divisions should be restructured so that 11 cluster directors report to an Assistant Superintendent for

Instruction and Administration. To achieve this, some existing responsibilities would need to be realigned, and five additional directors would need to be hired at an estimated annual cost of \$522,600. It is also recommended that five coordinator and administrative positions be eliminated, resulting in estimated annual savings of \$229,268. The net annual cost to implement these recommendations is estimated at \$293,332.

- 2. Improvements in instruction and classroom planning are needed. There was no system-wide policy for homework or teacher lesson plans, and some schools did not require written lesson plans to be turned in to the principal to monitor the quality of lesson planning. Some of the curriculum guides needed to be updated, and some skills were being taught developmentally and logically out of sequence. The number of advanced placement classes did not meet the standards established in the Accountability Framework. Title I school improvement plans needed to be enhanced. Recommendations to address the needed curriculum and instruction improvements could be implemented without additional financial resources.
- 3. Opportunities to improve teacher attendance and performance evaluations were identified. The number of teacher absences were considered to be high, and tenured teachers were only required to be evaluated twice in ten years. An effective strategy to reduce teacher absenteeism by 10% each year over the next four years should be developed. In addition to enhancing students' educational experiences, this would save the school system an estimated \$1,313,055 over the next five years. Additionally, tenured teachers should be evaluated at least three times in a ten-year period.
- 4. More effective strategies to address low-performing schools need to be developed. There was no systematic plan in place to improve the performance at four state-identified target schools. In addition, comparisons among Metropolitan Nashville Public Schools indicate that teachers at schools with all "D" or "F" grades tended to have less experience, fewer certifications and higher turnover than at other schools. In addition to participating in services offered by the state to assist the four schools, a teacher incentive program to attract and retain highly qualified teachers at low performing schools is recommended. This would cost an estimated \$1,870,500 annually.
- 5. Family involvement strategies need to be developed. There was no policy addressing building and maintaining family involvement, and several schools do not have active PTA's or PTO's. A policy addressing school-based family involvement should be developed, and principal evaluations should more specifically address family involvement. Central office support should be available to improve family participation.
- 6. <u>Educational technology needs to be effectively planned, equipped and supported.</u> There was no comprehensive technology plan in place, and computers were not evenly

distributed among schools. Additionally, there were only two technicians to support over 13,000 computers, resulting in long delays in repairing and installing computers. A comprehensive technology plan, including educational technology, needs to be developed at an estimated cost of \$225,000. Approximately \$300,000 needs to be budgeted annually to ensure computer resources are distributed equitably among schools, and one technology resource teacher needs to be assigned to support each cluster at a cost of approximately \$613,800 per year. Finally, the Schools for Thought program should be expanded at an estimated cost of \$405,000 annually.

- 7. The school system needs to investigate the high number of zero tolerance violations as compared to other school districts in the state. Zero tolerance violations in the Nashville school system are noticeably higher than in other school systems in the state. This is an indication that the program may not be serving as an incentive for students to obey the rules, or that it is being applied more stringently than in other districts. The school system should assess the procedures surrounding the zero tolerance policy.
- 8. The policy prohibiting competitive food sales during meal times needs to clarified and enforced. Allowing sales of food with minimal nutritional value during mealtimes is against National School Lunch Program regulations, but there are two conflicting school policies addressing this issue. MGT observed students purchasing vending machine food during meal times, which could be a violation of federal regulations depending on their nutritional value. The school policy prohibiting competitive food sales should be clarified and enforced to ensure compliance with federal regulations.
- 9. Several educational and support services to students need to be enhanced. Various student programs and services were identified as needing improvement, including such programs and services as psychologists, social workers and counselors; the gifted and talented program; dropout prevention; English as a second language; media materials and textbook management. Recommendations are being made to increase the number of psychologists, social workers and counselors at an estimated annual cost of \$2,103,420. This would provide at least one counselor to every K-8 school. The gifted and talented program, ENCORE, should be relocated among clusters to increase accessibility to eligible students, and an effective dropout prevention program identifying at-risk students should be developed. The English as a second language program needs a full-time coordinator at an estimated cost of \$39,856 annually. The budget for library books and other media materials should be increased by approximately \$553,008 annually to ensure an adequate number of items are available for each student. Finally, a textbook management system is needed to get textbooks to students more timely. Such a system can be purchased for approximately \$1,000.

Management of the School System and Resources

- 10. <u>Virtually all information technology systems need to be updated and replaced.</u> This includes the student information system, the financial and other administrative management systems and the computer networks. Additional staffing and training is also needed to support state-of-the-art information technology. The cost to replace the major student and administrative information systems will be at least \$17,000,000, which includes a new student information system estimated at \$9,441,750. Additional staffing and training needed to support information technology is estimated at \$663,579 annually.
- 11. The school system should enhance efforts to fill principal and teacher positions. A significant number of principal positions will become vacant in the near future, and the competition to hire qualified teachers will be increasing. The school system should continue efforts to enhance support for and develop a curriculum for the Leadership Academy to train prospective principals. A formal teacher recruitment plan should be developed.
- 12. <u>Information on outside financial and other assistance provided to individual schools should be tracked centrally.</u> Schools with strong relationships to business and community groups and grantors have greater access to financial and other resources than their counterparts. A coordinator should be hired to track all resources received and available to schools in order to facilitate obtaining outside resources for schools needing assistance. Such a position is estimated to cost \$71,650 annually.
- 13. Communication to the community needs to be improved. Communication about the school system to the stakeholders, including the general community, was largely reactive. Additionally, there was not a comprehensive communications policy in place. A Director of Public Relations should report to the Director of Schools, and a communications plan should be developed. Additional staffing estimated at \$121,650 annually is recommended.
- 14. The school system should implement a Medicaid recovery program. Certain services provided to students are billable to Medicaid. It is estimated that the school system could recover approximately \$1,220,000 annually from Medicaid.
- 15. <u>Transportation could be managed more efficiently.</u> The number of mechanics per bus was higher than industry practice, and buses were being replaced more frequently than required by state law. Additionally, the manual routing system in place is not as efficient as computerized routing systems. Reducing the number of mechanics, replacing buses in accordance with state regulations and implementing a computerized routing system could save an estimated \$2,787,492 in operating and capital expenditures annually.
- 16. <u>Facility maintenance requirements should be adequately funded.</u> Funding for on-going maintenance has been below peer and best practice funding levels. Increased funding for the 2001-2002 fiscal year of \$840,000 is recommended, followed by additional increases rising to \$2,640,000 by the 2004-2005 fiscal year. Additionally, the focus on

funding deferred maintenance needs to be continued in future capital budgets. The operating budget increases can be partially offset by implementing building usage fees that could produce \$516,960 in revenue annually. The increases could also be offset by energy management savings that could produce savings totaling \$4,190,000 over a five-year period.

- 17. Additional resources are needed for custodial services. The number of custodians and level of custodial supplies were funded at levels that were lower than levels recommended by best practices. Additional annual funding of \$412,968 is recommended for 2001-2002, and additional annual increases totaling \$4,821,872 are recommended over the following four years. These recommended increases will be partially offset by recommended productivity improvement measures expected to save up to \$530,000 annually beginning in 2003-2004.
- 18. <u>Business Office staffing levels need to be enhanced.</u> The size of the Business Office staff is not adequate to support a school system the size of Nashville's, as compared to similarly sized systems and as evidenced by excessive overtime. Three positions at an annual cost estimated at \$173,600 are recommended.

Financial Impact of Audit Recommendations

As explained in the attached Executive Summary, MGT found that the overall funding of the school system has been generally adequate. The cumulative net additional cost of all recommendations impacting the annual operating budget over the next five fiscal years, in current year dollars, is estimated to be \$11,963,250. This is comprised of \$47,005,775 in spending recommendations that are offset by \$35,042,525 of savings and revenue enhancements. The audit also recommends \$14,450,335 in net capital expenditures over the next five years and identifies \$9,271,008 in net savings that could be achieved in the food service operation. Those food service savings would be restricted to use for that fund.

The largest spending recommendations are related to technology and total \$26,654,566 over the next five fiscal years. This amount includes \$7,912,816 of operating expenditures related to technology resource teachers, technicians, training and other support; \$9,441,750 for a student information system; \$7,500,000 for other systems and \$1,500,000 to ensure an adequate number of computers are available for students in all schools.

A summary of the estimated total additional funding needed for the schools operating budget for the next five fiscal years is attached as an exhibit to this audit report. As outlined in the attached exhibit, after considering the funding needed to maintain the current level of service, the additional funding needed for the school improvement plan, the cost associated with statutory requirements and the financial impact of the audit

recommendations, estimated additional funding of \$165,841,244 will be required to support the Metropolitan Nashville Public Schools general operating budget over the next five fiscal years.

Management's responses to the audit recommendations follow this report.

We greatly appreciate the cooperation and help provided by the Metropolitan Board of Education staff throughout the course of this audit.

This report is intended for the information of the management of the Metropolitan Government of Nashville and Davidson County. This restriction is not intended to limit the distribution of this report, which is a matter of public record.

Internal Audit Section

Kim McDoniel Internal Audit Manager

Copy: Mayor Bill Purcell

David L. Manning, Director of Finance

Karl F. Dean, Director of Law

Eugene Nolan, Associate Director of Finance

Metropolitan Council Audit Committee

Richard V. Norment, Director of County Audit

KPMG, Independent Public Accountant

Report of Internal Audit Section - Exhibit

Metropolitan Nashville Public Schools General Operating Budget Estimated Five Year Funding Requirements

	Fiscal Year 2001-2002	Fiscal Year 2002-2003	Fiscal Year 2003-2004	Fiscal Year 2004-2005	Fiscal Year 2005-2006	Estimated Additional Funding Required
Previous year's operating budget	\$ 407,626,464	\$ 441,425,568	\$ 471,448,550	\$ 502,904,709	\$ 537,684,968	
Estimated increase for continuation funding, the school improvement plan and other statutory requirements	31,479,631	28,431,141	29,974,540	31,219,143	32,170,070	\$ 153,274,525
Estimated funding required to implement performance audit recommendations (adjusted for anticipated increases)	5,364,447	9,614,594	9,949,688	12,190,669	12,507,184	49,626,583
Total estimated increase in funding required	36,844,078	38,045,735	39,924,228	43,409,812	44,677,254	202,901,108
Less: Estimated performance audit savings opportunities (adjusted)	3,044,974	8,022,753	8,468,069	8,629,553	8,894,514	37,059,864
Estimated net increase in funding required	33,799,104	30,022,982	31,456,159	34,780,258	35,782,740	\$ 165,841,244
Total estimated fiscal year operating budget	\$ 441,425,568	\$ 471,448,550	\$ 502,904,709	\$ 537,684,968	\$ 573,467,708	

Internal Audit Section

Report on Metropolitan Nashville Public Schools

Section II Management's Response

Kim McDoniel Internal Audit Manager 222 3rd Avenue North, Suite 701 Nashville, TN 37201

Dear Ms. McDoniel:

The intent of this letter is to acknowledge receipt of the <u>Performance Audit</u> of the Metropolitan Nashville Public Schools.

First, please permit me the opportunity to thank Mayor Bill Purcell for responding to the Board of Public Education's desire to be the first Metro department to have such an audit performed. It could not have happened without his vision, his leadership and his effort to secure the funding and implementation of this Performance Audit. I also wish to thank the Metro Internal Audit Department for providing the necessary leadership for this project. As I have said publicly, there was no higher priority assignment for the school district this year, other than improving the achievement levels of nearly 70,000 students.

Second, the findings and recommendations of this **Performance Audit** have been developed by MGT after a four month process which involved the significant input of Board Members, Community Leaders, Metro School personnel, parents, students and citizens. The process to arrive at these findings and recommendations, in my judgement, were comprehensively developed and are inclusive of all stakeholders in the school system. As Director of Schools, I am appreciative of the opportunity to respond to the preliminary drafts of this Audit during the reporting phase of the process.

Third, the findings and recommendations of this **Performance Audit** will immediately be disseminated to the members of the Board of Public Education for their review and study. It would be my recommendation that one or more "Board study sessions" be devoted to a thorough review of this exhaustive document. During those sessions, I will, as Director of Schools, share my administrative recommendations with the Board who will then ultimately determine whether these recommendations will be implemented, in whole or in part. I however can assure you that the staff of the Metropolitan Nashville Public Schools will keep your office apprised of the status of the Board of Public Education's deliberations on the findings and recommendations contained in the **Performance Audit**.

Again, let me offer my appreciation to Mayor Purcell and to your office for leading this exhaustive and comprehensive effort.

Sincerely,

Bill M. Wise

Internal Audit Section

Report on Metropolitan Nashville Public Schools

Section III MGT Executive Summary

EXECUTIVE SUMMARY

<u>Overview</u>

On August 22, 2000, the Internal Audit Section of Metropolitan Government of Nashville and Davidson County contracted with MGT of America, Inc., to conduct a performance audit of Metropolitan Nashville Public Schools (MNPS). The study was completed within a five-month time period with a draft final report submitted on December 11, 2000 and a final report submitted in January 2001. The study team adhered to the project schedule contained in Exhibit 1.

Metropolitan Nashville Public Schools has a K-12 student population of about 70,000 students. This size places Metropolitan Nashville Public Schools as the 2nd largest school system in K-12 student enrollment among the state's 138 school systems.

MNPS has 129 schools (66 elementary, 31 middle, 11 high schools, 13 magnet, four special education, one adult education school, and three alternative schools). These schools are organized into 11 geographical clusters. Sixty-one (61) of the 129 schools are SACS accredited.

