Auditor of State
Betty Montgomery

MEDINA CITY SCHOOL DISTRICT

PERFORMANCE AUDIT

AUGUST 19, 2003

To the residents and Board of Education of the Medina City School District:

In June 2002, the Medina City School District (Medina CSD) contacted the Auditor of State to request a performance audit. In an effort to improve service delivery and optimize operational efficiency and effectiveness, Medina CSD requested a performance audit that would provide an independent assessment of its current operations. By requesting this in-depth review of its operations, Medina CSD demonstrated a commitment to quality educational services delivered in the most economical and cost-effective manner possible.

The performance audit contains information on the impact of costs savings and efficiency improvements in the District's financial, human resources, facilities, transportation, and technology operations. The information contained within the performance audit is intended to assist the District in identifying potential cost savings and efficiency improvements. The District is also encouraged to continue to assess overall operations and develop other recommendations independent of the performance audit.

An executive summary has been prepared which includes the project history, objectives and scope, and methodology of the performance audit. The executive summary also includes a summary of significant findings, commendations, recommendations and financial implications. This report has been provided to the Medina City School District and its contents have been discussed with appropriate District officials and management. The District has been encouraged to use the results of the performance audit as a resource in improving its overall operations, service delivery, and financial stability.

Additional copies of this report can be requested by calling the Clerk of the Bureau's office at (614) 466-2310 or toll free at (800) 282-0370. In addition, this performance audit is accessible online through the Auditor of State of Ohio website at http://www.auditor.state.oh.us/ by choosing the "On-Line Audit Search" option.

Sincerely,

Betty Montgomery

BETTY D. MONTGOMERY
Auditor of State

August 19, 2003

Executive Summary

Project History

In June 2002, Medina City School District (Medina CSD) contacted the Auditor of State's Office to request a performance audit. In an effort to improve service delivery and optimize operational efficiency and effectiveness, Medina CSD requested a performance audit that would provide an independent assessment of its current operations. Performance audits have been conducted on the State's largest 21 urban school districts as well as fiscal emergency, fiscal watch, and fiscal caution districts, as required by law. By requesting this in-depth review of its operations, Medina CSD demonstrates a commitment to quality educational services delivered in the most economical and cost-effective manner possible.

Based upon discussions with Medina CSD officials, the following areas were identified for evaluation as part of the performance audit:

- Financial Systems,
- Human Resources,
- Facilities,
- Transportation, and
- Technology.

Planning for the performance audit began in July 2002. The overall objectives of the performance audit were to review and evaluate selected operations of Medina CSD and develop recommendations for increased efficiency and/or effectiveness based on best practices and comparisons to peer school districts. The primary focus of the recommendations is to provide opportunities for Medina CSD to enhance current services while establishing cost savings. Medina CSD is encouraged to continue to monitor and assess its operations to identify future areas for improvement.

This performance audit provides a number of recommendations, many of which include associated cost savings or efficiency improvements. Medina CSD management should carefully review and consider the implications of all recommendations when making decisions necessary to maintain the financial viability of the District and, at the same time, uphold the high standards of academic excellence achieved by staff and students alike. Furthermore, results of this performance audit should not be construed as criticisms of Medina CSD management. Rather, the audit should be used as a management tool by Medina CSD and the community to further improve and streamline operations in the District.

The executive summary includes a district overview, key findings and recommendations, additional findings and recommendations, commendations acknowledging efficient and/or effective practices, and a summary of financial implications associated with the recommendations. However, the performance audit also contains a number of recommendations which may not necessarily result in cost savings or revenue enhancements, but will result in improved operations. The summary of financial implications is followed by overall performance audit information including a definition of performance audits, the objectives, scope and methodology of the performance audit, and peer district comparisons of selected information.

District Overview

Medina CSD is located in Medina County and encompasses approximately 52 square miles. According to Average Daily Membership (ADM) data compiled by the Ohio Department of Education (ODE), Medina CSD served approximately 6,500 students in FY 2001-02. In addition, as reported in Medina CSD local report cards for FY 2001-02, the District met 21 of 22 standards and received an *Excellent* rating. Medina CSD has consistently improved its district rating by meeting additional performance standards. In FY 1999-00, the District met 22 of 27 standards, which placed Medina CSD in the *Continuous Improvement* rating. The District met 23 of 27 standards in FY 2000-01, giving it an *Effective* rating.

In FY 2001-02, Medina CSD spent approximately 85 percent of its operating budget to fund payroll and fringe benefits. According to the District's local report card, Medina CSD's average teacher salary was $50,289. Medina CSD's teacher salaries are affected by the high experience and education levels of its staff.

In FY 2001-2002, Medina CSD had 748.1 full-time equivalent (FTE) employees, compared to a peer average of 736.2. Medina's staffing per 1,000 average daily attendance (ADM) was the second highest of the peers and above the peer average by almost four percent. In FY 2002-03, the District increased its total staffing level by 55.7 FTEs, decreasing Medina CSD's student to teacher ratio from 17.7:1 to 16.5:1. Medina CSD's annual insurance cost per employee, for both single and family plans, was the second highest among the peers for FY 2001-02. Medina CSD currently pays the entire premium amount for all employees in the District.

Medina CSD consists of nine school buildings – one kindergarten center, five elementary buildings, two middle schools, and one high school. In addition, Medina CSD owns a garage and the Bowman house, which accommodate the operations department and one special education classroom. Total maintenance and operations expenditures per square foot were $6.46 in FY 2001-02. This was significantly higher than both peer and industry averages. Medina CSD's maintenance staffing levels were higher than those of the peers and industry averages; however, custodial staffing levels were generally in line with the peers.

In FY 2001-02, Medina CSD transported 4,874 students on a fleet of 61 buses. Medina CSD's cost per mile and cost per student are lower than the peer average. In addition, Medina CSD carries the second highest number of students per bus of all the peers. Medina CSD could realize additional efficiencies if it reduced its spare bus ratio to be more in line with the peers and pursued additional use of existing routing software. A significant factor affecting transportation in Medina CSD is the large area the District encompasses (52 square miles), which is over twice the area of the peer average and creates additional transportation challenges.

Technology integration and use at Medina CSD is generally very good. In some cases, the District exceeds best practices in areas such as hardware and infrastructure. For instance, Medina CSD currently operates its network on fiber optic cable. However, the District could benefit from additional planning for technology, particularly in the areas of resource allocation, disaster recovery, and future needs. Overall, Medina CSD has endeavored to create an atmosphere that fully integrates the benefits of technology in the classroom.

Key Findings/Recommendations

The performance audit report and executive summary contain a number of findings and recommendations pertaining to Medina CSD's financial systems, human resources, facilities, transportation, and technology operations. The following are the key findings and related recommendations. Additional analyses on these topics are contained throughout the report.

Financial Systems

- While the current basic financial needs of Medina CSD are being met, the District's five-year forecast shows a negative fund balance starting in FY 2004-05 and accumulating to approximately $44.5 million by FY 2006-07. Based on the analysis of the various "what if" scenarios in this report, Medina CSD would have to receive new revenue equal to a 8.5 mill operating levy to meet its projected expenditures, even if it implemented the performance audit recommendations and proposed hiring freeze. Therefore, if the levy does not pass, Medina CSD would need to implement strategies to further reduce expenditures, in addition to those identified in this performance audit.

    Medina CSD should evaluate the various scenarios to determine which course of action is best for the District. To present a levy to the constituents of the District, Medina CSD should present a program detailing what course of action it is taking to control costs and to maintain a positive ending fund balance throughout the forecast period. If Medina CSD seeks approval of an operating levy from the residents, it should outline how the District will use the funding to fulfill its current and future educational goals. In addition, Medina CSD should reassess the need for any new positions as situations throughout the forecasted period change. Furthermore, Medina CSD should immediately begin

reviewing the performance audit, and promptly implement the recommendations and additional strategies to improve efficiencies and save costs. Doing so would minimize the amount of additional revenue needed from its constituents.

- Medina CSD and the City of Medina jointly participated in the capital addition bond levy passed in 1999. The levy was for the acquisition of land, a new elementary school, an addition to the high school, and a community recreation center to be incorporated into the high school. The operating costs of the recreation center are to be split approximately 53 percent to Medina CSD and 47 percent to the City of Medina. Total annual operating costs of the recreational center are estimated to be approximately $750,000 and have been included in the district's budget and five-year forecasts. However, Medina CSD did not include the revenue it receives from the City of Medina for the expenditures it incurs in the five-year forecast.

  Medina CSD should update its five-year forecast to include the revenue it receives for the City of Medina's portion of the operating costs of the recreation center. Medina CSD should ensure the District is receiving all of the agreed upon revenue from the City of Medina. In addition, the District should ensure this cost-sharing agreement between Medina CSD and the City of Medina is clearly stated in the five-year forecast's notes and assumptions.

- The treasurer obtains information from multiple sources to complete the five-year forecast. However, the treasurer is solely responsible for preparing the revenue information. Medina CSD has purchased a standardized financial forecasting system for schools and desires to have it in place for FY 2003-04. The treasurer and assistant treasurer will be trained on the new forecasting system and the assistant treasurer will assume a role in the forecasting process. Written procedures will be developed within Medina CSD on how to use the system.

  Medina CSD should proceed with the implementation of the new forecasting operating system. This implementation should be a priority in the treasurer's office for FY 2003-04. By having a forecasting process that is used by appropriate personnel in addition to the treasurer, Medina CSD will have sufficient back up to complete the forecasts in a timelier manner, generate different scenarios, reduce the possibility of errors, and provide definitive recorded steps for others to examine and help control the accuracy of the system.

- Medina CSD's total governmental expenditures per pupil are 5.5 percent higher than the peer average. The District's percentage of total governmental fund operational expenditures for instruction (61.2 percent) was lower than two of the peers. Medina CSD also spent $3,707 per pupil on regular instruction expenditures, while the peer average

was $4,080 per pupil. In addition, Medina CSD expended more dollars per pupil, $868 to $435, than did the peers, on average, for special instruction.

Medina CSD should closely examine its spending patterns and consider reallocating the monies it is currently receiving toward those programs and priorities which have the greatest impact on improving the students' education and maintaining its effective performance rating from ODE. In addition, Medina CSD should closely analyze the cost reductions recommended in the **human resources**, **facilities**, and **transportation** sections of this report to aid it in managing projected deficits for the forecasted period.

● Medina CSD does not have a formalized strategic planning process, although it developed a strategic plan in 1995. There is no evidence that the strategic plan is tied to Medina CSD's budget or long-term forecast. Also, the plan has not been updated for current needs and has not been reviewed for goal accomplishments.

Medina CSD should prepare a comprehensive strategic plan, re-evaluating and updating the portions of the 1995 plan which were not implemented, and incorporating meaningful new long-range goals and objectives. All long-range factors should be included, such as collective bargaining, facility utilization, community wants and needs, and capital requirements. Short-range plans and budgets should be developed to be consistent with these long- range parameters.

Human Resources

● Medina CSD has a relatively high number of administrators, as indicated by the District having a higher percentage of staff in the administrative classification than the peer average. In addition, Medina CSD maintains a higher ratio of administrators to FTE employees than the peers. By having a high number of administrators, Medina CSD may be diverting resources from direct instructional areas.

Medina CSD should conduct a detailed analysis of the duties and responsibilities of the administrative staff to determine if resources are being used efficiently and effectively in relation to District needs. Medina should evaluate the feasibility of consolidating and/or combining functions being performed by the supervising/managing/directing and coordinator positions. Based upon the staffing analysis**,** Medina CSD should reduce its administrative staff by at least 3.0 FTEs, which would result in annual cost savings of approximately $253,500. Moreover, the District should review the feasibility of further reductions in this area.

● There are currently nine periods in the Medina CSD middle and high schools. Teachers at Medina CSD are required to teach no more than five periods, according to contract

stipulations. The remaining four periods are used for planning, team planning, duty period, and lunch. As a result, Medina teachers are teaching less time during the school day than the peer districts. In addition, the contracts in the peer districts are less precise regarding the teacher workday, allowing those districts more flexibility in scheduling.

In future contract negotiations, the District should try to achieve more flexibility in teacher scheduling to increase the amount of direct instructional time while meeting the scheduling needs of students. Given the current 9 period schedule, teachers could be required to teach an additional period in lieu of the team planning period. This would increase average instructional minutes to 252 at the high school level, and bring Medina CSD in line with the peer districts. Adding an additional instructional period for middle and high school teachers would also lead to a decrease in the number of teacher staff positions required to fill a similar schedule. Reducing 25 middle and high school teachers by adding one additional instructional period would save the District approximately $1.7 million annually.

- In FY 2002, Medina CSD's regular student to regular teacher ratio was lower than all three peers. However, Medina CSD hired 24 new regular education teachers in FY 2003, further decreasing its regular student to regular teacher ratio to 16.2 to 1. To obtain a student to teacher ratio similar to Pickerington (18.8 to 1) which has the next lowest ratio of regular students to regular teacher, Medina CSD would need to reduce 17 regular education teachers, in addition to reducing 25 middle and high school teachers by adding one additional teaching period. Furthermore, Pickerington met 100 percent of the State's report card standards for FY 2002, even though its regular student to regular teacher ration was higher than Medina CSD.

  Given the District's future financial situation, Medina CSD should consider reducing an additional 17 regular education teachers. Moreover, Medina CSD should closely assess the need for additional staffing positions in the future, thereby ensuring the best use of taxpayer dollars and that the District is accomplishing its educational mission in a cost-effective manner. Reducing 17 regular education teachers would save the District approximately $1.1 million annually.

- Medina pays 100 percent of the health care premiums for its employees. In contrast, Pickerington LSD requires employees to contribute 5 percent of the cost of single plan monthly premiums and 10 percent of the family plan monthly premiums. The SERB average indicates like size school districts require an employee contribution of 6 percent of the total single plan premium and 7.5 percent of the total family plan premium.

  Medina CSD should seek a 6 percent employee contribution toward monthly health care premiums during the next contract negotiations. If Medina CSD does not want to seek an

employee contribution for monthly health care premiums, changing the variables within the plan would also lead to cost savings, such as increasing co-pays, out-of -pocket maximums, and deductibles. Requiring employees to contribute 6 percent towards the monthly healthcare premium would save the District $302,000 annually.

- Medina CSD offers a retirement incentive of a one-time payout of 45 percent of the teacher's salary for teachers that retire during the first year of eligibility with at least 10 years of teaching experience. Early retirement incentives are very costly to the District and in previous performance audits have been shown to be a financial burden for school districts that offered this benefit. In addition, Medina CSD has a very experienced teaching staff which could make the early retirement incentive very costly for Medina CSD in the near future.

  Medina CSD should seek to eliminate the retirement incentive during future contract negotiations. The money that Medina CSD currently spends on retirement incentives could be redirected to programs for direct instruction of students. If retirement incentives were eliminated, the District could potentially save approximately $141,000 annually.

Facilities

- Medina CSD has not developed a comprehensive facilities master plan (FMP) documenting long-term facilities needs, such as construction needs, building closures, additions, renovations, and preventive maintenance. The lack of a comprehensive FMP hinders Medina CSD's ability to prioritize major renovations and maintenance activities, and also hinders the District's ability to perform long-range financial planning and budgeting for facility renovations and maintenance needs.

  Medina CSD should develop a comprehensive FMP which focuses on short-term and long-term building capital improvement and maintenance needs. Due to the District's rapid growth, it is not necessary to address school closings and consolidation as they relate to under-utilized space. However, the District may wish to address closings and consolidations due to extensive repairs/renovations at older facilities, redistricting, and reconfiguring grade levels.

- Medina CSD does not have formal, updated capacities for the District's school buildings that are clearly communicated to District administrators, staff and the community. AOS calculated the buildings' capacities using a standard methodology often employed by educational planners and other urban school districts, showing that the total building capacity, excluding modular classrooms, is nearly 800 students more than the capacity used by Medina CSD.

Medina CSD should formally adopt a building capacity calculation methodology which takes into consideration the District's needs and educational philosophy. The methodology should be used to determine school building capacity whenever there is new construction, major renovations, or changes in educational philosophies. Because the District is experiencing continuous, rapid growth, building capacities should be compared to enrollment projections annually to determine building utilization rates. Regularly monitoring utilization rates will allow Medina CSD to plan and prepare for the projected growth of the student population.

- Medina CSD has not incorporated its permanent improvement into a comprehensive capital improvement plan or facilities master plan (FMP).

  Medina CSD should continue to update its permanent improvement plan and incorporate it into the multi-year capital improvement plan and FMP to help ensure the most critical facilities needs are completed as funds become available. This would also help ensure that all capital outlay expenditures coincide with the District's continuous improvement plan and would demonstrate fiscal responsibility to the citizens of the District.

- Medina CSD does not have a comprehensive energy management and conservation plan. Medina CSD spent $1.63 per square foot on utilities in FY 2001-02, which is 15 percent higher than the peer district average.

  Medina CSD should immediately begin implementing an energy management and conservation program, including increasing cooling temperatures to 78 degrees and decreasing heating temperatures to 68 degrees; turning off computers and office equipment or programming them to power down when not in use; and purchasing gas and electricity through a discounted program or consortium. Adjusting thermostat settings to those recommended in the *Facilities Management Handbook* could save Medina CSD as much as $200,000 annually.

- Medina CSD's maintenance employees are responsible for maintaining an average of 52,861 square feet per FTE, which is 61 percent less than the peer average, and 53 percent less than the AS&U median for school districts with more than 3,500 students. By maintaining such a low square footage per maintenance FTE, Medina CSD limits the funds available for other facilities and educational purposes.
  Medina CSD should evaluate the volume and type of work performed by its maintenance staff. Based upon comparisons to the peer districts, Medina CSD could reduce its maintenance staff by 6.0 FTEs, which would reduce facilities related expenditures by approximately $267,000 annually. Furthermore, Medina CSD should eliminate plans to hire an additional maintenance FTE in FY 2003-04.

Transportation

- Medina CSD transports all students in grades one through twelve who live one mile or more from school. Currently, all kindergartners ride to and from school by bus, regardless of how far they live from school. Considering the rapid growth experienced by the District and associated increases in capital costs, revising the current transportation policy would allow Medina CSD to allocate additional resources to support direct instructional activities. Either of the following options would reduce transportation costs: transporting only those high school students living over two miles, reducing high school transportation to the state minimum, or reducing transportation services to state minimums for kindergarten through grade 12.

  As Medina CSD prioritizes expenditures to ensure direct instructional activities are adequately supported, the District should review its transportation policy to determine if it can continue to provide the current level of transportation services that exceed State minimum standards. Depending on which of the above mentioned options the District adopts, savings could range from approximately $35,000 to $270,000. Before implementing any reduction in transportation service, the District should determine the feasibility of such a reduction with regards to the safety of students, particularly in areas and neighborhoods where there are no sidewalks.

- Medina CSD has the lowest active to spare bus ratio in comparison to the peers, with one spare for every 3.0 active buses. Spare buses comprise approximately 25 percent of the entire fleet for Medina CSD. This data indicates that Medina CSD may be committing an unnecessarily high level of resources to its bus fleet. In addition, the average age and mileage of its bus fleet indicates that Medina CSD does not have a significant need for a high number of spare buses.

  Medina CSD should consider reducing the percentage of spare buses it maintains by reducing future bus purchases. Medina CSD could continue to add two buses per year to accommodate student population growth, but could extend the life of active buses and suspend the purchase of four replacement buses for eight years. By doing so, Medina CSD would avoid annual capital expenditures of $252,000 per year.

- The efficiency and effectiveness of Medina CSD's transportation department is hindered by the lack of appropriate facilities. Specifically, the garage for servicing buses is three blocks away from the transportation offices and parking area for the buses, and one bay is occupied by the District's facilities maintenance department. The one bay also creates service delivery problems for the mechanics and large jobs such as brake repairs must be out-sourced. In addition, the current parking area for the buses is almost full. Finally,

Medina CSD has no fuel storage facility. Without fuel storage, the District cannot take advantage of bulk fuel purchases.

The relocation of the transportation department and its increasing needs should be incorporated into the development of Medina CSD's facilities plans. Plans for the transportation department should include fuel storage and expanded repair capabilities. With appropriate transportation facilities, Medina CSD could reduce the outsourcing of repairs, extend the life of its buses, enable more preventative maintenance and general upkeep, and take advantage bulk fuel purchases. Constructing a fuel storage facility and transportation facility would cost the District approximately $120,000 and $100,000, respectively, in one-time expenditures. However, the District could save approximately $56,000 annually on fuel purchases and $36,000 annually by eliminating three modular units.   At the end of this engagement, Medina CSD provided information to AOS indicating that construction costs could be higher, depending on other factors such as site acquisition costs.

- Currently, the transportation department at Medina CSD employs a head bus driver, a secretary and a computer operator. The peers do not employ computer operators because the transportation department secretary generally provides computer duties.

  Medina CSD should reduce its clerical staffing in the transportation department to 2.0 FTEs by not filling the computer operator position, thereby saving approximately $33,000 in salary and benefit costs annually. With appropriate training, the secretary position could assume the duties of the computer operator position. When customer service needs and computer input are greater, such as the month of August when bus routes are developed and school begins, the transportation department could borrow clerical personnel from another department or use temporary employees.

Technology Utilization

- Medina CSD is servicing more district personnel, students, and computers per technician FTE than the peer districts. With current staffing levels, technicians have difficulty responding to technical requests as evidenced by the work order backlog. The effect of insufficient staffing to handle work order requests is the possibility of unused and non-functioning technology.

  One alternative to addressing staffing needs is using the $25,000 allocated to part-time employees in the technology department. Alternative funding sources for additional staff, such as grants from Ohio SchoolNet, should also be investigated.

- The two integration specialists in Medina CSD each work for their individual building principals and functions vary significantly depending on their building assignment. This decentralization does not give the technology department much control over the position. Central management of this position would allow for common usage to meet the goals, purpose, and objectives of the position and standardize its usage in the District. Additionally, the District does not have a formal job description for the integration specialist position, which allows each building principal to use this position as they see fit.

  Medina CSD should consider reorganizing and placing the integration specialist positions under the control of the technology department. The technology department should work closely with building principals and the director of instruction to ensure that the position meets the needs of the buildings and the District. To further formalize the integration specialist position, a job description should be created detailing specific job duties and clarifying to whom employees are supposed to report.

- Medina CSD's Technology Plan is largely a historical document. It details how technology is currently used; however, it does not address essential planning functions. Medina CSD's Technology Plan does not include a framework for administrative decisions, goals, a plan for future District technology acquisitions, or an allocation plan for resources. In addition, the plan does not outline future funding or specific professional development plans. The plan also does not include an assessment of the current equipment or particular needs of the District.

  Medina CSD should expand its current Technology Plan to include a framework for administrative decisions, goals and plans for future district wide and building level technology acquisitions; a plan for the allocation of current and new resources; and an assessment of the district and individual buildings to identify technology needs. By enhancing the Technology Plan to include this framework, the District will benefit by being able to use the plan to support budget requests, acquire and allocate equipment, and assist with staff allocation and planning.

- Medina CSD does not currently use a formal equipment replacement schedule for upgrading technology equipment on a regular basis. Technology personnel reported that equipment replacement is currently completed on an irregular basis when the funds become available. As a result, this process has not been adequate to replace workstations at an acceptable rate. Until FY 2001-02, District funding was not available for replacement.

  Medina CSD should develop and implement a formal replacement schedule for District hardware. District management should support the plan with adequate funding whenever

possible. In addition, Medina CSD should investigate alternative funding sources, such as grants, for a replacement initiative. The replacement schedule should be prepared by the technology committee, be consistent with the Technology Plan, and include a cost-benefit analysis for alternate means of acquiring equipment, such as leasing. For the District to follow a five-year replacement schedule for all units, the cost would be approximately $328,000 annually.

Additional Findings and Recommendations

This section of the executive summary is organized by report section and highlights other findings and recommendations from those areas of the audit report. Each section of the audit report contains additional findings and recommendations.

Financial Systems

- Through the efforts of the treasurer and the forecasting system, a large amount of summary detail is available to readers. However, more information about certain assumptions and their effect on the forecast could improve the readers' and stakeholders' understanding of the document. To provide a greater level of explanatory detail, subjects such as projected inflation rates, and comparable external averages and benchmarks should be incorporated in the forecast.

  The five-year forecast and the current accompanying assumptions or notes should provide more explanatory detail. Medina CSD should quantify the cost of implementing programs needed to meet the educational outcomes and accountability standards established in legislation. In addition, the forecast should be updated during the year as situations occur that materially affect the District's financial situation. By providing more detail in the forecast and its supporting notes, the Board and the public will better understand the financial condition of Medina CSD.

- Medina CSD's policy is that school principals and department managers operate independently for budgeting purposes. This allows each school principal and department manager to decide what resources will be required in the budget. However, Medina CSD's current budget process does not require each school principal and department manager to include detailed information regarding how those resources will be used throughout the school year.

  Medina CSD should require more detail be included with the data submitted for annual budget purposes. The District should require department managers and school principals to document costs over certain thresholds that are included in the budget. The administration will then be more aware of spending patterns, and should changes to the

budget or spending levels be necessary, will be better able to develop reliable budget amendments during the fiscal year.

● The District does prepare a capital improvement plan to coincide with the permanent capital improvement levy passed every five years. However, Medina CSD has not prepared a long-range capital plan. The District does not have an overall capital plan for growth or future needs, especially in the area of facility planning.
Medina CSD should establish a clear, concise long-range capital plan. The plan should outline future population and student growth projections within Medina CSD, and be detailed for at least five years to coincide with the five-year forecast. By establishing the plan and presenting it to the public, Medina CSD will establish a degree of confidence in the voting public to support future capital needs and promote discussions on the goals.

● Medina CSD's purchasing procedures lack vendor coordination and performance monitoring that would help to control the purchasing and costs of products.

Medina CSD should perform an analysis of the routine purchases made by the school principals and department managers. When vendor contracts are formed, each contract should include parameters such a maximum amount of supplies desired from the vendors, and an agreed upon delivery period and price. A preferred vendor list and catalog for each vendor should be distributed to all operational units to be used throughout the contract period. Additionally, vendor performance should be monitored.

Human Resources

● Medina CSD does not operate under a centralized human resource department. Although the current employees responsible for human resource functions appear to meet the needs of the District, the coordination of several departments and separation of classified and certificated employees may lead to duplication of efforts in some instances. Larger school districts are often able to achieve increased economy and efficiency by combining many of the related human resource functions into one department.

Medina CSD should consider centralizing its human resource functions. Reorganizing the duties of the current staff members that already dedicate a majority of their time to human resource functions would create efficiencies and streamline procedures by reducing duplications of effort. As a result, staff performing human resource activities could allocate time to other important District initiatives.

● The total number of eligible supplemental positions at Medina is higher than the peer districts. A higher number of available supplemental contracts may become expensive for

the District in the future should the majority of these positions be filled, especially if they are filled with experienced staff.

Medina CSD should review the total positions eligible for supplemental contracts to determine if any could potentially be eliminated. If Medina CSD eliminated 80 supplemental contracts that paid an average of 5.0 percent of the base salary, it would avoid incurring costs of approximately $125,000 annually.

- Ohio's graduation requirements stipulate that students take lab science classes that have 150 hours of instruction time. The 42 minute periods at Medina CSD do not allow the required hours to be achieved in a regular period class assignment. Therefore, Medina CSD has additional labs one day per week. Students enrolled in science labs have the lab one day per week and study hall the other four days. When the science lab students are excluded from the study hall numbers, the total number of students enrolled in study hall is still high. Excessive study hall enrollment is an inefficient use of student and teacher time.

  Medina CSD should consider options that increase the amount of time teachers spend in direct instruction. One option the District is currently considering is lengthening the class period and reducing the number of periods in a day. Lengthening the class period to 50 minutes would allow for elimination of the study halls related to science lab scheduling. Reducing the number of periods would also decrease the number of students enrolled in study hall and reduce the need for teacher aides that assist in their supervision.

- Maintenance and custodial employees both have an average number of leave days greater than 20. This corresponds to data which show total maintenance and utility substitute costs to be higher than the peers. Sick and personal leave per employee is greater than 10 days in the clerical, transportation, and maintenance categories.

  Medina CSD should seek to limit the number of sick and personal leave days used by classified staff, particularly in the maintenance, clerical, and transportation classifications. Supervisors should use the current attendance incentive to encourage employees to reduce the number of sick and personal leave days used and should try to avoid using substitutes whenever possible. The District may be able to avoid using substitutes by implementing cross-training programs for classified personnel. Medina CSD would save approximately $21,000 annually if maintenance, clerical and transportation personnel reduced sick leave use by three days.

- Medina's level of dental insurance coverage is similar to the peer districts with the exception of the Class 3 coverage. Medina CSD is the only district among the peers that covers 80 percent of Class 3 procedures.

Medina CSD should consider reducing the level of benefits for Class 3 coverage to 60 percent during the next contract negotiation period. If Medina CSD is unable to reduce dental benefits to a level comparable to the peer school districts, it should consider requiring a 6 percent contribution to the dental premium, consistent with the SERB average for contributions. A 6 percent contribution to the dental premium would result in savings of $36,000 annually.

● Medina CSD's severance payout is more generous than any of the peer districts. In addition to providing a relatively higher number of sick leave days paid out at retirement, Medina CSD also provides bonus payments that are based on the number of accumulated sick leave days. None of the peers provides bonus payments.

During the next contract negotiation period, Medina CSD should seek elimination of the bonus payouts for accumulation of sick days over 250 days and reduce the total possible payout to 60 days. The District should also seek to limit the severance pay to only teachers retiring under the qualifications of STRS. Reducing the payout to 60 days and eliminating the attendance bonuses could save Medina CSD $40,000. Limiting severance pay only to retirement would save the district $46,000.

● While Medina CSD provides additional compensation for exceeding class size limits, two of peers do not provide such compensation.

Medina CSD should seek to exclude additional compensation and teaching aides for exceeding class size limits from future contract negotiations, or raise the class size limits at which additional compensation is earned. This could save the District approximately $20,000 annually.

Facilities

● The joint school district/city recreation center appears to be a mutually beneficial arrangement. By pooling their resources and sharing the cost, Medina CSD and the City of Medina enjoy the benefits of a state-of-the-art recreation complex, with each paying approximately half of the cost.

Medina CSD's superintendent and business manager should closely monitor and evaluate the resources the District allocates above and beyond those expressly stipulated in the contract to operate the recreation center. Dedicating resources beyond those required to operate the recreation center in a safe, clean, comfortable manner limits the resources Medina CSD can use for educational purposes or for repairs and upgrades on other facilities.

- The inaccurate coding of expenditures inhibits Medina CSD's ability to readily identify costly benefits and opportunities for cost savings. Furthermore, improper coding negatively impacts the District's ability to accurately forecast and budget for future salary and benefit costs.

  Medina CSD should account for all expenditures in accordance with the guidelines established in the Uniform School Accounting System (USAS) manual. Doing so would allow the District to thoroughly examine why certain salary-related expenditures were incurred and to determine how much benefits are costing the District.

- Medina CSD does not have a formal replacement plan for operations department equipment and vehicles. A formal replacement plan would help Medina CSD better plan for equipment and vehicle purchases, as well as better communicate its needs to the Board and the public.

  Medina CSD should develop a formal replacement plan for operations department equipment and vehicles. The replacement policy should consider factors such as the manufacturer's projected life, the useful life based on the District's experience and repair histories.

Transportation

- Medina CSD does not have procedures in place to facilitate the collaboration of education and transportation. In FY 2001-02, the District provided private transportation to students in the pre-school program due to an end-of-day scheduling conflict. According to the transportation manager, the transportation department was excluded from the planning process. The addition of the preschool routes resulted in an additional transportation cost of $96,000.

  Medina CSD should create written procedures to facilitate the collaboration of education and transportation personnel in planning efforts. District employees should continue to work together to develop practical policies and procedures for special needs transportation. In addition, changes in educational programs and bell times should be communicated with the transportation manager to ensure transportation is coordinated in an efficient manner for both regular and special needs students.

- Medina CSD does not have a formal, written bus replacement plan. A bus replacement plan would allow the transportation department to plan and budget for routine maintenance and distribute the impact of bus maintenance, repair, and purchase over several years.

Medina CSD's transportation department, in conjunction with the District's business office and treasurer, should develop a formal bus replacement plan that outlines when each bus will be replaced and the funding source for the replacements. Because the older buses at Medina CSD have relatively low mileage, the District has some flexibility in the bus replacement plan without impacting student safety. At the end of this engagement, Medina CSD provided a bus replacement plan to AOS.

● Medina CSD does not use a bid or request for proposal process for the repair and maintenance of buses. In addition, the purchasing policies of the District do not provide specific guidelines to the transportation department regarding contracting for repairs or the bulk purchase of items such as fuel, lubricants, wiper fluid, tires, or paper products.

The District should develop an RFP process for standard services and inventory or negotiate term agreements with selected vendors to "lock-in" prices for services, labor and supplies for each year. The transportation department should work with the Medina CSD business office to develop policies that ensure a uniform method for receiving and documenting bids for repair jobs.

● Although Medina CSD uses *Edulog* routing software to manage the various bus routes and runs, it does not use the route optimizing features to determine further efficiencies that could be achieved. Route optimizing features may assist with the development of scenarios to promote cost savings.

The transportation department should continue to provide training on *Edulog* to the position responsible for the data base management as well as the transportation manager to ensure routing effectiveness and efficiency is optimized. If Medina CSD acquires the facilities necessary to provide large repairs in-house, the transportation manager should obtain maintenance and inventory management software.

Technology Utilization

● The Medina CSD technology department does not have a formal policy for resource allocation. When determining where hardware will be placed in the District, the technology coordinator considers the need and the age of the current units in the facilities and tries to achieve equality in the distribution; however, previous considerations were based only on the number of computers per building rather than head counts. As a result, inequities occur because some facilities have more students and therefore, a higher ratio of students per computer.

Medina CSD's technology department should implement a formal resource allocation plan. This plan should outline for the next three to five years, particular needs in the

District, identify the age of current resources (inventory database), and present a plan for allocation based on projected resources that will be required in that time period.

• Medina CSD's technology department does not have a formal disaster recovery plan. While department staff members have discussed actions it may take in the event of a disaster, these plans have not been formalized.

The technology department should develop and implement a detailed disaster recovery plan specific to technology functions in the District. This plan should include provisions for all major district and building systems including the Lake Erie Educational Computer Association (LEECA). By establishing a disaster recovery plan, Medina CSD would be better able to deal with potential disasters and reduce the impact that a disaster may have on productivity.

• SchoolNet recommends that school districts provide one workstation for every five students in the district. Medina CSD is under the recommended students per computer ratio; however, it has the second highest number of students per workstations of the peers. Medina CSD allocates a larger number of computers to staff than the peers. The high number of administrative computers is due, in part, to issuing every high school teacher a laptop computer.

Medina CSD should continue to use technology to meet overall District goals. In doing so, the allocation of resources should be equitable among all students. The District should strive to achieve equal distribution based on building head counts. The number of computers allocated to students and administration should be addressed in the Technology Plan. In addition, the District must consider the allocation of resources between administrative and educational functions, and closely monitor technology resources allocated for administrative use.

• The current Technology Plan does not include measurements that the District should use to gauge technology operations, determine how well the District is meeting established goals, and where improvement is needed. In addition, the data gathered from such measurement could be used to assist the technology department in supporting funding requests or acquiring additional funding through grants.

Medina CSD's technology department and technology committee should consider developing a method to obtain and analyze performance results. Establishing performance measures can ensure that the technology staff is meeting its own goals and those of Medina CSD.