In the 1999-2000 school year, the school system had a student population of 47.5 percent White, 45.2 percent Black, 3.8 percent Hispanic, 3.3 percent Asian, and 0.2 percent Native American. For the 1999-2000 school year, the school system had a total of 3,201 English for Speakers of Other Languages (ESOL) students, 19,627 Title I students, and 34,589 students eligible for free and reduced priced meals. MNPS has a total of 10,617 special education students; the number of special education students identified and served in MNPS continues to grow with an annual average increase of approximately 4.7 percent.

Metropolitan Nashville Public Schools has over 8,500 employees (of which about 4,500 are teachers) and has a total budget of over \$512 million for the 2000-01 fiscal year. The operating budget totals \$407.6 million, and the rest of the budget is comprised of debt service (\$45.6 million), state and federal grant programs (\$35.8 million), and the school lunchroom operation (\$23.8 million). For the 2000-01 school year, MNPS has 59.5 percent funding from local sources, 31.8 percent from state funding sources, and 8.7 percent from federal sources. The MNPS per pupil expenditure is \$6,912. Additional information on Metropolitan Nashville Public Schools, with comparisons to selected peer school systems, is contained in Chapter 2 of the full report.

Environment for the Performance Audit

Two of the Mayor's platforms when running for office were to support and enhance Metropolitan Nashville Public Schools and to initiate performance audits in Metropolitan Government of Nashville and Davidson County. The Metropolitan Board of Education came forth and asked the newly elected Mayor if MNPS could be the first in the series of government departmental audits. The Internal Audit Section agreed to prioritize an audit of MNPS, as there had never been a full audit of the school system. The Board of Education's request was granted with the full support of the Director of Schools. Prior to the commencement of the audit, the Mayor conducted site visits to many of the MNPS schools.

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EXHIBIT 1 TIME LINE FOR THE PERFORMANCE AUDIT OF METROPOLITAN NASHVILLE PUBLIC SCHOOLS

Week of	ACTIVITY				
August 28, 2000	■ Finalized contract.				
	Conducted initial meeting in Nashville with county and school system officials.				
	 Designed tailor-made, written surveys for administrators, principals, and teachers. 				
September 4, 2000	Conducted central office administrator, teacher, and principal surveys.				
September 11, 2000	 Collected and analyzed existing and comparative data available from the school system and state agencies. 				
	Produced MNPS profile tables.				
September 18, 2000	Visited the school system.				
	 Conducted diagnostic review. 				
	 Collected existing data. 				
	 Interviewed Board of Education members. 				
	 Interviewed community/business leaders. 				
September 25, 2000	Analyzed survey data and information which were collected the weeks of September 4 through September 18, 2000.				
October 2, 2000	Tailored audit guidelines and trained MGT team members using findings from the above analyses.				
October 9, 2000 October 16, 2000	■ Conducted formal on-site review.				
	 Conducted public hearing (October 12, 2000). 				
October 25, 2000	 Requested additional data from the school system. 				
	 Discussed (via phone call, email, and/or fax) preliminary findings with key MNPS personnel. 				
November 10, 2000	Submitted the preliminary findings to MNPS and Internal Audit Section.				
November 14, 2000	Met with MNPS to review findings.				
December 11, 2000 - December 31, 2000	Prepared the draft report, made revisions, and reviewed the draft with MNPS management.				
January 2001	Finalized the report, obtained management responses, and presented the report to the Metropolitan Government of Nashville and Davidson County and the Metropolitan Board of Education.				

Source: Created by MGT, 2000.

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In August, when MGT received the contract to conduct the performance audit, the school system was in its second year of undergoing significant change. The 43 year-old federal desegregation case that polarized the Nashville community ended in October 1998 when a U.S. District Judge declared the Metropolitan Nashville Public Schools to be a unitary system. As a result of this ruling, the school system created a three-tier system that allows students to attend three schools within one feeder pattern, or cluster.

Under the leadership of the Director of Schools and the Board of Education (and in collaboration with a broad-based group of community representatives), the school system developed a plan that resulted in the federal court declaring the system's unitary status. This action resulted in absolving the school system from many of the previous restrictions, including massive cross bussing of students imposed by the desegregation plan. The Mayor, Board of Education, Director of Schools and other parties are acutely aware of the established requirements to maintain unitary status. These requirements are contained in the Pupil Assignment Plan commonly referred to by staff and others as the MNPS School Improvement Plan.

The Nashville community has been focused on academic achievement and performance accountability in MNPS. Beginning in 1993, a Nashville/Davidson County community group called the Citizens Panel has produced an annual report card for MNPS. The school system's grades on this report card have increased from the grade of C in 1994 and I for "incomplete" in 1997 (due to a lack of established goals) to a B minus in 1999. The 2000 Progress Report Card released on December 15, 2000, graded MNPS as a C rating — a grade lower than the previous year.

MNPS has a systemwide *Accountability Framework* with eight goals related to measuring and increasing students' academic achievement and providing a safe and orderly environment for learning. According to the results of the 2000 School Report Card from the Tennessee Department of Education, MNPS has made little progress in achieving its goals in the *Accountability Framework*. Scores went down for a number of high school students taking Advanced Placement Tests and, according to the report, the system failed to narrow the performance gap between students from poverty-level families and those with higher incomes. Only 49.2 percent of the MNPS third graders are reading at the national average, while the school system's accountability goal is 70 percent. Thus, student achievement and accountability were questioned by many within MNPS and in the community at the onset of the performance audit.

It was within this context that the Internal Audit Section of Metropolitan Government of Nashville and Davidson County contracted with MGT of America to conduct the performance audit of Metropolitan Nashville Public Schools.

Audit Methodology

MGT consultants began the research for this project in August 2000. Several methods were used to gather and analyze new and existing data for the performance audit. MGT adhered to the methodology requirements outlined in the RFP in conducting the audit. The first step included a review of an extensive set of records, documents, and data. This information was used as a starting point for collecting data during the diagnostic review and on-site work. A major component of the study was the input provided by

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Metropolitan Nashville Public Schools administrators, teachers, instructional and classified employees, parents, and students.

One unique feature of the MNPS performance audit was the use of the Web sites of both the Metropolitan Government and Metropolitan Nashville Public Schools to link to MGT of America. Through this linkage, the Nashville community was able to provide anonymous comments to MGT consultants about issues and concerns. Approximately 200 messages were received throughout the duration of the performance audit.

Additionally, five school systems were selected for comparison to Metropolitan Nashville Public Schools. MGT's experience has found that such comparisons with other school systems yield valuable insights and often form a basis for determining efficient and effective practices for a school system interested in making improvements.

The school systems chosen for the program comparison and agreeing to participate are:

- Austin Independent School District (TX)
- Charlotte-Mecklenburg Schools (NC)¹
- Columbus Public Schools (OH)
- Hamilton County Schools (TN)
- Jefferson County Public Schools (KY)

Diagnostic Review

During the week of September 18, 2000, five MGT staff members conducted the diagnostic review. Interviews were completed in group settings with representatives of various organizations, and with individuals, including the Board of Education members and central office administrators; teachers, principals and other school personnel; officials of Metropolitan Government; and business and community leaders.

Employee Surveys

To secure the involvement of central office administrators, school principals, and teachers in the scope of the performance audit, three surveys were prepared and disseminated in September 2000. Through the use of anonymous surveys, administrators and teachers were given the opportunity to express their views about the management and operations of the school system. These surveys were similar in format and content to provide a database for determining how the opinions and perceptions of central office administrators, principals, and teachers vary.

Conducting the Formal On-Site Audit

During the weeks of October 9th and October 16th, MGT conducted the formal on-site audit with a team of 15 consultants. As part of our on-site review, MGT consultants examined the following systems and operations in Metropolitan Nashville Public Schools:

- School System Organization and Management
- Educational Service Delivery

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¹ Charlotte-Mecklenburg Schools was unable to participate fully, however the school system did provide information about enrollment, staffing, technology, and purchasing practices.

- Personnel Management
- Financial Management
- Asset and Risk Management
- Purchasing and Warehousing
- Facilities Use and Management
- Community Involvement and Communications
- Administrative and Instructional Technology
- Transportation
- Food Service
- Safety and Security

MGT's systematic assessment of Metropolitan Nashville Public Schools included the use *Guidelines for Conducting Management and Performance Audits of School Districts*. Following the collection and analysis of existing data and new information, MGT tailored the guidelines to reflect local policies and administrative procedures; the unique conditions of Metropolitan Nashville Public Schools; and the input of parents, community leaders, administrators, staff, teachers, and students. The on-site audit included meetings with appropriate central office and school-level staff, as well as reviews of documentation provided by these individuals.

Members of the audit team conducted visits to 52 schools in the school system, and some schools were visited more than once. A public hearing was conducted at the Nashville Convention Center on October 12, 2000. Metropolitan Nashville Public Schools and Metropolitan Government advertised this public hearing through informational flyers, newspaper articles, and media press releases.

Major Findings, Commendations, and Recommendations

As stated in the Request for Proposals (RFP), the purpose of the study is to complete a comprehensive performance audit of the Metropolitan Nashville Public Schools in the following areas:

- Comparisons of the Metropolitan Nashville Public Schools (MNPS) to selected peer school systems as a whole and to selected benchmarks.
- Measurement of specific areas of administration, instruction, and all other operational areas, (e.g., transportation plant operations and maintenance, food service, central storeroom, capital projects, finance, and technology), against policies, procedures, and other standards promulgated by the Metropolitan Board of Education.
- Major strengths and weaknesses for all operational areas, including significant contributing factors behind those strengths and weaknesses.
- A long-range planning model to help Metropolitan Nashville Public Schools achieve goals to fulfill its educational mission and to enhance its overall effectiveness in the community.

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- All relevant findings and recommendations for any areas where the performance of Metropolitan Nashville Public Schools should be improved. The written recommendations were to include, to the fullest extent possible, cost savings, measurable implementation goals, and other applicable quantifiable data.
- A description of any instances of non-compliance with laws and regulations, fraud and abuse, or illegal acts coming to the proposer's attention. Any such instances noted were to include a quantification of the financial impact, if applicable and determinable.

This executive summary highlights major findings, commendations, and recommendations. Additional findings, commendations and recommendations and the details supporting the major recommendations included in this executive summary (along with fiscal impact analyses, implementation plans and recommended timelines) have been developed for MNPS management and Board member use and are contained in the Long-Range Implementation Plan resulting from this performance audit. This detailed report will be available at all Nashville public libraries and online at www.nashville.org.

It should be noted that several of the recommendations will have to be coordinated with other departments of the Metropolitan Government in order to be implemented effectively. We recommend that an Enabling Task Force be appointed by the Mayor and the Director of Schools and that such a task force be empowered to develop and implement collaborative strategies to facilitate the implementation of the recommendations made as a result of this performance audit.

Major Commendations

MGT identified several commendations and best practices related to MNPS in the school system's efforts to improve management practices, increase the efficiency and effectiveness of operations, and contain costs. Among the audit's commendations are:

- MNPS developed a plan that resulted in the federal court declaring the system's unitary status in 1998. This *Pupil Assignment Plan* is the foundation for maintaining a unitary school system and avoiding reversion to pre-1998 desegregation requirements. MNPS is commended for the development and implementation of the *Pupil Assignment Plan* (School Improvement Plan) that is designed to ensure that MNPS maintains its unitary school system designation.
- Metropolitan Nashville Public Schools is commended for initiating a the Lesson Study Initiative — a program designed to collaboratively improve student achievement and share model lesson plans among school system teachers. With this initiative, a group of five to seven teachers choose an instructional concept that has been difficult for students to master. Working collaboratively, the group discusses the learning problem encountered and plans a course of action to improve the existing lessons. Then, one or more of the teachers actually teaches the lesson and evaluates students' learning. The study group then revises the lesson based on student performance

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- from the first lesson. Another teacher reteaches the lesson and evaluates the outcomes to determine if learning has improved.
- Since the 1985-86 school year, the United States Department of Education has awarded nine schools in MNPS the Blue Ribbon Award. This award, based primarily on academic achievement, shows that these schools claimed recognition as national schools of excellence. The schools honored are Andrew Jackson Elementary, Brookmeade Elementary, Dodson Elementary, Eakin Elementary, Head Middle, Lakeview Elementary, Meigs Magnet School, Glencliff High, and Hillsboro High. Metropolitan Nashville Public Schools is commended for the national recognition of nine Blue Ribbon Award Schools.
- MGT reviewed the current Character Education Curriculum Guides and found them to be exemplary. A set of principles such as honesty or civility is attached to each six weeks of study in the K-8 Core Curriculum and the 9-12 Social Studies curriculum.
- Metropolitan Nashville Public Schools is commended for providing the opportunity for teachers to share a teaching position. During the 2000-01 school year, over 34 teachers are sharing teaching positions. Job sharing allows teachers to continue to work if they are unable to teach full-time.
- Purchasing cards were introduced to MNPS in November 1997. Even though the number of transactions has peaked at about 1,000 per year and has since dropped below 1,000, the average annual dollar volume continues to grow. The purchasing card program is designed to improve efficiency in processing low dollar value purchases by schools and departments from any vendor that accepts the VISA credit card. Of the five comparison school systems studied, MNPS is the only school system using this efficient practice. The MNPS Purchasing Department is commended for the development of a purchasing card system that has substantially reduced the number of purchase orders, invoices, and payments that have to be processed.
- The MNPS Purchasing Agent has implemented a pilot program for online purchasing opportunities. A pilot program offered by MNPS, through two vendors, provides online Internet access for direct purchasing. This system allows users to research and make purchases online. The successful implementation of an online purchasing program will help ensure the continuation of the decentralization of the purchasing process for MNPS. MNPS is the only school system out of the five comparison school systems currently using Web-based procurement. The MNPS Purchasing Department is commended for its effort to create cost and other efficiencies by using online purchasing programs.

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- Value engineering is the process where the project's owner, architect, and contractor review the construction documents prior to construction to determine if alternative systems or methods can reduce the construction costs. The goal is to receive the same value or quality for less money. The MNPS Office of Plant Planning and Construction utilizes a Process Improvement Checklist as a value engineering tool. The process has been successful in reducing construction costs. Metropolitan Nashville Public Schools is commended for utilizing value engineering techniques to maximize the value of construction dollars.
- The Mayor of Metropolitan Government of Nashville and Davidson County started a tradition for the 2000-01 school year by supporting and funding a two-part Back-to-School Festival. Part I of the festival involved inviting parents to stop by their child's school on the first day of school, take a school tour, and meet their child's teachers. Part II of the festival involved Nashville students, parents, and community members being invited to the Gaylord Entertainment Center for a Back-to-School afternoon celebration. It was estimated that 10,000 people and over 50 local businesses and community organizations participated in the event. MNPS and the Mayor's Office is commended for coordinating a Back-to-School Festival to encourage parent involvement and community support of Metropolitan Nashville Public Schools.
- Metropolitan Nashville Public Schools is commended for its exemplary Peer Assistance Leadership and Support (PALS) Program which provides support and assistance to new teachers and assists current teachers who are experiencing difficulties. PALS (a joint project of the MNPS and the MNEA) is designed to help teachers experience success in the classroom. A team of experienced and outstanding classroom teachers is chosen to serve on a full-time basis for two-year terms to improve instruction and mentor new teachers.
- Under the leadership of the Technology Services Department, MNPS has been very successful in acquiring E-rate funds (funds established by the Federal Communications Commission to assist schools is gaining access to the "Information Super Highway"). In 1999, MNPS received roughly \$2,572,530, and in 2000 the school system received about \$1,012,100. Over the last three years, MNPS has secured over \$5 million to support the school system's technology infrastructure. The MNPS Library Media and Technology Services Department is commended for its successful efforts to obtain E-rate funds for Metropolitan Nashville Public Schools.
- Metropolitan Nashville Public Schools has created and maintained an exemplary Web site. The school system has a comprehensive Web site located at http://www.nashville-schools.davidson.k12.tn.us. The MNPS Web master is a professional employee, the Coordinator

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of Learning Resources, who does the Web site work at home, afterhours, and on weekends. The Web site is a rich compendium of useful current information and links. All information on the site is available both to the public and to the employees of the school system. The Board of Education Policy manual is on the Web site, with live links between the index for the policy manual and the policies. There is a "new" sign that flashes next to a new file, to alert readers to new materials as well as useful resources for parents. There is also a list of community partnerships being developed with links to descriptive files or home pages. In the 1999-2000 school year, there were 130,255 hits on the MNPS homepage for an average of 10,855 each month.

- MNPS in-house transportation repair and maintenance capabilities are exceptional. The MNPS Transportation Department has one of the best maintenance facilities of more than 30 that the MGT team has observed nationwide. Performance of maintenance services by the Transportation Department is done in-house economically. The Department of Transportation is commended for its excellent maintenance facilities.
- The Metropolitan Police Department provides a number of programs under the auspices of the School Resources Division, allocating 32 sworn police officers to MNPS programs. The officers work in cooperation with the administration, students, and staff to establish a positive working relationship with school personnel in an effort to prevent juvenile delinquency, help maintain a safe and secure environment on campus, and promote positive attitudes regarding the police role in society.

RECOMMENDED IMPROVEMENTS IN EDUCATIONAL AND STUDENT SUPPORT SERVICES

Below are the key Performance Audit findings and recommendations related to improvements in Educational and Support Services for MNPS students. Any fiscal impacts are indicated, and a summary of fiscal impacts is presented following the recommendations.

Strategic Planning and Effective Linkages

There is no process or system for linking school-level and cluster school improvement plans to a master planning document or the two primary plans that guide the school system. By assigning the proposed Planning and Budgeting Department the responsibility for creating effective linkages among the various planning documents, and developing an overall strategic plan for Metropolitan Nashville Public Schools, the school system should be able to provide the institutionalized linkage to interface between cluster plans

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(representing needs of schools) and an overall school system planning document. As this recommendation is accomplished, a mechanism should evolve to permit an effective monitoring of the strategic plan development and implementation. The Director of Planning and Budgeting should be assigned responsibility for ensuring that the entire planning process takes place and involves all appropriate stakeholders (Chapter 5, Recommendation 5-18).

- MGT found that the Divisions of Pre-K-8 and 9-Adult are lacking a formal communication network between the divisions, and the delivery of some curriculum and instructional services could be improved. Some of the spans of control are inequitable and the current organizational structure does not effectively support the cluster (three-tier) concept. By restructuring the Divisions of Pre-K-8 and 9-Adult and upgrading the current position of Assistant Superintendent for Pre-K-8 position to an Assistant Superintendent for Instruction and Administration, and by having a Director of Cluster Facilitation and Administration for each of the 11 clusters, the efficiency and effectiveness of the delivery of curriculum and instruction should be enhanced. If implemented, this would cost the school system approximately \$293,332 per year (Chapter 6, Recommendation 6-1).
- No written goals, strategies, or timelines exist detailing how the Divisions of Pre-K-8 and 9-12 and the Departments within those Divisions will function collectively to stay focused on the Accountability Framework. Some individual departments, such as the Research and Evaluation Department, have a department mission, vision, and goals, but there is no evidence of systemic division goals and objectives. While the Accountability Framework has eight specific goals and objectives, each division and each department within the division should have their own specific goals, objectives, and timelines that are directly tied to the systemwide By developing and implementing Accountability Framework. coordinated written goals, objectives, and strategies for the Divisions of Pre-K-8 and 9-Adult, MNPS should have a better plan for directing all personnel and resources toward common curriculum and instructional goals (Chapter 6, Recommendation 6-2).
- The Department of Vocational, Adult, and Community Education is located in the Division of 9-Adult Instruction and Administration. Coordinator responsibilities fall within three areas: adult and vocational education, community education, and secondary vocational education. The Vocational, Adult, and Community Education Department of MNPS is overstaffed when compared to Columbus City and Hamilton County School Districts. The current structure, which separates similar functions, fails to capitalize upon the related responsibilities of these coordinators and clerical staff. MNPS should reorganize the Vocational, Adult, and Community Education Department to include three areas: Adult Basic and

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Vocational Education, Community Education, and Secondary Vocational Education. By implementing this recommendation, MNPS could save an estimated \$443,555 per year (**Chapter 6**, **Recommendation 6-24**).

- MNPS had 22 schools in the 1999-2000 school year that had their school improvement plans rejected by the Tennessee State Department of Education for various deficiencies. Five high schools, 15 middle schools, and two elementary schools were rejected. Of those 22 rejected by the state, eight schools (after resubmitting their plan to the state) had their plans rejected a second time. Interviews and a review of memorandums show that schools create their plans with little (and sometimes no) central office staff assistance. Several of the MNPS school improvement plans lacked critical components. MNPS should develop a systemwide school improvement plan process which includes clear expectations for the quality of plans and regular assistance from the central office in the development and implementation of the plans (Chapter 6, Recommendation 6-9).
- Achievement scores in MNPS are relatively low and have not shown marked improvement since the 1999-2000 test results. The school system has four schools on the state's low performing list due to their low achievement test results. The Research and Evaluation Department should constantly search for promising intervention strategies and programs and should validate that these are quality programs and appropriate by using a pre-established set of criteria. The selection of programs must be based on an individual analysis of school performance reports, school improvement plans, and cluster improvement plans. MNPS should identify effective intervention strategies in low performing schools and improve students' performance on the state standardized tests and on SAT and ACT tests (Chapter 6, Recommendation 6-13).

Curriculum, Instruction, and Classroom Planning

A review of Metropolitan Nashville Public Schools Policy and Procedures Manual shows that the school system does not have a systemwide policy for student homework or teacher lesson plans. Site visits and interviews with staff verified the lack of these two curriculum and instruction-related policies and procedures. Also, site visits to the four low performing schools and interviews with principals and school-based staff confirm that some teachers in the school system are regularly writing lesson plans and are routinely required to turn plans into their principal, while others may have their plans in writing but are not required - or even encouraged - to submit their plans for the principal's review. By creating systemwide policies for student homework and teacher lesson plans, MNPS should provide the means to ensure that the teachers of the school system have uniform standards guiding lesson preparations. These

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- lesson plans should also facilitate ensuring that substitute teachers can carry out the appropriate instruction in the absence of the regularly assigned personnel (Chapter 6, Recommendation 6-3).
- MGT reviewed the Core Curriculum Guides and found that there are four different timeline schedules for updating the Core Curriculum Reading Program (CCRP), but there is not one comprehensive, clearly-understood schedule for the revision schedule, nor could MGT find one comprehensive schedule for updating Mathematics Improvement Plan Guides (MIP curriculum guides) or other subject area guides. Although staff indicated that guides are in the process of being updated, some guides, such as high school choral and high school keyboard, have not been updated since the 1980s. Some of the guides have revision dates on the cover or inside the cover; others do not have revision dates. Classroom visits showed that some MNPS teachers are still using the Tennessee Comprehensive Curriculum Guide as a basis for understanding state standards. That guide is now obsolete and has been replaced with the new set of Tennessee State Curriculum Frameworks. Site visits also showed that some skills are being taught developmentally and logically out of sequence. It is recommended that MNPS create a master schedule for updating all curriculum guides, update the guides according to the master schedule, and provide information to teachers on the revised Tennessee State Curriculum Frameworks (Chapter 6, Recommendation 6-5).
- A comprehensive system is not in place in MNPS to review initiatives, and to match initiatives with needs and desires throughout the school system. The school system should create a coordinated system for matching the needs of clusters, schools, and programs with potential and existing sources of funds. The system should include an evaluation component as a pre-requisite for initiatives and a central clearinghouse should include what types of initiatives are in progress, their connections to systems goals and programs, their successes and challenges, and their potential for replication 6. (Chapter Recommendation 6-10 and Chapter Recommendation 12-10).
- While more students are taking Advanced Placement (AP) courses, the numbers still do not meet the school system's accountability The accountability goal (Goal 5) states that the standards. percentage of students taking at least one Advanced Placement class before graduation will increase annually. The 2001 objective is that 35 percent of the high school students will take at least one Advanced Placement class before graduation and that 65 percent will attain a score of three or greater. MNPS should continue placing emphasis upon attainment of Accountability Goal 5-an annual increase in the number of students taking and passing Advanced Placement classes and examinations (Chapter Recommendation 6-6).

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- While the Core Curriculum Reading Program is considered an academic curriculum, it more accurately reflects a scope and sequence or framework of instructional skills. An academic program is based upon a written plan that includes mission, guiding principles, a proven research base, effective intervention strategies, and authentic, on-going assessment of student achievement. While the Title I program offers a variety of academic curricula, an academic plan that reflects the mission, guiding principles, strategies and assessment of quality instruction in reading, language arts, and math has not been developed. This plan must be the basis for differentiated instruction of students who exhibit diverse learning needs and varied learning styles. The degree to which Title I school improvement plans incorporate, and teachers implement, researchbased, instructional strategies, in the daily schedule for students who are at-risk for school failure is varied. A review of sample school improvement plans, interviews with the Title I staff, and follow-up comments by K-8 Instruction and Administration staff support this Also, technology is not consistently used as an effective instructional tool in some Title I schools. With expansion in this area, students can receive additional practice in core skills, as well as extended exploration using higher order thinking skills. Educational technology needs to become an integral component of the instructional day. It is recommended that MNPS develop Title I school improvement plans that are consistent with federal, state, and system requirements, and consistently reflect research-based, effective intervention strategies, and authentic, ongoing assessment of student achievement in reading, language arts, and math. (Chapter 6, Recommendation 6-25).
- MNPS should examine the reasons why teachers absences are high. The average number of days MNPS teachers are absent per year is 14. MNPS should develop strategies to reduce the number of teachers absent from duty by 10 percent each year for the next four years beginning in the 2001-02 school year, resulting in a potential savings of \$1,313,055 (Chapter 7, Recommendation 7-13). In addition, the MNPS Teacher Evaluation Committee should meet and reconsider the recommendation made to the Metropolitan Board of Education to evaluate teachers only twice every 10 years once they become tenured. MGT strongly recommends that a new proposal be placed before the MBOE stating that tenured teachers should be evaluated at least every three years (Chapter 7, Recommendation 7-14). MNPS should also develop a comprehensive systemwide Staff Development Master Plan that links MNPS priorities with the opportunities provided in staff development (Chapter 7, Recommendation 7-15).

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Low Performing Schools

There are 51 MNPS schools that scored all D's and/or F's on the 2000-01 Tennessee Comprehensive Assessment Program. MGT noted that these schools have higher percentages of non-certified teachers, less experienced teachers, and higher rates of teacher turnover. As of January 2001, MNPS does not have a systemwide plan to provide assistance to these lower performing schools. MGT could not locate a systematic plan for assisting the four stateidentified targeted schools or the 51 lowest performing schools in the school system. MNPS may not be taking full advantage of no cost (or little cost) services offered by the state to assist the low performing schools. It is recommended that MNPS develop and implement a systemwide intervention plan to assist the lower performing schools (schools with Ds and Fs), ensure that any selected intervention strategies have been validated as successful strategies, and provide incentives for highly qualified teachers to teach (or remain) in lower performing schools. It is recommended that MNPS set a goal of a minimum of 50 percent of the teachers in the 51 low performing school systems be high performing teachers based on identified criteria. If half of the total number of teachers in the 51 low performing schools received annual incentive pay of \$3,000, it would cost approximately \$1,870,500 per year (Chapter 6, Recommendation 6-11).