- Technology training in the District is limited, sporadic, and unplanned. Without proper training, technology could go unused by staff and the goal of integration in the classroom would be difficult to achieve. Peers use training calendars to inform staff and teachers of specific training dates. This enables staff to adequately plan for training.

  Medina CSD's technology department should develop and implement an annual training calendar to address the technology training needs of the instructional and administrative staff. The technology department should also develop minimum standards for staff proficiency, training requirements, and continued skills improvement. Furthermore, the District should allocate funding for training sessions in the budget for all District employees. For Medina CSD to provide 16 hours of internal training for 50 percent of the teaching staff, the cost would be approximately $12,000.

Commendations

- By using conservative forecasting methods, Medina CSD is able to forecast revenues and expenditures close to actuals.

- Community involvement through open communication allows Medina CSD the opportunity to raise public awareness. By expressing educational and financial concerns to the citizens, Medina CSD is capitalizing on an opportunity to gain public acceptance and awareness of educational and financial situations occurring in the District.

- Implementing an electronic work order system has allowed Medina CSD to streamline its work order request process and eliminate the downtime associated with processing, approving, and delivering written requests.

- Using technology mentors and technology representatives enables the technicians to focus on keeping the hardware operational, and allows fellow teachers to resolve simple software issues and help others with integration.

- The District has exceeded its peers and best practices by providing a fiber optic network. The current structure should be ample to grow with the District as it continues to advance in technologies.

- Medina CSD's centralized software and hardware purchasing allows staff input into technology purchases and allows the technology department to ensure the software and hardware will work as intended with other systems in the District.

- Using teachers as technology representatives, mentors and integration specialists has provided adequate technical support for Medina CSD's schools. Assistance with technology integration is provided at a very low cost, helping to ensure the additional use of technology in the classroom.

Summary of Financial Implications

The following tables summarize the performance audit recommendations that contain financial implications. These recommendations provide a series of ideas or suggestions that Medina CSD should consider when making the important decisions necessary to maintain financial stability and continue to meet its educational goals. The financial implications are divided into two groups: those that are subject to bargaining unit negotiation, and those that are not. Detailed information concerning the financial implications, including assumptions, is contained within the report.

Summary of Financial Implications Subject to Negotiations

Ref no.	Recommendation	Estimated Annual Cost Savings
R3.3	Add instructional period, allowing for reductions in teaching staff	$1,751,000
R3.9	Employee contribution to health care premiums	$302,000
R3.10	Employee contribution to dental premiums	$36,000
R3.11	Reduction of Severance pay	$86,000
R3.12	Elimination of Early Retirement Incentive	$141,000
R3.13	Elimination of class size limits	$20,000
Total		**$2,336,000**

Summary of Financial Implications Not Subject to Negotiations

Ref no.	Recommendation	Estimated Annual Revenue Enhancement	Estimated Annual Cost Savings	Estimated One-Time Implementation Costs	Estimated Annual Costs
Financial Systems					
R2.4	Include revenue from recreation center	$365,000	$0	$0	$0
Human Resources					
R3.2	Reduce administrative staffing	$0	$254,000	$0	$0
R3.5	Reduce teaching staff	$0	$1,163,000	$0	$0
R3.7	Reduce supplemental contracts	$0	$125,000	$0	$0
R3.8	Reduce classified leave usage	$0	$21,000	$0	$0
Facilities					
R4.6	Implement an energy management and conservation program	$0	$200,000	$0	$0
R4.8	Reduce maintenance staffing levels	$0	$267,000	$0	$0
Transportation					
R5.1	Examine transportation policies	$0	$35,000	$0	$0
R5.4	Suspend the purchase of buses		$252,000	$0	$0
R5.7	Construct a fuel storage facility and transportation facility	$0	$92,000	$220,000	$0
R5.8	Do not fill computer operator position	$0	$33,000	$0	$0
Technology					
R6.11	Implement a five-year computer replacement plan	$0	$0	$0	$328,000
R6.21	Provide technology training	$0	$0	$0	$12,000
Totals		**$365,000**	**$2,442,000**	**$220,000**	**$340,000**

The summarized financial implications are presented on an individual basis for each recommendation. The magnitude of cost savings associated with some recommendations could be affected or offset by the implementation of other interrelated recommendations. Therefore, the actual cost savings, as compared to estimated cost savings, could vary depending on the implementation of the various recommendations.

Objectives and Scope

A performance audit is defined as a systematic and objective assessment of the performance of an organization, program, function or activity to develop findings, conclusions and recommendations. Performance audits are usually classified as either economy and efficiency or program audits.

Economy and efficiency audits consider whether an entity is using its resources effectively and efficiently. They attempt to determine if management is maximizing output for a given amount of input. If the entity is efficient, it is assumed that it will accomplish its goals with a minimum of resources and with the fewest negative consequences.

Program audits are normally designed to determine if the entity's activities are effective, if they are reaching their goals, and if the goals are proper, suitable, or relevant. Program audits often focus on the relationship of the program's goals with the actual program's outputs or outcomes. Program audits attempt to determine if the actual outputs match, exceed or fall-short of the intended outputs. This audit was primarily designed as an economy and efficiency audit.

The objectives of performance audits may vary. The AOS has designed the performance audit with the objective of reviewing systems, organizational structures, finances, and operating procedures to develop recommendations for reducing operating costs, increasing revenues, or improving efficiency. Specific objectives for this performance audit include the following:

- Identify opportunities for improving district effectiveness, responsiveness and quality of service delivery which is cost beneficial;
- Identify opportunities for improving district procedures, work methods and capital asset utilization;
- Determine if the current district's organization is flexible and effectively structured to meet future demands;
- Evaluate financial policies and procedures, and provide recommendations for enhanced revenue flow, expenditure reductions, or alternative financing techniques;
- Assure administrative activities are performed efficiently and effectively without unnecessary duplication;
- Determine if support activities are sufficient to meet educational objectives;
- Ensure education goals and objectives are supported by the administrative organization;
- Ensure the administrative hierarchy does not diminish teacher effectiveness; and
- Perform an independent assessment of the district's financial situation.

The performance audit topics focus primarily on the support side of school district operations. By focusing on support systems, the audit provides Medina CSD with alternative recommendation to enable it to operate more efficiently and economically. Enhancements to these systems will assist in improving the delivery of education services to students.

Methodology

To complete the performance audit, the auditors gathered and assessed a significant amount of data pertaining to Medina CSD, conducted interviews with various groups associated with the District, and conducted interviews and assessed information from the peer districts along with other nearby school districts. This methodology is further explained as follows:

Studies, Reports and Other Data Sources

In assessing Medina CSD, the District was asked to provide any previous studies or analyses already prepared on the subjects covered. In addition to assessing this information, the auditors spent a significant amount of time gathering and assessing other pertinent documents or information. Examples of the studies and other data sources with were studied include the following:

- Financial forecasts;

- Medina CSD financial and budgetary reports;

- Board policy manuals and meeting minutes;

- Negotiated labor agreements;

- Organizational charts and position descriptions;

- Various reports from the Education Management Information System (EMIS) and other reports from the Ohio Department of Education (ODE) information systems;

- Cost of Health Insurance in Ohio's Public Sector report from the State Employee Relations Board (SERB);

- ODE transportation forms;

- American School and University's (AS&U) 2001 Annual Maintenance and Operating Cost Study;

- District enrollment projections;

- Technical architectural diagrams;

- Education technology best practices as defined by the Florida Office of Program Policy Analysis and Government Accountability (OPPAGA), and the Texas School Performance Review; and

- Ohio Revised Code and Ohio Administrative Code.

Interviews, Discussions and Surveys

Numerous interviews and discussions were held with many levels and groups of individuals involved internally and externally with Medina CSD. These interviews were invaluable in developing an overall understanding of Medina CSD operations and in some cases, were useful sources for identifying concerns with Medina CSD's operations and providing recommendations to address the concerns.

Benchmark Comparisons with Other Districts

Two school districts, Stow-Monroe Falls City School District (Stow-Monroe Falls CSD) and Strongsville City School District (Strongsville CSD) were selected to provide benchmark comparisons with Medina CSD. Additional information from Pickerington Local School District, Reynoldsburg Local School District, and Solon City School District was also used in various sections of the report. Other performance audits contained information or suggested procedures which were incorporated where applicable.

Comparative Districts

Peer district comparisons provide information on like practices, statistics and benchmarking data. Peer school districts are selected based on a variety of factors, including demographic and educational data provided by ODE. Based on school district report card data, ODE establishes groups of similar districts, from which peers were selected for the performance audit, pursuant to discussions with Medina CSD administration. Peer averages exclude Medina CSD unless otherwise noted. State averages include all school districts within the State of Ohio. Certain information contained within this executive summary may differ from the individual sections, due to the timing of data from ODE.

ODE issues annual school district report cards that measure attainment of Statewide academic performance standards. These report cards reflect data for the school year prior to that in which the report card is issued (for example, the 2003 report cards reflect data for the 2001-2002 school year).

Medina CSD's report card scores have remained near the peer average for all four years presented. However, after being in the *Continuous Improvement* category for two years, Medina CSD moved up to the *Effective* category in FY 2000-2001. In FY 2001-02, Medina CSD further increased its district rating to the *Excellent* category by meeting 21 of 22 performance standards.

Report Card Standards				
District	**FY 1998-1999**	**FY 1999-2000**	**FY 2000-2001**	**FY 2001-02 [1]**
Medina CSD	20	22	23	21
Stow-Monroe Falls CSD	19	20	22	20
Strongsville CSD	22	22	25	22
Peer Average	21	21	24	21
Total Possible	**27**	**27**	**27**	**22**

Source: ODE's Local Report Cards
[1] The 12th grade proficiency tests are no longer administered so the number of performance standards is 22 for FY 2001-02.

The assessed average property valuation is an important component in a school district's funding. Average property valuation is a significant factor in determining the ability of the school district to generate stable or additional income. Because school district funding in the State of Ohio is driven by local property tax revenue, a higher average property valuation indicates a greater potential to generate income for a school district.

Medina CSD's average property valuation per pupil was $146,880 in FY2000-2001, which was below the peer average of $157,748. Medina CSD's average property valuation increase of 17.7 percent over the three year period was the highest among the peer districts.

Average Valuation per Pupil (Tax Year)			
District	**FY 1998-1999**	**FY 1999-2000**	**FY 2000-2001**	**% Change 1999-2001**
Medina CSD	$124,799	$128,958	$146,880	17.7
Stow-Monroe Falls CSD	$123,589	$127,685	$131,545	6.4
Strongsville CSD	$163,631	$180,315	$183,951	12.4
Peer Average	**$143,610**	**$154,000**	**$157,748**	**9.8**

Source: CUPP Report

Medina CSD had the second highest expenditures per pupil of the peer districts. The District's expenditures per pupil increased 9.1 percent from FY 1999-00 to FY 2001-02, whereas the peer average expenditures per pupil increased an average of 7.6 percent during the same time period.

Expenditures per Pupil			
District	**FY 1999-2000**	**FY 2000-2001**	**FY 2001-02**	**% Change 2000-2002**
Medina CSD	$7,798	$7,987	$8,507	9.1
Stow-Monroe Falls CSD	$6,763	$7,306	$7,520	11.2
Strongsville CSD	$8,423	$8,316	$8,815	4.7
Peer Average	**$7,593**	**$7,811**	**$8,168**	**7.6**
State Average	**$7,057**	**NA[1]**	**$8,073**	**14.4**

Source: ODE's Local Report Cards
[1]Information was unavailable for the State average in FY2000-2001.

Medina CSD's revenues were approximately $18 more per pupil than its expenditures per pupil in FY2000-2001. In addition, Medina CSD's revenues per pupil were higher than the peers as well as the State average. Although Medina CSD's revenues per pupil increased by 10.4 percent over the three year period, this was still lower than the State average increase of 13.9 percent for the same period.

Revenues per Pupil				
District	**FY 1998-1999**	**FY 1999-2000**	**FY 2000-2001**	**% Change 1999-2001**
Medina CSD	$7,250	$7,832	$8,005	10.4
Stow-Monroe Falls CSD	$6,253	$6,529	$7,012	12.1
Strongsville CSD	$7,464	$7,639	$7,690	3.0
Peer Average	**$6,859**	**$7,084**	**$7,351**	**7.2**
State Average	**$6,681**	**$7,013**	**$7,611**	**13.9**

Source: ODE's Local Report Cards
Note: The local report cards did not report revenue per pupil for FY 2001-02.

Of the three districts shown, Medina CSD had the second highest percentage of revenue from local sources in FY2001-2002.

Percentage of Revenue – Local			
District	**FY 1999-2000**	**FY 2000-2001**	**FY 2001-02** [1]
Medina CSD	67.0	65.8	61.8
Stow-Monroe Falls CSD	59.7	58.0	55.6
Strongsville CSD	75.1	74.2	73.0
Peer Average	**67.4**	**66.1**	**64.3**
State Average	**50.4**	**49.8**	**N/A**

Source: ODE's Local Report Cards
[1] The local report cards did not report state averages for percentage of revenue sources for FY 2001-02.

Percentage of Revenue – State			
District	**FY 1999-2000**	**FY 2000-2001**	**FY 2001-02** [1]
Medina CSD	30.2	31.8	35.8
Stow-Monroe Falls CSD	38.4	39.9	42.3
Strongsville CSD	23.1	24.1	25.4
Peer Average	**30.8**	**32.0**	**33.9**
State Average	**43.8**	**44.0**	**N/A**

Source: ODE's Local Report Cards
[1] The local report cards did not report state averages for percentage of revenue sources for FY 2001-02.

Percentage of Revenue – Federal			
District	**FY 1999-2000**	**FY 2000-2001**	**FY 2001-02** [1]
Medina CSD	2.8	2.4	2.4
Stow-Monroe Falls CSD	1.9	2.1	2.0
Strongsville CSD	1.8	1.7	1.6
Peer Average	**1.9**	**1.9**	**1.8**
State Average	**5.8**	**6.2**	**N/A**

Source: ODE's Local Report Cards
[1] The local report cards did not report state averages for percentage of revenue sources for FY 2001-02.

Medina CSD's average pupil/teacher ratio (class size) was 19.6 for FY2000-2001, the highest among the peers, and higher than both the peer and State averages. Over the three year period, Medina CSD's pupil-to-teacher ratio declined by 4.4 percent, which was more than the peer and State averages' decline for the same time period. Current pupil-to-teacher ratios were compared to the peers and assessed accordingly in the **human resources** section of the report.

K-12 Pupil to Teacher Ratio				
District	**FY 1998-1999**	**FY 1999-2000**	**FY 2000-2001**	**% Change 1999-2001**
Medina CSD	20.5	19.2	19.6	(4.4)
Stow-Monroe Falls CSD	20.5	19.2	19.1	(6.8)
Strongsville CSD	19.4	19.2	19.4	0
Peer Average	**20.0**	**19.2**	**19.3**	**(3.5)**
State Average	**18.6**	**18.1**	**18.0**	**(3.2)**

Source: ODE's Local Report Cards
Note: The local report cards did not report K-12 pupil to teacher ratios for FY 2001-02.

In FY 2000-2001, Medina CSD's student absentee rate was the second lowest among the peers and slightly below the peer average. Further, Medina CSD's student absentee rate declined 12.5 percent over the three year period.

Student Absentee Rate				
District	**FY 1998-1999**	**FY 1999-2000**	**FY 2000-2001**	**% Change 1999-2001**
Medina CSD	4.8	4.7	4.2	(12.5)
Stow-Monroe Falls CSD	6.2	5.7	5.5	(11.3)
Strongsville CSD	4.9	3.6	3.7	(24.5)
Peer Average	**5.6**	**4.7**	**4.6**	**(17.9)**
State Average	**6.5**	**6.4**	**6.1**	**(6.2)**

Source: ODE's Local Report Cards
Note: The local report cards did not report student absentee rates for FY 2001-02.

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Financial Systems

Introduction

This section focuses on the financial systems within Medina City School District (Medina CSD) and is divided into two subsections: (A) Forecasting, Financial Planning, and Budgeting; (B) Procurement and Payroll. The objective is to analyze each functional area, including an evaluation of internal controls, and develop recommendations for improvements and efficiencies. Background information and findings are addressed in each subsection. Within this report, the five-year forecast prepared by Medina CSD was assessed for reasonableness and adjusted by recommendations of the Auditor of State's Office (AOS). Recommendations on how the District can improve the financial forecasting process are provided to management for further consideration. Peer information is also included throughout this report and comparisons are made to the following peer school districts: Strongsville City School District (Strongsville CSD) and Stow-Munroe Falls School District (Stow CSD). In addition, Medina CSD is also compared to the following comparable school districts for selected analyses: Solon City School District (Solon CSD), Pickerington Local School District (Pickerington LSD), and Reynoldsburg City School District (Reynoldsburg CSD). Furthermore, this report is based on available information prior to May 2003.

This section focuses primarily on the General Fund, which accounts for 76.8 percent of the monies collected in the 33 active funds used by Medina CSD. The General Fund is Medina CSD's general operating fund and is used to account for all financial resources except those required by law or contract to be accounted for in a separate fund. The General Fund is available for any purpose, provided the expenditure is made according to the laws of the State of Ohio. Medina CSD's use of grants is also examined. Grants are funded by the federal government, the state government or private sources and are accounted for in separate Special Revenue Funds.

A. Forecasting, Financial Planning, and Budgeting

Background

The Medina Board of Education (the Board) believes that the quantity and quality of educational programs are directly dependent on the funding provided and the effective, efficient management of those funds. With the assistance of the treasurer and designated personnel, the Board acts as a trustee to protect and preserve the community's investment. In this trustee capacity, the Board assigns competent personnel and establishes efficient procedures to ensure sound management of fiscal affairs.

The superintendent is the chief executive officer of the District and is the primary professional advisor to the Board. He is responsible for the development, supervision, and operation of the school program and facilities. The treasurer is empowered to help the District achieve its goals by providing leadership and supervision of fiscal management. The treasurer works with the superintendent in financial planning and acts as the fiscal advisor to the superintendent and the Board.

Medina CSD is located in Medina County, Ohio. Its student population comes from the City of Medina, Medina Township, Montville Township, Granger Township, Lafayette Township, and Sharon Township. Medina CSD is a fast growing district with current enrollment of 7,088 students. Approximately 200 additional students enter the system each year. According to Medina CSD's projections, enrollment is expected to continue at an average of 150 to 200 new students per year for the next five to ten years. For more information regarding enrollment projections, see the **facilities section** of this performance audit.

Medina CSD's primary funding sources are local property taxes, state foundation support, and state and federal program support. Property taxes are levied on a calendar year basis against the assessed value of real, public utility and tangible (business) personal property located within the boundaries of Medina CSD. Under the Ohio Revised Code (ORC), school districts can increase local tax contributions by means of a property tax, a school district income tax or a joint city/school district income tax. Each of these measures requires voter approval. The residents of Medina CSD have generally been in favor of approving operating levies for the District, with the last operating levy being passed in 1995.

Table 2-1 details the election results for the past ten years for various levies Medina CSD placed on the ballot.

Table 2-1: Medina CSD Ten Year Levy History

Year	Type of Levy	Voted Millage	New/Renewal	Duration	Results
1991	Permanent Improvement	2.0 mills	Renewal	5 years	Passed
1991	Permanent Improvement	1.2 mills	New	5 years	Failed
1992	Capital Addition	3.4 mills	New	25 years	Passed
1994	Operating	8.4 mills	New	Continuing	Failed
1995	Operating	8.4 mills	New	Continuing	Passed
1996	Permanent Improvement	2.0 mills	Renewal	5 years	Passed
1998	Capital Addition	6.5 mills	New	28 years	Failed
1999	Capital Addition	6.4 mills	New	28 years	Passed
2001	Permanent Improvement	2.0 mills	Renewal	5 years	Passed

Source: Medina CSD Website

The Ohio General Assembly determines the level of state support for schools and distributes that support through the State Foundation Program. Allocations are based on a formula which guarantees each district will receive a certain amount per student. The distribution formula is predicated upon enrollment and is intended to address funding disparities based on local funding efforts and districts' ability to pay. The formula incorporates the Average Daily Membership (ADM) count and taxed millage minimums applied to Medina CSD's total assessed property valuation.

Federal monies are awarded predominately through grant programs directed at helping economically disadvantaged students or those with special educational needs. Districts may also be reimbursed for certain types of expenditures made for eligible students under the Medicaid program.

Organizational Function

Under the current organization, and in accordance with the ORC, the superintendent and the treasurer are hired by, and independently report to, the elected Board. Within the organizational structure, all schools and departments, except the treasurer's office, report to the superintendent.

Medina CSD's policies indicate that the Board, the superintendent, and the treasurer have significant roles in the planning function. The Board is responsible for approving the level of revenue necessary for the maintenance of an adequate educational program. The Board, in turn, relies on the superintendent and the treasurer for information and advice in making this determination. To ensure sufficient funding is available, the Board sets policies governing

Medina CSD's operations, adopts annual budgets to control the spending levels, and decides when to place a tax levy before the voters.

Although the treasurer is ultimately responsible for the overall preparation of the five-year forecast, the actual development of the forecast is not an exclusive responsibility of the treasurer's office. In practice, the treasurer receives input from the superintendent, assistant superintendent, and the business manager. The superintendent and assistant superintendent are in charge of developing salary and benefit expenditure projections for certificated personnel. The assistant superintendent analyzes current certificated staffing levels and provides data regarding new hires for future fiscal years for the treasurer to complete the total personnel cost for certificated employees. The business services manager provides expenditure projections for utilities, capital outlays, and classified personnel. The director of instruction provides projections for textbook expenditures. The treasurer compiles the data from these sources, and presents the five-year forecast to the Board for final approval.

Medina CSD's treasurer's office consists of 9.3 FTEs, including the treasurer, assistant treasurer, secretary to the treasurer, four accounting clerks, two payroll clerks, and a part-time position helping the secretary with benefit management. The treasurer is responsible for managing and tracking District revenues and expenditures, developing the annual budget, investing funds, and maintaining Medina CSD's five-year forecast.

Financial Forecast

The financial forecast presented in **Table 2-2** represents the treasurer's projection of Medina CSD's present and future financial condition in the absence of significant increases in revenues or reductions in expenditures. The forecast and accompanying assumptions are the representations of Medina CSD. The projections, which incorporate the General Fund only, are accompanied by three years of comparative historical results, general assumptions, and explanatory comments.

Table 2-2: Medina CSD Forecast

	Actual 1999-00	Actual 2000-01	Actual 2001-02	Forecast 2002-03	Forecast 2003-04	Forecast 2004-05	Forecast 2005-06	Forecast 2006-07
Real Estate Property Tax	29,733,293	31,146,412	32,150,846	33,638,991	35,049,171	36,555,382	38,109,121	39,472,894
Unrestricted Grants-in-Aid	11,042,484	12,802,286	16,114,929	15,604,102	16,249,026	15,453,407	16,306,259	16,388,004
Restricted Grants-in-Aid	159,188	74,371	286,943	71,207	71,207	71,207	71,207	71,207
Property Tax Allocation	2,897,746	3,069,973	3,189,892	3,237,302	3,366,434	3,495,923	3,632,141	3,740,117
Other Revenues	1,884,594	2,389,320	1,665,492	1,305,731	1,106,731	1,006,731	906,731	906,731
Total Operating Revenues	45,717,305	49,482,362	53,408,102	53,857,333	55,842,569	56,582,650	59,025,459	60,578,953
Salaries & Wages	28,447,131	30,458,404	33,607,650	38,224,116	40,855,562	43,359,510	46,253,215	49,266,396
Fringe Benefits	8,182,999	8,722,974	10,237,659	13,044,521	14,478,004	16,523,619	18,226,876	20,123,207
Purchased Services	2,993,456	3,704,905	4,068,087	5,198,015	5,392,114	5,626,758	5,898,798	6,134,755
Supplies, Materials & Textbooks	1,202,290	1,394,372	1,477,583	1,735,755	1,750,475	1,784,208	1,881,614	1,956,875
Capital Outlay	1,148,088	1,842,078	1,195,438	1,323,647	1,393,044	1,427,503	1,488,898	1,548,453
Other Expenditures	972,936	1,017,812	1,028,314	1,225,816	1,250,592	1,289,544	1,331,677	1,384,944
Total Operating Expenditures	42,946,900	47,140,545	51,614,731	60,751,870	65,119,791	70,011,142	75,081,078	80,414,630
Net Transfers /Advances In/(Outs)	(351,753)	(170,227)	(189,756)	(43,933)	(46,290)	(48,742)	(51,292)	(53,197)
Net Financing	(351,753)	(170,227)	(189,756)	(43,933)	(46,290)	(48,742)	(51,292)	(53,197)
Result of Ops (Net)	2,418,652	2,171,590	1,603,615	(6,938,470)	(9,323,512)	(13,477,234)	(16,106,911)	(19,888,874)
Begin Cash Balance	18,184,367	20,603,019	22,774,609	24,378,224	17,439,754	8,116,242	(5,360,992)	(21,467,903)
Ending Cash Balance	20,603,019	22,774,609	24,378,224	17,439,754	8,116,242	(5,360,992)	(21,467,903)	(41,356,777)
Outstanding Encumbrances	2,463,323	2,299,640	3,124,847	3,124,847	3,124,847	3,124,847	3,124,847	3,124,847
Ending Fund Balance	18,139,696	20,474,969	21,253,377	14,314,907	4,991,395	(8,485,839)	(24,592,750)	(44,481,624)

Source: Treasurer's Office

Medina CSD's financial projection in **Table 2-2** presents the expected revenues, expenditures and ending fund balance for the General Fund for each of the fiscal years including June 30, 2003 through June 30, 2007, with historical information presented for the fiscal years ended June 30, 2000, 2001 and 2002. Expenditures are expected to exceed revenues beginning in FY 2002-03, and this pattern is expected to continue each year throughout the forecast period. This trend of expenditures exceeding revenues is forecasted to result in negative fund balances of approximately $8.5 million, $24.6 million, and $44.5 million in FY 2004-05, FY 2005-06, and FY 2006-07, respectively, if the District does not receive any new revenue or further reduce expenditures.

The assumptions disclosed herein are based on information obtained from Medina CSD. Because circumstances and conditions assumed in projections frequently do not occur as

expected, and are based on information existing at the time projections are prepared, there will usually be differences between projected and actual results.

Major assumptions used by Medina CSD to develop its five-year forecast are as follows:

Revenues

- Medina CSD's forecast does not present any anticipated new tax levies. However, the District is contemplating placing a new operating levy on the May 2004 ballot (See **F2.2** and **R2.1**).

- Real estate property tax and tangible personal property tax revenues are expected to generate approximately $33.6 million in FY 2002-03. Property tax revenue estimates for FY 2003-04 through FY 2006-07 are based on calculations using actual historical growth patterns, including scheduled updates and reappraisals, and are substantiated by information provided for FY 2002-03 by the Medina County Auditor. The property tax data is based on historical collection levels. Calendar year 2001 was the six-year valuation reappraisal with collections realized in FY 2001-02. **Table 2-2A** represents Medina CSD's property tax revenue amounts and percent of growth over the previous year.

Table 2-2A: Medina CSD Property Tax Growth

	Property Tax Amount of Increase	Percent of Increase Over Previous Year	General Property Tax Increase	Tangible Personal Property Tax Increase
FY 2002-03	$1,488,145	4.6%	3.1%	10.2%
FY 2003-04	$1,410,180	4.2%	4.0%	4.9%
FY 2004-05	$1,506,211	4.3%	3.8%	5.9%
FY 2005-06	$1,553,739	4.3%	3.9%	5.3%
FY 2006-07	$1,363,773	3.6%	2.9%	5.7%

Source: Medina CSD FY 2003 Forecast

Real estate property tax percentage increases are expected to be lower due to the effective rates for voted millage being reduced by approximately 15 percent, or 4 mills, to offset the inflationary increases in assessed valuation. The decrease will offset the increase in the 4.3 inside millage revenue that will be received through the reappraisal. The calculations for general property taxes include the change in assessed valuation of electric utility production equipment (ORC 5727.84) from 100 percent to 25 percent of true value, and in natural gas utility property from 88 percent to actual true value. State legislation is in place to reimburse school districts for this lost revenue through the year 2016. According to the treasurer, the reimbursement is based on historical values. This reimbursement will be paid through the state foundation. Also, estimated future years' revenues have been reduced by 1.5 percent for the risk of bad debts.

The percent of tangible personal property tax will decrease starting in FY 2003-04 due to ORC 5727.84 which reduces the assessed inventory valuation rate by 1 percent per year until it is phased out. This equates to a 4 percent reduction in tangible taxes per year. The expected growth in local inventories accounts for the annual increases.

- Unrestricted grants-in-aid are the school foundation basic allowance. The State of Ohio determines the cost of a basic education by using the local share of funding and then calculating the appropriate state share. **Table 2-2B** presents the rate of increase (decrease) expected from the school foundation funds through FY 2006-07.

Table 2-2B: School Foundation Basic Allowance Growth Percents

	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
State Foundation Percent of Growth	(3.2%)	4.1%	(4.9%)	5.5%	0.5%

Source: Medina CSD FY 2003 Forecast

The state foundation percent of growth data is negative for FY 2002-03 and FY 2004-05 due to the effects of reductions in the State's education budget and property reappraisals. The local share of funding is 23 mills of the District's assessed property values. The reappraisal in calendar year 2001 increased assessed property values by $132 million. The local share of the cost per student (23 mills times $132 million or $3 million) will be phased in over 3 years. The local share of the minimum cost will be increased by $1 million per year starting in FY 2002-03 until the $3 million level is reached in FY 2004-05.

The state legislature has established that the cost of a minimum education per student shall be limited to a 2.8 percent increase per year (ORC 3317.012). The state formula subtracts 23 mills times the local assessed value. The local assessed value has been increasing at a faster rate than the 2.8 percent state mandated per pupil rate, thus causing a negative effect on the amount the state pays.

- Restricted grants-in-aid are funds received from the State of Ohio that must be used for specific purposes. Medina CSD is forecasting that these funds will remain constant for each year of the five-year forecast.

- Property tax allocations are monies received by Medina CSD from the state. These funds are received as a result of homestead exemption legislation (ORC 323.151), property tax rollback legislation (ORC 319.301), and personal property exemption amounts (ORC 5709.01). The state pays 10 percent on the homestead exemption, 2.5 percent rollback on residential/agricultural property tax, and 10 percent on the tangible personal property tax. Medina CSD forecasts the percent of increase based on historical growth, which takes into account the impact of reappraisals. **Table 2-2C** presents the percent of increases estimated for the Medina CSD five-year forecast.

Table 2-2C: Property Tax Allocation Growth Percents

	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Property Tax Allocation Percent of Increase	1.5%	4.0%	3.8%	3.9%	3.0%

Source: Medina CSD FY 2003 Forecast

● Other revenues include interest on investments, tuition from other districts, and miscellaneous receipts. **Table 2-2D** presents an annual reduction of income until FY 2006-07, when the income remains constant. The primary reason for this decrease is the loss of investment income as Medina CSD moves from a positive cash balance of over $21 million at the end of FY 2001-02 to a negative cash balance at the end of FY 2004-05.

Table 2-2D: Other Operating Receipts Growth Percents

	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Other Operating Receipts	(21.6%)	(15.2%)	(9.0%)	(9.9%)	0.0%

Source: Medina CSD FY 2003 Forecast

Medina CSD ended FY 2001-02 with a positive ending fund balance (See **Table 2-2).** As a result, Medina CSD has been able to invest these funds at interest bearing rates favorable to the District. As the five-year forecast demonstrates in **Table 2-2**, Medina CSD's positive cash balance could potentially become negative beginning in FY 2004-05. Because of the decrease in positive cash balances, Medina CSD will have fewer funds to invest which will limit the potential to earn interest income. As a result of investing fewer funds, Medina CSD's other operating receipts will continue to decline throughout the forecasted period until the loss of all interest income occurs in FY 2005-06.

Expenditures

● Medina CSD's increase of personal services expenditures, which includes certificated and classified personnel, is outlined in **Table 2-2E.**

Table 2-2E: Personal Services Percent of Growth

	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Personal Services Percent of Increases	13.7%	6.9%	6.1%	6.7%	6.5%

Source: Medina CSD FY 2003 Forecast

Medina CSD is a rapidly growing school district. Certificated and classified staff at Medina CSD are hired and retained according to the contractual agreement between the District and the unions. The growth in certificated staff for FY 2002-03 is attributed to a complete team being added to the team teaching structure in the middle schools and to the completion of

staffing for the unit based high school to open in the fall of 2003. The middle school programs provide for interdisciplinary team planning. In FY 2002-03, due to enrollment increases, one full team was added to each of the two middle schools. In the middle school concept, individual teachers are rarely added as student growth occurs for the general curriculum areas. Instead, teams of teachers are added when necessary.

In addition, certificated staffing levels have been increased because the current contract limits class sizes, thereby requiring the District to add certificated personnel to keep the class sizes within the negotiated parameters. The District also added several administrative positions to fill the new school and to train for the unit based high school. The majority of these administrative positions were filled in FY 2002-03. For more information on Medina CSD's contractual agreements and staffing levels, please see the **human resources section** of this performance audit.

As a result of Medina CSD's growth from approximately 600,000 square feet in FY 2001 to over 1.1 million square feet projected for FY 2003-04, the need for classified staff has grown accordingly. These new positions are almost filled and will be fully staffed by the beginning of the 2003-04 school year.

- **Table 2-2F** presents the percent of increase in cost to the employees' retirement, insurance, and benefits for FY 2002-03 through FY 2006-07. These expenditures include costs paid by Medina CSD on behalf of their certificated and classified staff. These costs are negotiated through union contracts.

Table 2-2F: Employee Retirement and Benefits Percent of Growth

	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Employee's Retirement/Insurance Benefits Percent of Increase	27.4%	11.0%	14.1%	10.3%	10.4%

Source: Medina CSD FY 2003 Forecast

The increases are tied to the personal services as described in the personal costs assumption. Medina CSD is increasing staff and, therefore, will incur additional costs in benefits. Along with the normal increase in costs due to more staff, Medina CSD is anticipating health insurance costs to continue to rise at approximately 13 percent per year over the length of the forecast. As per the last union contract for certificated employees, which expires in December 2004, Medina CSD has agreed, in lieu of compensation, to pay 2 percent of the Medina County Teacher's Association (MCTA) retirement contribution and to pay the full employee portion of the retirement contribution for administrators. In addition, Medina CSD agreed to increase the payment of the MCTA contribution for teachers to 4 percent in FY 2004-05, contributing to the forecasted increase of 14.1 percent in retirement and benefits for that year. See **human resources** section for further discussion.

- **Table 2-2G** presents the remainder of Medina CSD's expenditure categories and the associated growth. The expenditure categories include purchased services, supplies and materials, capital outlays, and other expenditures. Purchased services are amounts paid for personal services rendered to the District by persons or companies not on Medina CSD's payroll. Supplies and materials are amounts paid for materials of an expendable nature that are consumed, worn out, or deteriorated. Capital outlays are expenditures for the acquisition of, replacement of, or additions to, fixed assets. Additional capital improvements are purchased through, and accounted for, by the District from the five-year permanent improvement levy fund (See **F2.14**). Other objects are amounts paid for goods or services not otherwise classified as above and include the payment of dues and fees.