Textbooks

A lack of consistency exists in how schools collect for damaged and lost textbooks. Thousands of dollars are lost to the system each year because there is no uniform collection policy enforced. MGT was unable to determine the exact amount of the loss, because 22 percent of the schools failed to submit a report. Based on the Lost Textbook Report for the 1998-1999 school year, money was collected for about 42 percent of lost or damaged textbooks. If MNPS would develop a uniform lost/damaged book collection policy and enforce the policy, it is estimated that the school system could ultimately save approximately \$134,000 annually (Chapter 10, Recommendation 10-9). Additionally, MGT recommends that MNPS purchase a new textbook management system to enable the Textbook Coordinator to maintain a more accurate count of all textbooks, to facilitate getting textbooks to students timely, and to help prevent losses. Such a system could be obtained for approximately \$1,000, with estimated annual licensing fees of \$200 (Chapter 10, Recommendation 10-10).

Gifted and Talented Program

The current location of the MNPS ENCORE (Gifted and Talented)
 Program limits the participation of students who do not have transportation. In a school-by-school comparison, MGT found that of

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the 98 elementary and middle schools which serve grades eligible for Encore (K-6), only 31 offer at least 1/2 day per week of Encore service. Eighty (80) schools in the system serve grades eligible for Encore EID (Pre-K and Kindergarten), and the same 31 schools offering Encore have at least 1/2 day of Encore EID service per week. Relocating the Gifted/ENCORE Program by school clusters should give greater accessibility for eligible students, allow greater participation, and provide greater opportunity for comprehensive services to eligible students (Chapter 6, Recommendation 6-19).

Dropout Prevention

MNPS does not currently have a Dropout Prevention Plan. Data collection and tracking of students is difficult due to limited technology. Student populations are not reviewed to determine the number of students that have multiple at-risk indicators. Strategies for reducing the dropout rate are fragmented and varied throughout the system. MNPS should establish a data collection and tracking system for students that exhibit multiple risk factors for dropping out of school. By tracking students, the system should begin to target students in the elementary grades who exhibit risk factors of future school failure. Prevention strategies should be documented in school improvement plans at the elementary, middle, and high school levels (Chapter 6, Recommendation 6-23).

English as a Second Language (ESL)

The ESL Coordinator position is currently vacant. The former Coordinator is working on a part-time basis to fulfill the administrative duties during this vacancy. Considering the number of students that are served in the ESL Program, a full-time Coordinator should be hired to ensure that the program remains in compliance with federal statutes. An interim, half-time administrator cannot adequately fulfill the duties and requirements for the program. Considering that a state-mandated Corrective Action Plan is in place, there should be assurance that the plan is fully implemented. Additionally, MNPS should establish an ESL Task Force to develop inclusive instructional strategies for improved of ESL curriculum modifications implementation accommodations in general education at the elementary, middle, and high school level. Filling the vacant position at a full-time level approximately \$39,856 annually (Chapter 6, cost Recommendations 6-20 and 6-21).

Technology

Although a number of documents have been developed by MNPS staff, contractors, and other outside groups that address plans for various administrative and instructional technology initiatives, a comprehensive Technology Plan for the system does not exist. Despite the presence of a number of planning documents, there is

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not one plan that ties all the technology initiatives together. Nor have there been any concerted efforts to coordinate and ensure consistency among the various technology activities. MNPS should develop a Technology Plan that will guide the technology efforts and expenditures in Metropolitan Nashville Public Schools over the next three to five years. The development of such a plan would cost approximately \$225,000 (Chapter 13, Recommendation 13-1).

- There has been no formal MNPS committee structure nor any regularly scheduled meetings to address formal technology issues in the school system. It is recommended that MNPS establish an MNPS Technology Committee to monitor and provide oversight to the various technology endeavors of the school system. Although it will deal most frequently with instructional technology issues, it can also be a very good resource for addressing administrative technology issues (Chapter 13, Recommendation 13-2).
- MNPS schools do not enjoy an equitable distribution of technology resources. Schools in affluent areas and Title I schools generally have good technology resources, while the others generally do not. One strategy employed by some school systems to address this problem is to establish a "baseline" or minimum level of technology that every school should acquire. MNPS should establish a minimum level of technology that each school should possess to ensure students are able to use technology in a manner that will yield significant improvements in learning. MNPS should develop a funding strategy to address equity. MGT estimates the school system should allocate approximately \$300,000 annually to ensure computer equity among schools (Chapter 13, Recommendations 13-11 and 13-12).
- Maintenance and support of computers in the schools is the responsibility of the Library, Media, and Technology Services Department (LMTS) Department. The LMTS Department has two computer repair technicians who have the job of repairing and maintaining over 13,000 computers in all MNPS schools. Moreover, the budget available to purchase spare parts is only \$11,250 for the entire year. The best technology support strategy is to place a technology savvy teacher in each school. That should be the objective of the school system. Given the costs associated with this approach, a first step toward reaching that objective is to allocate a Technology Resource Teacher (TRT) to each cluster to develop additional teachers who can support technology in the schools. These TRTs should be experienced in using technology and well versed in how to integrate it into the curriculum. This would cost approximately \$613,800 per year (Chapter 13, Recommendation 13-20). MNPS should also enhance the level of computer technical support in the schools. This would cost approximately \$476,579 annually (Chapter 13, Recommendation 13-22).

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The Schools for Thought (SFT) Program is an excellent initiative that has significantly influenced the teachers who have participated. SFT is a tool that supports learning. It has a rigorous standards-based curriculum and focuses on continuous learning about learning. Research has proven SFT to be effective in enhancing student performance. Even though it is supported through a sizeable grant, only a limited number of teachers can be trained in a year. Consequently, only about 150 teachers have become SFT teachers, and 20 to 30 of those teachers have left the system. Thus, there are less than 150 SFT classrooms in the school system, while approximately 3,800 classrooms have not been significantly impacted by the program. MNPS should continue funding of the Schools for Thought Program and expand its impact across the school system. The cost is estimated at about \$405,000 per year (Chapter 13, Recommendation 13-19).

Student Support Services

- Metropolitan Nashville Public Schools (MNPS) budgets \$7 per student for media materials, while the national average expenditure (as determined by the American Library Association) is \$15 per student. MNPS should increase the media materials allocation to \$15 per student and ensure each multimedia media center has at least 12 print and nonprint items for each student. This would cost approximately \$553,008 annually (Chapter 6, Recommendation 6-17).
- During the 1999-2000 school year, there were 1,945 MNPS students referred for initial psychological evaluations. The recommended ratio by the National Association for School Psychologists is one psychologist to 1,000 students. Additionally, the National Association for School Social Workers recommends a ratio of one social worker to 800 students, and the American School Counseling Association suggests a ratio of one counselor to 250 students. MNPS does not meet these nationally recommended ratios. It is recommended that five additional psychologists and five additional social workers be hired in order to get MNPS ratios more in line with those of the peer districts. It is also recommended that 45 additional guidance counselors be hired in order to ensure that each K-8 school has at least one guidance counselor (Chapter 6, Recommendations 6-30, 6-31, and 6-32). These three recommendations would cost the school system approximately \$2,103,420 per year to implement.

Family Involvement

MNPS is lacking a policy that establishes the requirement for building, maintaining, and improving a school-based program of family involvement. This type of policy should create a formal requirement that schools, departments, programs and school system initiatives address family involvement and two-way communication.

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By creating a policy that establishes the requirement for building, maintaining, and improving a school-based program of family involvement, MNPS should experience a higher rate of parent and community involvement in schools. Additionally, MNPS should create a set of detailed guidelines, requirements, procedures and accountability measures to assist principals in implementing the proposed policy on family involvement and communications (Chapter 12, Recommendations 12-1 and 12-2).

- While the school system is commended for the systemic link that exists between the principal evaluation and the two plans that the principal uses to guide his/her work, the language included in the principals' evaluation procedures should more closely match the accountability plan for MNPS Goal 3-Communicate, Listen and Respond. MNPS should change the language of the principals' evaluation to be more specific in the area of family involvement and Additionally, MNPS should expand teacher communications. performance standards to include specific responsibilities for family involvement and family communication (Chapter 12, Recommendations 12-8 and 12-9).
- MNPS individual school improvement plans do not explain what constitutes a school's parent involvement plan and a school-by-school analysis found that of the 12 magnet schools, 92 percent have active PTA/PTOs, which is the highest level of participation by type of school. Schools classified as "other" (special education, adult education, and alternative learning centers) have the lowest level of PTA/PTOs. High schools only have a 50 percent rate of active PTA/PTOs. MNPS should require that school improvement plans and principal work plans contain at least one goal of significance in the area of family involvement and communications and require central office staff to work with those schools that have inactive PTO/PTAs to improve parent participation (Chapter 12, Recommendation 12-10).
- MNPS does not have a comprehensive resource for principals and teachers to use to develop best practices strategies for improving parent involvement. It is recommended that MNPS develop a database of practices, measures, and results in the area of communications with families and parent involvement for principals, teachers, and school improvement teams to draw upon as they design their school improvement plans (Chapter 12, Recommendation 12-11).

Food Services

There are conflicting Metropolitan Board of Education policies surrounding competitive food sales. This occurred as a result of changes in federal laws governing the National School Lunch Program. Current federal regulations prohibit the sale of foods of

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minimal nutritional value during meal times. MGT observed students purchasing food from vending machines during meal times, which, if determined to be foods of minimal nutritional value, is in violation of both of the MNPS policies and is in violation of current federal regulations. While it is important for principals and student organizations to have fundraising options available to them, students should eat nutritional meals at school without having to contend with the lure of other less nutritious items. While each of the MNPS policies complies with federal regulations, there is confusion in enforcement due to the conflicts between the policies. One clear policy should be adopted and enforced. This should not only increase meal participation and, therefore, revenues for the food service operation, but more importantly this should make it more likely that students will eat nutritious food at school (Chapter 15, Recommendation 15-6).

Safety and Security

- The fact that MNPS has an inordinate number of Zero Tolerance violations combined with the increasing number of violations annually either indicates that the program in MNPS is not effectively functioning as an incentive for students to obey the rules, or MNPS is interpreting the law in a more stringent manner than other school systems in the state. It does appear to be achieving the purpose of removing problem students from the school system. It is recommended that MNPS evaluate current procedures to determine why MNPS has such a high percentage of students with Zero Tolerance infractions and reassess the overall goals and procedures associated with this program (Chapter 16, Recommendation 16-23).
- MNPS has a policy (#1240) that states that "Upon entering any school building of Metropolitan Public Schools, all visitors shall report immediately to the office of the principal, or at support facilities and business offices, the office where they have business." policy goes on to state "If school staff desires, visitors may be issued a visitors' permit." There is no policy reference to securing all exterior doors except for the main entrance. MGT consultants visited over 50 schools during the weeks of October 9-13 and October 16-20, 2000 and found that the flexibility allowed in Board Policy #1240 has led to a lack of consistency involving school employees' responses to visitors in school system facilities. This policy also places the responsibility to report to the principal on the visitor and fails to identify responsibilities for staff. recommended that MNPS amend Board Policy #1240 to require all schools to adhere to Metropolitan Nashville Public Schools procedures requiring visitors to sign-in and out and consistently use visitor badges. Implementing a badge system would initially cost \$1,000, then \$300 annually (Chapter 16, approximately Recommendation 16-3).

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MNPS recently adopted technical specifications for playground equipment that meet the current safety standards adopted by the National Playground Safety Institute. Thus, all new equipment should meet these standards. However, playground equipment is often purchased with resources raised at the school, and if the MNPS purchasing process is not utilized, it is possible that equipment failing to meet current standards could be acquired and installed. Therefore, it is recommended that MNPS initiate a comprehensive safety inventory of all playgrounds within MNPS. This inventory should involve using a checklist developed by the National Playground Safety Institute. An MNPS employee within the Operations Department should be certified as a Certified Playground Safety Inspector (CPSI) at a one-time cost of \$400 (Chapter 16, Recommendation 16-11).

RECOMMENDED IMPROVEMENTS IN MANAGING METROPOLITAN NASHVILLE PUBLIC SCHOOLS AND ITS AVAILABLE RESOURCES

Below are the key findings and recommendations related to efficiency and overall management, including fiscal impacts.

Technology Management

- As of the date of MGT's on-site audit, there were over 13,000 computers in MNPS schools. There are currently no standards or guidelines that MNPS staff must follow in purchasing computers. Since much of the technology resources being acquired come from grants and PTO/PTA budgets, schools are frequently making the decisions about what to purchase. Because funds are limited, schools are likely to purchase the least expensive systems they can find, without carefully analyzing power, speed and compatibility capabilities. MNPS should establish computer acquisition standards that ensure Metropolitan Nashville Public Schools will acquire compatible computers capable of supporting current technology (Chapter 13, Recommendation 13-10).
- The primary administrative technology support unit for Metropolitan Nashville Public Schools (MNPS) is the Data Processing Department. The Data Processing Department has 26 authorized positions, and the unit reports to the Assistant Superintendent for Business and Facility Services. Despite the fact that the department has 26 authorized positions, only 23 of the positions were filled. One of the positions was not funded, and two others were vacant. Many corporations have concluded that information technology can be a much more significant resource if it is able to influence actions within the organization. As a result, many larger companies have established a CIO position that reports either to the CEO or the number two executive. By elevating the function to this level, the

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organization confirms that information technology is an enterprisewide resource. Therefore, it is recommended that MNPS rename the Data Processing Department to Information Technology and transfer it into a new Technology and Information Management Division that should be headed by a Chief Information Officer (CIO) reporting to the Director of Schools (Chapter 13, Recommendation 13-3).