Table 2-2G: Other Expenditures Percent of Growth

	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Purchased Services Percent of Growth	27.8%	3.7%	4.4%	4.8%	4.0%
Supplies and Materials Percent of Growth	17.5%	0.8%	1.9%	5.5%	4.0%
Capital Outlay Percent of Growth	10.7%	5.2%	2.5%	4.3%	4.0%
Other Objects Percent of Growth	19.2%	2.0%	3.1%	3.3%	4.0%

Source: Medina CSD FY 2003 Forecast

The additional one million square feet in growth of the District's buildings is directly responsible for the significant increases in expenditures for purchased services, supplies and materials, and capital outlays in FY 2002-03. Other costs consist mainly of the fees paid to Medina County for the collection of property taxes and fees paid to Medina County Educational Service Center (MCESC). Property tax collection fees are based on state law. MCESC services will continue to increase as the number of students and the number of buildings increase.

- **Table 2-2H** presents Medina CSD's excess of receipts and other financing sources over (under) expenditures and the ending cash balance for each fiscal year as a percent of receipts.

Table 2-2H: Excess of Revenues and Ending Cash as a Percent of Receipts

	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
Excess of Revenues as a Percent of Receipts	(10.9%)	(17.0%)	(23.3%)	(25.9%)	(30.8%)
Ending Cash as a Percent of Receipts	33.6%	16.1%	(7.6%)	(33.1%)	(62.9%)

Source: Medina CSD FY 2003 Forecast.

FY 2002-03 represents the first year Medina CSD expects to experience an excess of expenditures over revenues. This means the costs of education in the Medina CSD will exceed the sources of available revenue in the District. At this time, Medina CSD will begin to spend its surplus cash until the District, in FY 2004-05, anticipates the ending cash balance to be negative. The assumptions used in this forecast do not anticipate the impact of any new operating levies.

● Medina CSD forecasts its encumbrances for FY 2002-03 through FY 2006-07 based on the actual ending encumbrance balance of FY 2001-02.

Basis of Accounting

The financial forecast has been prepared on the cash receipts and disbursements basis of accounting, which is the required basis (non-GAAP [Generally Accepted Accounting Principles]) of accounting used for budgetary purposes. Under this method, revenues are recognized when received rather than when earned, and expenditures are recognized when paid rather than when the obligations are incurred. Under Ohio law, Medina CSD is also required to encumber legally binding expenditure commitments and to make appropriations for the expenditure and commitment of funds.

Fund Accounting

Medina CSD maintains its accounting in accordance with the principles of "fund" accounting. Fund accounting is used by governmental entities, such as school districts, to report financial position and the results of operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain district functions or activities. The transactions for each fund are reflected in a self-balancing group of accounts which present an accounting entity that stands separate from the activities reported in other funds.

The preceding projections represent only Medina CSD's General Fund. The General Fund is the operating fund of Medina CSD and is used to account for all financial resources except those required to be accounted for in another fund. The General Fund balance is available to Medina CSD for any purpose provided it is disbursed or transferred in accordance with Ohio law.

Financial Operations

Table 2-3 presents the distribution of revenue by funding source for the General Fund over the past three years, on a cash basis, for Medina CSD and peer districts.

Table 2-3: Percent of Revenue by Funding Source

	Medina CSD	Solon CSD	Stow CSD	Strongsville CSD	Peer Average	State Average
FY 1999-00:						
Local	66.9%	86.8%	59.7%	75.1%	75.1%	50.5%
State	30.3%	12.2%	38.4%	23.1%	23.4%	43.8%
Federal	2.8%	1.0%	1.9%	1.8%	1.5%	5.7%
FY 2000-01:						
Local	65.8%	85.0%	58.0%	74.2%	73.4%	N/A
State	31.8%	13.6%	40.0%	24.2%	24.9%	N/A
Federal	2.4%	1.4%	2.0%	1.6%	1.7%	N/A
FY 2001-02:						
Local	61.8%	85.3%	55.6%	73.0%	71.3%	N/A
State	35.8%	13.5%	42.3%	25.4%	27.1%	N/A
Federal	2.4%	1.1%	2.0%	1.6%	1.6%	N/A

Source: State report cards.
N/A= Not Available

Table 2-3 indicates that in FY 1999-2000, FY 2000-01, and FY 2001-02 Medina CSD received a lower percentage of local revenue than the peer average. School districts' local revenue sources are primarily limited to property taxes and income taxes. All school districts receive real and personal property tax revenues. Only some collect income taxes, either through a school district or a joint city/school district income tax approved by the voters. Medina CSD does not receive income taxes from the community and has not proposed that this course of revenue be pursued.

Table 2-4 provides the authorized millage amounts as well as the effective mills for levies Medina CSD received during calendar year 2002. Authorized millage includes the inside mills which are levied without a vote of the public as well as the outside mills which are voted on by the public.

Table 2-4: Tax Millage Currently Being Assessed for General Fund

Year	Type of Levy	Duration	Authorized Millage	Res/Ag Effective Millage	Commercial Effective
1976	Current Expense	Continuing	30.1	5.0	7.5
1983	Current Expense	Continuing	8.9	4.0	3.9
1986	Current Expense	Continuing	6.5	3.2	3.2
1987	Current Expense	Continuing	4.9	2.4	2.4
1990	Current Expense	Continuing	11.7	6.6	6.4
1995	Current Expense	Continuing	8.4	5.5	4.8
Inside Millage			4.3	4.3	4.3
Totals			74.8	31.0	32.5

Source: Medina CSD Website

Table 2-4 indicates that Medina CSD has a total authorized millage of 74.8 mills. The residential agricultural effective millage is 31.0 and the commercial effective millage is 32.5. The effective millage is the amount currently being assessed for Medina CSD.

Budgeting

The Board is required under the ORC to adopt an annual budget. Each year, two budgets are prepared by Medina CSD; a tax budget and an operating budget (the annual appropriation measure). No separate capital budget is prepared (see **R2.9**). The budgeting process identifies the adequacy of financial resources for the educational programs and provides a basis of accountability in fiscal management. The tax budget serves as a legal basis for the establishment of tax rates. There is no separate department responsible for the budgeting process within Medina CSD. The budgetary function is centralized in the offices of the superintendent, the treasurer, and the business manager.

The Board, by policy, is to collect and assemble the information necessary to discharge its responsibility for the fiscal management of Medina CSD and to plan for the financial needs of the educational program. The Board strives to maintain both short and long-range projections of Medina CSD's financial requirements. With this policy, the Board directs the superintendent and treasurer to:

- Include cost estimates in all ongoing financial requirements:
- Prepare a long-range, year-by-year plan for the maintenance and replacement of facilities and equipment;
- Maintain a plan of anticipated local, state, and federal revenues; and
- Report to the Board any serious financial implications that emerge from the District's ongoing fiscal planning.

In addition, the Board directs the superintendent to maintain a detailed five-year forecast of estimated revenues and expenditures.

Medina CSD prepares an annual tax budget. Per Medina CSD Board policy, each year the Board requires that the administration prepare, and then submit for Board review, the General Fund, as well as the other funds, which comprise the tax budget. The tax budget is designed to carry out the District operations in a thorough and efficient manner, maintain District facilities properly, and to honor continuing obligations of the Board. The treasurer is directed to present the tax budget to the Board along with all available information associated with each fund to allow for proper analysis by the Board. When presented to the Board for review and/or adoption, the tax budget is to indicate the following information:

- Proposed expenditures in each financial category for the ensuing year;
- Anticipated expenditures in each financial category for the current year;
- Actual expenditures in each financial category of the General Fund for the previous year;
- Sources and amounts of anticipated revenues; and
- The amount of fund equity anticipated at the end of the current year.

Medina CSD prepares an operating budget, or appropriation measure, annually. The operating budget is developed, approved, and filed according to statute. The Board, per published policy, adopts as part of its annual appropriation measure a spending plan setting forth a schedule of expenses and expenditures of the General Fund. A copy of the annual appropriation measure and the spending plan is submitted to the Superintendent of Public Instruction and setting forth all revenues available for appropriation by the District during such year and their sources; the nature and amount of expenses to be incurred during the year; the outstanding and unpaid expenses on the date the measure is adopted; the dates by which such expenses must be paid; and any other information the Superintendent of Instruction requires.

The preparation process is similar for both the tax budget and the annual appropriation measure. In general, the budgetary process begins in November, eight months prior to the start of the fiscal year. Revenues are obtained from the most recent Medina County Auditor Tax Estimates, Schedule B. The treasurer bases expenditure estimates on historical results, adjusted by estimated changes, to project cash balances for the ensuing fiscal year. The superintendent's office for certificated personnel and the business manager for classified staff, prepares the additions to the staff for the coming fiscal year and gives this information to the treasurer. The treasurer then calculates the salaries and benefits portion of the budget. The treasurer uses information provided by the business manager in the area of facility needs and transportation costs. Additional information is obtained from the director of instruction to reflect known and anticipated increases and decreases in areas such as textbooks and educational supplies. The treasurer compiles this information into the spreadsheet system designed for financial forecasting to arrive at the budgeted information to present to the Board.

Performance Measures

The following performance measures were used to analyze Medina CSD's forecasting, financial planning, and budgeting systems:

- Review financial planning as a major component of school management;
- Review forecasting practices;
- Review budgeting practices;
- Review adequacy and effectiveness of the financial forecasting process;
- Assess the extent to which policies and procedures are used for development and adoption of the budget;
- Establish with school officials a framework for future forecasts; and
- Assess the adequacy of a long-range strategic plan and long-range capital plan.

Findings / Commendations / Recommendations

Forecasting, Financial Planning, and Budgeting

F2.1   The treasurer's financial projections in **Table 2-2** are based upon the assessment of relevant financial conditions and analysis of underlying data completed by the treasurer's office, as well as input from the superintendent, assistant superintendent, and business manager. The validation of these assumptions and resulting estimates is a responsibility of Medina CSD. The treasurer has prepared various financial projections in past years for the purpose of identifying conditions which would require Medina CSD to take corrective actions and the possible results of those actions.   The initial projections and related scenarios are updated on an ongoing basis as significant changes occur within the District. Medina CSD prepares its budget on an annual basis and uses the budget to form the foundation for the five-year forecast. As a result, the annual budget is the primary tool used by Medina CSD for financial planning.

F2.2   As shown in **Table 2-2**, Medina CSD is projecting an ending fund balance deficit beginning in FY 2004-05 and throughout the remainder of the forecasted period. Although the District has not forecasted any new revenue to occur in the five-year forecast, Medina CSD is considering placing an operating levy on the May 2004 ballot to eliminate the deficit. Based on analysis prepared by AOS and information provided by the District, the following four scenarios have been prepared to show "what if" examples of how each scenario would affect the five year forecast:

- Medina CSD makes no changes to the current five-year forecast (See **Table 2-5**).

- Medina CSD implements all the recommendations proposed throughout this performance audit (See **Table 2-5A**).

- Medina CSD implements all the performance audit recommendations and does not hire any new positions for the remainder of the forecasted period, excluding teachers and 16 bus drivers (See **Table 2-5B**).

- Medina CSD implements the performance audit recommendations, mandates a hiring freeze for new positions excluding teachers and 16 bus drivers, and places a 8.5 mill levy on the May 2004 ballot (See **Table 2-5C**).

Table 2-5 shows the District's ending fund balance from the current five-year forecast, as presented in **Table 2-2**, which shows Medina CSD forecasting a $8.5 million, $24.6 million and $44.5 million deficit in FY 2004-05, FY 2005-06, and FY 2006-07, respectively.

Table 2-5: Medina CSD Forecast

	Forecasted FY 2002-03	Forecasted FY 2003-04	Forecasted FY 2004-05	Forecasted FY 2005-06	Forecasted FY 2006-07
Actual Ending Unencumbered Fund Balance	**$14,314,907**	**$4,991,395**	**($8,485,839)**	**($24,592,750)**	**($44,481,624)**

Source: Treasurer's Office

Table 2-5A presents the effect of the performance audit recommendations on Medina CSD's current five-year forecast. See **F2.17** for more information regarding the financial implications of these recommendations identified throughout this performance audit.

Table 2-5A: Effects of Potential Recommendations

	Forecasted FY 2002-03	Forecasted FY 2003-04	Forecasted FY 2004-05	Forecasted FY 2005-06	Forecasted FY 2006-07
Total Revenue	$53,857,333	$55,842,569	$56,582,650	$59,025,459	$60,578,953
Total Expenditure	($60,751,870)	($65,119,791)	($70,011,142)	($75,081,078)	($80,414,630)
Net Financing	($43,933)	($46,290)	($48,742)	($51,292)	($53,197)
Results of Operations	**($6,938,470)**	**($9,323,512)**	**($13,477,234)**	**($16,106,911)**	**($19,888,874)**
Beginning Cash Balance	$24,378,224	$17,615,754	$9,961,242	$1,325,008	($9,813,903)
Performance Audit Recommendations Savings	$176,000	$1,889,000	$4,841,000	$4,968,000	$5,098,000
Implementation Costs		($220,000)	$0	$0	$0
Ending Cash Balance	**$17,615,754**	**$9,961,242**	**$1,325,008**	**($9,813,903)**	**($24,604,777)**
Outstanding Encumbrances	($3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)	(3,124,847)
Adjusted Unreserved Fund Balance	**$14,490,907**	**$6,836,395**	**($1,799,839)**	**($12,938,750)**	**($27,729,624)**

Source: Treasurer's Office; Auditor of State of Ohio

Table 2-5A indicates that the overall savings resulting from the recommendations is close to $17 million for the forecast period. If Medina CSD implemented these recommendations, the projected adjusted unreserved fund balance deficit in FY 2004-05 through FY 2006-07 would be significantly reduced from the original forecasted deficit depicted in **Table 2-5.**

Table 2-5B presents **Table 2-5A** with the additional proposal of Medina CSD implementing a hiring freeze in FY 2003-04 through FY 2006-07 for all positions, except for hiring 10 teachers and two bus drivers each year to accommodate the projected increases in enrollment of about 150 to 200 students each year (see the **facilities** section for enrollment projections).

Medina CSD hired 24 new teachers in FY 2002-03 and numerous administrative and classified positions due to the opening of the new high school. However, by hiring 24

new regular education teachers, Medina CSD reduced its student to teacher ratio from the previous year. See the **human resources section** of this report for more information regarding staffing levels and student to teacher ratios. In addition, a hiring freeze for this analysis is exclusive of replacing existing employees who have separated employment.

Table 2-5B: Potential Effects of Recommendations & Proposed Hiring Freeze

	Forecast 2002-03	Forecast 2003-04	Forecast 2004-05	Forecast 2005-06	Forecast 2006-07
Beginning Salaries (See Table 2-2)	$38,224,116	$40,855,562	$43,359,510	$46,253,215	$49,266,396
Reduction of New Hire Salaries	($477,243)[1]	($830,198)	($902,986)	($1,047,284)	(1,248,015)
Adjusted Salaries (See Table 2-11)	**$37,746,873**	**$40,025,364**	**$42,456,524**	**$45,205,931**	**$48,018,381**
Beginning Benefits (See Table 2-2)	$13,044,521	$14,478,004	$16,523,619	$18,226,876	$20,123,207
Reduction of New Hire Benefits	($167,035)[1]	($290,569)	($316,045)	($366,549)	($436,805)
Adjusted Benefits (See Table 2-11)	**$12,877,486**	**$14,187,435**	**$16,207,574**	**$17,860,327**	**$19,686,402**
Effects of Performance Recommendations and Proposed Hiring Freeze					
Total Revenue	**$53,857,333**	**$55,842,569**	**$56,582,650**	**$59,025,459**	**$60,578,953**
Original Total Expenditure (See 2-2)	$60,751,870	$65,119,791	$70,011,142	$75,081,078	$80,414,630
Reduction of New Hire Salaries	($477,243)[1]	($830,198)	($902,986)	($1,047,284)	(1,248,015)
Reduction of New Hire Benefits	($167,035)[1]	($290,569)	($316,045)	($366,549)	($436,805)
Adjusted Total Expenditures (See 2-11)	**$60,107,592**	**$63,999,024**	**$68,792,111**	**$73,667,245**	**$78,729,810**
Net Financing	($43,933)	($46,290)	($48,742)	($51,292)	($53,197)
Results of Operations	**($6,294,192)**	**($8,202,745)**	**($12,258,203)**	**($14,693,078)**	**($18,204,054)**
Beginning Cash Balance	$24,378,224	$18,260,032	$11,726,287	$4,309,084	**($5,415,994)**
Performance Audit Recommendation Savings (See 2-11A)	$176,000	$1,889,000	$4,841,000	$4,968,000	$5,098,000
Implementation Costs (See 2-11B)	$0	($220,000)	$0	$0	$0
Ending Cash Balance	**$18,260,032**	**$11,726,287**	**$4,309,084**	**($5,415,994)**	**($18,522,048)**
Outstanding Encumbrances	($3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)
Adjusted Unreserved Fund Balance	**$15,135,185**	**$8,601,440**	**$1,184,237**	**($8,540,841)**	**($21,646,895)**

Source: Treasurer's Office; Auditor of State of Ohio; Medina CSD Treasurer
[1] Budgeted positions for FY 2002-03 that were not filled, based on information provided by Medina CSD.

As shown in **Table 2-5B,** if Medina CSD implemented the performance recommendations and implemented the proposed hiring freeze, the District would further reduce the projected deficits in FY 2005-06 and FY 2006-07.

Table 2-5C presents the information shown in **Table 2-5B** with the addition of a proposed 8.5 mill operating levy beginning in FY 2004-05.

Table 2-5C: Potential Effects of Recommendations, Proposed Hiring Freeze & Passage of Property Tax Levy

	Forecast 2002-03	Forecast 2003-04	Forecast 2004-05	Forecast 2005-06	Forecast 2006-07
Total Revenue	$53,857,333	$55,842,569	$56,582,650	$59,025,459	$60,578,953
Adjusted Total Expenditure (See Table 2-5B)	$60,107,592	$63,999,024	$68,792,111	$73,667,245	$78,729,810
Net Financing	($43,933)	($46,290)	($48,742)	($51,292)	($53,197)
Result of Operations	**($6,294,192)**	**($8,202,745)**	**($12,258,203)**	**($14,693,078)**	**($18,204,054)**
Beginning Cash Balance	$24,378,224	$18,260,032	$11,726,287	$8,700,084	$7,756,006
Performance Audit Savings (See Table 2-11A)	$176,000	$1,889,000	$4,841,000	$4,968,000	$5,098,000
Implementation Costs (See Table 2-11B)	$0	($220,000)	$0	$0	$0
Operating Levy Revenue	$0	$0	$4,391,000 [1]	$8,781,000	$8,781,000
Ending Cash Balance	**$18,260,032**	**$11,726,287**	**$8,700,084**	**$7,756,006**	**$3,430,952**
Outstanding Encumbrances	($3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)
Unreserved Fund Balance	**$15,135,185**	**$8,601,440**	**$5,575,237**	**$4,631,159**	**$306,105**

Source: Treasurer's Office; Auditor of State of Ohio; Medina CSD Treasurer
[1] Since the levy would not take effect until January 2005 if passed in May 2004, Medina CSD would only be able to generate half of the total revenue resulting from the 8.5 mill levy in FY 2004-05.

Medina CSD receives approximately $1,033,000 per mill based on data from the Medina County Auditor. Using the millage information from the Medina County Auditor and the data of the adjusted unreserved fund balance of **Table 2-5B**, Medina CSD will need to pass a 8.5 mill levy to eliminate the District's negative ending fund balances in the forecasted period. A 8.5 mill levy will generate approximately $8.8 million per year for the District.

The District is contemplating placing a new operating levy on the May 2004 ballot. If the levy does not pass, this analysis indicates that Medina CSD would need to implement strategies to further reduce expenditures, in addition to those identified in this performance audit. Furthermore, the results outlined in **Table 2-5A**, **Table 2-5B**, and **Table 2-5C** assume the District would fully implement the scenarios as they are presented. If the District did not fully implement the scenarios as presented, the results would change the ending fund balances. For example, if the District did not implement the proposed hiring freeze and performance audit recommendations, a higher operating levy would be needed to meet the District's projected expenditures.

R2.1   Medina CSD should evaluate the various scenarios to determine which course(s) of action(s) are best for the District. To present a levy to the constituents of the District, Medina CSD should present a program detailing what course of action it is taking to control costs and to maintain a positive ending fund balance throughout the forecast period. If Medina CSD seeks approval of an operating levy from the residents, it should

outline how the District will use the funding to fulfill its current and future educational goals. In addition, Medina should reassess the need for any new positions, including teachers and bus drivers, as situations throughout the forecasted period change (i.e., enrollment projections).

F2.3   **Table 2-6** presents Medina CSD's forecast versus actual comparison for FY 2001-02.

Table 2-6: Forecast vs. Actual, FY 2001-02

	Forecast		Actual
	FY 2002		**FY 2002**
General Property (Real Estate)	25,531,278		25,392,908
Tangible Personal Property Tax	7,141,592		6,757,938
Unrestricted Grants-in-Aid	15,209,199		16,114,928
Restricted Grants-in-Aid	60,000		286,943
Property Tax Allocation	3,155,551		3,189,892
All Other Operating Revenue	1,376,890		1,660,184
Total Revenue	52,474,510		53,402,793
Advances-In	32,448		163,000
All Other Financial Sources	0		37,713
Total Other Financing Sources	32,448		200,713
Total Revenues and Other Financing Sources	52,506,958		53,603,506
Personal Services	33,732,027		33,607,636
Employees' Retirement/Insurance Benefits	10,765,637		10,237,643
Purchased Services	4,529,666		4,068,082
Supplies and Materials	1,878,402		1,477,585
Capital Outlay	1,240,653		1,195,438
Other Objects	1,179,208		1,028,313
Total Expenditures	53,325,593		51,614,697
Operational Transfers - Out	488,260		210,800
Advances – Out	40,706		174,360
Total Other Financing Uses	528,966		385,160
Total Expenditure and Other Financing Uses	53,854,559		51,999,857
Revenues over(under) Exp & Oth Financing	-1,347,601		1,603,649
Beginning Cash Balance	22,732,827		22,774,609
Ending Cash Balance	21,385,226		24,378,258
Outstanding Encumbrances	2,299,640		3,124,843
Fund Balance June 30 for Certification of Appropriations	19,085,586		21,253,415
Fund Bal June 30 for Cert of Contracts,Salary Sched,Oth Obligations	19,085,586		21,253,415
Unreserved Fund Balance June 30	19,085,586		21,253,415

Source: Medina CSD Form 4502, Exhibit 2; Medina CSD Five-Year Forecast, ODE Website

Medina CSD's actual revenues were approximately 2.1 percent above projections, while actual expenditures were below the forecasted amounts by 3.4 percent for FY 2001-02. Overall, net revenues versus net expenditures were above projections by 5.5 percent.

C2.1   As shown in **Table 2-6**, the District is fairly accurate with its forecasting and budgets. Medina CSD is very conservative in its forecasting effort. By using conservative forecasting methods, Medina CSD is able to forecast revenues and expenditures which are close to actual results.

F2.4   A forecast is a management tool developed by the treasurer of a school district. The assumptions should be detailed and disclosed at the end of the forecast. Assumptions are educated estimates developed by the appropriate management within each district and communicated to the Board. Since assumptions can change based upon economic conditions, the forecast should be considered a working document that can be amended if conditions change significantly as time progresses.

The treasurer prepared a five-year financial forecast with supporting explanations and assumptions for the Board. Those key financial assumptions are presented with **Table 2-2** and are further explained in **Table 2-2A** through **Table 2-2H**. The forecast is primarily based upon historical revenues and expenditures and incorporates local property valuations, anticipated state funding, current staffing levels and expenditure patterns. It is intended to model Medina CSD's cash flow and indicate the anticipated financial condition through FY 2006-07. Revenues are projected to increase an average of almost $1.5 million per year throughout the forecasted period. In addition, during the same time period, operating expenditures are anticipated to increase an average of $5.8 million annually.

Through the efforts of the treasurer and the forecasting system, a large amount of summary detail is available to readers. However, more information about certain assumptions and their effect on the forecast could improve the readers' and stakeholders' understanding of the document. To provide a greater level of explanatory detail, subjects such as projected inflation rates, and comparable external averages and benchmarks would facilitate the expanded use of this financial document.

R2.2   The five-year forecast and the current accompanying assumptions or notes should provide more explanatory detail in areas not disclosed in previous forecasts. The following factors should be considered in developing projections:

- Historic and projected inflation rates;
- Actual results of the three most recent fiscal years, for comparison, with explanation of significant variances;
- Impact of a failed levy;
- Comparable external averages and benchmarks and internal financial objectives;
- Historic and projected enrollment and Average Daily Membership (ADM);
- Information about facility utilization (lease of portable classroom units);
- Detailed description of the components of state foundation revenues;

- Detailed description of the components of other local receipts and non-operating revenue;
- Historic and projected staffing by position;
- Detail on projected salary increases, including forecasted cost of living adjustments and step increase amounts, for both certificated and non-certificated staff.
- Historic and projected expenditures for main components of purchased services, materials and supplies, and other expenditures; specifically, amounts required for fulfilling minimum state requirements and when opening new facilities;
- Description of projected capital outlay expenditures, identifying amounts related to routine maintenance, specific projects and fulfilling minimum state requirements; and
- Detail of outstanding encumbrances at year-end.

The forecast should identify the set-asides for capital maintenance, textbooks, and instructional materials and supplies. Medina CSD should quantify the cost of implementing programs needed to meet the educational outcomes and accountability standards established in legislation. These costs should be included as "Additional Educational Enhancements" and described in the accompanying notes. Further, to ensure a more detailed forecast, projected cost of living increases, and step increase amounts should be used to develop additional "what-if" statements for alternative scenarios.

The treasurer has taken a good first step by including assumptions and supporting explanations along with the financial data, which has improved the reader's understanding of these projections. However, inclusion of actual historical information as well as comparative state averages and peer data would further assist the reader in interpreting the forecast and drawing well-founded conclusions. The forecast should be updated during the year as situations occur that materially affect Medina CSD's financial situation. By providing more detail in the forecast and its supporting notes, the Board and the public will better understand the financial condition of Medina CSD.

F2.5   Medina CSD has developed the major assumptions for revenues in the five-year forecast that detail almost 96 percent of annual total revenues in FY 2001-02. Even with this high percent of detail, Medina CSD's forecast does not contain several assumptions of key revenue information and sufficient detail to help the Board and community evaluate the overall financial condition of Medina CSD. Areas of missing information include other operating revenues, especially earnings on investments. Information such as the face value of each investment, interest rate earned, investment period, where the investment has been placed, and a summarization of the Board investment policy are items that would be of value to the reader of the detailed assumptions. The accuracy of the forecast enables future financial planning for situational changes both positive and negative. By not disclosing the detail of revenue items such as other operating revenues, readers are unable to adequately assess the information.

In contrast, sufficient supporting detail has been provided for anticipated revenue from real estate taxes, personal property taxes, state foundation revenues, and rollback homestead reimbursements. By providing detailed assumptions and supporting documentation, financial planning will be well guided into the future. Although Medina CSD uses a very conservative approach to forecast anticipated revenues, some areas of the revenue stream are not assessed in sufficient detail to allow users to determine the overall financial condition of the District.

R2.3 Medina CSD should consider capitalizing upon additional resources which are available to enhance the forecasting technique. Medina CSD's Board investment policy should be stated, in summary, for the reader. Details on the investment holdings at the time of the writing and the related earnings should be included in the assumption. The institution(s) where invested, the amount of the investment, the investment period, and the earning rates of the investments should be disclosed in table form. When the investment period expires, re-investment goals or use of the funds should be disclosed.

F2.6 Medina CSD and the City of Medina jointly participated in the capital bond levy passed in 1999. The levy was for the acquisition of land, a new elementary school, an addition to the high school and a community recreation center to be incorporated into the high school. The recreation center's capital costs of $7.5 million are to be paid by bonds issued by the City of Medina. Medina CSD is to participate in the use of the center for sport programs and extra curricular activities. The operating costs of the recreation center are to be split approximately 53 percent to Medina CSD and 47 percent to the City of Medina. See the **facilities section** for further details regarding the operations of the recreation center. Total annual operating costs of the recreational center are expected to be approximately $750,000 and have been included in the district's budget and five-year forecasts.

Table 2-7 presents the City of Medina's portion of the operating expenditures included in the five-year forecast.

Table 2-7: City of Medina Recreation Center Costs

	FY 2002-03 [1]	Annual Increase	FY 2003-04 [1]	FY 2004-05	FY 2005-06	FY 2006-07
Utilities	$115,000	4.00%	$239,200	$248,768	$258,719	$269,067
Custodians	$45,000	4.00%	$93,600	$97,344	$101,238	$105,287
Water	$12,500	4.00%	$26,000	$27,040	$28,122	$29,246
Telephone	$3,000	4.00%	$6,240	$6,490	$6,749	$7,019
Totals	$175,500		$365,040	$379,642	$394,827	$410,620
Rounded	$176,000		$365,000	$380,000	$395,000	$410,000

Source: Medina CSD Business Manager
[1] According to the treasurer, the recreation center will open in January 2003. Therefore, Medina CSD will only incur half of the total operational costs for FY 2002-03. The four percent increase in FY 2003-04 is based on annualizing the costs incurred in FY 2002-03.

The treasurer stated the expenditures were to be placed into separate accounts when the construction was finished and the recreation center opened. However, Medina CSD did not include the revenue it receives from the City of Medina for the expenditures it incurs in the five-year forecast. As a result of this oversight, the budget for FY 2002-03 and the five-year forecast prepared for FY 2002-03 through FY 2006-07 contain the recreation center total operating expenditures cost without the revenue to be received from the City of Medina. In addition, future year expenditures are forecasted to increase by four percent annually.

R2.4   Medina CSD should update its five-year forecast to include the revenue it receives for the City of Medina's portion of the operating costs for the recreation center. Medina CSD should ensure that it is receiving the agreed upon 47 percent of the total operating costs of from the City of Medina. In addition, the District should ensure this cost-sharing agreement between is clearly stated in the five-year forecast's notes and assumptions.

Financial Implication: The operating expenditures for the recreation center are expected to be approximately $750,000 per year starting with FY 2002-03 and increasing four percent per year throughout the five year-year forecast through FY 2006-07. The City of Medina is to reimburse Medina CSD 47 percent of the costs per year. The annual additional other income, as shown in **Table 2-7,** will be approximately $176,000, $365,000, $380,000, $395,000, and $410,000, for the FY 2002-03 through FY 2006-07, respectively.

F2.7   As previously mentioned, the treasurer obtains expenditure information from multiple sources to complete the five-year forecast. However, the treasurer is solely responsible for preparing the revenue information. Under the direction of the superintendent, the assistant superintendent provides certificated new staffing information to the treasurer. The director of instruction prepares text book purchasing. All other expenditures, including classified staffing, transportation, capital improvements, and utility expenses, are prepared by the business manager. By obtaining information in this manner, the treasurer is able to acquire a level of expertise from which Medina CSD can benefit.

Only new personnel to be added to the staff are given to the treasurer. The treasurer forecasts all personnel expenditures for the District using a spreadsheet system designed by him. This could lead to errors as no one reviews the data or is cognizant of the method used by the treasurer to prepare the forecast. The same spreadsheet system designed and used exclusively by the treasurer is in place for expenditures submitted by the business manager. Revenues are calculated using the same group of spreadsheets. No one else is trained and there are no written procedures in place on how to use or where to obtain information from the spreadsheet system. Also, the spreadsheet system in place uses several different spreadsheet products to produce the results. These different spreadsheets, and the need to continuously transfer data from one spreadsheet to

another, without verifying the accuracy of the numbers, could jeopardize the accuracy of the results.

Medina CSD has indicated it is aware of the potential problems it could face with just one person, the treasurer, having access to the forecasting spreadsheets and methodology. Medina CSD has purchased a standardized financial forecasting system for schools and desires to have it in place for FY 2003-04. The treasurer and assistant treasurer will be trained on the new forecasting system and the assistant treasurer will assume a role in the forecasting process. Written procedures will be developed within Medina CSD on how to use the system.

R2.5   Medina CSD should proceed with the implementation of the new forecasting operating system. This implementation should be a priority in the treasurer's office for FY 2003-04. The following lists the benefits of having a forecasting process that is used by appropriate personnel in addition to the treasurer:

● Having sufficient back up to complete the forecasts in the event the treasurer is unable to complete the task;
● Completing the forecast faster and generating different scenarios, with different inputs, for discussion purposes;
● Reducing the possibility of errors as others will be able to review the work; and
● Providing definitive recorded steps for others to examine to help control the accuracy of the system.

F2.8   The treasurer and superintendent initially submit expenditure information, by object code, to the business manager. The business manager is responsible for the final data being resubmitted to the treasurer for budget inclusion. The business manager's budget responsibilities include purchased services, supplies and materials, capital outlays, and other expenditures. The budgeting process is completed for one year. Medina CSD's policy allows the school principals and department managers to operate independently for budgeting purposes. This allows each school principal and department manager to decide what resources need to be included in the budget.

The business manager, through worksheets generated by the treasurer from his spreadsheet system, instructs the various department managers and school principals on what accounts they are to budget for the coming year. They also receive a three year history of the amount spent in each account. The managers and principals are given a total budget dollar amount for their related department or school, and they allocate this amount to the various accounts under their responsibility. After the principals and managers allocate the dollar totals to the accounts, the completed forms are returned to the business manager. The business manager reviews the forms, approves the amounts allocated by account, and verifies that the total originally submitted to the managers and

principals has not changed. However, even with the controls and reviews in place, the managers and principals are not required to provide any details of the spending plans for the individual amounts submit to the business manager. As a result, it is difficult to monitor and hold the managers and principals accountable for the spending of the funds in the separate accounts.

The business manager submits the returned, completed and approved forms, along with the budgeted accounts directly under his responsibility, to the treasurer. The treasurer re-enters the detail in his various spreadsheets. The five-year forecast is then generated using the one-year budget data as the base. A combination of historical patterns and estimates, with an attempt to maintain a four percent limit on growth per year, is used to generate the forecast on all expenditures except personnel costs and benefits. Detail on what data will comprise the information presented in the forecast is not submitted nor is it formally requested for the various expenditure amounts.

The Government Finance Officers Association (GFOA) recommends the functions, programs, and/or activities of the government's organizational units be identified. GFOA states that clear identification of the steps assists those reviewing or evaluating the organizational unit to develop a better understanding of the role of each unit and assists in evaluating the programs provided. Explicit descriptions of these items also help department managers better understand the tasks for which they are responsible. GFOA recommends preparing the documentation by the stakeholders (e.g., department managers and principals) to ensure they understand the responsibilities of their organizational unit. Any organizational unit for which resources are allocated through the budget process should also have its purpose and role described in the budget document.

R2.6   Medina CSD should require that more detail be included with the data submitted for annual budget purposes. Medina CSD should also require department managers and school principals to document costs over a certain threshold that are included in the budget. Medina CSD's administration will then be better aware of spending patterns, and should changes to the budget or spending levels be necessary, will be able to develop reliable budget amendments during the fiscal year.

The inclusion of detail with the budget data would also include composing a short-term plan for the year. Goals should be outlined by the stakeholders and they should be responsible for attaining the outlined programs to reach the goals. The stakeholders should be responsible for detailing progress on the goal and reporting on the conclusion of the detailed budget item.

F2.9   **Table 2-8** depicts the FY 2001-02 General Fund revenues by source and expenditures by object as a percent of total revenues and expenditures for those funds for Medina CSD and the peers.