- The MNPS student information management system in use is AIMS. AIMS operates on a midrange Unix system and uses a text-based interface—as opposed to the graphical user interfaces (GUI) that make modern software much more "user friendly." AIMS is slow and it is not able to take advantage of the Web for communications purposes, it is not vendor supported, and - most significant of all users are able to access information contained in the system only through printed reports or screen displays. Users cannot extract information to facilitate their decision-making, resulting in many schools maintaining duplicate student data... Acquiring and implementing a new Student Information System is essential for clear, timely communications and for making data-driven school system decisions. The total estimated cost of purchasing hardware and software and implementing a new Student Information System is approximately \$9 million (Chapter 13, Recommendation 13-7).
- Because there are so many problems with AIMS, that application is receiving most of the attention and criticism. However, if somehow AIMS satisfied everyone's needs, the other administrative applications would become targets for criticism. For example. administrators in the Finance, Personnel, Food Services, and Facilities Departments, among others, indicated that the applications that support their areas are inadequate. No one will disagree that the most important objective of a school system is to do everything within its power to support the learning activities in the classroom. Since accomplishing the administrative functions is not optional, administrative staff must perform as efficiently and productively as possible. Unless that staff has access to effectively functioning technology, it will not achieve the desired productivity levels. Thus, allocating funds to support the administrative functions must be a high priority and MNPS should develop a plan and timeline for replacing all administrative applications. The estimated total cost of replacing the hardware and software supporting all administrative systems is \$7,500,000 (Chapter 13, Recommendation 13-8).
- MNPS has not kept pace with technology and now finds itself operating with archaic computer systems and overly-manual, inefficient business processes. Metropolitan Nashville Public Schools is hindered in its decision-making processes because the current financial system is not able to provide useful information. Because the school system and Metro Government maintain dual sets of accounting records and the systems are difficult to reconcile

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and the Metro Government uses a financial system called FASTnet, MGT recommends that MNPS issue a Request for Proposals (RFP) to conduct an assessment of the FASTnet system to determine its feasibility in meeting the school system's needs. Such an assessment should cost approximately \$42,000 (Chapter 8, Recommendation 8-2).

The individual computers in the Business Services Department are not networked, and therefore no systemwide backups are performed. The week prior to the on-site work for this performance review, one of the department's computers had a hard drive failure. While the hardware was replaced in a timely manner, all the data on the old hard drive were lost. Had regular backups been made, these data would have been retrievable. The current situation with technology in the Business Services Department is not only affecting the way that employees work, but the difficulty faced by the employees in accomplishing what should be simple tasks can detrimentally affect morale. MNPS should upgrade and network the computers in the Business Services Department at an approximate cost of \$39,000 (Chapter 8, Recommendation 8-3).

Systemwide Resource Coordination

There is no central database of current partnerships, working agreements, or agency relationships. Individual outside partners and agencies can describe the schools they are working with, the dollar amounts and in-kind, investments they are making in the school system. However, the information regarding these initiatives, their financial, in-kind, or support value is not centrally available. The lack of information in this area means that central administrators cannot help to direct efforts and resources towards schools and clusters in greatest need. MNPS should create a coordinated system for matching the needs of clusters, schools, and programs with potential and existing sources of funds. Additionally, MNPS should devise a plan within each cluster for seeking and creating a database of agency relationships, resources, and services and hire an equity coordinator to oversee the coordination of both school system and outside resources. Such a position would cost approximately \$71,650 annually (Chapter 12, Recommendations 12-20 and 12-21).

School Management, Leadership Training, and Plans to Filling Vacancies

A principal is assigned to each MNPS school with the exception of five schools, which are classified as "Other Schools." Assignment of additional administrative positions to each school is based upon a formula of one position for each additional 500 students in membership. This formula is generally applied in staffing schools; however, school system representatives were unable to provide any written document containing a description of the administrative

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staffing formula. When student enrollments have declined below formula levels, MNPS has not reduced assistant principal positions. For example, MNPS has seven high schools that are overstaffed by one assistant principal. MNPS should assign assistant principal positions to all regular elementary, middle, and high schools based on a formula of one additional administrator for each 500 students. Should the school system need to make an exception to the staffing policy for special circumstances, the justification should be in writing and on file in the Office of the Director of Schools. If implemented, this recommendation could save the school system approximately \$416,528 per year (Chapter 5, Recommendation 5-19).

- The school principalship and other administrative positions require that applicants meet a series of basic requirements. Principals must have a master's degree and be licensed. Once qualified, remaining current in their field becomes their individual responsibility and no means are provided to ensure that further training is related to the identified needs of the individual or in alignment with important school or system goals. MNPS should continue active efforts to identify additional resources to support the Educational Leadership Academy, which should result in increasing the business and university community awareness of the school system's need for trained personnel to fill rapidly developing administrative vacancies. This would have a one-time cost of approximately \$5,000 (Chapter 5, Recommendation 5-20).
- MNPS staff is developing a leadership academy with a first priority on identifying and training prospective principals. MNPS and Peabody College of Vanderbilt University are collaborating on the development of the program. While the school system has established a pool of applicants, its membership is composed primarily of assistant principals and no systematic preparation for assuming principalships is ongoing. The school system has not identified a training framework that could be used for this type of personnel preparation and also serve as part of a plan to assist in obtaining additional financial support from foundations and other organizations interested in supporting the establishment of a leadership academy. Therefore, it is recommended that MNPS should develop the curriculum framework for the proposed Leadership Academy for training prospective principals (Chapter 5, Recommendation 5-22).

Recruitment Plan and Incentives

The MNPS recruitment budget is not large enough to provide any monetary incentives to attract teachers to the school system. The small budget has placed MNPS at a particular disadvantage in the market place, where many school systems are now offering such enticements as early signing bonuses. The competition is slated to become even fiercer with the pending critical teacher shortage.

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MNPS should create a Recruitment Advisory Committee to explore ways in which Metropolitan Nashville Public Schools might provide additional incentives to attract teachers to the school system (Chapter 7, Recommendation 7-7).

Although MGT was provided some informal documents and a report in relation to the recruitment efforts, the division does not have a comprehensive recruitment plan to guide, assess, or prepare for future recruitment efforts. MNPS should develop a formal recruitment plan, including a mission statement, goals, objectives, a needs assessment, an analysis and evaluation of past efforts, and strategies for the future to help guide the efforts of recruitment now, as well as in the crucial years ahead when more and more teachers will be retiring and the competition for qualified teachers will intensify (Chapter 7, Recommendation 7-8).

Medicaid Recovery

■ MNPS should be able to generate additional revenues by accelerating the implementation of a Medicaid reclaiming program. The estimated revenue that should be generated by MNPS is approximately \$20.00 per student, or \$1,400,000 annually, including administration and processing fees. The net revenue is estimated to be approximately \$1,120,000 annually for Metropolitan Nashville Public Schools (Chapter 6, Recommendation 6-27).

Preparation Pay for Teachers

MNPS teachers are awarded optional instructional preparation pay of \$100. Over 4,400 teachers took advantage of the supplement this school year. The school system spends approximately \$442,100 per year for this teacher benefit of being paid to prepare his or her classroom prior to the start of the school year. It is recommended that MNPS terminate this practice and use the money in more critical areas (Chapter 7, Recommendation 7-12).

Business Office Staff and Performance-Based Budgeting

- Metropolitan Nashville Public Schools' Business Services staff of 19 is considerably smaller than comparison school systems' Business Services staff. MNPS Business Services staff is working excessive amounts of overtime and yet there are many functions that are not being performed or are not being performed timely. One of the areas most at risk in the Business Services Department due to understaffing is the grants accounting and monitoring function. It is recommended that MNPS increase staff in the Business Services Department by adding three positions at a cost of approximately \$173,600 per year (Chapter 8, Recommendation 8-1).
- Although the budget form completed by departments has a section to list the Board of Education goal or objective being met, the school

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system does not base budget allocations on performance measurements. Without a system of performance measures, it is difficult to evaluate the effectiveness of funding for various programs, and making informative decisions regarding the allocation of funding is hindered. MNPS should implement a system of performance-based budgeting and invest in performance-based budgeting training for school system personnel, which would cost approximately \$5,500. The use of performance measures enables an organization to evaluate the effectiveness and efficiency of accomplishing what it is intended to accomplish. Performance measurement provides a management tool for improvement and an instrument for management planning and decision making (Chapter 8, Recommendation 8-5).

Systemwide Communication

- The current organizational structure and operation of the Department of Communications does not permit the Director of Communications the appropriate resources to effectively and proactively communicate with many stakeholders about the school system's priorities. Department basically operates in a reactive mode. To function more MNPS should reorganize the Department of Communications, change the department's name to the Department of Public Information, have the Director of Public Information report directly to the Director of Schools, and hire a full-time Community Additionally, once the Department is Involvement Coordinator. reorganized, MNPS should research and design a master plan for the Department of Communications. This would cost approximately \$121,650 annually (Chapter 12, Recommendations 12-22 and 12-23).
- MNPS does not have a communications committee to provide input on the design of systematic communications and public relations for the school system. It is recommended that the school system establish a standing communications advisory committee. Communications Committee should be an advisory committee to the Director of Public Information and the Director of Schools comprised of board members, central office administrators, Metro Council Education Committee members, a representative from the Mayor's office, communications professionals from the community, media representatives, a professional development specialist, principals and teachers, and family representatives. This group could, for example, look over school improvement and work plans in the area of communications, ask questions, review data, and make recommendations to the Director of Schools (Chapter 12, Recommendation 12-25).
- MNPS does not have a comprehensive communications policy, and it is recommended that the school system write a communications policy that gives responsibility to all schools, departments, clusters,

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divisions, and committees for maintaining and implementing a regular course of communication with external stakeholders which is coordinated through the Director of Public Information. This communications policy should be developed through the Director of Public Information. The MNPS should establish the communications plan as part of the work plan for every department, cluster, and school and require departments and schools to submit communications plans that clearly identify various components of effective internal and external communications (Chapter 12, Recommendation 12-26).

MNPS should be more proactive in communicating the "good news" of the school system. It is recommended that the school system develop a plan for news releases that increases frequency, issues releases an average of two weeks prior to events, and provides for monthly feature articles. The plan should include news releases and articles on topics that closely match the school system's goals and should include a feedback mechanism, so that hard data are available about whether or not coverage of school and system events increases as a result. If implemented, this recommendation should assist MNPS in improving its public image and improve systemwide/community communication efforts (Chapter 12, Recommendation 12-27).

Custodian and Facility Management

- The supervisory structure for custodial personnel does not allow for the proper supervision and management of custodial staff due to high supervisor to worker ratios. Each supervisor is currently responsible for a minimum of 174 custodial employees. Principals do not evaluate the custodial staff assigned to them, because custodians assigned to schools do not have a direct reporting relationship to the principal. Principals do provide input on the performance evaluation of Head Custodians to the Operations Department supervisory personnel. This structure results in a lack of accountability and responsibility for principals to maintain clean campuses; thus it is recommended that MNPS direct principals to supervise and evaluate custodians assigned to their school. This could save MNPS approximately \$174,435 annually on custodial supervisory positions (Chapter 11, Recommendation 11-2).
- Metropolitan Nashville Public Schools is not allocating custodians consistently with national best practices (which are approximately one custodian per 19,000 19,500 square feet). The practice used in MNPS is much lower than many other school systems. MNPS should provide custodial staffing consistent with the current allocation formula of one custodian per 19,400 square feet. Due to the costs and logistics involved in hiring additional staff and the local labor market, this increase in staffing should be accomplished incrementally over the next five years. The cost beginning in 2001-

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02 is estimated to be \$317,000, increasing up to approximately \$1,585,000 by the 2005-06 school year (Chapter 11, Recommendation 11-18).