Table 2-8: Revenue by Funding Source & Expenditure by Object

	Medina CSD	Pickerington CSD	Stow CSD	Strongsville CSD	Peer Average
Property & Income Tax	60.2%	44.1%	55.4%	72.3%	57.3%
Intergovernmental Revenues	36.7%	53.6%	43.3%	26.2%	41.0%
Other Revenues	3.1%	2.3%	1.3%	1.5%	1.7%
Total Revenue	**$53,402,793**	**$53,713,435**	**$40,417,246**	**$52,698,728**	**$48,943,136**
Wages	64.6%	61.1%	62.4%	58.7%	60.7%
Fringe Benefits	19.7%	17.5%	19.0%	27.4%	21.3%
Purchased Service	7.8%	12.4%	8.0%	7.0%	9.1%
Supplies & Textbooks	2.8%	3.9%	2.4%	1.9%	2.7%
Capital Outlays	2.3%	1.7%	3.8%	1.1%	2.2%
Debt Service	0.0%	0.0%	1.5%	0.0%	0.5%
Miscellaneous	2.0%	2.5%	1.9%	1.5%	2.0%
Other Financing Uses	0.7%	0.8%	1.0%	2.4%	1.4%
Total Expenditures	**$51,999,862**	**$53,671,909**	**$43,268,244**	**$56,441,136**	**$51,127,096**

Source: Medina CSD and Peers, Form 4502, Schedule 2, FY 2002
          Pickerington CSD, Form 4502, Schedule 2, FY 2001

As shown in **Table 2-8**, Medina CSD had the second highest total expenditures for FY 2001-02. **Table 2-8** shows that even though Medina CSD has the highest percentage of wages, the District has the second lowest percentage for benefits expense. Together, the wage and benefit expenditures in Medina CSD are 84.3 percent compared to 82.0 percent for the peers average. Medina added certificated and classified staff in FY 2001-02 to comply with the new certificated staff contract and to staff the new elementary and high schools. See **Tables 2-2E** and **2-2F** for more information regarding staff additions. Medina CSD has the second lowest percentage of purchased services at 7.8 percent as compared to the peers.

F2.10 **Table 2-9** shows expenditures posted to the various Uniform School Accounting System (USAS) function codes for Medina CSD and the peer districts for FY 2001-02. Function codes are designed to report expenditures by their nature or purpose. **Table 2-9** shows the operational expenditures per pupil and percentage of operational expenditures by functions for all funds which are classified as governmental fund types.

Table 2-9: Governmental Funds Operational Expenditures by Function

USAS Function Classification	Medina CSD $ Per Pupil	Medina CSD % of Exp	Stow CSD $ Per Pupil	Stow CSD % of Exp	Strongsville CSD $ Per Pupil	Strongsville CSD % of Exp	Reynoldsburg CSD $ Per Pupil	Reynoldsburg CSD % of Exp	Peer Average $ Per Pupil	Peer Average % of Exp
Instructional Expenditures:	**$4,857**	**61.2%**	**$4,558**	**65.4%**	**$5,212**	**63.9%**	**$4,150**	**57.5%**	**$4,668**	**62.1%**
Regular Instruction	$3,707	46.7%	$3,814	54.7%	$4,664	57.2%	$3,670	50.9%	$4,080	54.2%
Special Instruction	$868	10.9%	$475	6.8%	$394	4.8%	$444	6.2%	$435	5.8%
Vocational Education	$83	1.0%	$182	2.6%	$53	0.7%	$35	0.5%	$89	1.2%
Adult/Continuing Education	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%	$0	0.0%
Other Instruction	$199	2.5%	$87	1.2%	$101	1.2%	$0	0.0%	$65	0.9%
Support Service Expenditures:	**$2,945**	**37.1%**	**$2,413**	**34.6%**	**$2,942**	**36.1%**	**$2,858**	**39.6%**	**$2,749**	**36.5%**
Pupil Support Services	$419	5.3%	$374	5.4%	$309	3.8%	$627	8.7%	$430	5.7%
Instructional Support Services	$438	5.5%	$376	5.4%	$357	4.4%	$223	3.1%	$320	4.3%
Board of Education	$10	0.1%	$42	0.6%	$9	0.1%	$15	0.2%	$21	0.3%
Administration	$523	6.6%	$391	5.6%	$395	4.8%	$735	10.2%	$502	6.7%
Fiscal Services	$176	2.2%	$138	2.0%	$504	6.2%	$115	1.6%	$265	3.5%
Business Services	$132	1.7%	$78	1.1%	$168	2.1%	$40	0.6%	$99	1.3%
Plant Operation & Maintenance	$795	10.0%	$611	8.8%	$745	9.1%	$724	10.0%	$696	9.3%
Pupil Transportation	$410	5.2%	$330	4.7%	$403	4.9%	$323	4.5%	$354	4.7%
Central Support Services	$42	0.5%	$73	1.0%	$52	0.6%	$57	0.8%	$60	0.8%
Non-Instructional Services Expenditures	**$0**	**0.0%**	**$0**	**0.0%**	**$0**	**0.0%**	**$53**	**0.8%**	**$17**	**0.2%**
Extracurricular Activities Expenditures	**$135**	**1.7%**	**$103**	**1.5%**	**$24**	**0.3%**	**$147**	**2.1%**	**$89**	**1.2%**
Total Governmental Fund Operational Expenditures	**$7,937**	**100.0%**	**$7,073**	**100.0%**	**$8,179**	**100.0%**	**$7,212**	**100.0%**	**$7,523**	**100.0%**

Source: ODE Form 4502, Exhibit 2, FY 2002
ODE Form SF-3, FY 2002

Table 2-9 illustrates that Medina CSD's total expenditures per pupil are 3.0 percent below Strongsville CSD and 12.2 percent higher than Stow CSD. The District's expenditures are 10.1 percent higher than Reynoldsburg CSD. Overall, Medina CSD's per pupil expenditures are 5.5 percent higher than the peer average.

Medina CSD's percentage of total governmental fund operational expenditures spent on instruction (61.2 percent) was lower than two of the peers. Medina CSD spent $3,707 per pupil on regular instruction expenditures, while the peer average was $4,080 per pupil. In addition, Medina CSD expended $868 per pupil for special education compared to the peer average of $435. This expenditure was double the comparable per pupil expenditure by the peers. Medina CSD's policy is to provide an exceptional special education program and has expended the funds to achieve this goal. The higher special instruction costs for Medina CSD resulted in a 4.0 percent higher cost in overall instructional

expenditures than the peers. See **F3.6** and **F3.12** in **human resources** for an assessment of regular and special education teacher staffing levels. Furthermore, other instruction costs per pupil, which include tuition costs paid to other educational groups (See **F2.19**) and certificated staff insurance costs, is $134 higher than the peers.

As discussed in the **human resources**, **facilities**, and **transportation** sections of this report, recommendations were made to reduce staffing, optimize facility usage, reduce benefit costs, and optimize bus routing procedures. These recommendations, if implemented, could potentially reduce expenditures and are further supported by the analysis in **Table 2-9** which shows the following:

- In the support service expenditures function, Medina CSD spent $419 per pupil in pupil support services, which is approximately 12.0 percent higher than Stow CSD and 35.6 percent higher than Strongsville CSD. See **R3.2.**

- Medina CSD spent $438 per pupil in instructional support services, which is approximately 36.9 percent higher than the peer average of $320. See **R3.2.**

- Medina CSD spent $523 per pupil in administration support, which is approximately 33.8 percent higher than Stow CSD and 32.2 percent higher than Strongsville CSD's administration support. See **R3.2**.

- Medina CSD spent $176 per pupil in fiscal services, which is approximately 27.5 percent higher than Stow CSD and 53.0 percent higher than Reynoldsburg CSD. Approximately 53.8 percent of the costs in Medina CSD are the fees paid to the Medina County Auditor for the collection of property taxes.

- Medina CSD spent $132 per pupil in business services, which is approximately 35.0 percent higher than the peer average of $99. See **R3.2.**

- The District spent $410 per pupil on transportation, which is approximately 15.8 percent higher than the peer average of $354. See **R5.2, R5.3, R5.8,** and **R5.9**.

- Medina CSD spent $795 per pupil in plant operation and maintenance, which is approximately 14 percent higher than the peer average of $696. See **R4.5** and **R4.8.**

- The District spent $135 per pupil in extracurricular activities, which is approximately 51.7 percent more than the peer average of $89. See **R3.6.**

F2.11 **Table 2-10** shows the total per pupil expenditures for governmental funds, including facilities acquisition and construction, and debt service.

Table 2-10: Total Government Expenditures by Function

USAS Function Classification	Medina CSD		Stow CSD		Strongsville CSD		Reynoldsburg CSD		Peer Average	
	$ Per Pupil	% of Exp	$ Per Pupil	% of Exp	$ Per Pupil	% of Exp	$ Per Pupil	% of Exp	$ Per Pupil	% of Exp
Total Government Funds Operational Expenditures	$7,937	99.2%	$7,073	95.6%	$8,179	100.0%	$7,212	94.2%	$7,523	96.9%
Facilities Acquisition & Construction Expenditures	$68	0.8%	$215	2.9%	$0	0.0%	$88	1.2%	$96	1.2%
Debt Service Expenditures	$0	0.0%	$114	1.5%	$0	0.0%	$353	4.6%	$148	1.9%
Total Government Funds Operational Expenditures	**$8,005**	**100.0%**	**$7,402**	**100.0%**	**$8,179**	**100.0%**	**$7,654**	**100.0%**	**$7,767**	**100.0%**

Source: District 4502's, Exhibit 2

Table 2-10 shows that Medina CSD's per student operational expenditures are higher than two of the peers, and 3.1 percent or $238 higher than the peer average. The $68 per pupil spent on facilities acquisition and construction expenditures is attributed to the rental of the District's modular classrooms. As described in the **facilities section** of this performance audit, Medina CSD used its modular classrooms during the expansion of the high school.

R2.7 Medina CSD should closely examine the spending patterns indicated in **Table 2-9** and **Table 2-10** and consider reallocating the monies it is currently receiving toward those programs and priorities which have the greatest impact on improving the students' educational outcomes and maintaining its effective performance rating from ODE. In addition, Medina CSD should closely analyze the cost reductions recommended in the **human resources**, **facilities**, and **transportation** sections of this report to aid it in managing its projected deficits for the forecasted period.

F2.12 Medina CSD has strived to inform the community of its financial state and to generate interest and involvement in its affairs. There is a very active local public as well as an interactive web site, continuous press releases, and televised board meetings for public viewing. Medina CSD relies very heavily on the televised board meetings to reach the local community and encourage involvement in school affairs.

C2.2 Community involvement through open communication allows Medina CSD the opportunity to raise public awareness about new construction projects. The greater the public awareness, the greater the level of trust between the citizens within the community and Medina CSD. By expressing educational and financial concerns to the citizens, Medina CSD is capitalizing on an opportunity to gain public acceptance and awareness for educational and financial issues facing the District.

F2.13   Medina CSD does not have a formalized strategic planning process. The District developed a strategic plan in 1995, which was adopted by the Board. The strategies developed were intended to guide Medina CSD's curricular and operational development. While the strategies included goals, they did not include action plans, implementation guidelines, or time frames for accomplishment. The strategic plan also failed to include the financial implications of each goal which may have limited Medina CSD's ability to operate within its budgetary parameters. There is no evidence that the strategic plan is tied to Medina CSD's budget or long-term forecast. Also, the plan has not been revisited since it was written, meaning it has not been updated to reflect current needs, and the plans have not been reviewed for goal accomplishment.

       GFOA states a government entity should have broad goals that provide overall direction for the entity and serve as a basis for decision making. Goals are developed after undertaking an assessment of community conditions and other external factors, and a review of the internal operations of the government entity. A government entity should develop an understanding of the condition of the local community, and trends and issues that may affect it in the future. This process requires an examination and assessment of stakeholder issues, concerns, needs, and desires. Factors to consider may include the state of the economy, the composition of the population, legal or regulatory issues, and physical concerns of the entity.

R2.8   Medina CSD should prepare a broad, comprehensive strategic plan, re-evaluating and updating the portions of the 1995 plan which were not implemented, and incorporating meaningful new long-range goals and objectives. The strategic plan should include broad goals that provide overall direction for the short and long-range plans, as recommended by GFOA. All long-range factors should be included, such as collective bargaining, facility utilization, community wants and needs, and capital requirements. The plan documentation should include both implementation and resource allocation schedules. Short-range plans and budgets should be developed to be consistent with these long-range parameters. The entire planning process should then be driven by a clearly articulated vision of where Medina CSD wants to be in the future. This is particularly important for a district which must maximize the effectiveness of its potentially limited resources.

F2.14   Medina CSD has not prepared a long-range capital plan. The District does not have an overall capital plan for growth or future needs, especially in the area of facility planning. The District does prepare a capital improvement plan to coincide with the permanent capital improvement levy passed every five years. Medina CSD receives approximately $650,000 each year from this levy. The District uses outside architects and engineers, along with its school principals and maintenance staff, to evaluate anticipated needs for the five years the levy is in effect. The improvements are assigned priorities and are accomplished on an annual basis to coincide with available levy funds. The permanent

improvement levy plan contains on-going repairs, maintenance, and additions to fixed assets as outlined by the purpose of the levy. This plan is reviewed annually for potential emergency repairs, such as roof leaks. Emergency repairs are paid from the annual levy funds and require an adjustment to the intended schedule. See the **facilities section** of this performance audit for more information about facility planning.

The long-range capital plan would be used to guide Medina CSD in completing long-term capital needs and capital improvement decisions. The plan would outline when and where permanent capital additions would be needed, an estimate of their future costs, and a time when the addition would be needed to be placed on the ballot for voter approval. Medina CSD is currently growing at a fast pace and is expected to continue growing by approximately 200 students per year in the immediate future. As a result of this fast growth, the District relies heavily on leased trailers to fill the need for classrooms. A capital plan, when shared with the voting public, will enhance voter confidence in passing issues to support facility additions or new structures.

GFOA recommends a government entity identify its present and future capital needs. A capital plan assessment would become part of the strategic plan and be driven by the wants and needs of the community. The assessment would include an evaluation of issues, challenges, and opportunities affecting the provision of capital assets in the future, such as community needs and priorities; funding issues; economic, demographic, or other factors that may affect demand; and legal or regulatory issues. Additions to address future needs are placed within the plan when needed and removed when they are not needed.

R2.9   Medina CSD should establish a clear, concise long-range capital plan. The plan should outline future population and student growth within Medina CSD, and be detailed for at least five years to coincide with the five-year forecast. By establishing the plan and presenting it to the public, Medina CSD will establish a degree of confidence in the voting public to support future capital needs and promote discussions on the goals by creating a pattern for capital decision making needed within the District. The plan should contain all capital additions planned for the District, from new facilities to technological improvements, and present them in a manner easily understood by all stakeholders. Medina CSD should assess all areas of the capital plan, from the wants and needs of the community to funding requirements.

F2.15   As required by the Ohio Administrative Code, Medina CSD issues audited financial statements prepared in accordance with GAAP. While complying with the requirement to issue GAAP financial statements, Medina CSD does not prepare a Comprehensive Annual Financial Report (CAFR) as recommended by the GFOA. With the preparation of the CAFR, another version of the report, a Popular Annual Financial Report (PAFR) may also be made available to the public. A PAFR is a condensed supplement to the

CAFR and is aimed at providing information in a format more easily understood by the general public.

R2.10 Medina CSD should prepare and issue a CAFR in the format recommended by the GFOA. This expanded report format will provide more information about Medina CSD's environment, past spending decisions and future commitments, as well as budgetary basis statements and supplemental statistical information.

Medina CSD should also publish and circulate a PAFR. The PAFR should supplement the CAFR, and should describe Medina CSD's financial condition and results of operations in a condensed format. The PAFR should be aimed at providing objective information to the local citizens in a clear and concise manner, using narrative, charts, and graphs to interpret financial data and to help identify trends. Medina CSD should be able to produce both of these reports using in-house accounting staff. Any costs associated with the production of the reports should be limited to minor printing and production.

F2.16 Medina CSD receives many state and federal grants for specific programs. Grants are applied for by various faculty members with guidance from the department of instruction and an approval signature from the treasurer's office. However, there is no policy stating that Medina CSD should pursue grants that align with the educational mission. There is also no guidance concerning the minimal grant amount required to ensure that the grant is financially beneficial.

R2.11 The treasurer's office and department of instruction should coordinate grant seeking efforts to ensure grants are consistent with the educational mission of the District and that pursuit of this additional funding is financially beneficial. This coordinated grant program should receive joint oversight from the instruction department and the treasurer's office. The director of instruction should evaluate the grants' educational benefits while the treasurer should evaluate the net cost of administration. Staff within Medina CSD should make a conscious effort to be aware of continuing grant opportunities and communicate them to the director of instruction and the treasurer through a formal written process prior to submitting an application.

F2.17 **Table 2-11** is being presented as a potential financial forecast for Medina CSD management to use to assess the financial condition of the District. It is a management tool to be utilized to assess the impact that implementation of the various performance audit recommendations will have on Medina CSD's financial condition. The forecast presented contains the same financial projections as presented in **Table 2-2**, with additional lines to reflect the financial implications and implementation costs associated with the performance audit recommendations. However, adjustments were made to the

financial projections in **Table 2-2** based upon analysis conducted in this report, which include the following:

- Reducing the number of new employees the District would hire in FY 2002-03 through FY 2006-07, which reduces expenditures for salaries and benefits (See **Table 2-5B**).

- Including a 8.5 operating levy on the May 2004 ballot, which will yield annual revenue of approximately $4.4 million in FY 2004-05, and $8.8 million in FY 2005-06 and FY 2006-07 (See **Table 2-5C**). Since the levy would not take effect until January 2005 if passed in May 2004, Medina CSD would only be able to generate half of the total revenue resulting from the 8.5 mill levy in FY 2004-05.

Table 2-11: Proposed Financial Stability Plan

	Actual 1999-00	Actual 2000-01	Actual 2001-02	Forecast 2002-03	Forecast 2003-04	Forecast 2004-05	Forecast 2005-06	Forecast 2006-07
Real Estate Property Tax	$29,733,293	$31,146,412	$32,150,846	$33,638,991	$35,049,171	$36,555,382	$38,109,121	$39,472,894
Unrestricted Grants-in-Aid	11,042,484	12,802,286	16,114,929	15,604,102	16,249,026	15,453,407	16,306,259	16,388,004
Restricted Grants-in-Aid	159,188	74,371	286,943	71,207	71,207	71,207	71,207	71,207
Property Tax Allocation	2,897,746	3,069,973	3,189,892	3,237,302	3,366,434	3,495,923	3,632,141	3,740,117
Other Revenues	1,884,594	2,389,320	1,665,492	1,305,731	1,106,731	1,006,731	906,731	906,731
Total Operating Revenue	**$45,717,305**	**$49,482,362**	**$53,408,102**	**$53,857,333**	**$55,842,569**	**$56,582,650**	**$59,025,459**	**$60,578,953**
Salaries & Wages (See **Table 2-5B**)	$28,447,131	$30,458,404	$33,607,650	**$37,746,873**	**$40,025,364**	**$42,456,524**	**$45,205,931**	**$48,018,381**
Fringe Benefits (See **Table 2-5B**)	8,182,999	8,722,974	10,237,659	**$12,877,486**	**$14,187,435**	**$16,207,574**	**$17,860,327**	**$19,686,402**
Purchased Services	2,993,456	3,704,905	4,068,087	5,198,015	5,392,114	5,626,758	5,898,798	6,134,755
Supplies, Materials & Textbooks	1,202,290	1,394,372	1,477,583	1,735,755	1,750,475	1,784,208	1,881,614	1,956,875
Capital Outlay	1,148,088	1,842,078	1,195,438	1,323,647	1,393,043	1,427,503	1,488,898	1,548,453
Other Expenditures	972,936	1,017,812	1,028,314	1,225,816	1,250,593	1,289,544	1,331,677	1,384,944
Performance Audit Recommendations Implementation	**0**	**0**	**0**	**($176,000)**	**(1,889,000)**	**($4,841,000)**	**($4,968,000)**	**($5,098,000)**
Costs	**0**	**0**	**0**	**$0**	**$220,000**	**0**	**0**	**0**
Total Operating Expenditures	**$42,946,900**	**$47,140,545**	**$51,614,731**	**$59,931,592**	**$62,330,024**	**$63,951,111**	**$68,699,245**	**$73,631,810**
Net Transfers/Advances In/(Outs)	(351,753)	(170,227)	(189,756)	(43,933)	(46,290)	(48,742)	(51,292)	(53,197)
Net Financing	(351,753)	(170,227)	(189,756)	(43,933)	(46,290)	(48,742)	(51,292)	(53,197)
Result of Operations (Net)	2,418,652	2,171,590	1,603,615	**($6,118,192)**	**($6,533,745)**	**($7,417,203)**	**($9,725,078)**	**($13,106,054)**
Beginning Cash Balance	18,184,367	20,603,019	22,774,609	$24,378,224	$18,260,032	$11,726,287	$8,700,084	$7,756,006
Operating Levy (See **Table 2-5C**)	**0**	**0**	**0**	**0**	**0**	**4,391,000**	**8,781,000**	**8,781,000**
Ending Cash Balance	20,603,019	22,774,609	24,378,224	$18,260,032	$11,726,287	$8,700,084	$7,756,006	$3,430,952
Outstanding Encumbrances	(2,463,323)	(2,299,640)	(3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)	($3,124,847)
Ending Fund Balance	**$18,139,696**	**$20,474,969**	**$21,253,377**	**$15,135,185**	**$8,601,440**	**$5,575,237**	**$4,631,159**	**$306,105**

Source: Treasurer's Office

Accompanying tables (**Table 2-11A** and **Table 2-11B**) summarize the financial implications associated with the recommendations contained within this report. Some recommendations could be implemented immediately, while others will require further management action to realize the proposed savings. In addition, implementation costs and cost avoidances associated with the various recommendations are also summarized.

Moreover, the impact of the performance audit's financial implications on the ending fund balances throughout the forecasted period will depend on when Medina CSD fully implements the recommendations. Therefore, the ending fund balances in **Table 2-11** could change if Medina CSD does not implement the recommendations in a timely manner, which could subsequently affect the levy amount needed to help the District avoid future financial difficulties.

The performance audit recommendations presented in **Table 2-11A** are broken down into two categories; those recommendations subject to negotiation and those recommendations not subject to negotiation. **Table 2-11B** presents the implementation costs associated with various recommendations contained within the performance audit.

For Medina CSD to maintain financial stability, it may be necessary to make difficult management decisions. This performance audit provides a series of ideas and recommendations which Medina CSD should consider. However, this audit is not all inclusive, and other cost savings and revenue enhancements should be explored and incorporated into the financial planning of Medina CSD.

Table 2-11A: Summary of Performance Audit Recommendations

	Recommendations	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
R2.4	**Revenue Enhancements** Medina CSD and City of Medina Shared Recreation Center Costs	$176,000	$365,000	$380,000	$395,000	$410,000
	Recommendations Not Subject to Negotiation					
R3.2	Reduction in administrative staff	$0	$254,000	$262,000	$270,000	$278,000
R3.5	Reduction in Teaching Staff	$0	$0	$1,163,000	$1,198,000	$1,234,000
R3.7	Reduction in supplemental contract positions	$0	$125,000	$129,000	$133,000	$137,000
R3.8	Reduction in classified leave usage	$0	$21,000	$22,000	$23,000	$24,000
R4.5	Implement energy conservation program	$0	$200,000	$200,000	$200,000	$200,000
R4.8	Reduction of maintenance staff	$0	$267,000	$276,000	$286,000	$296,000
R5.1	Route reduction	$0	$35,000	$35,000	$35,000	$35,000
R5.4	Spare Bus Reduction	$0	$252,000	$252,000	$252,000	$252,000
R5.7	Fuel Storage Facility	$0	$56,000	$56,000	$56,000	$56,000
R5.7	Transportation Garage	$0	36,000	$36,000	$36,000	$36,000
R5.8	Staff reduction	$0	$33,000	$34,000	$35,000	$37,000
R6.11	Five-year computer replacement	$0	($328,000)	($328,000)	($328,000)	($328,000)
R6.21	Annual technology training	$0	($12,000)	($12,000)	($12,000)	($12,000)
	Total Recommendations Not Subject to Negotiation	**$176,000**	**$1,304,000**	**$2,505,000**	**$2,579,000**	**$2,655,000**
	Recommendations Subject to Negotiation					
R3.3	Add an instructional period, allowing for reductions in Teaching Staff	$0	$0	$1,751,000	$1,804,000	$1,858,000
R3.9	Implement contribution to healthcare premiums	$0	$302,000	$302,000	$302,000	$302,000
R3.10	Employee contribution to health dental premiums	$0	$36,000	$36,000	$36,000	$36,000
R3.11	Reduction of severance pay	$0	$86,000	$86,000	$86,000	$86,000
R3.12	Elimination of early retirement incentive	$0	$141,000	$141,000	$141,000	$141,000
R3.13	Elimination of class size limits	$0	$20,000	$20,000	$20,000	$20,000
	Total Recommendations Subject to Negotiation	**$0**	**$585,000**	**$2,336,000**	**$2,389,000**	**$2,443,000**
	Total Recommendations Included in Forecast	**$176,000**	**$1,889,000**	**$4,841,000**	**$4,968,000**	**$5,098,000**

Source: Financial Implication Summaries for all sections of this performance audit

Table 2-11B summarizes the implementation costs associated with the various recommendations contained within the performance audit.

Table 2-11B: Implementation Costs

	Recommendation Implementation Costs	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
R5.7	Implement a fuel storage facility	$0	$120,000	$0	$0	$0
R5.7	Transportation Garage	$0	$100,000	$0	$0	$0
	Total Implementation Costs	**$0**	**$220,000**	**$0**	**$0**	**$0**

Source: Financial Implication Summaries for all sections of this performance audit

B. Procurement and Payroll

Background

This section focuses on the purchasing and vendor payment functions within Medina CSD. The District purchases all products and services directly and does not maintain a warehouse operation for distribution. This section also focuses on time and attendance reporting, payroll transaction processing, paycheck generation and distribution, required external reporting, and benefits administration.

Procurement

The purchasing function for Medina CSD is under the supervision and direction of the business manager. **Chart 2-1** presents the reporting relationship of the purchasing function.

Chart 2-1: Medina CSD Procurement Operation
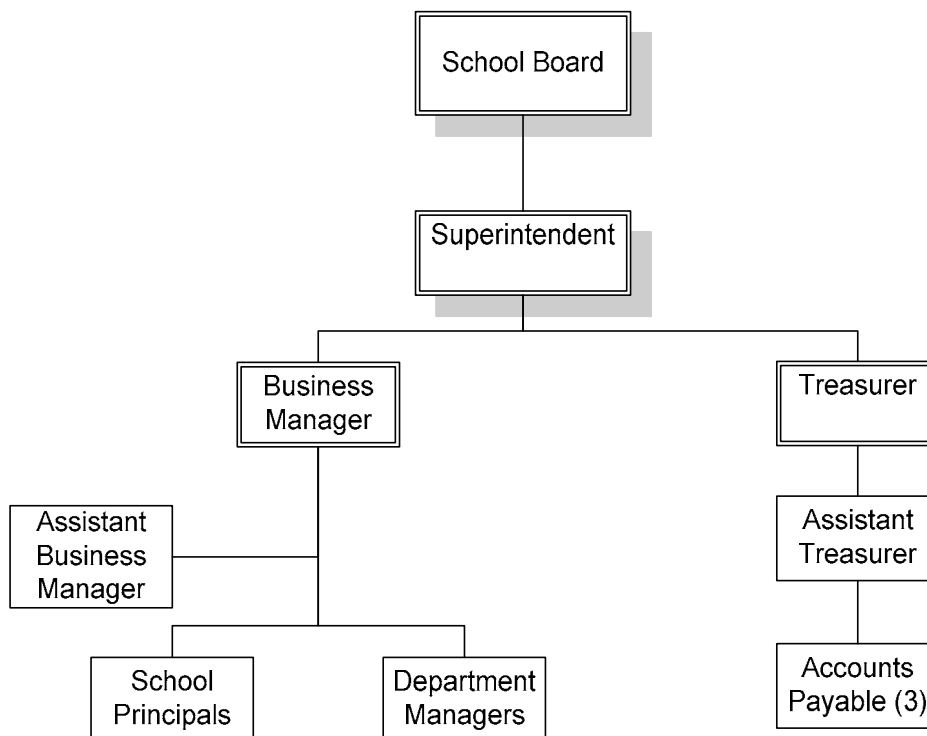
As stated previously, the school principals and department managers are given control over budgeting and purchasing for their schools or departments. The school principals and department managers begin the process by completing automated requisitions that are forwarded to the accounts payable group on a daily basis for processing. The requisitions are batched and sent to the treasurer and the business manager for approval. After both the treasurer and business manager approve the requests, the batch of requisitions is sent back to accounts payable to be converted into purchase orders. When the requests are converted into purchase orders, they are assigned consecutive purchase order numbers controlled by school or department number. The completed purchase orders are submitted back to the school principals and department managers for the ordering of goods and services.

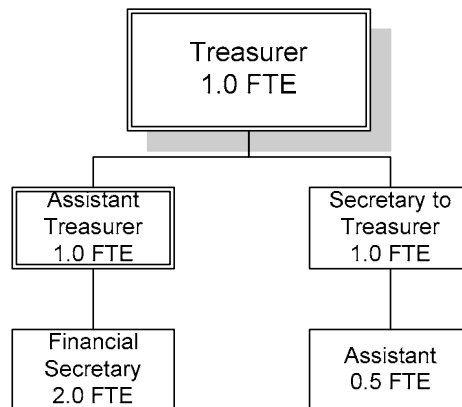Purchase orders are prepared on an annual basis for bulk goods or services, such as copy paper, needed throughout the year or on an as needed basis by the school principals or department managers. The only deviation from this order system is for the purchase of textbooks. The director of instruction is responsible for ordering textbooks and related educational materials directly from the publisher. The purchase of instructional material is mainly completed on an annual basis and the procurement steps previously described are followed.

Under ORC § 3313.46, school districts must solicit bids to build, repair, enlarge, improve or demolish a school building whenever the cost exceeds $25,000. Items covered by the competitive bid rules include capital projects and school buses. The business manager is responsible for soliciting bids on behalf of Medina CSD.

When orders are filled, the items are delivered to the individual buildings. Packing slips are matched with the purchase order at the building that the supplies are shipped to, and the packing slip and copy of the purchase order is forwarded to the accounts payable office. Vendor invoices are delivered to the accounts payable office. The accounts payable office recalculates the invoices to verify pricing and the vendor total with shipping and handling charges. If the accounts payable area receives an invoice from a vendor, but does not receive a copy of the packing slip from the receiving department, a memo is sent to the department to verify that the delivery was received. A memo is also sent when the invoice amount is more than the original purchase order amount. When a potential problem with the payment amount or quantity occurs, the school principal or department manager is responsible for notifying accounts payable that the payment is not to be made until the situation is rectified.

Payroll

Chart 2-2 illustrates the organizational structure and reporting relationships for the employees who are primarily involved in collecting time and attendance information, processing payroll, distributing paychecks, tracking leave balances, and administering benefits.