- Currently, there are no performance work standards in the MNPS Maintenance Department. Establishing labor performance standards is a recognized best practice for facilities maintenance management and will result in improved planning and scheduling of available resources. The setting of standards ensures that each person is assigned a reasonable day's work and provides the opportunity to balance workloads appropriately. Once implemented, productivity standards could save up to \$530,000 annually (Chapter 11, Recommendation 11-14).
- The Plant Operations Department has been unable to establish desired custodial cleanliness levels in Metropolitan Nashville Public Schools for various reasons. A major reason is MNPS has fewer than the number of essential custodians needed to properly maintain schools. In addition, the lack of clear standards, proper training and supervision, and the necessary supplies are major obstacles faced by custodial personnel at the school level. Restrooms, in particular, were repeatedly cited by principals, community members, students, and parents as being a concern in the school system. MNPS should establish custodial standards and a quality control program to measure compliance and improvement opportunities (Chapter 11, Recommendation 11-20).
- In addition to establishing custodial standards, a quality control program and training, a school system must be able to provide custodial personnel adequate supplies to maintain a clean and healthy school environment. The MNPS Plant Operations Department allocates approximately \$0.042 per square foot for cleaning supplies. Previous studies of school systems have found \$0.05 per square foot to be a reasonable allocation for cleaning supplies. It is recommended that MNPS should provide a minimum funding level for the cost of cleaning supplies and allocate to the schools accordingly. It is estimated this recommendation would cost school system \$95,968 annually (Chapter Recommendation 11-21).
- The Plant Maintenance Department in Metropolitan Nashville Public Schools is currently funded at a level of 68 cents per square foot, considerable lower than the comparison school systems. MGT recommends that MNPS incrementally increase funding levels for the Plant Maintenance Department to a minimum goal of 75 cents per square foot (and 90 cents by 2004-05) to ensure the Plant Maintenance Department is performing services consistent with what is necessary to keep buildings in good working order. The cost to increase the plant maintenance budget is estimated at approximately \$7,800,000 over a five-year period (Chapter 11, Recommendation)

- **11-10).** Additionally, the Mayor needs to continue his emphasis on capital funding for deferred maintenance, and all future capital projects should comply with the requirements of the Americans with Disabilities Act.
- Custodians in Metropolitan Nashville Public Schools have the additional burden of providing janitorial support for outside agency use of school facilities during weeknights. Outside agencies are not charged a usage fee during weeknights. The majority of the events supported occur after normal school hours. Aside from the additional costs of utilities and wear and tear on facility systems and equipment (lights, floors, air conditioning systems, etc.), these events require set up and clean up activities that must be performed by evening custodial personnel. MNPS should assess a building usage fee for outside agency activities on weeknights. A \$20 per hour weeknight usage fee would allow daytime custodial personnel to provide support on an overtime basis. This practice would prevent regular evening personnel from being diverted from critical cleaning activities required for a healthy and safe environment. The recommended fee should also provide for expense reimbursement for utilities, and equipment wear and tear, and could generate up to \$516,960 in revenue annually (Chapter 11, Recommendation 11-22).

Energy Management Program

Metropolitan Nashville Public Schools does not have a comprehensive energy management program. The school system is not taking advantage of significant opportunities to save energy dollars by having an aggressive energy management program. Four of the comparison school systems are using an energy program management program and report that their savings range from five percent to 15 percent. If implemented properly, an energy management program could provide MNPS an estimated \$4,190,000 in energy savings over a five year period (Chapter 11, Recommendation 11-24).

Supply Center Management

■ The MNPS Supply Center inventory has begun to decline. This decline can be attributed to MNPS use of purchasing cards and direct purchasing, as well as direct shipment to the users. The value of the Supply Center inventory declined from \$1,450,196 to \$1,250,831 between June 30, 1999 and June 30, 2000. The warehouse stores more than 3,200 items, some of which are ordered infrequently. MNPS should discontinue carrying slow moving items in the Supply Center catalog and reduce inventory, in general, at the Supply Center. The elimination of many of the 3,200 items in stock at the warehouse, and the adjustment to the reorder lead-time, should reduce the need for several thousand square feet

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- of warehouse space. By implementing this recommendation, the school system could realize an estimated savings of \$700,000 over a three-year time period (Chapter 10, Recommendation 10-5).
- The cost to the school system unit (school or department) ordering goods through the warehouse is not reflective of the cost to the school system to provide that service. Under the current policy, a three-percent surcharge is added to the cost of the goods ordered. This does not cover the cost of operating the warehouse and delivering the goods purchased. Furthermore, there is no surcharge or other cost recovery added to the numerous other pick-up and delivery services performed by the Supply Center staff. MNPS should include a surcharge that more accurately reflects the true cost of operating the Supply Center and should compare the full cost of obtaining goods using the warehouse system to the cost of obtaining goods directly from vendors (Chapter 10, Recommendation 10-6).

Transportation Efficiency

- MNPS currently maintains a fleet of 551 buses. Additionally, MNPS has 88 units of support equipment for a total fleet of 639. The fleet is maintained by 38 mechanics. The MNPS ratio of vehicles to mechanics is 17 to one. The transportation industry, as well as many school systems, use as a common practice a ratio of 20 to 30 vehicles per mechanic depending upon the age of the fleet, the expertise of the mechanics, and the type and quality of maintenance equipment available. By implementing a staffing policy mandating 25 vehicles per mechanic, MNPS should achieve an annual savings of approximately \$430,584 by eliminating 13 mechanic positions (Chapter 14. Recommendation 14-3).
- The Transportation Department is not adhering to an effective spare bus policy. All transportation operations require substitute vehicles to cover for units experiencing breakdowns or scheduled preventive maintenance. The generally accepted range for school bus fleet spares is 10 to 20 percent of the regularly scheduled peak bus usage. MNPS should implement an improved spare bus policy and incur an estimated savings of \$74,679 for the 2001-02 school year and approximately \$31,479 for the following four years (Chapter 14, Recommendation 14-6).
- The current MNPS bus replacement plan is replacing buses in excess of the amount needed to transport students to the school system. Tennessee law mandates that school buses be removed from service after 12 years. It is recommended that MNPS should implement an annual bus replacement policy of ten percent for an annual savings of \$882,000 (Chapter 14, Recommendation 14-8).
- Previous studies of school systems moving from manual to computer routing systems have shown a five to 10 percent reduction in the

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number of routes, which reduces the required number of buses, bus drivers, and mechanics. By a conservative estimate, MNPS Transportation Department should achieve a five percent reduction in routing. The MNPS Director of Transportation should coordinate with the Metro Planning Department, which already uses a computerized routing system, to initiate planning, training, and implementation of a computer system for routing and scheduling of student transportation requirements. This should ultimately save the school system an estimated \$1,474,908 annually (Chapter 14, Recommendation 14-12).

Food Services Management

■ The Food Services Department, while a generally self-sufficient operation, does not pay all the indirect costs related to its operation. Earlier in the 2000-01 school year, the Food Service Department did make a significant payment of \$365.682 on the utility costs associated with its operation. However, there are other indirect costs the department does not currently pay, including custodial services, insurance, and warehouse storage space. By determining and collecting all indirect costs the Food Service Department is not currently paying, MNPS could increase general fund revenues by approximately \$526,000 per year. The school system has not raised lunch prices in the past ten years, and comparison research shows MNPS lunch prices are significantly less than those in comparison school systems. Lunch prices could be increased to help cover indirect costs the Food Service Department is not currently paying. The increase in prices would be paid through the free and reduced lunch program for those students who are eligible for that program (Chapter 15, Recommendation 15-3 and 15-4).

The findings and recommendations summarized herein have the most significant impact on the school system due to (1) their potential for improving instructional services or increasing resources available for students, (2) the magnitude of change recommended, or (3) their fiscal implications. Many other findings, commendations, and recommendations are presented in the Long-Range Implementation Plan.

Funding of MNPS and Fiscal Impact of Recommendations

While the performance audit resulted in several recommendations that will require additional resources, we found that the overall funding of MNPS has been relatively adequate when compared to other school systems on such variables as expenditures per student, teacher salaries, instructional expenditures, capital outlay, total revenues, and student support services. To illustrate, the following exhibits shows comparisons of expenditures per student and teacher salaries.

Exhibit 2 shows that MNPS has higher per pupil expenditures than the state and national averages.

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EXHIBIT 2 PER PUPIL EXPENDITURE FOR MNPS, TENNESSEE, AND THE UNITED STATES NOVEMBER 2000

SCHOOL SYSTEM	PER PUPIL EXPENDITURE*
Metropolitan Nashville Public Schools	\$6,912
State of Tennessee	\$5,794
United States	\$6,829

Source: State of Tennessee Department of Education, Public School System Report Card, November 2000.

Exhibit 3 shows that the average teachers' salary in Metropolitan Nashville Public Schools is within \$800 of the peer school system average.

EXHIBIT 3 COMPARISON OF TEACHERS' AVERAGE SALARIES 1999-2000 SCHOOL YEAR

SCHOOL SYSTEM	AVERAGE TEACHER'S SALARY
Metropolitan Nashville Public Schools, TN	\$40,440
Austin ISD, TX	\$37,022
Columbus Public Schools, OH	\$45,655
Hamilton County Schools, TN	\$42,000
Jefferson County Public Schools, KY	\$41,000
SCHOOL SYSTEM AVERAGE	\$41,223

Source: Data Collected from Individual Peer School Systems, 2000. Source for Austin ISD administrator salary is the Academic Excellence Indicator System, Texas Education Agency, 1999-2000.

Following is a summary of the costs and savings recommended by this audit, separated by the operating budget (Exhibit 4), capital spending (Exhibit 5), and the restricted food service fund (Exhibit 6), and then presented in total (Exhibit 7). These amounts are presented in today's dollars and do not include the impact of salary increases and inflation.

EXHIBIT 4
NET (COSTS) SAVINGS FOR OPERATING FUNDING SOURCE

		YEARS									
CATEGORY	2001-02	2002-03	2003-04	2004-05	2005-06	Year (Costs) or Savings					
TOTAL SAVINGS	\$3,044,974	\$7,535,224	\$7,957,964	\$8,119,640	\$8,384,723	\$35,042,525					
TOTAL (COSTS)	(\$5,299,467)	(\$9,030,332)	(\$9,350,332)	(\$11,470,332)	(\$11,790,332)	(\$46,940,795)					
TOTAL NET (COSTS)	(\$2,254,493)	(\$1,495,108)	(\$1,392,368)	(\$3,350,692)	(\$3,405,609)	(\$11,898,270)					
One-time (Costs)						(\$64,980)					
TOTAL FIVE-YEAR NET	(COSTS) INCL	UDING ONE-TI	ME (COSTS)			(\$11,963,250)					

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^{*} Expenditures are based on average daily attendance, not enrollment.

EXHIBIT 5 NET (COSTS) SAVINGS FOR CAPITAL FUNDING SOURCE

		YEARS									
CATEGORY	2001-02	2002-03	2003-04	2004-05	2005-06	Year (Costs) or Savings					
TOTAL SAVINGS	\$956,679	\$913,479	\$913,479	\$913,479	\$913,479	\$4,610,595					
TOTAL (COSTS)	(\$4,929,750)	(\$4,953,300)	(\$4,953,300)	(\$1,953,300)	(\$1,953,300)	(\$18,742,950)					
TOTAL NET (COSTS)	(\$3,973,071)	(\$4,039,821)	(\$4,039,821)	(\$1,039,821)	(\$1,039,821)	(\$14,132,355)					
One-time (Costs)											
TOTAL FIVE-YEAR NET	COSTS INCLU	DING ONE-TIM	IE (COSTS)			(\$14,450,355)					

EXHIBIT 6
NET (COSTS) SAVINGS FOR RESTRICTED FUNDING SOURCE

		Total Five-							
CATEGORY	2001-02	2002-03	2003-04	2004-05	2005-06	Year (Costs) or Savings			
TOTAL SAVINGS	\$1,025,659	\$1,626,583	\$2,173,507	\$2,747,432	\$2,965,447	\$10,538,628			
TOTAL (COSTS)	(\$43,524)	(\$43,524)	(\$43,524)	(\$43,524)	(\$43,524)	(\$217,620)			
TOTAL NET SAVINGS	\$982,135	\$1,583,059	\$2,129,983	\$2,703,908	\$2,921,923	\$10,321,008			
One-time (Costs)									
TOTAL FIVE-YEAR NET	SAVINGS MINU	JS ONE-TIME (COSTS)			\$9,271,008			

EXHIBIT 7
SUMMARY OF ANNUAL COSTS AND SAVINGS FOR ALL FUNDING SOURCES

		YEARS								
CATEGORY	2001-02	2002-03	2003-04	2004-05	2005-06	Year (Costs) or Savings				
TOTAL SAVINGS	\$5,027,312	\$10,075,286	\$11,044,950	\$11,780,551	\$12,263,649	\$50,191,748				
TOTAL (COSTS)	(\$10,272,741)	(\$14,027,156)	(\$14,347,156)	(\$13,467,156)	(\$13,787,156)	(\$65,901,365)				
TOTAL NET (COSTS)	(\$5,245,429)	(\$3,951,870)	(\$3,302,206)	(\$1,686,605)	(\$1,523,507)	(\$15,709,617)				
One-time (Costs)						(\$1,432,980)				
TOTAL FIVE-YEAR NET	(COSTS) INCL	UDING ONE-TI	ME (COSTS)	_	_	(\$17,142,597)				

A comprehensive summary of each recommendation that resulted in recommended spending, savings, or revenue generation is presented in Exhibit 8. Note that these fiscal impacts are grouped by audit area, and there is an indication as to whether the impact affects the operating budget ("O"), capital spending ("C"), or is restricted to the

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EXHIBIT 8
CHAPTER BY CHAPTER SUMMARY OF POTENTIAL (COSTS) AND SAVINGS FOR ALL FUNDING SOURCES