Chart 2-2: Medina CSD Payroll Organization

```
                    ┌─────────────────┐
                    │    Treasurer    │
                    │     1.0 FTE     │
                    └────────┬────────┘
              ┌──────────────┴──────────────┐
       ┌──────┴──────┐              ┌────────┴────────┐
       │  Assistant  │              │  Secretary to   │
       │  Treasurer  │              │   Treasurer     │
       │   1.0 FTE   │              │    1.0 FTE      │
       └──────┬──────┘              └────────┬────────┘
       ┌──────┴──────┐              ┌─────────┴───────┐
       │  Financial  │              │    Assistant    │
       │  Secretary  │              │    0.5 FTE      │
       │   2.0 FTE   │              │                 │
       └─────────────┘              └─────────────────┘
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The financial secretaries in the payroll department are responsible for the preparation of the bi-weekly payroll. The secretary to the treasurer and her part-time assistant are responsible for the administration and control of benefits for Medina CSD. In addition to the payroll department, staff members at the school and department level are also involved in the gathering of payroll information. The school and department level secretaries are responsible for time and attendance, and for remitting the attendance sheets to the payroll department. Among the responsibilities of the payroll department are the processing, posting, and tracking of hours worked and leave hours used; the tracking and monitoring of merit pay increases; the control of information to and from the Lake Erie Education Computer Association (LEECA); the preparation of payroll checks or direct deposit drafts; and the maintenance of all personnel files, teacher certifications, transcripts, supplemental contracts, and salary notices.

Benefits administration at Medina CSD is completed by the secretary to the treasurer and a part-time assistant. The secretary and her assistant obtain information from new employees for the selection of the benefits package, prepare change forms for new benefit selections, and prepare communications to the payroll department regarding needed changes. Benefits information is obtained and written on a form to communicate the changes to the payroll department, and a copy is placed within the employee's personnel file. The secretary compares benefits paid to control records for assurance new inputs and changes are correct. See the **human resources** section of this report for further discussion of this function.

The operation of Medina CSD's payroll department falls under the authority of the treasurer. The following functions fall within the parameter of the payroll department:

- Issue accurate payroll checks or direct deposits to employees;
- Produce statements of employee compensation;
- Accurately withhold and remit payroll taxes and other deductions;

- File required reports with external entities such as the Internal Revenue Service, the State of Ohio, retirement systems, and various municipalities;
- Comply with unemployment, workers compensation, and COBRA requirements; and
- Perform benefits administration and control.

Medina CSD employees are designated as either certificated or classified and are paid on a bi-weekly basis. Pay dates are scheduled on the last day of the pay period for all employees. Certified personnel include principals, assistant principals, teachers, counselors, therapists, nurses, librarians, coaches, social workers, psychologists, and certain supervisors and directors. Classified personnel include instructional assistants, maintenance workers, custodians, maintenance personnel, food service workers, secretaries, and certain classified supervisors and administrators.

Payroll information is accumulated similarly for certificated and classified employees. Certificated and classified employees are compensated based upon a yearly salary. Daily arrival and departure times are not recorded unless there is an exception to their contractual hours (i.e. sick time, extra duty) which would affect their pay. This method is known as payroll by exception. Exceptions include, but are not limited to, a change in scheduled hours, classroom supervision by personnel other than those assigned, overtime worked, or payment due to a supplemental contract. An exception could occur for other situations detailed within the contracts.

Information on payroll exceptions is obtained in the same fashion for certificated and classified staff. When an employee is unexpectedly absent, the employee contacts their school or department. These absences are recorded at each location to generate a daily attendance report for department managers and school principals to review. To monitor this process, certificated and classified staff absence information is gathered on bi-weekly personnel absentee report which is signed by the employee. All unexpected absence forms are due to the payroll department by the Monday after the end of a two week payroll period.

The secretary to the treasurer, with help of a half-time clerical person, administers fringe benefits. The benefit responsibilities include informing new employees about available benefits, reviewing insurance billings, determining benefits eligibility based on employee or union contracts, and coordinating the Bureau of Workers' Compensation program. Changes to benefits are recorded in the individual personnel files and then forwarded to the payroll department to be input to employee records. See the **human resources** section of this report for additional information about types of benefits offered and the benefit function.

Performance Measures

The following performance measures were used to analyze the procurement and the payroll functions:

- Adherence to purchasing policies and procedures;
- Effectiveness of internal controls for purchasing;
- Adequacy of purchasing system.
- Effectiveness and efficiency of payroll transaction processing;
- Effectiveness of payroll system; and
- Adequacy of payroll policies and procedures

Findings / Commendations / Recommendations

Procurement and Payroll

F2.18   **Table 2-12** displays selected discretionary expenditures in FY 2001-02 as a percent of total General Fund expenditures for Medina CSD and the peers.

Table 2-12: Discretionary Expenditures

	Medina CSD	Stow CSD	Strongsville CSD	Solon CSD FY 2001	Peer Average
Prof. and Technical Service	1.3%	1.9%	1.8%	1.3%	1.6%
Property Services	2.2%	1.7%	0.7%	1.8%	1.4%
Mileage/Meeting Expense	0.3%	0.2%	0.1%	0.2%	0.2%
Communications	0.5%	0.2%	0.3%	0.2%	0.2%
Contract, Craft or Trade Service	0.0%	0.1%	0.1%	0.1%	0.1%
Pupil Transportations	0.0%	0.0%	0.2%	0.2%	0.1%
Other Purchased Service	0.0%	0.1%	0.5%	0.0%	0.2%
General Supplies	1.0%	0.9%	0.5%	1.4%	0.9%
Textbooks/Reference Materials	0.8%	0.5%	0.2%	0.9%	0.5%
Supplies & Materials for Resale	0.0%	0.0%	0.0%	0.0%	0.0%
Food & Related Supplies/Mat	0.0%	0.0%	0.0%	0.1%	0.0%
Plant Maintenance and Repair	0.7%	0.4%	0.5%	0.5%	0.5%
Fleet Maintenance and Repair	0.4%	0.6%	0.6%	0.5%	0.6%
Other Supplies & Materials	0.0%	0.0%	0.1%	0.0%	0.0%
Land, Building & Improvements	0.0%	2.1%	0.2%	0.0%	0.8%
Equipment	1.2%	1.5%	0.5%	1.0%	1.0%
Buses/Vehicles	1.1%	0.1%	0.5%	0.5%	0.4%
Other Capital Outlay	0.0%	0.0%	0.0%	0.0%	0.0%
Dues and Fees	1.9%	1.3%	1.3%	0.0%	0.9%
Insurance	0.1%	0.1%	0.2%	0.0%	0.1%
Awards and Prizes	0.0%	0.0%	0.0%	0.0%	0.0%
Miscellaneous	0.0%	0.4%	0.0%	0.0%	0.1%
Total	**11.4%**	**12.1%**	**8.1%**	**8.7%**	**9.5%**

Source: ODE Form 4502, Schedule P, FY 2002
         ODE Form 4502, Schedule P, FY 2001 for Solon

Table 2-12 shows Medina CSD's percentage of discretionary spending exceeds the peer average in 9 out of 22 categories. The most significant expenditure categories in which Medina CSD exceeds the peer average include property services, communication, buses/vehicles, dues and fees, and textbooks.

- Property services expenditures are higher than the peers due to the leasing of classroom modulars for the high school;
- Expenditures for communications are higher at Medina CSD than the peers because of improvements to the current District telephone system. As part of the new high school construction, the present communication system is being replaced with a new, fiber optic system which is expected to reduce costs;
- Medina CSD bids annually for buses. However, there is currently no formal District policy on the replacement of older buses. See the **transportation section** of this performance audit for more information regarding the District's bus replacement practices;
- Dues and fees include the costs paid to the Medina County Auditor for the collection of property taxes (See **F2.10**) and the cost of the annual financial audit; and
- Textbook purchases were needed in FY 2001-02 for the opening of the new elementary school and to replace other elementary books in the system.

F2.19 **Table 2-13** presents Medina CSD purchased services comparison for the FY 2000-01 and FY 2001-02.

Table 2-13: Medina CSD Purchased Services

	FY 2001	FY 2002	Increase (Decrease)
Purchased Services:			
Prof. and Technical Services	$704,810	$655,561	-7.0%
Property Services	$1,124,314	$1,167,978	3.9%
Travel Mileage/Meeting Exp.	$162,876	$148,660	-8.7%
Communications	$219,530	$236,601	7.8%
Utilities	$996,101	$1,252,313	25.7%
Contract/Craft/ Trade Services	$14,733	$9,648	-34.5%
Tuition	$473,940	$589,404	24.4%
Pupil Transportation Services	$8,600	$7,922	-7.9%
Other Purchased services	$0	$0	0.0%
Total Purchased Services	$3,704,904	$4,068,087	9.8%
Supplies and Materials:			
General Supplies	$493,055	$518,332	5.1%
Textbooks	$332,928	$345,936	3.9%
Library Books	$25,263	$24,923	-1.3%
Periodicals and Films	$25,805	$28,502	10.5%
Supplies and Materials	$0	$0	0.0%
Food Supp. And Mat.	$14,795	$14,920	0.8%
Maint and Repair to Plant	$323,394	$340,998	5.4%
Maint and Repair to Fleet	$203,917	$203,974	0.0%
Other Supplies and Materials	$0	$0	0.0%
Total Supplies and Materials:	$1,419,157	$1,477,585	4.1%

Source: ODE Form 4502, Schedule P, FY 2001 and FY 2002

The increase in utilities is due to the opening of the new elementary school in FY 2002. Tuition costs represent expenditures for students the District would normally be responsible for educating if they attended Medina CSD. These students have elected other education methods or have special education needs not provided by the District. Due to the small percent of overall change between the years, no further testing is needed.

F2.20   Medina CSD has implemented strategies for purchasing and asset management. **Table 2-14** depicts national best practices and Medina CSD's status in these activities.

Table 2-14: National Best Practices for Purchasing and Asset Management

Best Practices	Medina CSD's Response
1.) Volume purchases are annually negotiated for discounts.	Medina CSD negotiates volume purchases for supplies on an annual basis for delivery to the schools and departments on a quarterly basis.
2.) Vendor performance is monitored.	Medina CSD does not monitor vendor performance. See **R2.12.**
3.) A list of recommended or preferred vendors (including minority vendors) is compiled.	Medina CSD does not have a preferred vendor list. Purchases that are made throughout the year are made through any vendor provided the funds are appropriated to that school or department. See **R2.12**.
4.) Vendor catalogs - containing item numbers, descriptions and prices - are maintained and accessible.	Each school or department maintains its own list of vendor catalogs. See **R2.12**.
5.) Auctions of surplus furniture and equipment are conducted.	Auctions are organized at the administrative level when it is deemed appropriate by the business manager. Medina CSD attempts to conduct an auction every June but occasionally conducts auctions on a bi-annual basis. All discarded fixed assts from buses to broken televisions and desks are sold. Each auction is open to the public for bidding for approximately 3 days.
6.) Procurement policies and procedures are summarized with processes for acquiring goods and services, preparing requisitions, and explaining the approval process	Medina CSD does not have purchasing procedures which detail how to get goods and services, how to prepare requisitions, or how to gain management approval. See **R2.13.**
7.) Time between purchase order submission and issuance is assessed.	Requisitions are turned into purchase orders within one day. Once the requisition is returned to the accounts payable department, the purchase order is issued to the requesting department, who then sends the purchase order to the vendor. See **F2.21**.
8.) Cycle time for vendor payments is assessed.	Once an invoice has been received, the accounts payable department will notify the operational unit manager for payment approval.
9.) Warehouses are used effectively	Medina CSD does not operate a warehouse.
10.) Information transmitted between purchasing and accounting/finance is efficient and effective.	Medina CSD does not have a purchasing department. Medina CSD has controls in place to ensure employees who are authorized to make purchases must obtain approval from the treasurer and/or business manager before purchases are made.

11.) Inventory and fixed assets are appropriate.	Medina CSD has developed two automated fixed asset inventory systems. The first system is maintained in the treasurer's office as an accounting control of fixed assets for general ledger purposes. The second system is under the business manager. It is a system from the insurance industry and, besides location, description, etc., describes maintenance and replacement cycles. The location and placement of fixed asset inventory items within Medina CSD can be accessed through either system. Fixed assets are disposed of when obsolete or otherwise not needed. They are sold, auctioned, relocated, or disposed of.

Source: GAO Statement for Contract Management, "Trends and Challenges in Acquiring Services; Preliminary Assessment of Functional Area: Financial Systems, pp: 25, 26; City of San Antonio Performance Review.

F2.21 Each operational unit must research potential vendors and products for just-in-time delivery to Medina CSD.   Additional effort is expended by school principals and department managers to locate a vendor to supply the product needed. Situations were recounted of items that were purchased from a vendor without regard to possible savings available from other vendors. Medina CSD's purchasing procedures lack vendor coordination and performance monitoring that would help to control the purchasing and costs of products.

R2.12 Medina CSD should perform an analysis of the routine purchases made by the school principals and department managers. Once a product list is compiled, Medina CSD should consider notifying vendors, as is done for large, bulk items needed throughout the school year, to submit a competitive bid to supply the items to Medina CSD. When vendor contracts are formed, each contract should include parameters such a maximum amount of supplies desired from the vendors, and an agreed upon delivery period and price. Contract negotiations could also stipulate supplying inventory items directly to the school and operational units. A preferred vendor list and catalog for each vendor should be distributed to all operational units to be used throughout the contract period. Compilation of departmental needs, management of competitive vendor bids and contracts should be completed by the business manager. Vendor performance should be monitored from the compiled information. These techniques would save the schools and operational departments considerable time researching supply items, locating vendors and negotiating purchasing terms as well as allowing the opportunity to take full advantage of Medina CSD's purchasing power.

F2.22 Medina CSD does not have a purchasing procedure manual which provides the details for acquiring goods and services, preparing requisitions, and gaining the appropriate level of management approval.   The treasurer's office is in the process of completing a purchasing manual to define the procedures followed in that office, but, it only outlines the processes followed in preparing requisitions and purchase orders. Employees in Medina CSD currently rely upon past experience to complete these activities.

Proper guidance and supervision is needed within this area to ensure that purchases made are made in line with Medina CSD's educational mission. Since purchases are completed at the school and department unit level, the procedures manual should detail steps needed to get goods and services, how to find the best vendors, how to prepare requisitions, and how to gain management approval.

R2.13 Medina CSD should create a district-wide purchasing manual, outlining and explaining the activities associated with making purchases, that could be referenced by all employees assigned purchasing responsibilities. New and current employees could become familiar with all purchasing activities and gain a basic understanding of what is required to complete an acquisition. The details of this procedures manual should the District's adopted practices for the completion of the purchasing process. Furthermore, a procedures manual would be a useful reference for employees to use when employees who perform the majority of purchasing activities are on vacation or leave.

F2.23 Medina CSD uses an electronic purchase order system provided through state software. When a requisition is entered into the system, and after approval is obtained, the purchase order is created the next day by the accounts payable department. Each requisition must have the business manager's and treasurer's signatures as authorization to complete the purchase order process. Once the appropriate signatures are on the requisition, the requisition can be turned in to the accounts payable department so that the purchase order can be generated and returned to the requestor for sending to the appropriate vendor. By utilizing the latest technology combined with adequate internal controls, Medina CSD effectively manages the requisition and purchase order process. The cycle time for a requisition to be turned into a purchase order is one day.

F2.24 Per Board policy, substitution, alteration, or revision of any textbook within four years of its selection and adoption requires a four-fifths vote of the Board. Medina CSD administration tries to ensure textbooks are replaced on a seven year cycle. This seven year cycle is normally interrupted only for technology or regulatory changes. Text book replacement is a one-year process; beginning with a representative group of elementary, middle, and high school faculty assembling to update the curriculum. To update the curriculum, various sources of data are examined, including data from standardized tests and other achievement tests. All major topics from the updated curriculum are sent to publishers requesting samples be sent to the school. Subsequently, Medina CSD receives and reviews the samples. Community members are invited to participate in this review along with the representative faculty from the initial curriculum review. Reviewers are asked to evaluate how well each of the samples received meets the new curriculum criteria. Once a textbook is selected, there is a negotiation process between the District and the publisher regarding prices. After the selection is made, the superintendent presents the selections for Board approval in June. The textbooks are ordered in July by the director of instruction for dispersal in August to the schools. Approximately 125

different textbooks are used at Medina CSD that are on this seven year cycle. Additional volumes of textbooks already being used are usually purchased during the summer and only when it has been determined that replacements are needed or an additional class of the subject will be offered.

R2.14 Medina CSD should review its published policy regarding the purchasing of textbooks. A revision should be made to reflect the practice determined to be the most effective for the District. By revising the policy, Medina CSD will ensure all readers of its policies and the actual persons participating in the acquisition process will know how the purchasing of textbooks is to occur.

F2.25 The payroll department has a LEECA manual which outlines steps to follow when using the payroll software application. Medina CSD's payroll department is working on a department procedural manual. Currently, there is no separate manual available to all parties which describes the procedures used in the payroll department to generate payroll. The lack of a manual could lead to difficulties in accomplishing responsibilities in an efficient manner when there is a change in payroll department personnel.

R2.15 Medina CSD should continue to compile and complete a formal payroll procedure manual containing district-specific procedures, detailed explanations of the expectations of the position, as well as a daily schedule of activities to be performed by person with payroll responsibilities. By providing a framework of expectations for this department, as well as expectations for the communications between the payroll department and other departments, the treasurer's office would ensure effective and efficient practices are maintained. This procedure manual should contain detailed explanations of procedures as well as a time line for the completion of daily, weekly, and bi-weekly activities.

Financial Implications Summary

The following table represents a summary of the annual revenue enhancements for the recommendations Medina CSD should consider in this section of the report. For the purpose of this table, only recommendations with quantifiable financial impacts are listed.

Summary of Financial Implications

	Revenue Enhancements				
Recommendations	**Forecast 2002-03**	**Forecast 2003-04**	**Forecast 2004-05**	**Forecast 2005-06**	**Forecast 2006-07**
R2.4 Addition of City of Medina Shared Recreation Center Costs to Forecast	$176,000	$365,000	$380,000	$395,000	$410,000
Totals	**$176,000**	**$365,000**	**$380,000**	**$395,000**	**$410,000**

Conclusion Statement

While the current basic financial needs of Medina CSD are being met, the District's five-year forecast shows a negative fund balance starting in FY 2004-05 and accumulating to approximately $44.5 million by FY 2006-07. To help reduce potential future deficits, Medina CSD should evaluate the recommendations contained within this performance audit, as well as other cost saving possibilities, as it formulates future budgets and forecasts. In addition, Medina CSD should closely examine the "what if" scenarios presented in this report to assess the financial effect of these recommendations on the District's current five-year forecast. Based on the analysis in this report, Medina CSD would have to receive revenue equal to a 8.5 mill operating levy to meet its projected expenditures, even if it implemented the performance audit recommendations and proposed hiring freeze. Furthermore, the projected ending fund balances could change if Medina CSD does not implement the recommendations in a timely manner, which could subsequently affect the levy amount needed to help the District avoid future financial difficulties. Therefore, Medina CSD should immediately begin reviewing the performance audit, and promptly implement the recommendations and additional strategies to improve efficiencies and save costs. Doing so would minimize the amount of additional revenue needed from its constituents.

Medina CSD is a fast growing school district. As a result of this growth, it should be developing a planning strategy that incorporates growth into its current and future needs, with an emphasis on when new monies are to be needed to fund educational and facility needs. Medina CSD appears to adequately plan for expenditures, based on current conditions. However, the District needs to establish a strategy in its planning to address the additional funding needed to meet its operating expenditures and capital needs as identified in its forecast.

An overall strategic plan should be developed to guide the District for the next five years. The strategic plan should address the growth of Medina CSD, with an emphasis on when new funds will be needed to address the District's educational goals and facility requirements. The strategic plan and five-year forecast should be updated regularly to reflect current conditions. Capital planning should be completed on an annual basis in detail to address the current conditions. The long and short-term strategic and capital planning goals and objectives should be shared with the general public for their input and feedback.

The forecasting results for Medina CSD have been relatively accurate. The forecasting method needs to be updated to a system more friendly to its users. At present, only the Medina CSD treasurer has access to the system and the knowledge to effectively use the system to produce a budget and forecast. Allowing only the treasurer to know the budget and forecasting system could lead to problems in the future. Medina CSD is addressing this issue with a new forecasting system, but diligence on converting to the system for FY 2004-05 should become a priority.

The five-year forecast as developed by Medina CSD should be accompanied by more detail in the assumptions furnished with the forecast. The assumptions presented to the readers should be in more detail and should follow the strategic plan as developed by the District. The detailed assumptions will enable the readers to follow the reasoning behind the figures presented and aid the reader in arriving at logical conclusions.

Although Medina CSD's payroll department appears to be operating effectively, the procurement practices and payroll system used in the Medina CSD should have procedure manuals to guide operations. Procedure manuals will enable all users to know how the systems work and what actions are needed to complete each function. Procurement within the District needs to establish better vendor control at the department and school level. Establishing preferred vendors and monitoring the vendors' performance should enable Medina CSD to control costs.

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Human Resources

This section of the report focuses on the human resources operations within Medina City School District (Medina CSD). Comparisons will be made throughout this section of the report to the following peer school districts: Strongsville City School District (Strongsville CSD), Stow-Munroe Falls Local School District (Stow-Munroe Falls LSD), and Pickerington Local School District (Pickerington LSD). Pickerington LSD is identified as a best practice school district because it has achieved 27 of the 27 standards set by the Ohio Department of Education (ODE). Medina CSD's peers were identified based on information from ODE, review of various demographic information and input from Medina CSD personnel.

Organizational Function

Medina CSD does not have a centralized human resource department. Human resource responsibilities are spread through several departments in the District, including the superintendent's office, the business manager's office and the treasurer's office. Primary human resource functions include the following:

- Coordinating employee recruitment and selection;
- Monitoring compliance with state mandated employment standards (background checks, license requirements, and previous employment verification);
- Monitoring contract renewals and continuous improvement plans for teachers and professional development plans for classified staff;
- Maintaining personnel files;
- Negotiating and administering union contracts;
- Maintaining productive labor-management relations;
- Negotiating and administering benefits;
- Recruiting personnel;
- Conducting new employee orientation;
- Placing substitutes; and
- Administering and monitoring grievance policies.

Chart 3-1 represents District employees involved in human resource activities.

Chart 3-1: Medina City School District Human Resource Function

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┌──────────────┐                              ┌──────────────┐
│ Superintendent│                              │   Treasurer  │
└──────────────┘     ┌──────────────┐          └──────────────┘
      │              │Superintendent's│
      │              │   Secretary   │
      │              └──────────────┘
┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐
│  Assistant   │   │   Business   │   │  Treasurer's │   │  Assistant   │
│Superintendent│   │   Manager    │   │   Secretary  │   │   Treasurer  │
└──────────────┘   └──────────────┘   └──────────────┘   └──────────────┘
┌──────────────┐   ┌──────────────┐   ┌──────────────┐   ┌──────────────┐
│Administrative│   │   Assistant  │   │    General   │   │   Financial  │
│  Services    │   │   Business   │   │   Secretary  │   │   Secretary  │
│ Coordinator  │   │   Manager    │   └──────────────┘   │   (payroll)  │
└──────────────┘   └──────────────┘                      └──────────────┘
                   ┌──────────────┐
                   │Business Office│
                   │ Administrator │
                   └──────────────┘
```
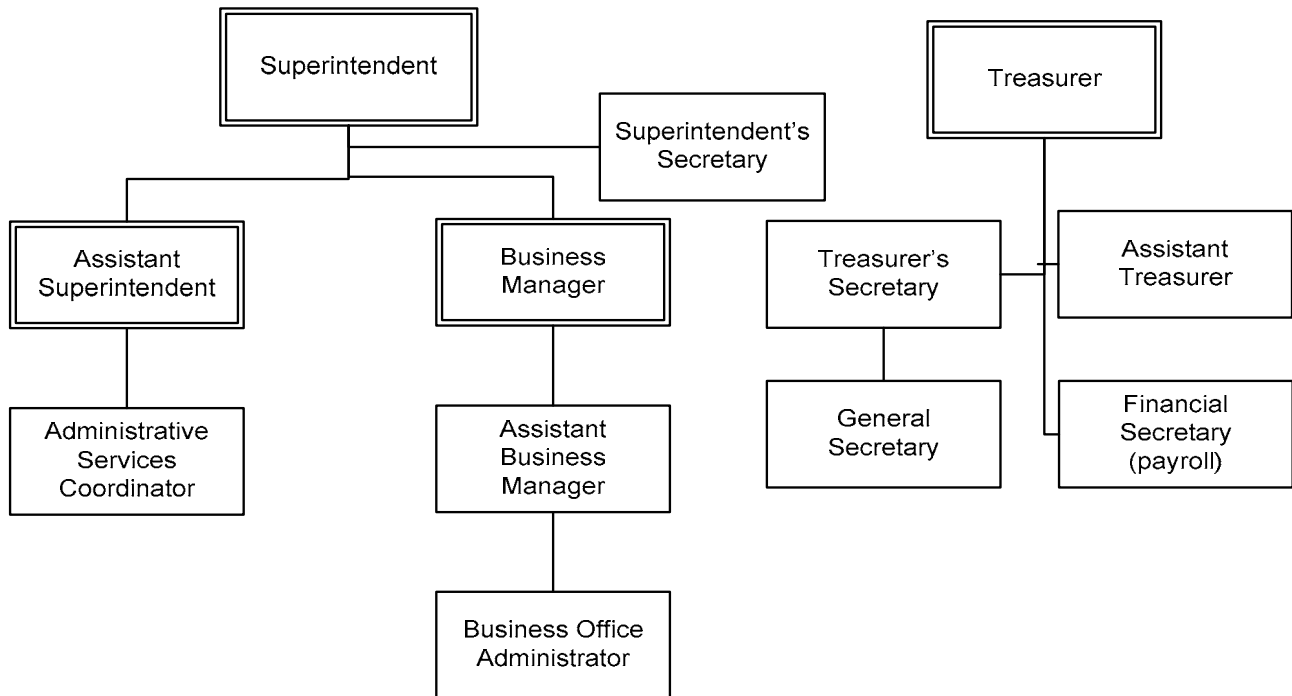
Source: Interviews with Medina CSD employees

Summary of Operations

All Medina CSD employees are categorized either as classified or certificated employees. Certificated personnel include principals, assistant principals, teachers, substitute teachers, counselors, therapists, nurses, librarians, coaches, social workers, psychologists and certain supervisors and directors. Classified personnel include instructional assistants, maintenance workers, custodians, maintenance personnel, food service workers, secretaries and certain classified supervisors and administrators.

Human resource functions are performed by several employees in several departments as noted in **Chart 3-1**. The assistant superintendent is involved in many human resource functions, including the negotiation of the union agreement every three years, the ongoing administration of the agreement and labor-management relations. In addition, the assistant superintendent provides counsel to the benefits secretary to resolve issues with benefits administration, and interviews all certificated employees as part of the hiring process to make hiring recommendations to the

Board. The assistant superintendent estimated that he devotes 50 percent of his time to human resources activities.

The administrative services coordinator (1.0 FTE) reports to the assistant superintendent. The following human resource related activities for are performed by the administrative services coordinator:

- Maintaining employee files;
- Maintaining contract renewal information;
- Maintaining certificate/license requirements;
- Administering the Local Professional Development program;
- Preparing all new hire paperwork and related verifications and background checks; and
- Overseeing the substitutes and the *Subfinder* system to place substitutes for certificated positions.

The administrative services coordinator receives assistance from the superintendent's secretary, who provides typing, filing, mailing and document preparation services. According to the superintendent's secretary, these human resource functions consist of approximately 50 percent of her total responsibilities.

Human resource responsibilities for classified employees are handled in the business office. The business manager oversees the recruitment, supervision, and evaluation of classified employees in the District; develops training and development programs for classified staff; and oversees supervisory staff. Approximately 25 percent of the business manger's responsibilities are related to human resources. The assistant business manager's responsibilities include managing worker's compensation and unemployment tracking; assisting in contract negotiations and interpretations; and meeting with employees and researching human resource issues.

The business office administrator is responsible for the majority of day-to-day human resource activity for classified staff, which consists of approximately 85 percent of her duties. The business office administrator prepares all classified job descriptions and postings; maintains employee files; communicates with payroll regarding employee status and leave requests; prepares grievance paperwork; and prepares all employment and pre-employment paperwork. Substitutes for classified positions are handled in different ways. Transportation, food service, and maintenance handle their own substitutes, while other substitutes are called in by the switchboard. However, the District will soon utilize the *Subfinder* system for classified positions as well.

The treasurer's secretary spends the majority of her time (80 percent) completing the benefits administration function for both classified and certificated employees. The treasurer's secretary also occasionally enlists the assistance of the part-time switchboard operator. As part of the benefits administration function, the treasurer's secretary is responsible for monitoring benefit eligibility; meeting with new employees to explain benefits and paperwork; entering address and status changes; tracking employees that are making contributions to premiums; answering employee questions and resolving benefit discrepancies. Employee benefit information is entered into the LEECA payroll system and every person enrolled for benefits is listed in a spreadsheet file. According to the treasurer, approximately 20 percent of the general secretary's time is devoted to the *Subfinder* system and 80 percent to other human resources functions.

Finally, there are two financial secretaries dedicated to payroll functions. They receive initial employment, or change of status information either from the business office for classified employees or from the administrative services coordinator for the certificated and administrative employees. This information is entered into the LEECA payroll system used by Medina CSD. The payroll department also receives leave information and enters it into the payroll system for tracking. Although payroll is typically a treasurer's office function, leave usage tracking is usually considered a human resources activity.

Performance Measures

The following performance measures were used to review Medina CSD's human resources functions:

- Obtain information to understand the historical and background information regarding its human resources operations;

- Assess the staffing levels of Medina CSD in FTEs compared to the peer districts;

- Assess the teachers' workday and student-to-teacher ratios;

- Assess the salary structure, as well as the supplemental payment contracts;

- Assess the staffing levels within the special education program;

- Analyze substitute payments within Medina CSD and the use of leave by personnel;

- Assess benefit levels and costs of health insurance; and

- Analyze key contractual and employment issues for certificated and classified employees.

Findings / Recommendations / Commendations

Human Resource Functions

F3.1   As indicated in the summary of operations, Medina CSD does not operate under a centralized human resource department. Although the current employees responsible for human resource functions appear to meet the needs of the District, the coordination of several departments and separation of classified and certificated employee may lead to duplication of efforts in some instances. For example, there is no centralized database for all District employees, because several District employees maintain separate employee databases for specific purposes. Many school districts separate the human resource activities for classified and certificated employees; however, larger school districts are often able to achieve increased economy and efficiency by combining many of the related human resource functions into one department. For example, Strongsville CSD has a centralized human resource department that is responsible for all benefits administration, recruiting, records management, attendance tracking, and substitute placement.

R3.1   Medina CSD should consider centralizing its human resource functions. While the total staff dedicated to human resource functions is consistent with Strongsville CSD, reorganizing several of the current staff members that already dedicate the majority of their time to human resource functions would create efficiencies and streamline procedures by reducing duplication of efforts. As a result, staff performing human resource activities could allocate time to other important District initiatives.   One centralized database for all employees could track contract renewals, salary increases and benefit information. Medina CSD is already considering the use of the *Subfinder* system for classified as well as certificated employees. This system would automate substitute placement for classified employees. Although certificated and classified employees may have different hiring procedures and a different negotiated agreement, there are still many similar procedures that would benefit from a centralized human resource function.

The current positions involved in human resource activities could be reorganized into a department under the supervision of the assistant superintendent. Job functions that are duplicated should be consolidated and responsibilities could be more efficiently arranged so that no additional positions would be required. For example, one employee would oversee substitute placements, vacancy postings, and position tracking responsibilities; another employee would be responsible for managing employee records and contract renewals; the third employee would be responsible for overseeing benefits administration. Many of the processes used by the administrative services coordinator to track teacher certification and contract renewals for certificated employees could also be used for classified employees. The District may also consider implementing a human resource software program.   There are several vendors offering software packages

designed to help organizations track and store employee information, job status, pay grade, supervisor information, benefit eligibility and elections, leave usage, and performance evaluation.

Staffing Analysis

Table 3-1 displays the actual staffing levels at Medina CSD and peer school districts during FY 2001-2002 as reported by the Educational Management Information System (EMIS). Adjustments were made to the corresponding EMIS reports based on interviews with the appropriate District personnel. In addition, staffing changes for FY 2002-2003 at Medina CSD are also included in the tables.

Table 3-1: FTE Staffing Levels for FY 2001-02

Category	Medina FY 2002	Medina FY 2003	Pickerington	Stow-Munroe	Strongsville	Peer Average
Administrators:	**38.5**	**39.5**	**27.0**	**32.4**	**29.8**	**29.8**
Professional Education: Subtotal	**447.0**	**483.65**	**519.3**	**388.0**	**435.6**	**447.5**
Curriculum Specialists	1.6	1.6	7.0	1.0	3.0	3.7
Counseling	14.0	17.5	17.0	11.2	13.0	13.7
Librarian / Media	6.5	6.5	5.5	6.0	6.0	5.8
Remedial Specialists	0.0	0.0	12.0	0.0	0.0	4.0
Regular Education Teachers	316.3	349.45	372.1	267.1	313.9	317.7
Special Education Teachers	55.1	55.1	63.8	34.1	43.5	47.1
Vocational Education Teachers	7.5	7.5	7.9	21.5	7.0	12.1
Tutor / Small Group Instructor	25.0	25.0	6.8	27.3	21.2	18.4
Educational Service Personnel	20.7	20.7	20.2	19.8	28.0	22.7
Other Professional	0.3	0.3	7.0	0.0	0.0	2.3
Professional – Other	**16.1**	**16.1**	**18.2**	**10.4**	**16.4**	**15.0**
Technical: Subtotal	**15.5**	**15.5**	**12.4**	**6.4**	**4.0**	**7.6**
Computer Operator	4.0	4.0	1.0	0.0	0.0	0.3
Graphic Arts	1.0	1.0	0.0	0.0	0.0	0.0
Library Technician	0.0	0.0	4.5	0.0	0.0	1.5
Library Aide	7.5	7.5	6.9	6.4	2.0	5.1
Other Technical	3.0	3.0	0.0	0.0	2.0	0.7
Office / Clerical: Subtotal	**108.9**	**114.5**	**75.6**	**101.7**	**140.0**	**105.7**
Bookkeeping	2.0	2.0	7.0	5.0	0.0	4.0
Clerical	37.1	39.6	28.7	36.6	61.1	42.1
Messenger	0.0	0.0	0.0	1.0	0.0	.3
Recordkeeper	0.0	0.0	0.0	1.0	1.0	.7
Teaching Aide	68.8	71.9	39.9	56.1	76.9	57.6
Telephone Operator	1.0	1.0	0.0	2.0	1.0	1.0
Crafts / Trades	**15.5**	**16.5**	**7.0**	**13.0**	**15.0**	**11.7**
Transportation	**35.4**	**37.4**	**30.5**	**49.2**	**47.0**	**42.2**
Custodial	**36.5**	**46.0**	**42.5**	**35.5**	**49.9**	**42.6**
Food Service	**32.7**	**32.7**	**18.1**	**22.5**	**26.6**	**22.4**
Monitoring	**0.0**	**0.0**	**0.0**	**17.6**	**3.8**	**7.1**
Groundskeeping	**0.0**	**0.0**	**4.0**	**0.0**	**0.0**	**1.3**
Other Service Worker / Laborer	**2.0**	**2.0**	**8.0**	**0.9**	**1.0**	**3.3**
Total FTEs	**748.1**	**803.8**	**762.6**	**677.6**	**769.1**	**736.2**

Source: FY 2002 EMIS staff summary reports for Medina CSD and peer districts

It is recognized that the staffing levels within a school district vary depending on the number of students enrolled. **Table 3-2** illustrates the staffing levels per 1,000 ADM at Medina CSD and the peer districts.

Table 3-2: FTE Staffing Levels for FY 2001-02 per 1,000 ADM

Category	Medina FY 2002	Medina FY2003	Pickerington	Stow-Munroe	Strongsville	Peer Average
Average Daily Membership (ADM)	**6,563**	**6,749**	**7,692**	**5,763**	**6,836**	**6,764**
Administrators: Subtotal	**5.9**	**5.9**	**3.5**	**5.6**	**4.4**	**4.5**
Professional Education: Subtotal	**68.1**	**71.7**	**67.5**	**67.1**	**63.7**	**66.1**
Curriculum Specialists	0.2	0.2	0.9	0.2	0.4	0.5
Counseling	2.1	2.6	2.2	1.9	1.9	2.0
Librarian / Media	1.0	1.0	.7	1.0	0.9	0.9
Remedial Specialists	0.0	0.0	1.6	0.0	0.0	0.5
Regular Education Teachers	48.2	51.8	48.4	46.3	45.9	46.9
Special Education Teachers	8.4	8.2	8.3	5.9	6.4	6.9
Vocational Education Teachers	1.1	1.1	1.0	3.7	1.0	1.9
Tutor / Small Group Instructor	3.8	3.7	.9	4.7	3.1	2.9
Educational Service Personnel	3.2	3.1	2.6	3.4	4.1	3.4
Other Professional	0.0	0.0	.9	0.0	0.0	0.3
Professional - Other	**2.5**	**2.4**	**2.4**	**1.8**	**2.1**	**2.1**
Technical: Subtotal	**2.4**	**2.3**	**1.6**	**1.1**	**0.6**	**1.1**
Computer Operator	0.6	0.6	0.1	0.0	0.0	0.0
Graphic Arts	0.2	0.1	0.0	0.0	0.0	0.0
Library Technician	0.0	0.0	0.6	0.0	0.0	0.2
Library Aide	1.1	1.1	0.9	1.1	0.3	0.8
Other Technical	0.5	0.4	0.0	0.0	0.3	0.1
Office / Clerical: Subtotal	**16.6**	**17.0**	**9.8**	**17.6**	**20.4**	**16.0**
Bookkeeping	0.3	0.3	0.9	0.9	0.0	0.6
Clerical	5.7	5.9	3.7	6.3	8.9	6.3
Messenger	0.0	0.0	0.0	0.2	0.0	0.1
Records Managing	0.0	0.0	0.0	0.2	0.1	0.1
Teaching Aide	10.5	10.7	5.2	9.7	11.3	8.7
Telephone Operator	0.2	0.1	0.0	0.3	0.1	0.2
Crafts / Trades	**2.4**	**2.4**	**0.9**	**2.3**	**2.2**	**1.8**
Transportation	**5.4**	**5.5**	**4.0**	**8.5**	**6.9**	**6.5**
Custodial	**5.6**	**6.8**	**5.5**	**6.2**	**7.3**	**6.3**
Food Service	**5.0**	**4.8**	**2.4**	**3.9**	**3.9**	**3.4**
Monitoring	**0.0**	**0.0**	**0.0**	**3.1**	**0.6**	**1.2**
Groundskeeping	**0.0**	**0.0**	**0.5**	**0.0**	**0.0**	**0.2**
Other Service Worker / Laborer	**0.3**	**0.3**	**1.0**	**0.2**	**0.1**	**0.4**
Total FTEs per 1,000 ADM	**114.0**	**119.1**	**99.1**	**117.4**	**112.2**	**109.6**

Source: FY 2002 EMIS staff summary report for Medina CSD and peer districts, FY 2002 EMIS enrollment reports

As illustrated in **Table 3-2**, increases in FY 2003 have greatly affected staffing at Medina CSD. Medina's FY 2003 FTEs per 1,000 ADM are higher than the peer average in the following classifications:

- Administrators (See **R3.2**);
- Counseling;
- Regular education teachers (See **R3.3** and **R3.5)**
- Special education (See **F3.12**);
- Technical;
- Teaching aides (See **R3.4** and **R3.13**);
- Crafts and Trades (See the **facilities** section);
- Custodial (See the **facilities** section); and
- Food Service.