	CHAPTER REFERENCE	Funding	Annual (Costs) or Savings/Revenue						One-Time (Costs)
			2001-02	2002-03	2003-04	2004-05	2005-06	(Costs) or Savings	or Savings
CHAPT	ER 5: SCHOOL SYSTEM ORGANIZATION AND MANAGEME	NT							
5-8	Update Policy Manual (p. 5-26)	0							(6,080)
5-13	Upgrade Assistant Superintendent to Deputy Director (p. 5-43)	0	(6,344)	(8,458)	(8,458)	(8,458)	(8,458)	(40,176)	
5-19	Assign Assistant Principals Based on Formula (p. 5-62)	0	416,528	416,528	416,528	416,528	416,528	2,082,640	
5-20	Identify Additional Resources for Education Leadership Academy (p 5-64)	0							(5,000)
	SUBTOTAL (COSTS)/SAVINGS		410,184	408,070	408,070	408,070	408,070	2,042,464	(11,080)
CHAPT	ER 6: EDUCATIONAL SERVICE DELIVERY								
6-1	Restructure Two Instructional Divisions (p. 6-16)	0	0	(293,332)	(293,332)	(293,332)	(293,332)		
6-4	Discontinue Mailing of Curriculum Materials (p. 6-30)	0	20,400	20,400	20,400	20,400	20,400		
6-11	Offer Teacher Incentive Pay (p. 6-59)	0	0	(1,870,500)	(1,870,500)	(1,870,500)	(1,870,500)		
6-14	Produce Parent Test Result Sheets (p. 6-70)	0	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	\ / /	
6-17	Increase Expenditures for Media Materials (p. 6-77)	0	0	(553,008)	(553,008)	(553,008)	(553,008)		
6-20	Hire ESL Coordinator (p. 6-82)	0	(39,856)	(39,856)	(39,856)	(39,856)	(39,856)	(199,280)	
6-24	Reorganize Vocational, Adult, and Community Education (p. 6-103)	0	0	443,555	443,555	443,555	443,555	1,774,220	
6-26	Reorganize Special Education (p. 6-120)	0	0	(177,132)	(177,132)	(177,132)	(177,132)		
6-27	Accelerate Medicaid Reimbursement (p. 6-121)	0	0	1,120,000	1,120,000	1,120,000	1,120,000		
6-28	Eliminate Pupil Personnel Services Staff (p. 6-124)	0	16,916	16,916	16,916	16,916	16,916		
6-30	Hire Five Psychologists (p. 6-127)	0	(191,220)	(191,220)	(191,220)	(191,220)	(191,220)		
6-31	Hire Five Social Workers (p. 6-129)	0	(191,220)	(191,220)	(191,220)	(191,220)	(191,220)		
6-32	Hire 45 Guidance Counselors (p. 6-132)	0	(1,720,980)	(1,720,980)	(1,720,980)	(1,720,980)	(1,720,980)		
	SUBTOTAL (COSTS)/SAVINGS		(2,107,960)	(3,438,377)	(3,438,377)	(3,438,377)	(3,438,377)	(15,861,468)	
CHAPT	ER 7: PERSONNEL MANAGEMENT								
7-2	Eliminate Three Directors (p. 7-11)	0	0	128,466	128,466	128,466	128,466	513,864	
7-12	Abolish Instructional Preparation Pay (p. 7-43)	0	0	442,100	442,100	442,100	442,100	1,768,400	
7-13	Reduce Absenteeism (p. 7-46)	0	0	381,775	343,615	309,291	278,374	1,313,055	
	SUBTOTAL (COSTS)/SAVINGS		0	952,341	914,181	879,857	848,940	3,595,319	
CHAPT	ER 8: FINANCIAL MANAGEMENT		•	<u>.</u>					
8-1	Increase Staff in Business Services Department (p. 8-8)	0	(173,600)	(173,600)	(173,600)	(173,600)	(173,600)	(868,000)	
8-2	Conduct MIS Needs Assessment (p. 8-12)	0							(42,000)
8-3	Upgrade and Network Computers in Business Services (p. 8-14)	С							(39,000)
8-5	Implement Performance-Based Budgeting (p. 8-27)	0		İ					(5,500)
	SUBTOTAL (COSTS)/SAVINGS		(173,600)	(173,600)	(173,600)	(173,600)	(173,600)	(868,000)	(86,500)

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EXHIBIT 8 (Continued) CHAPTER BY CHAPTER SUMMARY OF POTENTIAL (COSTS) AND SAVINGS FOR ALL FUNDING SOURCES

CHAPTER REFERENCE	PTER REFERENCE Funding Annual (Costs) or Savings/Revenue					Total Five-Year	One-Time (Costs)	
	Source	2001-02	2002-03	2003-04	2004-05	2005-06	(Costs) or Savings	or Savings
CHAPTER 9: ASSET AND RISK MANAGEMENT								
9-2 Submit Grant Funds Monthly (p. 9-5)	0	54,255	54,255	54,255	54,255	54,255	271,275	
9-5 Eliminate Fixed Asset Department (p. 9-20)	0	137,960	137,960	137,960	137,960	137,960	689,800	
9-6 Close Reuse and Recycle Center (p. 9-24)	0	0	71,346	71,346	71,346	71,346	285,384	
9-8 Hire Internal Auditor (p. 9-29)	0	(39,680)	(39,680)	(39,680)	(39,680)	(39,680)	(198,400)	
SUBTOTAL (COSTS)/SAVINGS		152,535	223,881	223,881	223,881	223,881	1,048,059	
CHAPTER 10: PURCHASING AND WAREHOUSING								
10-1 Create Purchase Card Incentive Program (p. 10-9)	0							(5,000
10-4 Obtain Access to Imaging System (p. 10-13)	С							(2,000
10-5 Reduce Supply Center Inventory (p. 10-18)	0	400,000	200,000	100,000	0	0	700,000	·
10-9 Develop Book Collection Policy (p. 10-26)	0	67,000	100,500	134,000	134,000	134,000	569,500	
10-10 Purchase Textbook Management System (p. 10-28)	0	0	(200)	(200)	(200)	(200)	(800)	(1,000
10-11 Outsource Books for Binding (p. 10-29)	0	20,650	20,650	20,650	20,650	20,650	103,250	·
10-13 Transfer Print Shop (p. 10-33)	0	17,229	17,229	17,229	17,229	17,229	86,145	
10-15 Reorganize Delivery Services (p. 10-36)	0	(5,000)	(10,000)	(10,000)	(10,000)	(10,000)	(45,000)	
SUBTOTAL (COSTS)/SAVINGS		499,879	328,179	261,679	161,679	161,679	1,413,095	(8,000
CHAPTER 11: FACILITIES USE AND MANAGEMENT (Does not in	iciude capi	tal cost avoidance	potential from ye	ear-round schools	- Recommendatio	n 11-4)		
11-2 Eliminate Three Custodial Supervisors (p. 11-8)	O	174,435	potential from ye	ear-round schools	- Recommendation	n 11-4) 174,435	872,175	
	•					,	872,175 (25,000)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42)	0	174,435	174,435	174,435	174,435	174,435	·	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) Implement Productivity Improvement Measures (p. 11-48)	0	174,435 (5,000)	174,435 (5,000)	174,435 (5,000)	174,435 (5,000)	174,435	(25,000)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures	0 0	174,435 (5,000) (840,000)	174,435 (5,000) (840,000)	174,435 (5,000) (840,000)	174,435 (5,000) (2,640,000)	174,435 (5,000) (2,640,000)	(25,000)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance	0 0	(5,000) (840,000)	174,435 (5,000) (840,000) 265,000	(5,000) (840,000) 530,000	(5,000) (2,640,000) 530,000	174,435 (5,000) (2,640,000) 530,000	(25,000) (7,800,000) 1,855,000	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50)	0 0 0	174,435 (5,000) (840,000) 0 (24,400)	174,435 (5,000) (840,000) 265,000 (24,400)	174,435 (5,000) (840,000) 530,000 (24,400)	174,435 (5,000) (2,640,000) 530,000 (24,400)	174,435 (5,000) (2,640,000) 530,000 (24,400)	(25,000) (7,800,000) 1,855,000 (122,000)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60)	0 0 0 0 0 0	174,435 (5,000) (840,000) 0 (24,400) (317,000)	174,435 (5,000) (840,000) 265,000 (24,400) (634,000)	174,435 (5,000) (840,000) 530,000 (24,400) (951,000)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,268,000)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000)	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60) 11-19 Provide Custodial Training Program (p. 11-62)	0 0 0 0 0 0 0 0	174,435 (5,000) (840,000) 0 (24,400) (317,000) (25,000)	174,435 (5,000) (840,000) 265,000 (24,400) (634,000) (25,000)	174,435 (5,000) (840,000) 530,000 (24,400) (951,000) (25,000)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,268,000) (25,000)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000) (25,000)	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000) (125,000)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60) 11-19 Provide Custodial Training Program (p. 11-62) 11-21 Increase Custodial Supply Budget (p. 11-64)	0 0 0 0 0 0 0 0 0	(5,000) (840,000) 0 (24,400) (317,000) (25,000) (95,968)	174,435 (5,000) (840,000) 265,000 (24,400) (634,000) (25,000) (95,968)	174,435 (5,000) (840,000) 530,000 (24,400) (951,000) (25,000) (95,968)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,268,000) (25,000) (95,968)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000) (25,000) (95,968)	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000) (125,000) (479,840)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60) 11-19 Provide Custodial Training Program (p. 11-62) 11-21 Increase Custodial Supply Budget (p. 11-64) 11-22 Implement Building Usage Fee (p. 11-66)	0 0 0 0 0	(5,000) (840,000) 0 (24,400) (317,000) (25,000) (95,968) 516,960	174,435 (5,000) (840,000) 265,000 (24,400) (634,000) (25,000) (95,968) 516,960	174,435 (5,000) (840,000) 530,000 (24,400) (951,000) (25,000) (95,968) 516,960	(5,000) (2,640,000) (2,640,000) 530,000 (24,400) (1,268,000) (25,000) (95,968) 516,960	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000) (25,000) (95,968) 516,960	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000) (125,000) (479,840) 2,584,800	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60) 11-19 Provide Custodial Training Program (p. 11-62) 11-21 Increase Custodial Supply Budget (p. 11-64) 11-22 Implement Building Usage Fee (p. 11-66) 11-23 Hire Two Environmental Specialists (p. 11-67)	0 0 0 0 0	(5,000) (840,000) 0 (24,400) (317,000) (25,000) (95,968) 516,960 (86,800)	174,435 (5,000) (840,000) 265,000 (24,400) (634,000) (25,000) (95,968) 516,960 (86,800)	174,435 (5,000) (840,000) 530,000 (24,400) (951,000) (25,000) (95,968) 516,960 (86,800)	(5,000) (2,640,000) (2,640,000) 530,000 (24,400) (1,268,000) (25,000) (95,968) 516,960 (86,800)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000) (25,000) (95,968) 516,960 (86,800)	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000) (125,000) (479,840) 2,584,800 (434,000)	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60) 11-19 Provide Custodial Training Program (p. 11-62) 11-21 Increase Custodial Supply Budget (p. 11-64) 11-22 Implement Building Usage Fee (p. 11-66) 11-23 Implement Energy Management Program (p. 11-69) SUBTOTAL (COSTS)/SAVINGS	0 0 0 0 0 0 0 0	(5,000) (840,000) 0 (24,400) (317,000) (25,000) (95,968) 516,960 (86,800) 246,000	174,435 (5,000) (840,000) 265,000 (24,400) (634,000) (25,000) (95,968) 516,960 (86,800) 542,000	174,435 (5,000) (840,000) 530,000 (24,400) (951,000) (25,000) (95,968) 516,960 (86,800) 838,000	(5,000) (2,640,000) (2,640,000) (24,400) (1,268,000) (25,000) (95,968) 516,960 (86,800) 1,134,000	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000) (25,000) (95,968) 516,960 (86,800) 1,430,000	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000) (125,000) (479,840) 2,584,800 (434,000) 4,190,000	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60) 11-19 Provide Custodial Training Program (p. 11-62) 11-21 Increase Custodial Supply Budget (p. 11-64) 11-22 Implement Building Usage Fee (p. 11-66) 11-23 Implement Energy Management Program (p. 11-69) SUBTOTAL (COSTS)/SAVINGS	0 0 0 0 0 0 0 0	(5,000) (840,000) 0 (24,400) (317,000) (25,000) (95,968) 516,960 (86,800) 246,000	174,435 (5,000) (840,000) 265,000 (24,400) (634,000) (25,000) (95,968) 516,960 (86,800) 542,000	174,435 (5,000) (840,000) 530,000 (24,400) (951,000) (25,000) (95,968) 516,960 (86,800) 838,000	(5,000) (2,640,000) (2,640,000) (24,400) (1,268,000) (25,000) (95,968) 516,960 (86,800) 1,134,000	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000) (25,000) (95,968) 516,960 (86,800) 1,430,000	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000) (125,000) (479,840) 2,584,800 (434,000) 4,190,000	
11-2 Eliminate Three Custodial Supervisors (p. 11-8) 11-6 Implement Professional Development Program (p. 11-30) 11-10 Increase Plant Maintenance Budget (p. 11-42) 11-14 Implement Productivity Improvement Measures (p. 11-48) 11-16 Implement Training Program for Plant Maintenance (p. 11-50) 11-18 Increase Custodial Staffing (p. 11-60) 11-19 Provide Custodial Training Program (p. 11-62) 11-21 Increase Custodial Supply Budget (p. 11-64) 11-22 Implement Building Usage Fee (p. 11-66) 11-23 Hire Two Environmental Specialists (p. 11-67) 11-24 Implement Energy Management Program (p. 11-69) SUBTOTAL (COSTS)/SAVINGS CHAPTER 12: COMMUNICATIONS AND COMMUNITY INVOLVEME	0 0 0 0 0 0 0 0	174,435 (5,000) (840,000) 0 (24,400) (317,000) (25,000) (95,968) 516,960 (86,800) 246,000 (456,773)	174,435 (5,000) (840,000) 265,000 (24,400) (634,000) (25,000) (95,968) 516,960 (86,800) 542,000 (212,773)	174,435 (5,000) (840,000) 530,000 (24,400) (951,000) (25,000) (95,968) 516,960 (86,800) 838,000 31,227	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,268,000) (25,000) (95,968) 516,960 (86,800) 1,134,000 (1,789,773)	174,435 (5,000) (2,640,000) 530,000 (24,400) (1,585,000) (25,000) (95,968) 516,960 (86,800) 1,430,000 (1,810,773)	(25,000) (7,800,000) 1,855,000 (122,000) (4,755,000) (125,000) (479,840) 2,584,800 (434,000) 4,190,000 (4,238,865)	

MGT of America, Inc.

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EXHIBIT 8 (Continued) CHAPTER BY CHAPTER SUMMARY OF POTENTIAL (COSTS) AND SAVINGS FOR ALL FUNDING SOURCES

	CHAPTER REFERENCE	Funding	<u> </u>						One-Time (Costs)
		Source	2001-02	2002-03	2003-04	2004-05	2005-06	(Costs) or Savings	or Savings
СНАРТЕ	ER 13: ADMINISTRATIVE AND INSTRUCTIONAL TECHNO	LOGY							
13-1	Develop Technology Plan (p. 13-4)	С							(225,000)
13-4	Hire Director of Data Processing (p. 13-12)	0	(105,400)	(105,400)	(105,400)	(105,400)	(105,400)	(527,000)	
13-7	Acquire Student Information System (p. 13-20)	С	(3,069,750)	(3,093,000)	(3,093,000)	(93,000)	(93,000)	(9,441,750)	
13-8	Replace Administrative Application (p. 13-22)	С	(1,500,000)	(1,500,000)	(1,500,000)	(1,500,000)	(1,500,000)	(7,500,000)	
13-12	Allocate Funds for Computer Equity (p. 13-28)	С	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	(1,500,000)	
13-14	Hire WAN Support (p. 13-32)	0	(49,600)	(49,600)	(49,600)	(49,600)	(49,600)	(248,000)	
13-16	Implement MNPS Email System (p. 13-37)	С		, ,			· · · · · ·		(12,000)
13-17	Implement Disaster Recovery Plan (p. 13-38)	С	(60,000)	(60,000)	(60,000)	(60,000)	(60,000)	(300,000)	
13-18	Implement Training Program (p. 13-40)	0	(46,000)	(31,500)	(31,500)	(31,500)	(31,500)	(172,000)	
13-19	Continue SFT Program (p. 13-44)	0	(337,500)	(405,000)	(405,000)	(405,000)	(405,000)	(1,957,500)	
13-20	Allocate Cluster Technology Resource Teachers (p. 13-47)	0	(646,800)	(613,800)	(613,800)	(613,800)	(613,800)	(3,102,000)	
13-22	Allocate Computer Repair Technician (p. 13-50)	0	0	(476,579)	(476,579)	(476,579)	(476,579)	(1,906,316)	
	SUBTOTAL (COSTS)/SAVINGS		(6,115,050)	(6,634,879)	(6,634,879)	(3,634,879)	(3,634,879)	(26,654,566)	(237,000)
	ER 14: TRANSPORTATION								
14-3									
	Reduce Mechanics (p. 14-15)	0	430,584	430,584	430,584	430,584	430,584	2,152,920	
14-6	Reduce Spare Buses (p. 14-21)	С	74,679	31,479	31,479	31,479	31,479	200,595	
14-6 14-8	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24)	C	74,679 882,000	31,479 882,000	31,479 882,000	31,479 882,000	31,479 882,000	200,595 4,410,000	
14-6 14-8 14-9	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26)	C C O	74,679 882,000 (756)	31,479 882,000 (3,756)	31,479 882,000 (6,756)	31,479 882,000 (9,756)	31,479 882,000 (12,756)	200,595 4,410,000 (33,780)	
14-6 14-8 14-9 14-12	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32)	C C O	74,679 882,000 (756)	31,479 882,000 (3,756) 1,508,508	31,479 882,000 (6,756) 1,474,908	31,479 882,000 (9,756) 1,474,908	31,479 882,000 (12,756) 1,474,908	200,595 4,410,000 (33,780) 5,933,232	
14-6 14-8 14-9 14-12	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39)	C C O	74,679 882,000 (756) 0 (5,000)	31,479 882,000 (3,756) 1,508,508 (5,000)	31,479 882,000 (6,756) 1,474,908 (5,000)	31,479 882,000 (9,756) 1,474,908 (5,000)	31,479 882,000 (12,756) 1,474,908 (5,000)	200,595 4,410,000 (33,780) 5,933,232 (25,000)	
14-6 14-8 14-9 14-12	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32)	C C O	74,679 882,000 (756)	31,479 882,000 (3,756) 1,508,508	31,479 882,000 (6,756) 1,474,908	31,479 882,000 (9,756) 1,474,908	31,479 882,000 (12,756) 1,474,908	200,595 4,410,000 (33,780) 5,933,232	
14-6 14-8 14-9 14-12 14-18	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39)	C C O	74,679 882,000 (756) 0 (5,000)	31,479 882,000 (3,756) 1,508,508 (5,000)	31,479 882,000 (6,756) 1,474,908 (5,000)	31,479 882,000 (9,756) 1,474,908 (5,000)	31,479 882,000 (12,756) 1,474,908 (5,000)	200,595 4,410,000 (33,780) 5,933,232 (25,000)	
14-6 14-8 14-9 14-12 14-18	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39) SUBTOTAL (COSTS)/SAVINGS	C C O	74,679 882,000 (756) 0 (5,000)	31,479 882,000 (3,756) 1,508,508 (5,000)	31,479 882,000 (6,756) 1,474,908 (5,000)	31,479 882,000 (9,756) 1,474,908 (5,000)	31,479 882,000 (12,756) 1,474,908 (5,000)	200,595 4,410,000 (33,780) 5,933,232 (25,000)	
14-6 14-8 14-9 14-12 14-18	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39) SUBTOTAL (COSTS)/SAVINGS	C C O O O	74,679 882,000 (756) 0 (5,000) 1,381,507	31,479 882,000 (3,756) 1,508,508 (5,000) 2,843,815	31,479 882,000 (6,756) 1,474,908 (5,000) 2,807,215	31,479 882,000 (9,756) 1,474,908 (5,000) 2,804,215	31,479 882,000 (12,756) 1,474,908 (5,000) 2,801,215	200,595 4,410,000 (33,780) 5,933,232 (25,000) 12,637,967	
14-6 14-8 14-9 14-12 14-18 CHAPTE	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39) SUBTOTAL (COSTS)/SAVINGS ER 15: FOOD SERVICE Conduct Financial Review (p. 15-8)	C C O O O O R	74,679 882,000 (756) 0 (5,000) 1,381,507	31,479 882,000 (3,756) 1,508,508 (5,000) 2,843,815	31,479 882,000 (6,756) 1,474,908 (5,000) 2,807,215	31,479 882,000 (9,756) 1,474,908 (5,000) 2,804,215	31,479 882,000 (12,756) 1,474,908 (5,000) 2,801,215	200,595 4,410,000 (33,780) 5,933,232 (25,000) 12,637,967	
14-6 14-8 14-9 14-12 14-18 CHAPTE 15-1 15-3	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39) SUBTOTAL (COSTS)/SAVINGS ER 15: FOOD SERVICE Conduct Financial Review (p. 15-8) Pay Indirect Costs (p. 15-11)	C C O O O O O O O O O O O O O O O O O O	74,679 882,000 (756) 0 (5,000) 1,381,507	31,479 882,000 (3,756) 1,508,508 (5,000) 2,843,815 463,030 526,057	31,479 882,000 (6,756) 1,474,908 (5,000) 2,807,215 654,045 526,057	31,479 882,000 (9,756) 1,474,908 (5,000) 2,804,215 872,060 526,057	31,479 882,000 (12,756) 1,474,908 (5,000) 2,801,215 1,090,075 526,057	200,595 4,410,000 (33,780) 5,933,232 (25,000) 12,637,967 3,297,225 2,630,285	
14-6 14-8 14-9 14-12 14-18 CHAPTE 15-1 15-3 15-4	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39) SUBTOTAL (COSTS)/SAVINGS ER 15: FOOD SERVICE Conduct Financial Review (p. 15-8) Pay Indirect Costs (p. 15-11) Increase Lunch Prices (p. 15-13) Increase Breakfast and Lunch Participation	C C O O O O O R R	74,679 882,000 (756) 0 (5,000) 1,381,507 218,015 526,057 451,735	31,479 882,000 (3,756) 1,508,508 (5,000) 2,843,815 463,030 526,057 451,735	31,479 882,000 (6,756) 1,474,908 (5,000) 2,807,215 654,045 526,057 451,735	31,479 882,000 (9,756) 1,474,908 (5,000) 2,804,215 872,060 526,057 451,735	31,479 882,000 (12,756) 1,474,908 (5,000) 2,801,215 1,090,075 526,057 451,735	200,595 4,410,000 (33,780) 5,933,232 (25,000) 12,637,967 3,297,225 2,630,285 2,258,675	1,000,000
14-6 14-8 14-9 14-12 14-18 CHAPTE 15-1 15-3 15-4 15-5	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39) SUBTOTAL (COSTS)/SAVINGS ER 15: FOOD SERVICE Conduct Financial Review (p. 15-8) Pay Indirect Costs (p. 15-11) Increase Lunch Prices (p. 15-13) Increase Breakfast and Lunch Participation (p. 15-16)	C	74,679 882,000 (756) 0 (5,000) 1,381,507 218,015 526,057 451,735	31,479 882,000 (3,756) 1,508,508 (5,000) 2,843,815 463,030 526,057 451,735	31,479 882,000 (6,756) 1,474,908 (5,000) 2,807,215 654,045 526,057 451,735	31,479 882,000 (9,756) 1,474,908 (5,000) 2,804,215 872,060 526,057 451,735	31,479 882,000 (12,756) 1,474,908 (5,000) 2,801,215 1,090,075 526,057 451,735	200,595 4,410,000 (33,780) 5,933,232 (25,000) 12,637,967 3,297,225 2,630,285 2,258,675	
14-6 14-8 14-9 14-12 14-18 CHAPTE 15-1 15-3 15-4 15-5 15-7	Reduce Spare Buses (p. 14-21) Reduce Annual Bus Purchases (p. 14-24) Provide ASE Training (p. 14-26) Use Computerized Routing (p. 14-32) Implement Training Program (p. 14-39) SUBTOTAL (COSTS)/SAVINGS ER 15: FOOD SERVICE Conduct Financial Review (p. 15-8) Pay Indirect Costs (p. 15-11) Increase Lunch Prices (p. 15-13) Increase Breakfast and Lunch Participation (p. 15-16) Negotiate Vendor Contract (p. 15-21)	C	74,679 882,000 (756) 0 (5,000) 1,381,507 218,015 526,057 451,735	31,479 882,000 (3,756) 1,508,508 (5,000) 2,843,815 463,030 526,057 451,735	31,479 882,000 (6,756) 1,474,908 (5,000) 2,807,215 654,045 526,057 451,735	31,479 882,000 (9,756) 1,474,908 (5,000) 2,804,215 872,060 526,057 451,735	31,479 882,000 (12,756) 1,474,908 (5,000) 2,801,215 1,090,075 526,057 451,735	200,595 4,410,000 (33,780) 5,933,232 (25,000) 12,637,967 3,297,225 2,630,285 2,258,675	1,000,000 (2,050,000)

MGT of America, Inc.

EXHIBIT 8 (Continued) CHAPTER BY CHAPTER SUMMARY OF POTENTIAL (COSTS) AND SAVINGS FOR ALL FUNDING SOURCES

	CHAPTER REFERENCE	Funding		Annual (Co	osts) or Savings	s/Revenue		Total Five-Year	One-Time (Costs)			
		Source	2001-02	2002-03	2003-04	2004-05	2005-06	(Costs) or Savings	or Savings			
CHAPTER 16: SAFETY AND SECURITY												
16-1	Add Supervisory Position (p. 16-6)	0	(75,543)	(63,543)	(63,543)	(63,543)	(63,543)	(329,715)				
16-3	Implement Badge System (p. 16-10)	С	0	(300)	(300)	(300)	(300)	(1,200)	(1,000)			
16-4	Purchase Sign and Decal Materials (p. 16-12)	С							(14,000)			
16-8	Purchase Latex Gloves (p. 16-25)	0	(500)	(500)	(500)	(500)	(500)	(2,500)				
16-11	Require CPSI Training (p. 16-31)	0							(400)			
16-13	Outsource Security Threat Assessments (p. 16-33)	0	0	(25,000)	(25,000)	(25,000)	(25,000)	(100,000)				
16-19	Install Security System (p. 16-44)	С							(25,000)			
16-20	Reassign Security at Athletic Events (p. 16-47)	0	(75,000)	(75,000)	(75,000)	(75,000)	(75,000)	(375,000)				
	SUBTOTAL (COSTS)/SAVINGS		(151,043)	(164,343)	(164,343)	(164,343)	(164,343)	(808,415)	(40,400)			
TOTAL	SAVINGS		5,027,312	10,075,286	11,044,950	11,780,551	12,263,649	50,191,748				
TOTAL	COSTS)		(10,272,741)	(14,027,156)	(14,347,156)	(13,467,156)	(13,787,156)	(65,901,365)	(1,432,980)			
TOTAL	NET (COSTS) SAVINGS		(5,245,429)	(3,951,870)	(3,302,206)	(1,686,605)	(1,523,507)	(15,709,617)				
TOTAL I	FIVE-YEAR NET COSTS INCLUDING ONE-TIME (COSTS)							(17,142,597)				

Fund Source: O = Operating; C = Capital; R = Restricted

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