The technical classification mainly includes library aides and library technicians. In Medina CSD and Strongsville CSD, computer technicians are also included in this classification. Staffing in the technology department is examined in detail in the **technology utilization** section of this performance audit report. Although Medina CSD has higher staffing levels for food service, its food service operations are self-sustaining and do not require transfers from the General Fund. The number of teaching aides at Medina CSD is not significantly different than Strongsville CSD or Stow-Munroe Falls CSD; however, Pickerington LSD employs fewer teaching aides. See **R3.4** and **R3.13** for more information regarding Medina CSD's policy regarding the number of teaching aides employed.

While FY 2002 staffing levels for counselors are comparable to the peers, Medina CSD added 3.5 FTEs during FY 2003. As a result, the District has the highest number of counselors per 1,000 ADM of the peers. Since staffing information for FY 2003 was received during the end of this engagement, a full assessment of the FY 2003 counselor staffing levels could not be performed. Medina CSD also added 2.5 FTE clerical positions and 2.0 FTE transportation positions (bus drivers). However, FY 2003 FTE staffing levels per 1,000 ADM for clerical and transportation positions are still lower than the peer average. For additional information on bus driver staffing levels, see the **transportation** section.

In total, Medina CSD added 67 new positions, which are exclusive of replacing existing positions, during the FY 2003 school year. The 67 new positions equate to 55.7 FTEs added to the District's total staffing levels.

F3.2   **Table 3-3** compares the total number of FTEs to total administrators for Medina CSD and the peer districts.

Table 3-3: FTE's to Administrator Comparison

	Medina	**Pickerington**	**Stow-Munroe**	**Strongsville**	**Peer Average**
Total FTE Administrators	38.5	27.0	32.4	29.8	29.7
Total FTE Employees	748.1	762.6	675.7	768.1	735.4
FTE Employees per Administrator	19.4 to 1	28.2 to 1	20.9 to 1	25.8 to 1	24.8 to 1
Total FY 2001 ADM	6,563	7,692	5,764	6,836	6,764
Administrators per 1,000 ADM	5.8	3.5	5.6	4.4	4.5

Source: FY 2002 EMIS staff summary reports and EMIS enrollment reports and Medina CSD FY 2003 additional staffing information.

As shown in **Table 3-3**, Medina CSD employs more administrators than all of the peer districts. As result, Medina maintains a lower ratio of administrators to FTE employee than the peers. This indicates that Medina administrators are responsible for fewer employees than administrators in the peer districts. **Table 3-4** shows a more detailed breakdown of administrators at Medina CSD by EMIS classification code. The table indicates that 15 of the Medina CSD administrators are categorized either as supervising/managing/directing or coordinator. Staff reports some of these positions are temporary to assist with the transition to the new high school concept and will likely be eliminated once the transition is complete.

Table 3-4: Breakdown of Administrators at Medina CSD for FY 2002

	Number of FTEs
Central- Based Administrators:	
Administrative Assistant	3
Administrative Intern	1
Assistant Superintendent	1
Superintendent	1
Supervising/Managing/Directing	5
Treasurer	2
Coordinator	7.5
Total	**20.5**
Site-Based Administrators:	
Assistant Principal	4
Principal	10
Supervising/Managing/Directing	2
Coordinator	1
Total	**17**
Other Administrative	1
Total Administrative FTEs	**38.5**

Source: FY 2002 EMIS staff summary report for Medina and FY 2003 additional staffing information.

F3.3   Medina CSD has a high number of administrators in the Supervising/ Managing/Directing and Coordinator categories. Adjustments were made to the EMIS classifications for some of the positions that are categorized differently in the peer districts' EMIS reports. For example, the maintenance supervisor was reclassified as crafts and trades and the food service manager was reclassified under the food service category. Although there are noted differences in the coding of administrative positions in EMIS, there is still a relatively high number of administrative positions at Medina CSD compared to the peer districts. By having a high number of administrators, Medina CSD may be diverting resources from direct instructional areas (See **R3.2**).

F3.4   For purposes of assessing staffing levels, Medina CSD's total FTEs for FY 2001-02 were divided into six personnel classifications as defined in **Table 3-5**. The position descriptions were obtained from the FY 2002 EMIS staff summary report. The six personnel classifications identified in **Table 3-5** are used in **Table 3-6** to assess the allocation of district employees.

Table 3-5: EMIS Personnel Classifications and Position Descriptions

Classification	Position Descriptions
Administrative Employees	Administrative Assistant, Assistant Superintendent, Superintendent, Assistant Principal, Principal, Supervisor/Manager/Director, Treasurer, Coordinator, Curriculum Specialists
Teachers	Remedial Specialists, Regular Education Teachers, Special Education Teachers, Vocational Education Teachers, Tutor/Small Group Instructors, Educational Service Personnel, Supplemental Service Teacher
Pupil Services	Counselors, Librarian/Media, Dietician/Nutritionist, Psychologist, Registered Nurse, Social Worker, Speech and Language Therapist, Educational Interpreter
Support Services	General Maintenance, Mechanic, Foreman, Transportation, Custodian, Food Services
Other Classified Employees	Personnel, Library Aide, Clerical, Records Managing, Teaching Aide, Parent Mentor
Technical	Other Technical

Source: FY 2002 EMIS staff summary report and the EMIS job descriptions

F3.5   **Table 3-6** illustrates the number of FTEs within the personnel classifications for Medina CSD and the peer districts. In addition, **Table 3-6** shows the percentage of FTEs within each classification compared to the total number of FTEs at each school district for FY 2002.

Table 3-6: Total FTE Employees and Percentages of Total Employees

	Medina		Pickerington		Stow-Munroe		Strongsville		Peer Average	
Classification	**FTEs**	**Percent**	**FTEs**	**Percent**	**FTEs**	**Percent**	**FTEs**	**Percent**	**FTEs**	**Percent**
Administration	38.5	5.2%	27.0	3.5%	32.4	4.7%	29.8	3.9%	29.8	4.0%
Teachers	447.0	59.6%	519.3	68.1%	388.0	57.3%	435.6	56.7%	447.5	61.0%
Pupil Services	16.1	2.2%	18.2	2.4%	10.4	1.5%	16.4	2.1%	15.0	2.0%
Support Services	122.1	16.3%	110.1	14.4%	138.7	20.5%	143.3	18.6%	130.6	17.8%
Other Classified	108.9	14.5%	75.6	9.9%	101.6	15.0%	140.0	18.2%	105.7	14.3%
Technical	16.5	2.2%	12.4	1.6%	6.4	1.0%	4.0	.5%	7.6	0.9%
Total	749.1	100%	762.6	100%	677.6	100%	769.1	100%	736.2	100%

Source: FY 2002 Staff Summary Report from Medina CSD and the peer school districts

As shown in **Table 3-6**, Medina CSD has a higher percentage of staff in the administrative classification than the peer average. In addition, when compared to the peer average, Medina CSD has a lower percentage of staff in the teacher and support services classification. Medina CSD has a significantly lower percentage of staff in the teacher classification compared to Pickerington LSD.

R3.2 Medina CSD should seek to allocate a greater percentage of its resources to direct instruction. To do so, Medina CSD should conduct a detailed analysis of the duties and responsibilities of the administrative staff to determine if resources are being used efficiently and effectively in relation to District needs. For instance, Medina should evaluate the feasibility of consolidating and/or combining functions being performed by the supervising/managing/directing and coordinator positions. In addition, Medina CSD should consider its current and future financial situation when seeking reductions in this area. Based upon the analysis in **Table 3-6,** Medina CSD should reduce its administrative staff by at least 3.0 FTEs, and review the feasibility of further reductions in this area. This would bring the District to a level more in line with Stow-Munroe, which has the next highest level of administrative staff based on its ratio of FTE employees per administrator (**Table 3-3**), administrators per 1,000 ADM (**Table 3-3**) and administrative staff as a percentage of total staff (**Table 3-6**).

Financial Implication: Assuming an average annual salary of $65,000 for administrators and benefits equal to 30 percent of annual salaries, Medina CSD would generate an estimated annual cost savings of $254,000 by reducing 3.0 FTEs in administrative personnel. These cost savings could be reallocated to other operational areas within the District.

F3.6 The negotiated agreement between Medina CSD and its certificated personnel stipulates the length and make-up of the teacher workday. **Table 3-7** indicates an average workday for regular education teachers at the middle schools and high school as defined by the negotiated agreement and master teacher schedule.

Table 3-7: Analysis of Teacher's Work Day

Description of Activity	Average Middle School Teacher	Average High School Teacher
Length of Day (based on the negotiated agreement)	7 hours, 30 minutes or 450 minutes	7 hours, 30 minutes or 450 minutes
Number of periods in Day	9 periods	9 periods
Breakdown by minutes:		
Time prior to start of class	13 minutes	5 minutes
Home Room	7 minutes	4 minutes (included in 1st period)
Planning	42 minutes	42 minutes
Duty Period	42 minutes	42 minutes
Duty-free Lunch	42 minutes (1 period)	42 minutes (1 period)
Team Planning period	42 minutes	42 minutes
Instructional minutes	212 minutes	210 minutes
Time after school	23 minutes	15 minutes
Time between classes	27 minutes	48 minutes
Total actual minutes	**450 minutes**	**450 minutes**
Balance of minutes (or periods)	0 minutes	0 minutes

Source: Medina CSD's Master Teacher's Schedules

Table 3-7 shows the average teacher work day for middle and high school teachers employed by Medina CSD. Teachers are required to teach no more than five periods, according to contract stipulations. The remaining four periods are used for planning, team planning, duty period, and lunch. Teachers who agree to teach 6 classes will not have a duty period and teachers may also be exempted from a duty period if they have 5 classes with 2 preparations, or 5 classes with 3 preparations. In contrast, Stow-Munroe Falls CSD negotiated agreement simply states that no teacher will be required to teach more than 6 classes or have more than 3 preparations. The contract between the Pickerington Education Association and the Pickerington Board of Education states only that teachers will receive a planning period of no more than 40 minutes and a 30 minute duty free lunch. In FY 2001, Strongsville CSD high school teachers taught an average of 255 minutes, based on contracts in place at the time. Based on these peer comparisons, Medina teachers at the secondary levels are teaching less time during the school day than the peer districts. In addition, the contracts in the peer districts are less precise regarding the teacher workday, allowing those districts more flexibility in scheduling.

R3.3   In future contract negotiations, the District should try to achieve more flexibility in teacher scheduling to increase the amount of direct instructional time while meeting the scheduling needs of students. Given the current 9 period schedule, teachers could be required to teach an additional period in lieu of the team planning period. This would increase average instructional minutes to 252 at the high school level, and bring Medina CSD in line with the peer districts. Adding an additional instructional period for middle and high school teachers would also lead to a decrease in the number of teacher staff positions required to fill a similar schedule.

Financial Implication: For the FY 2003 school year, Medina employed 185 middle and high school teachers. Adding one additional instructional period to the average teacher's schedule would potentially reduce staffing requirements to 154 middle and high school teachers, thereby allowing Medina CSD to reduce up to 31 teachers. However, differences in class size and schedules may not allow Medina CSD to eliminate all 31 positions. To provide a conservative estimate of potential teacher reductions, Medina CSD should consider reducing 25 middle and high school teachers by adding one additional instructional period to each teacher's workday. Based on an average salary of $52,638 and benefits equal to 30 percent of salaries, this would save the District approximately $1.7 million annually.

F3.7   Ohio's graduation requirements stipulate that students take lab science classes that have 150 hours of instruction time. The 42 minute periods at Medina CSD do not allow the required hours to be achieved in a regular period class assignment. Therefore, Medina CSD has additional labs one day per week. Students enrolled in science labs have the lab one day per week and study hall the other four days. Other factors that effect study hall

totals but which are not included in the table are late arrivals, early releases, alternative schools and other special programs. **Table 3-8** shows the number of students in study hall for each period during the current semester at Medina's high school.

Table 3-8: Analysis of Study Hall Assignments

Period	Study Hall Students	Science Lab	Totals
1	115	43	158
2	370	308	678
3	100	0	100
4	127	45	172
5	343	376	719
6	65	0	65
7	119	26	145
8	516	252	768
9	360	43	403
Totals	**2,115**	**1,093**	**3,208**

Source: Medina CSD, High School Principal

Medina CSD' teachers are also required to have a duty period. Currently, the majority of the duty periods in the high school are study hall monitoring. When the science lab students are excluded from the study hall numbers, the total number of students enrolled in study hall is still high. Medina CSD's high school current enrollment is 2,216 students. With 2,115 students enrolled in study hall, it appears that Medina CSD has almost every student enrolled in at least one period, or more, of study hall per day. Excessive study hall enrollment is an inefficient use of student and teacher time.

R3.4   Medina CSD should consider options that increase the amount of time teachers spend in direct instruction. One option the District is currently considering is lengthening the class period and reducing the number of periods in a day. Lengthening the class period time to 50 minutes would allow for elimination of the study halls related to science lab scheduling. Reducing the number of periods would also decrease the number of students enrolled in study hall, and reduce the need for teacher aides that assist in the supervision of study halls. Since Medina CSD uses teachers and teacher aids to supervise study hall, and considering the various options available to increase direct instruction time, quantifying the number of teacher aids that could be reduced and subsequent financial impact cannot be readily determined. However, the financial impact of reducing teacher staffing levels by increasing the number instructional periods is identified in **R3.3**.

F3.8   Ohio Administrative Code (OAC) 3301-35-05 (A) (5) states that "the ratio of teachers to students district-wide shall be at least one full-time equivalent teacher for each 25 students in the regular student population." **Table 3-9** compares the student-to-teacher ratio for Medina CSD with the peer districts in three different calculations.

Table 3-9: Comparison of Student-to-Teacher Ratios

	Medina FY 2002	Medina FY 2003	Pickerington	Stow-Munroe	Strongsville	Peer Average
Regular Students to Regular Teachers[1]	17.7 to 1	16.5 to 1	18.8 to 1	19.5 to 1	19.1 to 1	19.1 to 1
Total ADM to Regular Education Teachers	20.7 to 1	19.3 to 1	20.7 to 1	21.6 to 1	21.8 to 1	21.4 to 1
Total ADM to Regular and Special Teachers	17.7 to 1	16.7 to 1	17.6 to 1	19.1 to 1	19.1 to 1	18.6 to 1

Source: FY 2002 EMIS staff summary and school enrollment reports for Medina CSD and the peer school districts, 2002 ODE report cards for Medina CSD and the peer districts
[1]Regular students were calculated using percentages of students with disabilities from the ODE district report cards. In addition, student enrollment for FY 2003 was used to calculate student teacher ratios for FY 2003.

In FY 2002, Medina CSD's regular student to regular teacher ratio was the lowest of the peers. In addition, total ADM to regular and special teachers, and ADM to regular teachers were both lower than Stow-Munroe and Strongsville. Consequently, Medina CSD is allocating more teachers for its student population than the peers. Nonetheless, Medina CSD hired 24 new regular education teachers in FY 2003, further decreasing its regular student to regular teacher ratio to 16.5 in FY 2003. To obtain a student to teacher ratio similar to Pickerington (18.8 to 1) which has the next lowest ratio of regular students to regular teacher, Medina CSD would need to reduce 42 regular education teachers. However, as mentioned in **R3.3**, the District should reduce 25 middle and high school teachers by adding one additional teaching period to each teacher's workdays. If Medina CSD implemented **R3.3**, 17 additional regular education teachers could be reduced to increase its student to teacher ratio to 18.8 to 1. Furthermore, Pickerington met 100 percent of the State's report card standards for FY 2002, even though its regular student to regular teacher ration is higher than Medina CSD.

R3.5 Given the District's future financial situation (see the **financial systems** section), Medina CSD should consider reducing 17 regular education teachers to increase its current student to teacher ratio. By reducing 17 regular education teachers, the District will have a student to teacher ratio of 18.8 to 1, which is still lower than two of the three peers. In addition, Medina CSD should carefully assess the need for additional staffing positions in the future, thereby ensuring the best use of taxpayer dollars and that Medina CSD is accomplishing its educational mission in a cost-effective manner.

Financial Implication: Based on an average salary of $52,638 and benefits equal to 30 percent of salaries, reducing 17 regular education teachers would save the District approximately $1.1 million annually.

Salaries and Supplementals

F3.9   **Table 3-10** compares average salaries within each EMIS classification between Medina CSD and the peer districts. Medina CSD's administrators receive a full pick-up of the employee portion of the STRS contribution (9.3 percent), whereas employees represented under the teachers' negotiated agreement receive a partial pick-up of the employee portion of the STRS contribution; of the 9.3 percent that is usually identified as the employee portion of the STRS contribution, the district pays 2 percent of the employee's salary and the employee pays the remaining 7.3 percent. In **Table 3-10**, the Medina Revised column includes this portion for the purpose of peer comparison. Strongsville CSD's employees receive a full pick-up of the employee portion of the STRS contribution. The columns labeled as revised salary in **Table 3-10** for Medina CSD and Strongsville CSD indicate the effect of the pick-up on the salaries of these employees.

Table 3-10: Average Salary by EMIS Classification

	Medina	Medina Revised[3]	Pickerington	Stow-Munroe	Strongsville	Strongsville Revised	Peer Average[2]
Official/ Administrative	$64,835	$71,739	$78,797	$65,029	$70,274	$77,414	$73,747
Professional Education	$51,510	$51,510	$49,370	$45,810	$48,608	$53,547	$49,242
Professional Other[1]	$49,368	$49,368	$40,788	$45,499	$46,235	$50,932	$45,739
Technical	$30,306	$30,306	$23,882	$18,927	$35,308	$38,895	$27,234
Office/Clerical	$23,142	$23,142	$20,753	$24,026	$20,947	$23,075	$22,618
Crafts/Trades	$26,874	$26,874	$35,396	$32,103	$41,609	$45,836	$37,778
Transportation	$20,505	$20,505	N/A[4]	$22,051	$23,959	$26,393	$24,222
Custodians	$31,101	$31,101	$27,754	$30,164	$32,134	$35,399	$31,106
Food Service	$12,612	$12,612	$19,314	$19,002	$18,130	$19,972	$19,429
Other Service Worker	$28,454	$28,454	$20,286	$23,330	$30,069	$33,124	$25,580

Source: FY 2002 Staff summary report from Medina and peer districts

[1] Certain employees in this category are included under the teacher's association

[2] The peer average was computed using the revised salary numbers

[3] The revised salary includes the effect of the Districts' pick-up of the employees' portion of STRS. In Medina, administrators receive a full pick-up of their portion of STRS.

[4] Transportation numbers for Pickerington LSD were not included because this function is performed by an outside contractor.

Medina CSD's salaries are higher than the peer average in the following categories:

- Professional Education;
- Professional Other;
- Technical;
- Office/Clerical; and
- Service Other.

Some variances in salaries across categories can be attributed to differences in EMIS classification between Medina CSD and the peer districts. For example, technical salaries in Pickerington LSD and Stow-Munroe Falls CSD are lower than Medina CSD and Strongsville CSD because Pickerington LSD and Stow-Munroe Falls CSD include mainly library aides and library technicians in the technical classification. In contrast, Medina CSD and Strongsville CSD include computer technicians, who are paid at a higher salary than library aides and technicians, in the technical classification. Custodial and maintenance salaries are reviewed in the **facilities** section of this performance audit.

In Medina CSD, the teacher's negotiated agreement stipulates that the District pay 2 percent of the employees' portion of the STRS contribution. This increases actual average salaries for employees covered by the teacher's negotiated agreement by 2.19 percent. In Medina CSD, administrators have the full portion of the employee STRS contribution (9.3 percent) paid by the District, which increases administrative salaries by 10.16 percent. Salaries for Professional Education and Professional Other categories are also affected by the level of experience as reviewed in **F3.10**.

F3.10 The average salary in the professional education classification is also affected by the level of experience at the District. **Table 3-11** reviews average years experience in Medina CSD and the peer Districts.

Table 3-11: Comparison of Teacher Experience

	Percentage of Teachers By Experience Levels		
	Low Experience (0-4 Years)	**Middle Experience (5-9 Years)**	**High Experience (10+ Years)**
Medina	21.5%	18.8%	59.7%
Pickerington	34.5%	19.8%	45.7%
Stow-Munroe Falls	22.8%	17.8%	59.4%
Strongsville	27.2%	17.9%	54.9%

Source: ODE report of classroom teacher's salaries, ODE website

Medina CSD has a high percentage of teachers in the middle and high experience categories, and only 21.5 percent of the District's teachers have 4 years experience or less. A more experienced teaching staff leads to higher average salaries, which is consistent with the information presented in **Table 3-10**. Stow-Munroe Falls CSD teachers have a very similar experience level compared to Medina CSD. However, Stow-Munroe Falls CSD's average salary in the professional education classification is approximately $6,800 lower than Medina CSD's average salary.

According to the union contract, Medina CSD will pay 2 percent of the STRS contribution for teachers in FY 2002-03 and FY 2003-04. In FY 2004-05, the pick-up will increase to 4 percent. This is in addition to regular salary increases of 3 percent in FY 2003-04 and 1 percent in FY 2004-05.

R3.6 Medina CSD should continue to assess the salary levels of teachers in the District relevant to the experience level of staff. Medina CSD should also continue to asses the impact of the pick-up on the pick-up as it tends to make salaries appear lower than they actually are. In future contract negotiations, Medina CSD should consider the full impact of paying a portion of the employee's STRS contribution in addition to agreeing to salary increases. Paying 4 percent of the teachers' STRS contribution in addition to providing a 3 percent regular salary increase in future years could considerably impact the District's projected financial condition (see the **financial systems** section). Therefore, Medina CSD should consider reducing either the STRS pick-up or regular salary increases in subsequent contract negotiations. In addition, the District should review the effect of contract terms on District salaries compared to similar and surrounding districts.

F3.11 **Table 3-12** compares the actual amounts paid for some common supplemental contract positions at Medina CSD and the peer districts.

Table 3-12: Analysis of Supplemental Contract Payments

Position	Medina	Stow-Munroe Falls	Strongsville
Head Varsity Basketball Coach (Boys)	$6,568	$6,457	$6,492
Head Varsity Basketball Coach (Girls)	$6,882	$5,870	$6,492
Head Varsity Track Coach (Boys)	$6,568	$3,634	$4,798
Head Varsity Baseball Coach	$5,340	$3,997	$4,798
Head Varsity Softball Coach	$5,474	$3,634	$4,798
Head Varsity Cheerleader Advisor	$1,408	$2,516	$2,540
Junior Class Advisor	$2,624	$1,118	$1,665
Senior Class Advisor	$579	$1,845	$1,524
Total Number of Eligible Positions	421	222	344
Total FY 2002 Positions	$490,098	$370,056	$807,085[1]
Average per Eligible Position	$1,164	$1,666	$2,346

Source: Medina CSD and peer school districts.
[1]Strongsville total payments and number of position is from FY 2001.
[2] Pickerington shows the range of payment, which varies based on years of teaching experience. The other districts show the actual amount paid for these positions.

The sample of supplemental positions in **Table 3-12** shows that Medina CSD paid higher wages for 6 of the 8 sampled positions. However, at Medina CSD and the peer school districts, supplemental contracts are paid as a percentage of the base salary step that increases with years of experience. When the supplemental contracts are compared by percentage level paid across the districts, Medina CSD pays a higher rate for only 2 of the 8 sampled positions. As a result, years of experience appears to be the major factor contributing to the higher wages for supplemental positions at Medina CSD.

Medina CSD's supplemental contract total payments are lower than Strongsville, yet slightly higher than Stow-Munroe Falls. However, the total number of eligible positions at Medina is higher than the peer districts. A higher number of available supplemental contracts may become expensive for the District in the future should the majority of these positions be filled, especially if they are filled with experienced staff.

R3.7 Due to its relatively high number of supplemental positions, Medina CSD should review the total positions eligible for supplemental contracts to determine if any supplemental contract positions could potentially be eliminated. Medina CSD should strive to reduce the available number of supplemental contracts to be more in line with the peer schools.

Given the current constraints on Medina CSD's financial resources, reducing the number of supplemental contracts could create additional resources for other areas.

Financial Implication: Based on a sample review of supplemental payments in the collective bargaining agreements, the median percentage of pay for the lower paid supplemental positions is approximately 5.0 percent. If Medina CSD eliminated 80 supplemental contracts, to be comparable to Strongsville CSD, that paid an average of 5.0 percent of the base salary, it would avoid incurring potential costs of approximately $125,000 annually.

Special Education

F3.12 The Ohio Administrative Code (OAC) 3301-31-03 and 3301-51-04 stipulates recommended staffing levels for special education programs based on level of disability and grade level of the students. **Table 3-13** shows the ratio of special education students to special education teachers at Medina CSD based on FY 2002 staffing and enrollment information.

Table 3-13: Special Education Student-to-Teacher Ratio

	Medina	Stow-Munroe	Strongsville	Peer Average
Special Education Teachers	55.1	34.1	43.5	38.8
Special Needs Students[1]	924	543	832	688
Student to Special Education FTE	16.8	16.0	19.1	17.8

Source: FY2002 EMIS school enrollment report and 2002 ODE report cards for Medina CSD and the peer districts
[1]As reported in the 2002 ODE report card

Medina CSD has fewer special education students per teacher than Strongsville CSD, and a ratio similar to Stow-Munroe Falls CSD. OAC establishes guidelines for special education student to teacher ratios which vary between 6 and 24 based on the severity of the disability. Specific ratios for disabilities were not examined because special education teachers may be assigned to students with different disabilities making specific ratios difficult to compare. Overall, the student to teacher ratio in special education appears to be in line with OAC guidelines and staffing changes in this area are not recommended.

Substitutes

F3.13 **Table 3-14** compares Medina CSD and peer district substitute costs. The categories in **Table 3-14** represent key indicators in determining efficiency of substitute use in a school district.

Table 3-14: Comparison of Substitute Hourly Rates

	Medina	Stow-Munroe Falls	Strongsville
Auto/Manual Substitute Placement	Teacher – Auto Others – Manual	Manual	Manual
Daily Cost of Teacher Substitutes	1-15 days $95 16-60 days $105 61+ days for the same position $165.85 Ad-hoc subs who work more than 5 full days in a pay period $100 Exclusive subs $105	0-60 days $105 61+ days 1st step of union agreement with applicable step	0-6 days $85 7-19 days $90 20-59 days $115 60+ $152.57 (in same position)
Small Group Instructors	N/A	N/A	$80 per day
Hourly Cost of Teaching Aides	$7.00 per hour	$8.00 per hour	$7.21 per hour
Hourly Cost of Bus Drivers	$12.50 per hour	$10.25 per hour	$11.73 per hour
Hourly Cost of Cafeteria Personnel	$7.42 per hour	$7.00 per hour	$6.75 per hour
Hourly Cost of Clerical Personnel	$9.05 per hour	$8.00 per hour	$7.53 per hour
Hourly Cost of Custodians	$9.00 per hour	N/A	$9.35 per hour
Hourly Cost of Maintenance	$8.00 per hour	$8.00 per hour	$9.61 per hour
Hourly Cost of Mechanics	$9.25 per hour	N/A	$9.87 per hour

Source: Medina CSD and the peer districts

As shown in **Table 3-14**, Medina CSD's rate for substitute teachers is similar to Stow-Munroe Falls CSD but higher than Strongsville CSD for short-term substitutues. Medina CSD's substitute rates are higher than the peer districts' for bus drivers, clerical personnel, and cafeteria personnel. According to Medina CSD's transportation supervisor, the District has difficulty obtaining substitutes for bus drivers due to its rural location, which explains why it is necessary to offer a higher rate for substitutes for this category. Higher daily substitute rates may increase the overall costs to a district.

F3.14 **Table 3-15** shows the total substitute payments made by Medina CSD and the peer districts during FY 2002.

Table 3-15: Substitute Payments for FY 2002

	Medina		Stow-Munroe Falls		Strongsville	
Classification	**Amount Paid**	**Percent of Total**	**Amount Paid**	**Percent of Total**	**Amount Paid**	**Percent of Total**
Teachers	$690,860	60%	$623,541	74%	$572,542	66%
Other Certified	$99,917	9%	$99,337	12%	N/A	N/A
Clerical	$79,801	7%	$25,503	3%	N/A	N/A
Maintenance and Utility	$164,204	14%	$29,832	4%	N/A	N/A
Food Service	$20,571	2%	$18,980	2%	$19,700	3%
Trans-portation Personnel	$67,021	6%	$28,840	3%	$77,045	9%
Other Classified Personnel	$25,494	2%	$15,692	2%	$201,972	22%
Totals	$1,147,868	100%	$841,725	100%	$871,259	100%

Source: Medina CSD and the peer school districts
[1] Pickerington Teacher total includes all certificated, other classified includes all non-certificated. Food Service substitute costs are not part of the General Fund.

Medina CSD had the highest overall substitute costs compared to the peers, even though the percentage paid for teaching substitutes was lower than the peers. Maintenance and utility substitute costs shown in **Table 3-15** include costs for temporary summer staff. See the **facilities** section of this performance audit for a complete analysis of maintenance staffing levels. Total costs for substitutes can be affected by the rate paid for substitutes and the amount of time substitutes are required to work. According to **Table 3-14** the rates paid for substitute clerical staff, bus driver, and cafeteria workers are high compared to the peers. Medina CSD has recently implemented an automated substitute scheduling system. The system allows the District to monitor future leave and plan accordingly. This may include alerting building principals to particularly high usage periods so they can restrict further discretionary leave use. Another factor that affects the amount a school district pays for substitutes is the amount of leave used by district employees. Usage of leave by classified employees in Medina CSD is addressed in **F3.16** and **Table 3-17**.

Leave Usage

F3.15 ORC §3319.141 stipulates that "Each person who is employed by any board of education in this state shall be entitled to 15 days sick leave with pay, for each year under contract, which shall be credited at the rate of 1.25 days per month." Based upon documentation submitted by Medina CSD, the average teacher used 8.13 sick leave days and 1.73 personal leave days during FY 2001-02.

Table 3-16: 2002 Teachers Attendance Rates

Medina CSD	96.5%
Stow-Munroe Falls CSD	93.8%
Strongsville CSD	96.1%
Pickerington LSD	95.9%
Peer Average	95.3%
State Average	95.3%

Source: Medina CSD and the Peer school districts sick leave usage and ODE

The average attendance rate for all regular teachers employed by Medina CSD is 96.5 percent. **Table 3-16** shows that this percentage is higher than the state average and higher than the peer school districts, thereby minimizing sick leave costs at Medina CSD.

F3.16 **Table 3-17** illustrates the number of days of leave used by Medina CSD classified staff for FY 2001-02 which could have required either a substitute or another staff member to cover for the vacancy.

Table 3-17: Classified Staff Leave Days Taken During FY 2002

Classification	Sick Leave	Personal Leave	Professional Leave	Vacation Leave	Other	Total Days Taken	Number of Employees	Average Sick & Personal Leave per Employee	Average Per Employee (All Leave)
Aides	723.8	189.0	81.5	N/A	26.2	1,020.5	93.0	9.8	11.0
Clerical/Office	383.0	89.0	32.2	203.3	2.3	709.8	45.0	10.5	16.2
Custodians	259.5	70.3	N/A	534.0	10.5	874.3	41.0	8.0	21.3
Food Service	260.0	51.0	5.3	N/A	1.0	317.3	38.0	8.2	8.3
Maintenance	144.5	33.3	3.0	223.0	0.0	403.8	16.0	11.1	25.2
Transportation	514.0	108.2	7.8	52.0	19.5	701.5	51.0	12.2	13.8
Other	1.5	0.0	0.0	6.5	0.0	8	1.0	1.5	8
Totals	2,286.3	540.8	129.8	1,018.8	59.5	4,035.2	285.0	9.9	14.2

Source: Medina CSD

As shown in **Table 3-17**, the average number of leave days used per classified employee is 14.2. Based upon information from previous school district performance audits, this does not appear to be excessive. However, the maintenance and custodial employees both have an average number of leave days greater than 20. This corresponds to the data in **Table 3-15**, which show total maintenance and utility substitute costs to be higher than the peers. In addition, sick and personal leave per employee is greater than 10 days in the clerical, transportation, and maintenance categories.

Classified employees are entitled to an attendance incentive as defined under article 22.04 of their negotiated agreement. The employee receives $250 for perfect attendance, $150 for missing only 1 day, $100 for missing only 2 days, and $50 for missing no more than 3 days.

R3.8   Medina CSD should seek to limit the number of sick and personal leave days used by classified staff, particularly in the maintenance, clerical, and transportation classifications. Supervisors should use the current attendance incentive to encourage employees to reduce the number of sick and personal leave days used and should try to avoid using substitutes whenever possible. The District may be able to avoid using substitutes by implementing cross-training programs for classified personnel.

Financial Implication: Medina CSD would save approximately $21,000 annually if maintenance, clerical and transportation personnel reduced sick leave by three days.

Benefits Administration

F3.17   The State Employee Relations Board (SERB) compiled a report of the *Cost of Health Insurance in Ohio's Public Sector* in 2001. Sixty-five percent of the responding employers required employees to pay a portion of the cost of a family medical plan. Fifty-three percent required employees to contribute to single plan premiums. Some other important facts noted in the study include the following:

- In the cases where employees pay a portion of the premium cost for medical coverage, the average monthly contribution is $30.46 for single and $87.36 for family. These rates translate to approximately 12.4 percent of the cost of a single plan and 13.8 percent of the monthly family premium.

- The estimated cost of medical and other health benefits was $6,919 per employee in 2001.

- Monthly medical insurance premiums currently average $243.97 for single coverage and $624.47 for a family.

- Eighty-eight percent of public employers offer some type of dental coverage. Fifty-eight percent offer vision insurance.

- The average dental plan costs $30.23 per month for a single and $55.42 for a family. Vision coverage averages $8.18 and $15.76 for a single and family, respectively.

- In 2001, medical premiums rose an average of 14.7 percent for both single and family coverage over 2000 rates.

F3.18 The SERB report *Cost of Health Insurance in Ohio's Public Sector* also reports numerous findings specifically for school districts. This information is important because it allows school districts to compare information based on school district average as well as like-sized school districts. Some of the key information pertaining to school districts contained within the report includes the following:

- The average medical premium for school districts is $247.73 for a single plan and $620.22 for a family plan. For school districts with an enrollment of 2,500-9,999 students, the average premium is $241.71 and $596.56.

- The average employee contribution for school districts is $16.55 for a single plan and $58.12 for a family plan. For districts with an enrollment of 2,500-9,999 students, the average employee contribution for a single plan is $14.18 and $44.70 for a family plan.

- The average cost of insurance per employee for a school district in 2001 was $7,108.00. The average cost of insurance for districts with enrollment between 2,500 – 9,999 students in 2001 was $6,866.

F3.19 **Table 3-18** provides selected medical insurance information in FY 2003 for Medina CSD and the peer districts.

Table 3-18: Monthly Health Insurance Premiums and Employee Contributions

School	Provider(s)	Monthly Premium for Single Plan	Monthly Premium for Family Plan	Full-time Employee Share for Single Plan	Full-time Employee Share for Family Plan
Medina	Qualchoice	$287.48	$718.75	$0.00	$0.00
Stow-Munroe	Medical Mutual Supermed Plus Aultcare [1]	$265.44	$644.79	$5.98 for 3 years	$13.75 for 3 years
Strongsville	Medical Mutual Select	$315.09	$789.76	$0	$0
	Medical Mutual Classic	$329.55	$826.01	$0	$20 if hired after 1/1/95
	Kaiser HMO	$263.26	$695.00	$0	$0
Pickerington	United Healthcare	$305.18	$732.16	$15.26	$73.22
2001 SERB Avg. (2,500-9,999 students)		$241.71	$596.56	$14.18	$44.70

Source: Medina CSD and peer school districts and State Employee Relations Board (SERB) report, Cost of Health Care in the Public Sector
[1] The monthly premium costs for Medical Mutual and Supermed Plus Aultcare are the same.

When compared to the peer districts, Medina CSD's monthly premium for a single employee falls in the middle range of the other districts' plans. Medina CSD premiums are higher than Stow-Munroe and Strongsville's HMO. The monthly premium for a family plan at Medina CSD is higher than Stow-Munroe and Strongsville's HMO.

F3.20 Benefits offered as components of a medical insurance plan may impact the cost of the plan and should be considered when conducting a cost-benefit analysis. Typically, the level of benefits, including co-pays, annual deductibles, and the inclusion of prescription plans is included in the bargaining agreements. **Table 3-19** compares key benefits of Medina CSD and the peer districts' plans.

Table 3-19: Key Medical Plan Benefits

	Medina **Qualchoice** **Option 1** **Option 2** **Option 3**	**Pickerington** **United Healthcare**	**Stow-Munroe Falls** **Medical Mutual** **Supermed Plus** **Aultcare**	**Strongsville** **Medical Mutual** **Select** **Medical Mutual** **Classic** **Kaiser**
Office Visits	$5 co-pay $10 co-pay Deductible and 85%/15% of R&C	100%	Deductible and 80%/20% In-Network 90%/10% Out of Network 80%/20%	$10 co-pay $8 co-pay 100%
Employee annual deductible	None None $100 (S)$200(F)	None	$100(S) $200(F) In-Network $100.00 (S) $200.00 (F) Out of Network $200.00 (S) $400 (F)	None $100(S), $200(F) None
Out-of-Pocket Maximum	None $100(S)$200(F) $200(S)$400(F)	$500(S) $1000(F)	$500(S)$1,000(F) In Network $500(S)$1,000(F) Out of Network $1,000(S) $2,000(F)	None $200(S) $400 (F) None
Prescription plan included	Yes	Yes	Yes Yes	Yes Yes Yes
Need to choose primary physician	Yes No No	No	No No	Yes No Yes
Maternity	100% 90%/10% Deductible and 85%/15% of R&C	100%	Deductible and 80%/10% In-Network 90%/10% Out of Network 80%/20%	100% 90% 100%
Well-child care	$5 co-pay $10 co-pay Deductible and 85%/15% of R&C	$5 co-pay, then 100%	After deductible, 100% up to $500 max In Network: 100% Out of Network: 80%	$10 co-pay, then 100% 0-9 years, 90%,$500 Max 100%

Inpatient hospital care	$5 co-pay $10 co-pay Deductible and 85%/15% of R&C	$100 co-pay, then 100%	Deductible and 80%/20% In Network: 90% Out of Network: 80%	100% 90% 100%

Source: Medina CSD health insurance handbook and the peer district handbooks

Table 3-19 shows that the level of some benefits offered with Medina CSD's health insurance plan is comparable to the level of benefits offered at the peer districts. However, Medina CSD offers more generous plan benefits than Stow-Munroe Falls, which could contribute to the higher healthcare premium costs at Medina CSD as compared to Stow-Munroe Falls (see **Table 3-18**). Medina CSD uses an active Health Insurance Committee and employs the services of a health insurance consultant in an effort to help keep benefit costs down.

F3.21   Medina pays 100 percent of the health care premiums for its employees. Pickerington LSD requires employees to contribute 5 percent of the cost of single plan monthly premiums and 10 percent of the cost family plan monthly premiums. The SERB report indicates like size school districts require a contribution of $14.18 for a single plan and $44.70 for a family plan, which is approximately 6 percent of the total single plan premium and 7.5 percent of the total family plan premium.

R3.9   Based upon rising health care costs for governmental entities, the potential need for Medina to reduce its operating costs and the employee contribution statistics reported by SERB, Medina CSD should require all of its employees to contribute towards the monthly premium costs for health insurance. Medina CSD should seek a 6 percent employee contribution toward monthly health care premiums during the next contract negotiation period to bring them in line with the SERB reported average for similar size districts. This would amount to $17 per month for employees covered under the single employee coverage and $43 per month for employees covered under family coverage. If Medina CSD does not want to seek an employee contribution for monthly health care premiums, changing the variables within the plan would also lead to cost savings. Increasing co-pays, out-of -pocket maximums, and deductibles would result in lower monthly health care premiums.

Financial Implication: Requiring employees to contribute 6 percent towards the monthly healthcare premium would save the District $302,000 annually, assuming enrollment levels comparable to FY 2001-02. The District had 125 employees enrolled in the single plan and 533 enrolled in the family plan in FY 2001-02.

F3.22 **Table 3-20** provides selected dental insurance information for Median CSD and the peer school district. Medina CSD pays 100 percent of the cost of the monthly premium for Dental insurance.

Table 3-20: Comparison of Dental Insurance Premiums

District	Provider	Single Plan Monthly Premium	Full-time Employee Share	Family Plan Monthly Premium	Full-time Employee Share	FY 2001 Average Enrollment Per plan	Self-Insured
Medina	CoreSource	$38.52	$0.00	$84.28	$0.00	122 S 539 F	No
Pickerington	Self-Funded Programs, Inc.	$55.00	$8.95	$55.00	$8.95	N/A[1]	Yes
Stow-Munroe Falls	Medical Mutual	$33.71	$0.00	$83.13	$0.00	151 S 527 F	No
Strongsville	CoreSource	$87.81	$0.00	$87.81	$0.00	674	Yes

Source: Medina CSD treasurer's office and peer school district treasurers
[1]Data was unavailable.

As shown in **Table 3-20**, Medina CSD's monthly dental insurance premium for a single employee is lower than two of the three peers, and the family monthly insurance premium is higher than two of the three peers. There is no employee contribution to the dental insurance coverage. In comparison to the SERB study, the cost of Medina CSD's single and family dental insurance premiums ($38.52 and $84.28, respectively) is higher than SERB's average reported monthly dental plan premiums for single and family plans ($30.23 and $55.42 per month, respectively.)

F3.23 **Table 3-21** compares the benefits offered by the dental plans at Medina CSD and the peer districts.   Levels of specific, key benefits provided and the related deductibles can affect the premiums and, therefore, are important for an accurate comparison.

Table 3-21: Comparison of Dental Insurance Benefits

Description	Medina	Pickerington	Stow-Munroe	Strongsville
Maximum Benefit each Calendar year for class 1, 2 and 3	$2,500	$2,500	$2,500	$2,500
Lifetime Maximum for Orthodontic Services, per person	$1,000	$850	$1,200	$1,500
Annual Deductible	$25 (S) $50 (F)	$25 (S) $50 (F)	$25 (S) $50 (F)	$25 (S) $50(F)
Percentages for Dental Procedures:				
Class 1 – Preventive and Diagnostic	100%	100%	100%	100%
Class 2 - Basic Restoration	80%	80%	80%	80%
Class 3 - Major Restoration	80%	60%	60%	60%
Class 4 - Orthodontia	60%	60%	60%	60%

Source: Negotiated agreements

Medina's level of insurance coverage is similar to the peer districts with the exception of the Class 3 coverage. Medina CSD is the only district that covers 80 percent of Class 3 procedures.

R3.10 Medina CSD should consider reducing the level of benefits for Class 3 coverage to 60 percent during the next contract negotiation period. Reducing the level of coverage to 60 percent should lead to lower monthly premiums, while continuing to offer benefits at a level comparable to other school districts. If Medina CSD is unable to reduce dental benefits to a level comparable to the peer school districts, it should consider requiring a 6 percent contribution to the dental premium, keeping in line with the SERB average for contributions.

Financial Implication: A 6 percent contribution to the dental premium would cost employees $2 per month for single coverage and $5 per month for family coverage. This would result in a savings of $3,000 per month for Medina CSD, which is $36,000 annually.

Contractual and Employment Issues

Certain contractual and employment issues that have been assessed and compared to the peer districts are illustrated on the following pages. Because contractual and employment issues directly affect the operating budget, many of the issues have been assessed to show the financial implication for Medina CSD. The implementation of any of the following recommendations would require union negotiations.

F3.24 The certificated staff is represented by Medina City Teacher's Association. The current negotiated agreement was recently renewed and is effective through December 31, 2004.

Table 3-22 compares key contractual issues for the certified staff at Medina CSD and the peer districts.

Table 3-22: Certificated Contractual Comparison

	Medina	Pickerington	Stow-Munroe Falls	Strongsville[2]
Length of work day	7.5	7.5	7.5	7.5
Maximum class size	K-2 22 3-5 24 6 25 7-8 27 9-12 29	K-4 26 5-8 28 9-12 30	K-4 25:1	Not Stated in Contract
<u>Number of contract days</u> Instructional days In-service days Parent/teacher conferences Professional development	<u>184</u> 178 2 2 2	<u>186</u>[1] 179 4 3	<u>184</u> 180 4	<u>185.5</u> 180 3.5 2
Maximum number of sick days accrued	295	250 2001-02 255 2002-03 260 2003-04	282	Unlimited
Maximum number of sick days paid out at retirement	For Resignation: 60 days. For retirement: 80 days. Plus additional: $1000 for 250 accumulated days $1500 for 265 $2000 for 280 $3000 for 295 a additional bonus of $1000 if attendance during last 3 year before retirement is 97%	61 days	61 days	Retirement: 115 days Resignation: 115 - 135 days depending upon years of service
Number of years required for severance pay	5	Eligibility requirements under STRS	Retirement	Eligibility requirements under STRS
Number of personal days	3 days Plus one additional day if employee has 90 hours of accrued sick leave	3 days	3 days	2 days
Notice required	5 days notice required, exception made for emergencies	48 hours	As soon as possible	As soon as possible

Number of leave days for association business	22 accumulated days to be divided among association members	12 days, 20 days during contract negotiation years, to be divided among association members	1 day	7 days for OEA or NEA meetings 8.5 days for SEA meetings. May receive an additional 3 days but the association would be responsible for the cost of the substitute.
Sabbatical	May receive one year without pay after five years of service and must return to the District for two years. Receives the difference between employees salary and the long term substitute's salary.	After 5 years, under the guidelines of ORC section 3319.131 and subject to review of a committee.	No less than 1 semester, no more than 1 year, only after 5 years of service	1 or 2 semesters after 5 years of service. Must return to the District for at least 1 year.
Professional leave	3 days	Professional leave is allowed, the number of days is not specified	Professional leave is allowed, the number of days is not specified	Professional leave is allowed, the number of days is not specified
Number of days to file a grievance	20 days	20 days	30 days	30 calendar days
Pick-up of Employee STRS Portion by District	FY2003 2% FY2004 2% FY2005 4%	No	No	Yes (District pays full employee portion)
Cost of living increases each year of the contract	FY 2004 3% FY 2005 1%	FY2003 4.2% FY2004 4.2%	2 %	FY2000 2.9% FY2001 3.9% FY2002 3.15%

Source: Medina CSD Teacher's negotiated agreement and the peer districts' agreements
[1] In grades 9-12, there is one less parent-teacher conference day and one more day of instruction
[2] This information is based on Strongsville's previous contract, which expired in FY2002, as the most recent contract was not available

There are some contractual similarities between Medina CSD and the peer school districts. However, Medina has a generous severance package and strict guidelines relating to class sizes as well as guaranteed salary increases and the district's pick up of a portion of the teachers' STRS contribution. Two of the three peers only pay a total of 61 days of severance pay. Only one other peer has a stipulation for additional compensation for exceeding class limits, and those limits are much higher than Medina's class limits.

F3.25 Medina CSD treasurer's office provided information that severance package for certificated employees cost the District $182,768 in FY 2001-02. The certificated agreement allows for payout of accumulated sick leave for employees with at least 5 years of experience. Severance pay for accumulated sick leave is calculated at their daily rate of pay based on their last contract less any supplemental contracts or allowances for up to 40 days. Any days over 40 will be multiplied by one-half and added to the 40 days, up to a total of 60 days.

Employees who retire in accordance with ORC § 3307.38, receive payment for accumulated sick leave following the schedule above, up to a maximum of 80 days. In addition, employees also receive a cash incentive added to the severance calculation as follows.

- 250 days of accumulated sick leave $1,000;
- 265 days of accumulated sick leave $1,500;
- 280 days of accumulated sick leave $2,000; and
- 295 days of accumulated sick leave $3,000.

Also, employees who have greater than 295 days of accumulated sick leave and 97 percent attendance rate in their last three years of employment are eligible for an additional $1,000. This severance payout is more generous than any of the peer districts. The District believes the attendance incentives contribute to the high attendance rate seen in **F3.15**.

R3.11 During the next contract negotiation period, Medina CSD should seek to reduce the severance pay out to be more in line with peer school districts. Specifically, the District should seek elimination of the bonus payouts for accumulation of sick days over 250 days and reduce the total possible payout to 60 days. The district should also seek to limit the severance pay to only teachers retiring under the qualifications of STRS. The total severance package cost the District $ 182,767 in FY 2002.

Financial Implication: Reducing the payout to 60 days and eliminating the attendance bonuses would bring Medina CSD's severance package in line with Pickerington LSD and Stow-Munroe Falls CSD and could save Medina CSD $40,000 and limiting severance pay only to retirement would save the district $46,000 based on FY 2001-02 retirement information.

F3.26 Medina CSD offers a retirement incentive of a one-time payout of 45 percent of the teacher's salary for teachers that retire during the first year of eligibility after at least 10 years of teaching experience. Strongsville CSD is the only other peer contract that

offered an early retirement incentive in FY 2000-01. However, current Strongsville CSD's contracts were not available for review. Retirement incentives are very costly to the District and in previous performance audits have been shown to be a financial burden for school districts that offered this benefit. As shown in **Table 3-11**, Medina CSD has a very experienced teaching staff which could make the retirement incentive very costly in the near future.

R3.12 Medina CSD should seek to eliminate the retirement incentive from future contract negotiations. Medina CSD could potentially face costly payouts for the retirement incentive it has in place. Retirement incentives may be designed for long term savings, but districts are often required to make significant cash outlays at times when they can least afford them. The money that Medina CSD currently spends on retirement incentives could be redirected to programs for direct instruction of students.

Financial Implication: Medina CSD paid $141,613 in retirement incentives in FY 2001-02. If retirement incentives were eliminated, the District could potentially save a similar amount annually in the future.

F3.27 The negotiated agreement between Medina CSD and the Medina City Teacher's Association has class size limits that are defined in **Table 3-22**. Medina CSD's values the importance of small class sizes. However, exceeding these specified class limits has a financial impact on the District. In grades K-6, the District is responsible to provide 1 hour of paraprofessional time every day for one student over the class size limit. If the class size limit is exceeded by more than one student, the District may provide one hour of paraprofessional (teaching aides) time each day for each student over the limit or four percent of the base pay for each student over the class size limit plus one student. The base salary for FY 2002-03 is $31,280, so a first grade teacher with 24 students would receive an additional $1,251 for the extra students or 2 hours per day of paraprofessional time.

In grades 7-12, extra compensation is calculated based on class load, or the total number of students a teacher has contact with in a day, which is not to exceed 125 students. Teachers receive additional compensation for each student over 125 students. The compensation for each student over the class load limit is 4 percent of the base salary multiplied by the fraction of the school year the student is assigned to the teacher.

Although the contract for the Pickerington LSD compensates teachers for exceeding class size maximums of 30 students in grades K-8 and 32 in grades 9-12, the teacher's contracts for Stow Munroe CSD and Strongsville CSD do not include additional compensation for exceeding class size limits. Pickerington LSD's compensation rate for self-contained class rooms in grades K-6 is $25 per week for each student over the

maximum. For grades 7-12 and team teaching grades K-6 the rate is $15 per week per overage class. Therefore, Pickerington's compensation rate is significantly lower than Medina CSD and the class size maximums are higher than at Medina CSD.

R3.13 Medina CSD should seek to exclude additional compensation and teaching aides for exceeding class size limits from future contract negotiations, or raise the class size limits at which additional compensation is earned. If the resources are not available to sustain small class sizes, the District will experience additional financial constraints due to the requirements of this contractual obligation.

Financial Implication: This contractual stipulation is new to Medina CSD and the first semester effected by the class size limits is fall 2002. The Assistant Superintendent estimated a cost of $10,000 for fall semester 2002 ($20,000 annually) based on applications for payment submitted by teachers under this article of the contract. The cost of the contract stipulation will most likely increase in subsequent years as enrollment increases, especially if Medina CSD has to limit hiring to contain costs.

F3.28 Classified staff at Medina CSD are represented by Ohio Association of Public School Employees, OAPSE/AFSCME Local 4, AFL-CIO and Local #305. The current agreement was recently renegotiated and will remain in effect through June 30, 2006. **Table 3-23** compares some of the key contractual issues for classified staff at Medina CSD and the peer districts. Pickerington LSD's classified employees are not represented by a bargaining unit and are therefore not included in the comparison.

Table 3-23: Classified Contractual Comparison

	Medina	Stow-Munroe Falls	Strongsville
Evaluations required	Yes	Yes	No
Minimum call-in hours paid to employees for emergencies	1 hour	Minimum of 2 hours	Minimum of 2 hours
Vacation time to accumulate	1-6 years: 10 days 7-14 years: 15 days 15-24 years: 20 days 25+ years: 25 days	6 months: 5 days 1-5 years: 10 days one extra day per year for years 6-20, up to 25 days	1-6 years: 10 days 7-12 years: 15 days 12-19 years: 20 days 20+ years: 25 days
Sick/personal leave incentive	0 absences $250 1 absence $150 2 absences $100 3 absences $50	0 or 1 absences in a year: 3 days pay 2 or 3 absences in a year: 2 days pay 4 absences in a year: 1 day pay	$100 per quarter that an employee has perfect attendance
Maximum number of sick days accrued	295	Unlimited	320 days
Maximum number of sick days paid at retirement (percentage payout)	20% of the first 50 accumulated days and 40% of the remaining accumulated days: 180 days maximum	A maximum of 183 days paid at 1 day for every 3 sick days	30% of accumulated days up to 96 days plus a retirement incentive
Number of years required for severance pay	Eligibility requirements of SERS	Retirement	Eligibility requirements of SERS
Number of personal days	3 days	3 days	3 days
Notice required	5 days	As far in advance as possible	72 hours notice must be given to use and personal leave
Number of holidays paid for 12-month employees	11 holidays	12 holidays	11 holidays
Number of holidays paid for less than 12 month employees	9 holidays	11 holidays	8 holidays
Number of days to file a grievance	15 work days	7 days	14 calendar days
Labor-Management Committee	Yes	Yes	Yes
Pick-up of employee SERS portion by District	No	No	Yes
Cost of living increases each year of the contract	Each salary step in each category receives an additional 3.5% of the base salary step for that category for each contract year	2% every 6 months of the contract	FY 1998: 3.1% FY 1999: 3.9% FY 2000: 2.9 % FY 2001: 2.9 % FY 2002: 3.9 %

Source: Medina CSD classified negotiated agreement and peer agreements

The key contractual issues addressed in **Table 3-23** indicate that the contract for classified employees at Medina CSD is in line with the peer school districts.

F3.29 The negotiated agreement specifies employee evaluations should be completed every year in March or April by the immediate supervisor. Employees also have the right to make comments on their evaluations. After 5 years of service, classified employees are only required to be evaluated every 3 years, but may be evaluated on an as needed basis. The evaluation process for classified employees at Medina CSD was reviewed and yielded no recommendations.

F3.30 Classified employees at Medina CSD have the opportunity to increase their hourly wage through a professional development program referred to as the Support Staff Training Program. Employees can increase their hourly wage by $.65 per hour through a three step program of continued training. Appropriate training classes are designated and approved by a committee. Strongsville CSD has a committee designated to address professional development for classified employees. Stow-Munroe Falls CSD's negotiated agreement for classified employees does not address professional development. The professional development program for classified employees is an appropriate tool to recognize and retain classified employees and yielded no recommendations.

Financial Implications Summary

The following table is a summary of estimated annual savings from the above recommendations. These cost savings could assist Medina CSD in achieving its educational goals with respect to revenue constraints. The financial implications are divided into two groups: those that are not subject to negotiations and those that are. Implementation of those recommendations subject to negotiation would require agreement of the affected bargaining units.

Summary of Financial Implications Not Subject to Negotiations

	Recommendation	Estimated Annual Cost Savings
R3.5	Reduction in teaching staff	$1,163,000
R3.2	Reduction in administrative personnel	$254,000
R3.7	Reduction in supplemental contract positions	$125,000 (Cost Avoidance)
R3.8	Reduction in classified leave usage	$21,000
Total		**$1,563,000**

Summary of Financial Implications Subject to Negotiations

	Recommendation	Estimated Annual Cost Savings
R3.3	Add an additional instructional period, which would allow reductions in teaching staff	$1,751,000
R3.9	Employee contribution to health care premiums	$302,000
R3.10	Employee contribution to dental premiums	$36,000
R3.11	Reduction of Severance pay	$86,000
R3.12	Elimination of Early Retirement Incentive	$141,000
R3.13	Elimination of class size limits	$20,000
Total		**$2,336,000**

Conclusion Statement

Medina CSD should reorganize to create a centralized human resource department to take advantage of commonalities in functions and improve overall controls. Currently, several functions are duplicated for certificated and classified employees. Combining these functions and implementing an HR software package or manipulating the current databases to perform more functions could serve to centralize procedures and produce efficiencies.

Overall staffing levels at Medina CSD are in line with the peers. One area that is significantly higher than the peer districts is administrative staff. Medina CSD needs to examine the administrative functions in the District to determine which positions provide the District with the most benefit. Medina CSD may be faced with a financial situation that will require examination of all District expenses. In that situation, administrative staff should be reduced before eliminating expenditures associated with the direct instruction of students.

The current schedules in the District have middle and high school teachers devoting approximately 210 minutes per day to direct instruction, the other time is spent in planning and duty periods. There is also a high number of students in study hall at the high school. Medina CSD should consider options that increase the amount of time students are in class and teachers are engaged in direct instruction. The negotiated agreement sets limits on the teacher workday, including planning periods, duty periods and class periods. Medina should seek to increase the number of periods teachers can be required to teach according to the contract. Increasing the amount of time teachers spend in direct instruction improves the efficiency of the current teaching staff, leading to opportunities for savings in teaching positions. In future negotiations, Medina CSD should seek more flexibility regarding teacher class periods. Since the District's student-to-teacher ratio is the lowest of the peers and given its future financial situation, Medina CSD should consider the potential of reducing additional teacher positions.

Medina CSD currently pays the full amount of employee medical and dental monthly premiums. Medina CSD should consider requiring all employees to pay 6 percent of monthly health care premiums. This will assist Medina CSD in meeting the demands of rising health care costs and reduce operating expenses. It should also consider the current benefits offered in the dental plan. As the benefit level is higher than peer districts, Medina CSD should determine if this plan should be renegotiated.

Medina CSD also has a very generous severance payout and a retirement incentive. These contractual provisions can become very expensive for a school district with limited financial resources and a highly experienced workforce. Medina CSD should seek to eliminate these provisions from future contracts and work to implement a package similar to the peer districts. Medina CSD should also seek to eliminate the class size limits and accompanying additional

compensation. This contract stipulation could be very costly if Medina CSD finds it necessary to keep staffing at the current levels.

Facilities

Background

The facilities section focuses on custodial and maintenance operations within Medina City School District (Medina CSD).   Comparisons will be made throughout the report to the following peer school districts: Pickerington Local School District (Pickerington LSD), Stow-Munroe Falls City School District (Stow-Munroe Falls CSD) and Strongsville City School District (Strongsville CSD).

Organizational Function

Medina CSD consists of nine schools: one kindergarten, five elementary, two middle and one high school. In addition, Medina CSD owns a garage shared by the transportation and operations departments and the Bowman House, which houses operations department offices and a special education classroom.

The business manager is responsible for overseeing the management and operations of the facilities, including construction projects. An assistant business manager handles the day-to-day affairs of the Business Office, fills in for the business manager and completes specific projects. Medina CSD's operations department, which is responsible for the operations and upkeep of the District's facilities, employs a building and grounds supervisor, a custodial coordinator, a maintenance coordinator, an HVAC coordinator and a full-time secretary.

The operations department's FY 2001-02 organizational structure and full-time equivalent (FTE) staffing levels, 56.3 FTEs, are depicted in **Chart 4-1**.

Chart 4-1: FY 2001-02 Operations Department Staff

```
                          ┌─────────────────────┐
                          │  Business Manager    │
                          │     0.50 FTE         │
                          └──────────┬──────────┘
                                     │
                          ┌──────────┴──────────┐
                          │ Assistant Business   │
                          │      Manager         │
                          │     0.30 FTE         │
                          └──────────┬──────────┘
                                     │
                    ┌────────────────┴─────────┬──────────────────┐
          ┌─────────┴─────────┐                          ┌────────┴─────────┐
          │ Building & Grounds │                          │ Operations Dept. │
          │    Supervisor      │                          │    Secretary     │
          │    1.00 FTE        │                          │    1.00 FTE      │
          └─────────┬─────────┘                          └──────────────────┘
      ┌─────────────┼───────────────────────┐
┌─────┴──────┐ ┌────┴────────┐      ┌────────┴─────────┐
│Maintenance │ │    HVAC      │      │Custodial Services│
│Coordinator │ │ Coordinator  │      │  Coordinator     │
│  0.75 FTE  │ │  0.75 FTE    │      │   1.00 FTE       │
└─────┬──────┘ └──────┬──────┘      └────────┬─────────┘
      └────────┬───────┘                      │
          ┌────┴────┐                   ┌──────┴──────┐
          │Repairman │                   │Head Custodian│
          │  13.50   │                   │   9.00 FTE   │
          └────┬────┘                    └──────┬──────┘
          ┌────┴────┐                     ┌──────┴───────┐
          │ Laborer  │                     │Assistant Head │
          │ 2.00 FTE │                     │  Custodian    │
          └─────────┘                     │   1.00 FTE    │
                                          └──────┬───────┘
                                           ┌──────┴──────┐
                                           │  Custodian   │
                                           │  25.50 FTE   │
                                           └─────────────┘
```
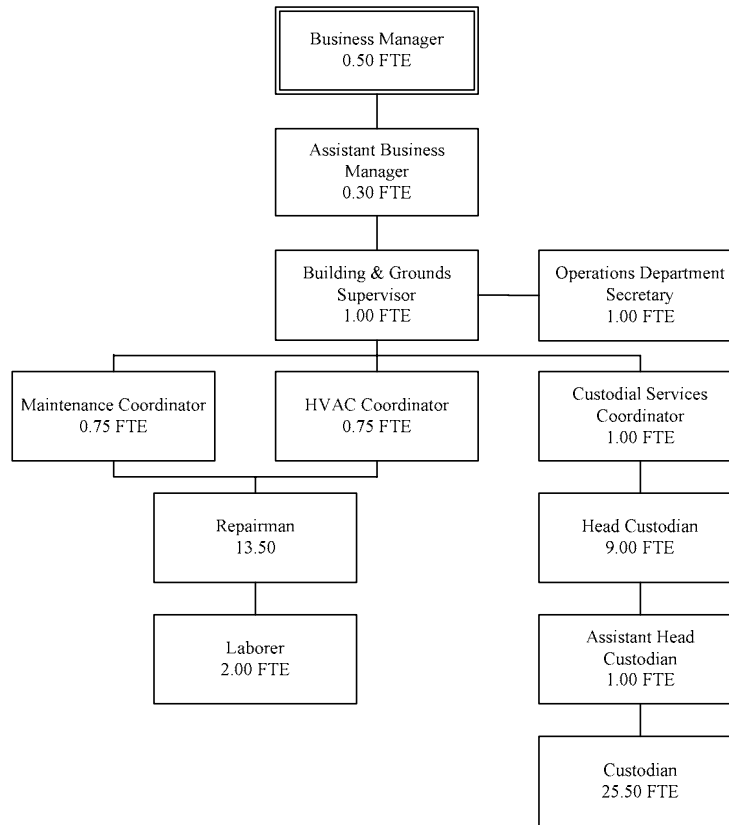
Source: Medina CSD's Business Office and Operations Department

Summary of Operations

The custodial staff is responsible for providing a clean and safe environment for the students, staff and public who use the facilities. Medina CSD's custodial staff consists of 37 employees (36.5 FTEs), including the custodial coordinator. The custodial coordinator supervises the day-to-day custodial operations, inspects custodial work, oversees the cleaning schedule and orders custodial supplies. Head custodians open and prepare the buildings for operation each day, work lunch periods, complete minor repairs and supervise custodians assigned to the individual building. The assistant head custodian is assigned to the high school and is responsible for cleaning and completing minor repairs. The custodial staff is also responsible for tending the grounds which immediately surround their assigned building. Custodians do not clean the bus garage, Bowman House or either stadium. These areas are cleaned by the maintenance staff.

Maintenance staff members are not assigned to a specific building. They travel from building to building, as required by assignments, and are responsible for maintaining facilities and keeping them in a safe, serviceable condition. The maintenance staff consists of 17 positions (17.0

FTEs), including the HVAC coordinator and maintenance coordinator. The HVAC coordinator maintains and monitors the District's HVAC systems and orders related materials. The maintenance coordinator supervises maintenance repairmen and laborers, orders materials and prioritizes work orders. Repairmen complete assigned work orders, perform preventive maintenance tasks, mow the majority of the grounds and prepare athletic fields. During the winter, repairmen also complete the majority of the plowing and snow removal. The laborers assist repairmen with assigned tasks, including grounds work. The maintenance staff is also responsible for cleaning the bus garage, the Bowman House and both stadiums.

Staffing

In FY 2002, Medina CSD employed 58 individuals (56.30 FTEs) to supervise and maintain its facilities. The administrative group includes seven positions (5.30 FTEs). Except for the business manager and the assistant business manager, all positions are dedicated solely to the operations department. The business manager spends approximately 50 percent of his time handling facilities-related issues, including those related to the renovation/construction of the high school complex. The assistant business manager spends approximately 30 percent of his time handling facilities-related issues.

The custodial coordinator position is 100 percent administrative/supervisory. However, the HVAC coordinator and the maintenance coordinator spend approximately 75 percent of their time performing administrative/supervisory tasks and the remaining 25 percent performing repair and maintenance tasks. The custodial staff consists of 36 employees (35.50 FTEs): 9 head custodians (9.00 FTEs); 1 assistant head custodian (1.00 FTE); and 26 custodians (25.50 FTEs). The maintenance staff consists of 17 employees (15.50 FTEs): 13 repairmen (13.00 FTEs), 2 laborers (2.00 FTEs), 1 maintenance coordinator (0.50 FTE) and 1 HVAC coordinator (0.50 FTE). The time spent by the HVAC coordinator (0.25 FTE) and the maintenance coordinator (0.25 FTE) performing repairs is included in the total FTE count (15.50 FTEs) for the maintenance staff. **Table 4-1** details Medina CSD's custodial and maintenance staffing levels for FY 2001-02.

Table 4-1: Number of Employees (FTEs) for FY 2001-02

Classification	Total Number of Positions	Actual FTEs
Business Manager	1.00	0.50 [1]
Assistant Business Manager	1.00	0.30
Building and Grounds Supervisor	1.00	1.00
Custodial Coordinator	1.00	1.00
HVAC Coordinator [2]	1.00	0.75
Maintenance Coordinator [2]	1.00	0.75
Operations Department Secretary	1.00	1.00
Total Administration	**7.00**	**5.30**
Head Custodian	9.00	9.00
Assistant Head Custodian	1.00	1.00
Custodian	26.00	25.50
Total Custodial	**36.00**	**35.50**
Repairman	13.00 [2]	13.50
Laborer	2.00	2.00
Total Maintenance	**15.00**	**15.50**
Total	**58.00**	**56.30**

Source: FY 2001-02 EMIS Staff Demographics Report, Business Manager and Building and Grounds Supervisor
[1] The business manager generally spends 20 percent of his time on facilities related work. This increases to 50 percent during times of construction.
[2] The HVAC coordinator and maintenance coordinator spend approximately 25 percent of their time performing HVAC and maintenance repairs, respectively. This time has been added to the actual FTEs for the repairman classification.

For FY 2002-03, the operations department added an assistant building and grounds supervisor position because the current building and grounds supervisor will retire at the end of the fiscal year. Upon his retirement, the assistant will move into the building and grounds supervisor position and the assistant position will not be filled.

Key Statistics

Key statistics related to Medina CSD's maintenance and operations are presented in **Table 4-2**. In addition, results from *American School & University*'s 31st annual Maintenance and Operations Cost Study (AS&U), released in April 2002, are included in the table and throughout the facilities section of the report. To compile the AS&U annual cost study, a detailed survey was mailed out to chief business officials for public school districts across the nation to gather information regarding staffing levels, expenditures and salaries for maintenance and custodial workers. Unlike previous years where results were divided into regions, this year's report provides the median number for each category on a national level and by district enrollment (less than 1,000 students; 1,000 to 3,499 students; and greater than 3,500 students).

According to the 31st annual AS&U study, districts spent only 7.8 percent of their net current expenditures on maintenance and operations (M&O) in the 2001-02 school year, down from 8.5 percent the year before.

Unless otherwise noted, the peer district averages in **Table 4-2** and all other tables in this section do not include statistics for Medina CSD.

Table 4-2: FY 2001-02 Key Statistics and Indicators

Number of Sites	**13**
- Elementary Schools	6
- Middle Schools	2
- High Schools	1
- Other [1]	4
Total Square Feet Maintained [2]	**751,289**
- Elementary Schools	341,227
- Middle Schools	222,062
- High Schools	188,000
- Other [1]	15,200
Square Feet per FTE Custodial Staff Member (35.00) [3]	**21,465**
- Elementary Schools (19.00)	17,959
- Middle Schools (8.00)	27,758
- High School (8.00)	23,500
AS&U 31st[h] Annual M&O Cost Study >3,500 Students	**20,440**
AS&U 31st Annual M&O Cost Study National Median	**23,985**
Peer District Average	**22,166**
Medina CSD Square Feet per FTE Maintenance Staff Member (14.50) [4]	**52,861 [5]**
AS&U 31st Annual M&O Cost Study >3,500 Students	**113,376**
AS&U 31st Annual M&O Cost Study National Median	**89,000**
Peer District Average	**136,665**
FY 2001-02 General Fund Maintenance and Operations Expenditures per Square Foot	**$6.46**
- Custodial	$2.79
- Maintenance	$2.04
- Utilities	$1.63
AS&U 31st Annual M&O Cost Study >3,500 Students	**$3.93**
AS&U 31st Annual M&O Cost Study National Median	**$3.34**
Peer District Average	**$5.44**

Source: Medina CSD treasurer's office, Business Office, business manager and building and grounds supervisor

[1] The other sites consist of the transportation/maintenance garage, Bowman House, Duke Stadium and Memorial Stadium. These sites are cleaned by the maintenance staff, not the custodial staff. Therefore, the sites are excluded from all custodial square footage analyses.

[2] Total square feet maintained includes 50 modular classrooms (25 modular units).

[3] The custodial FTE number has been reduced by 0.50 FTE because one part-time (0.50 FTE) custodian is assigned to the board offices.

[4] Reflects a reduction of 1.0 FTE to account for grounds work responsibilities.

[5] The square footage per maintenance FTE is derived by dividing the number of FTEs into the total building square footage, including modular space, plus 15,200 square feet for the other sites which maintenance staff clean.

Medina CSD's square footage per custodial FTE of 21,465 square feet is lower than the peer average, but higher than the AS&U median for school districts with more than 3,500 students. See **F4.9** and **F4.10** for additional information on Medina CSD's custodial staffing. The District's square feet per maintenance FTE of 52,861 square feet is less than half of both the peer

average and the AS&U median for school districts with more than 3,500 students. See **F4.13** for additional information on Medina CSD's maintenance staffing.

Another area of significant variance between Medina CSD and the peer average is the District's general fund maintenance and operations expenditures per square foot. See **F4.5** for additional information on Medina CSD's expenditures per square foot and **F4.8** for additional information on utilities expenditures.

Financial Data

Tables 4-3 and **4-4** illustrate Medina CSD's General Fund expenditures incurred to maintain and operate the District's facilities for FYs 2000-01 and 2001-02 and the budget for FY 2002-03.

Table 4-3: Medina CSD General Fund Expenditures: FY 2000-01 vs FY 2001-02[1]

Accounts	FY 2000-01 Operations	FY 2000-01 Maintenance	FY 2000-01 Total	FY 2001-02 Total	Difference	Percentage Change
Salaries	$1,201,665	$560,133	$1,761,798	$2,054,190	$292,393	16.6%
Benefits	$364,894	$172,451	$537,346	$658,770	$121,424	22.6%
Purchased Services	$174,732	$464,588	$639,320	$510,246	($129,074)	(20.2%)
Utilities	$996,101	$0	$996,101	$1,252,312	$256,211	25.7%
Supplies/ Materials	$96,602	$174,011	$270,613	$263,069	($7,544)	(2.8%)
Capital Outlay	$12,199	$105,533	$117,732	$189,302	$71,570	60.8%
Other	$22,384	$0	$22,384	$24,877	$2,493	11.1%
Total	**$2,868,577**	**$1,476,716**	**$4,345,293**	**$4,952,766**	**$607,473**	**14.0%**

Source: Medina CSD treasurer's office, expense budget worksheet
[1] These figures do not include technology related expenditures. Refer to the **technology** section of this report.

Table 4-4: Medina CSD General Fund Expenditures: FY 2001-02 vs FY 2002-03 Budget[1]

Accounts	FY 2001-02 Operations	FY 2001-02 Maintenance	FY 2001-02 Total	FY 2002-03 Budget	Difference	Percentage Change
Salaries	$1,379,387	$674,803	$2,054,190	$2,734,025	$679,835	33.1%
Benefits	$439,865	$218,905	$658,770	$988,258	$329,488	50.0%
Purchased Services	$188,446	$321,799	$510,246	$742,468	$232,222	45.5%
Utilities	$1,252,312	$0	$1,252,312	$2,041,793	$789,481	63.0%
Supplies/ Materials	$95,358	$167,711	$263,069	$356,865	$93,796	35.7%
Capital Outlay	$11,344	$177,958	$189,302	$167,190	($22,112)	(11.7%)
Other	$24,877	$0	$24,877	$32,000	$7,123	28.6%
Total	**$3,391,589**	**$1,561,176**	**$4,952,766**	**$7,062,599**	**$2,109,833**	**42.6%**

Source: Medina CSD treasurer's office, expense budget worksheet
[1] These figures do not include technology related expenditures. Refer to the **technology** section of this report.

Explanations for the variances in **Tables 4-3** and **4-4** are as follows:

- *A 16.6 percent increase in salaries from FY 2000-01 to FY 2001-02 and a 33.1 percent increase from FY 2001-02 to the budget for FY 2002-03:* In FY 2001-02, Medina CSD increased staffing levels due to the opening of a new elementary school in the fall of 2001. The District increased staffing levels again in FY 2002-03 to prepare for the completion of the high school and the opening of the recreation center. In FY 2002-03, Medina CSD added two repairman positions and 17 custodial positions, and added the temporary assistant building and grounds supervisor position.

- *A 22.6 percent increase in benefits from FY 2000-01 to FY 2001-02 and a 50.0 percent increase from FY 2001-02 to the budget for FY 2002-03:* Benefits increased in FY 2001-02 and again in FY 2002-03 due to the increase in custodial and maintenance staff.

- *A 20.2 percent decrease in purchased services from FY 2000-01 to FY 2001-02 and a 45.5 percent decrease from FY 2001-02 to the budget for FY 2002-03:* Medina CSD opened a new elementary school in FY 2001-02 and is opening portions of the high school complex during FY 2002-03. Budget amounts for FY 2002-03 were estimated based on this increase in square footage.

- *A 25.7 percent increase in utilities from FY 2000-01 to FY 2001-02 and a 63.0 percent increase from FY 2001-02 to the budget for FY 2002-03:* In FY 2001-02, Medina CSD opened a new elementary school. Completed sections of the high school, as well as the recreation center, will come online during FY 2002-03. Budget amounts for FY 2002-03 were estimated based on this increase in square footage.

- *A 2.8 percent decrease in supplies and materials from FY 2000-01 to FY 2001-02 and a 35.7 percent increase from FY 2001-02 to the budget for FY 2002-03:* Medina CSD opened a new elementary school in FY 2001-02 and is opening portions of the high school complex during FY 2002-03.

- *A 60.8 percent increase in capital outlay from FY 2000-01 to FY 2001-02 and an 11.7 percent decrease from FY 2001-02 to the budget for FY 2002-03:* Medina CSD opened a new elementary school in FY 2001-02 and is opening portions of the high school complex during FY 2002-03.

- *An 11.1 percent increase in other expenditures from FY 2000-01 to FY 2001-02 and a 28.6 percent increase from FY 2001-02 to the budget for FY 2002-03:* Other expenditures represent increases in charges for taxes and assessments collected by the Medina County Auditor's office.

Performance Measures

The following list of performance measures was used to conduct the review of Medina CSD's facilities operations:

- Assess the use of existing facilities and those currently under construction;
- Determine the effectiveness of long-range facilities planning;
- Determine building capacities and utilization rates;
- Evaluate energy conservation measures and efforts;
- Assess General Fund custodial and maintenance operating expenditures;
- Assess current custodial and maintenance staffing levels; and
- Evaluate the use of staffing resources.

Findings/Commendations/Recommendations

Facilities Planning and Management

F4.1 Medina CSD's superintendent uses a two-pronged approach to generate annual student enrollment projections; an enrollment projection software program and the expertise of a local community planner. The software program uses many factors, including the following, to generate projections:

- Live birth data;
- Fertility rates;
- Change ratios;
- Demographic changes;
- Historical enrollment data;
- Residential construction; and
- Migration trends.

The superintendent also consults with a local community planner to further assess the extent and location of new residential housing. Medina CSD is experiencing significant growth due to the proliferation of new residential construction within the District's borders. **Table 4-5** compares Medina CSD's FY 2002-03 student enrollment to enrollment figures for the past seven years.

Table 4-5: Medina CSD K-12
Historical Enrollment

School Year	Head Count	Percent Change from Previous Year
2002-2003	7,016 [1]	2.51%
2001-2002	6,845 [2]	4.17%
2000-2001	6,570	3.56%
1999-2000	6,344	2.19%
1998-1999	6,208	2.49%
1997-1998	6,057	2.04%
1996-1997	5,936	1.21%
1995-1996	5,865	N/A

Source: Medina CSD Superintendent's Office
[1] As of September 11, 2002
[2] Includes preschool students

Since 1995, the District's enrollment has increased by nearly 1,200 students, which averages to 143 students each year, and Medina CSD projects continued enrollment increases for the next ten years. **Table 4-6** shows Medina CSD's projected enrollment through the 2011-2012 school year.

Table 4-6: Medina CSD K-12
Projected Enrollment

School Year	Enrollment Projection	Percent Change from Previous Year
2002-2003	7,007	N/A
2003-2004	7,155	2.11%
2004-2005	7,346	2.67%
2005-2006	7,519	2.36%
2006-2007	7,710	2.54%
2007-2008	7,861	1.96%
2008-2009	8,033	2.19%
2009-2010	8,196	2.03%
2010-2011	8,350	1.88%
2011-2012	8,500	1.80%

Source: Medina CSD Superintendent's Office

Medina CSD's methods for projecting future enrollments, as well as the enrollment projections themselves, appear reasonable. The District's student population is expected to increase at approximately two percent for each of the next 10 years, which translates to approximately 1,500 additional students by the 2011-2012 school year. Growth in a community impacts the size of the student population and therefore school facility utilization rates. Continual increases in enrollment can lead to high building utilization rates, and in some cases, overcrowding. Projecting future enrollment allows a district to anticipate future needs and to take action to prevent overcrowding. However, it should be noted that the accuracy of projections which include live birth data usually decline after five years, due to the lack of information regarding live births. Inaccurate projections are typically more likely to be too high rather than too low.

F4.2   Medina CSD has not developed a comprehensive facilities master plan (FMP) documenting long-term facilities needs, such as construction needs, building closures, additions, renovations, and preventive maintenance. A typical FMP generally contains the following information:

● Historical data about demographics and community characteristics;

● Educational programs, goals and practices;

● Enrollment projections;

● Facility evaluations and capital improvement needs;

- Capacity and space utilization analyses;
- Implementation plan and budget which includes funding sources; and
- Evaluation process.

The development of a comprehensive FMP provides facilities support staff with a clearer, more detailed plan for using its limited resources. Administrators can also use the document to communicate funding requirements to the Board and voters. In addition, a comprehensive FMP can be used to provide a continuous basis for planning educational facilities which will meet the changing needs of the Medina CSD. It can also assist the District in making more effective decisions regarding allocation of resources to achieve its goals and objectives. A comprehensive FMP may also be used for the following:

- Determine the appropriate number of facilities required to serve both current and projected student populations;
- Estimate the funding needed for repairs, renovations and new construction;
- Document the need for school closings and consolidations;
- Justify buying and selling property; and
- Develop cost-effective alternative uses for existing facilities.

The lack of a comprehensive FMP hinders Medina CSD's ability to prioritize major renovations and maintenance activities and also hinders the District's ability to perform long-range financial planning and budgeting for facility renovations and maintenance needs.

R4.1 Medina CSD should develop a comprehensive FMP which focuses on short-term and long-term building capital improvement and maintenance needs. Due to the District's rapid growth, it is not necessary to address school closings and consolidation as they relate to under-utilized space. However, the District may wish to address closing and consolidations due to extensive repairs/renovations at older facilities, redistricting, and reconfiguring grade levels.

The plan should incorporate building preventive maintenance needs as well as capital improvement needs that will be required as the facilities continue to age. When developing the plan, Medina CSD should obtain input from a variety of stakeholders, such as community groups, business representatives, administrators, teachers, support staff, parents and students. The District should also incorporate input from design professionals with experience in educational facilities planning. Given Medina CSD's anticipated future growth, the FMP should be updated annually and adjusted for factors

such as changes in available funding and shifts in employment that can impact the District.

F4.3   Medina CSD does not have formal, updated capacities for the District's school buildings that are clearly communicated to District administrators, staff and the community. AOS calculated the buildings' capacities using a standard methodology often employed by educational planners and other urban school districts. The capacity for an elementary school building, including Medina CSD's Kindergarten Center, is calculated by multiplying the number of regular classrooms by 25 students and the number of special education classrooms by 10 students. Kindergarten classrooms are multiplied by 50 students to account for morning and afternoon sessions. Special education classrooms in which different students rotate throughout the day, as well as classrooms used for music, art and computer labs are excluded from the count.

The capacity in the middle and high schools is calculated by multiplying the number of teaching stations by 25 students and then multiplying the product by an 85 percent utilization factor. Similarly, special education teaching stations were multiplied by 10 students and then multiplied by an 85 percent utilization factor. Only modular units which are currently used as regular classrooms were included in this analysis. **Table 4-7** compares Medina CSD and AOS capacity calculations.

Table 4-7: Medina CSD FY 2002-03 School Building Capacity

Building	Medina CSD Capacity – without Modular Classrooms	AOS Capacity – without Modular Classrooms	AOS Capacity – with Modular Classrooms [1]
Kindergarten Center [2]	225	250	250
Blake Elementary	600	675	750
Canavan Elementary	625	810	910
Fenn Elementary	650	675	775
Garfield Elementary	650	705	705
Heritage Elementary	450	595	595
Total Elementary School Capacity	**3,200**	**3,710**	**3,985**
Claggett Middle	809	935	1,063
Root Middle	749	867	1,016
Total Middle School Capacity	**1,558**	**1,802**	**2,078**
Medina High [3]	2,400	2,444	2,444
Total High School Capacity	**2,400**	**2,444**	**2,444**
Total Capacity for All School	**7,158**	**7,956**	**8,507**

Source: Medina CSD Superintendent's Office

[1] Elementary modular classroom capacities were calculated based on grades one through five, with 25 students per class. Modular classrooms counted as set asides were excluded from the capacity calculation. Middle school modular classroom capacities were calculated based on an 85 percent utilization rate with 25 students per class.

[2] AOS capacities do not include rooms used for the special education preschool and at-risk pre-kindergarten programs.

[3] This represents Medina High's capacity upon completion of the construction project. Because the modular classrooms will not be used for high school classes after completion of the construction project, modular classrooms were not included in AOS' capacity analysis for the high school.

Table 4-7 illustrates that a difference of nearly 800 students exists between the capacity calculation, excluding modular classrooms, performed by AOS and the capacity used by Medina CSD. This difference increases to over 1,300 students when the capacity calculation including modular classroom is compared to the capacity used by Medina CSD. The differences may be due to Medina CSD's preference for class sizes smaller than 25 students. In addition, the District currently uses capacities developed in a 1997 facilities study, which does not include Blake Elementary, opened in fall 2001, or the renovated high school, which will open in fall 2003. Furthermore, key administrators provided the Auditor of State (AOS) with different building capacity figures. There was a variance of approximately 150 students between the two sets of capacity figures. Therefore, there appears to be a lack of internal communication and agreement on the actual capacity at Medina CSD.

When Medina CSD's current student enrollment of 7,016 students is used to determine overall building utilization, the District is operating at approximately 98.0 percent of capacity, based on Medina CSD's capacity figures of 7,158 students. **Table 4-8** presents

the 2002-03 and projected 2006-07 enrollment figures compared to the AOS capacity calculations, excluding modular classrooms, to determine building utilization rates.

Table 4-8: Current and Projected Building Utilization Rates, without Modular Classrooms

School Type	AOS Capacity	2002-03 Enrollment	Over/(Under) Building Capacity	2002-03 Utilization Rate	2006-07 Projected Enrollment	Over/(Under) Building Capacity	2006-07 Utilization Rate
Elementary	3,710	3,172	(538)	**85.5%**	3,483	(227)	**93.9%**
Middle	1,802	1,628	(174)	**90.3%**	1,811	9	**100.5%**
High	2,444	2,216	(228)	**90.7%**	2,416	(28)	**98.9%**
Total	**7,956**	**7,016**	**(940)**	**88.2%**	**7,710**	**(246)**	**96.9%**

Source: Medina CSD Superintendent's Office

As shown in **Table 4-8**, Medina CSD's overall building utilization rate for 2002-03, excluding modular classrooms, is 88.2 percent. Each school type is under capacity. By the 2006-07 school year, the K-12 student enrollment is expected to increase by nearly 700 students and the overall building utilization rate will increase to 96.9 percent. The elementary schools and high school will still be under capacity, although the high school will only be under capacity by 28 students. Conversely, the middle schools will be slightly over capacity, with a utilization rate of 100.5 percent.

However, the utilization rates presented in **Table 4-8** are not accurate because Medina CSD is using modular classrooms at six of its nine school buildings. This excludes the modular units at the high school, which are being used during construction. In **Table 4-9**, the 2001-02 and projected 2006-07 enrollment figures are compared to the AOS capacity calculations, including modular classrooms, to determine building utilization rates.

Table 4-9: Current and Projected Building Utilization Rates, with Modular Classrooms

School Type	AOS Capacity	2002-03 Enrollment	Over/(Under) Building Capacity	2002-03 Utilization Rate	2006-07 Projected Enrollment	Over/(Under) Building Capacity	2006-07 Utilization Rate
Elementary	3,985	3,172	(813)	**79.6%**	3,483	(502)	**87.4%**
Middle	2,078	1,628	(450)	**78.3%**	1,811	(267)	**87.1%**
High	2,444	2,216	(228)	**90.7%**	2,416	(28)	**98.9%**
Total	**8,507**	**7,016**	**(1,491)**	**82.5%**	**7,710**	**(797)**	**90.6%**

Source: Medina CSD Superintendent's Office

As shown in **Table 4-9**, Medina CSD's overall building utilization rate for 2002-03, including modular classrooms, is 82.5 percent. Each school type is under capacity. By the 2006-07 school year, the K-12 student enrollment is expected to increase approximately 700 students and the overall building utilization rate will increase to 90.6 percent. Although each school type will remain under capacity, the high school will only be 28 students under capacity. To address projected increases in enrollment over the next five years, Medina CSD may need to build an additional wing onto the high school or again lease modular classrooms by the 2006-07 school year. The new high school was

designed to accommodate the future addition of another wing on the school's existing grounds.

The 18 modular classrooms which are currently at the high school will not be needed for high school classes once construction of the high school complex is completed in the fall of 2003. If the District continues to lease the classrooms, it would increase Medina CSD's capacity by an additional 450 students.

Without formally defined building capacities, Medina CSD can not optimize the allocation of building space, nor can it adequately plan for the District's projected future growth.

R4.2   Building capacity and utilization should be reviewed annually in conjunction with enrollment projections (**F4.1**) to determine the appropriate amount of space needed to house Medina CSD's current and projected student populations. Medina CSD should formally adopt a building capacity calculation methodology which takes into consideration the District's needs and educational philosophy. The methodology should be used to determine school building capacity whenever there is new construction, major renovations or changes in educational philosophies. Because Medina CSD is experiencing continuous, rapid growth, building capacities should be compared to enrollment projections annually to determine building utilization rates. Regularly monitoring utilization rates will allow Medina CSD to plan and prepare for the projected growth of the student population.

Medina CSD should also determine if it will use the modular classrooms at the high school for another purpose once construction of the high school is completed and incorporate the decision into facilities planning. Additionally, the District should closely monitor the student population at the high school to determine when additional classroom space will be needed. Medina CSD should decide if the additional space will be achieved through construction of an additional academic wing or through the use of modular units.

F4.4   Medina CSD and the City of Medina (the City) entered into a joint operating agreement for the Medina Recreation Center (recreation center), which is attached to the high school. The recreation center is owned by Medina CSD and leased to the City, which provided $7.5 million for the recreation center's construction. The City's leasehold interest commences on the day the recreation center opens for public use and terminates on June 30 of the fiftieth year. However, mutual consent by both parties can terminate the agreement prior to its 50 year expiration.

The agreement requires the City to reimburse Medina CSD for 47.5 percent of the recreations center's operating expenses. Operating expenses include the following:

- Utilities;
- Custodial service;
- Maintenance;
- Repairs of equipment with a useful life of less than five years;
- Snow and ice removal; and
- Grounds work.

Additionally, Medina CSD and the City must each establish a Capital Improvement Fund and each contribute $100,000 annually to its respective fund on a sliding implementation scale. Neither entity is required to contribute during the first two years of the agreement. However, in the third year, each must contribute 30 percent; in the fourth year, 60 percent; in the fifth year, 90 percent; and in the sixth year and each year thereafter, 100 percent.

Per the agreement, Medina CSD is required to provide custodial staffing for the recreation center seven days a week, with the initial staffing of 4.0 FTEs working three different shifts. An appendix to the agreement provides a detailed schedule of cleaning tasks. Custodial staffing levels are expected to be adjusted according to the needs of the recreation center. The agreement also defines certain times of the year during which either the District or the City will have priority use of specified areas of the recreation center and provides for annual review and revision of these areas. An appendix details the initial priority use schedules for each entity, with time and space equitably distributed. The agreement appears to provide equal access to the recreations center's facilities for both the City and District.

The joint school district / city recreation center appears to be a mutually beneficial arrangement. Each entity may not have been able to incur the costs of such a facility independently. However, by pooling their resources and sharing the cost, Medina CSD and the City enjoy the benefits of a state-of-the-art recreation complex, with each paying approximately half of the cost.

R4.3 Medina CSD's superintendent and business manager should closely monitor and evaluate the resources the District allocates, above and beyond those expressly stipulated in the contract, to operate the recreation center. The superintendent and business manager should report this information to the School Board at least annually. Dedicating resources beyond those required to operate the recreation center in a safe, clean, comfortable environment limits the resources Medina CSD can use for educational purposes or for repairs and upgrades on other facilities. Additionally, Medina CSD should monitor the District's use of recreation center facilities to ensure that it maintains a fair and equitable arrangement with the City.

Facilities-Related Expenditures and Revenue Streams

F4.5   Revenue from the General Fund is used to support the maintenance and operation (M&O) of Medina CSD's facilities. As shown in **Tables 4-3** and **4-4**, the General Fund provided approximately $4.9 million in FY 2001-02 for custodial and maintenance salaries and benefits, purchased services, utilities, supplies and materials, and capital outlay. **Table 4-10** illustrates Medina CSD's and the peer districts' FY 2001-02 General Fund M&O expenditures in terms of cost per square foot.

Table 4-10: FY 2001-02 General Fund M&O Expenditures per Square Foot

Expenditures	Medina CSD	Pickerington LSD	Stow-Munroe Falls CSD	Strongsville CSD	Peer Average	AS&U >3,500 Students
Custodial and Maintenance Salaries and Benefits	$3.54	$2.79	$2.44	$3.72	$2.98	$2.23
Purchased Services	$0.67	$1.03	$0.50	$0.37	$0.63	$0.06
Utilities	$1.63	$1.11	$1.34	$1.80	$1.42	$1.36
Supplies/Materials	$0.34	$0.44	$0.27	$0.25	$0.32	$0.21
Capital Outlay	$0.25	$0.07	$0.13	$0.06	$0.08	N/A
Other	$0.03	$0.00	$0.00	$0.00	$0.00	$0.07
Total M&O General Fund Expenditures	**$6.46**	**$5.44**	**$4.68**	**$6.19**	**$5.44**	**$3.93**

Source: Medina CSD and peer district budget worksheet reports

Overall, Medina CSD's General Fund facilities related expenditures per square foot ($6.46) are significantly higher than the peer district average ($5.44) and the AS&U median for districts with more than 3,500 students ($3.93). Furthermore, the District is higher than the peer district average and the AS&U median in every expenditure line item. The largest differences exist in custodial and maintenance salaries and benefits, which is $0.56 higher than the peer average, and utilities, which is $0.21 higher than the peer average. When Strongsville CSD is excluded from the peer averages in these categories, the peer averages become $2.62 and $1.23, respectively. Medina CSD's salaries and benefits expenditures become $0.92 higher than the peer average and utilities expenditures become $0.40 higher than the peer average.

A major factor contributing to the relatively high salaries and benefits costs per square foot is the higher maintenance staffing levels at Medina CSD (see **F4.13** and **R4.8**). In addition, capital outlay expenditures per square foot are the highest at Medina CSD, which can be attributed to the modular classrooms (see **F4.3**). See **F4.11** and **F4.14** for information regarding salaries and benefits expenditures and **F4.8** for utilities expenditures.

F4.6   Medina CSD has not incorporated its permanent improvement into a comprehensive capital improvement plan or facilities master plan (FMP) (see **F4.2** for FMP). The District contracted Fanning/Howey Associates, Inc. to develop a permanent improvement plan for FY 1997-98 through FY 2000-01. The plan detailed, by building, the necessary repairs and upgrades, provided a cost estimate for each project, and listed the fiscal year in which the work should occur. During the course of this audit, the District and Fanney/Howey Associates updated the permanent improvement plan to reflect needs of the facilities for FY 2003 through FY 206. The plan identifies the funding source for each project as permanent improvement levy (PIL), unless otherwise noted. Given that $516,000, or 91 percent, of the $570,000 generated by the PIL in FY 2001-02 was spent on maintenance and operations, identifying the funding source demonstrates fiscal responsibility to the taxpayers of Medina CSD.

R4.4   Medina CSD should continue to update its permanent improvement plan and incorporate it into the multi-year capital improvement plan and FMP (see **R4.1**) to help ensure the most critical facilities needs are completed as funds become available. This would also help ensure that all capital outlay expenditures coincide with the District's continuous improvement plan and would demonstrate fiscal responsibility to the citizens of the District. For more information regarding PIL expenditures and a comprehensive capital improvement plan, see the **financial systems** section of this performance audit report.

F4.7   According to expenditure reports, Medina CSD paid approximately $2.1 million for custodial and maintenance salaries in FY 2001-02. Salaries were paid from the operation and maintenance of plant services function (function 2700) of the General Fund. **Table 4-11** shows what object codes were charged for custodial and maintenance salaries.

Table 4-11: FY 2001-02 Custodial and Maintenance Salary Expenditures

Expenditures	Object Code	Total Object Code Salaries	Percentage of Total Salaries
Custodial & Maintenance Salaries	141	$1,754,991	85.4%
Temporary Custodial & Maintenance Salaries	142	$164,204	8.0%
Custodial & Maintenance Overtime	144	$134,995	6.6%
Total Salaries	**N/A**	**$2,054,190**	**100.0%**

Source: FY 2001-02 General Fund budget expense worksheet for function 2700

Approximately 85 percent of custodial and maintenance salary expenditures, regardless of the reason incurred, were coded to object code 141, regular non-certificated salaries and wages. According to the Uniform School Accounting System (USAS) manual, object code 141 is to be used to record expenditures incurred for actual work performed by permanent employees.

Medina CSD does not use the non-certificated leave benefits objects code (151 – sick leave, 152 – personal leave, 153 – vacation, etc.) to track how much it costs when a

classified employee is absent and cannot accomplish the duties normally performed for "regular" salaries and wages. Instead, all custodial and maintenance expenditures, except for temporary salaries and overtime costs, are coded to object code 141. As a result, Medina CSD cannot easily determine how much the negotiated leave benefits are costing each department. The inaccurate coding of expenditures inhibits Medina CSD's ability to readily identify costly benefits and opportunities for cost savings. Furthermore, improper coding negatively impacts the District's ability to accurately forecast and budget for future salary and benefit costs.

R4.5 Medina CSD should account for all expenditures in accordance with the guidelines established in the USAS manual. By opting not to account for expenditures as recommended in the USAS manual, it is not possible to thoroughly examine why certain salary-related expenditures were incurred. It is also not possible to determine how much benefits, such as vacation and sick leave, are costing the District.

Energy Management

F4.8 Medina CSD does not have a comprehensive energy management and conservation plan. Despite using an energy management program to regulate temperatures in the District's buildings and completing a $1.4 million H.B. 264 project, Medina CSD spent $1.63 per square foot on utilities in FY 2001-02. This is 15 percent higher than the peer district average (**Table 4-10**).

Building temperatures are set at 75 for cooling and 72 for heating and the operations department receives a weekly schedule of after hours events for each school building and sets the temperatures accordingly. However, some of the newer buildings have individual room thermostats which permit manual adjustments of three to five degrees. Additionally, the energy management system can not regulate cooling temperatures at Garfield Elementary, Medina CSD's oldest building. According to Medina CSD's building and grounds supervisor, individual window air conditioners are used for cooling Garfield elementary due to the prohibitive expense of installing central air in the building.

According to the *Facilities Management Handbook*, from a baseline that represents no real effort at energy management, savings and cost avoidance of 30 to 33 percent are possible with a good energy plan. Adjusting thermostat settings to 78 degrees for cooling and 68 degrees for heating can reduce energy costs by approximately 16 percent.

Reducing the District's utilities expenditures would allow Medina CSD to allocate more funds to building maintenance and repairs, thus ensuring a safe environment for the students, staff and community.

R4.6 Medina CSD should immediately begin implementing an energy management and conservation program, which includes the following measures:

- Increasing cooling temperatures to 78 degrees and decreasing heating temperatures to 68 degrees;

- Turning off computers and office equipment or programming them to power down when not in use; and

- Purchasing gas and electricity through a discounted program or consortium.

Furthermore, maintenance staff should monitor manual changes to ensure they are not excessive and do not hinder the energy management and conservation program.

Financial Implication: Adjusting thermostat settings to those recommended in the *Facilities Management Handbook* could save Medina CSD approximately 16 percent of its utility expenditures. Based on the actual utility expenditures of approximately $1.3 million in FY 2001-02 (see **Tables 4-3** and **4-4**), Medina CSD could save approximately $200,000 annually. These savings will reduce Medina CSD's expenditures per square foot to $1.37, which is slightly lower than the peer average but higher than Pickerington LSD and Stow-Munroe Falls CSD (see **Table 4-10**).

Custodial Services

F4.9 Medina CSD determines custodial staffing levels through comparisons to other school districts and with a DOS-based software program, CustStaff. Staffing levels are based on the square footage per building and rounded to the nearest 0.5 FTE custodian. **Table 4-12** shows the FY 2001-02 average square footage per FTE custodian for Medina CSD, the peer districts and the AS&U median for school districts with more than 3,500 students.

Table 4-12: FY 2001-02 Square Footage per Custodial FTE

Medina CSD	**21,465**
Peer Districts:	
- Pickerington LSD	22,001
- Stow-Munroe Falls CSD	26,067
- Strongsville CSD	17,500
Peer District Average	**22,166**
Difference	**(701)**
AS&U 30th Annual Cost Study >3,500 Students	**20,440**
Difference	**1,025**

Source: Custodial department staffing rosters and building inventories, AS&U 31st Annual M&O Study

In FY 2001-02, Medina CSD's custodial staff was responsible for maintaining slightly less square footage per FTE custodian than the peer districts. Overall, Medina CSD's custodians were responsible for an average of 21,465 square feet compared to the peer district average of 22,166 square feet. However, Medina CSD's custodial staff maintained approximately 1,000 more square feet per FTE than the AS&U median for school districts with more than 3,500 students.

Table 4-13 compares Medina CSD's school building and custodial staff to the peer districts' school buildings and custodial staffs.

Table 4-13: Comparison of School Facilities and FY 2001-02 Custodial FTEs

	Medina CSD	Pickerington LSD	Stow-Munroe Falls CSD	Strongsville CSD	Peer Average	Difference Between Medina CSD and Peer Average
Elementary School Buildings	6	7 [1]	6 [2]	8		
Total Sq. Footage [3]	341,227	517,911 [1]	303,916 [2]	347,355		
Number of Custodians	19.00	24.00 [1]	14.00 [2]	20.40		
Sq. Footage per Custodian	17,959	21,580 [1]	21,708 [2]	17,027	20,105	(2,146)
Middle School Buildings	2	1 [4]	1	2		
Total Sq. Footage [3]	222,062	111,142 [4]	147,500	167,803		
Number of Custodians	8.00	6.00 [4]	3.50	8.72		
Sq. Footage per Custodian	27,758	18,521 [4]	42,143	19,243	26,636	1,122
High School Buildings	1	1	1	1		
Total Sq. Footage [3]	188,000	273,000	304,514	234,470		
Number of Custodians	8.00	11.00	10.50	13.80		
Sq. Footage per Custodian	23,500	24,818	29,001	16,991	23,603	(1,728)
Total for All Buildings	9	9	8	11		
Total Sq. Footage [3]	751,289	902,053	755,930	749,628		
Number of Custodians	35.00	41.00	28.00	42.92		
Sq. Footage per Custodian	21,465	22,001	26,998	17,466	22,155	(690)

Source: Custodial departments, staff rosters, and building inventories
[1] Figures include Pickerington LSD's middle schools, which house fifth and sixth grades.
[2] Figures include Stow-Munroe Falls CSD's intermediate school, which houses fifth and sixth grades.
[3] Total square footage figures include modular classroom square footage.
[4] Pickerington LSD's junior high school, which houses seventh and eighth grades, is counted as a middle school.

Overall, Medina CSD's custodians were responsible for maintaining 690 square feet less than the peer district average. In addition, custodians assigned to Medina CSD's elementary schools were responsible for maintaining 17,959 square feet per FTE, which is 2,146 square feet less than the peer district average of 20,105 square feet per FTE. Medina CSD's square footage per custodial FTE may be lower than the peer average because most of the District's classrooms are carpeted, which requires more extensive cleaning. Furthermore, the elementary square footage figures for both Pickerington LSD and Stow-Munroe Falls CSD include their intermediate schools (grades 5 and 6), which may allow them to maintain more square footage per custodial FTE due to the age of the students and furniture size. Although Medina CSD's overall square footage per FTE

ratio was slightly lower than the peer average, custodial staffing levels appear adequate based on these additional factors.

F4.10   For FY 2002-03, Medina CSD has increased custodial staffing at the high school facility by 17.0 FTEs, for a total of 25.0 FTEs, to accommodate the facility's increased square footage.   The high school construction project more than tripled the building's square footage, from 172,000 square feet to 546,884 square feet. **Table 4-14** compares Medina CSD's FY 2001-02 school building and custodial staff to its FY 2002-03 school building and custodial staff and to the peer district's school buildings and custodial staffing levels.

Table 4-14: Comparison of FY 2001-02 Staffing to FY 2002-03 Staffing

	Medina CSD FY 2001-02	Medina CSD FY 2002-03	Peer Average	Difference Between FY 2002-03 Staffing and Peer Average
Elementary School Buildings	6	6		
Total Sq. Footage	341,227 [1]	341,227		
Number of Custodians	19.00	19.00		
Sq. Footage per Custodian	17,959	17,959	20,105	(2,146)
Middle School Buildings	2	2		
Total Sq. Footage	222,062 [1]	222,062		
Number of Custodians	8.00	8.00		
Sq. Footage per Custodian	27,758	27,758	26,636	1,122
High School Buildings	1	1		
Total Sq. Footage	188,000 [1]	546,884 [2]		
Number of Custodians	8.00	25.00		
Sq. Footage per Custodian	23,500	21,875	23,603	(103)
Total for All Buildings	9	9		
Total Sq. Footage	751,289 [1]	1,110,173		
Number of Custodians	35.00	52.00		
Sq. Footage per Custodian	21,465	21,349	22,155	(806)

Source: Custodial departments, staff rosters, and building inventories
[1] Total square footage figures include modular classroom square footage.
[2] Total square footage of the completed high school complex includes 106,004 square feet for the recreation center and excludes modular classroom square footage.

Of the 25.0 FTEs assigned to the high school complex, 12.0 FTEs are dedicated solely to the recreation center and auditorium/music wing and the remaining 13.0 FTEs are dedicated to the high school. Medina CSD appears to have adequately planned for custodial staffing in response to the increase in high school complex's square footage and the additional responsibilities of the recreation center (see **F4.3**).

F4.11   **Table 4-15** compares the FY 2001-02 average weighted base salary for Medina CSD's custodians to the average weighted base salaries at the peer districts and to the AS&U median for school districts with more than 3,500 students.

Table 4-15: FY 2001-02 Custodial Average Base Salaries

	FY 2001-02 Average Weighted Base Salary
Medina CSD	**$30,669**
Peer Districts:	
- Pickerington LSD	$27,643
- Stow-Munroe Falls CSD	$32,627
- Strongsville CSD	$32,923
Peer District Average	**$31,064**
Difference	**($395)**
AS&U 31st Annual Cost Study >3,500 Students	**$29,443**
Difference	**$1,226**

Source: FY 2001-02 Staff Demographics Report for Medina CSD, peer district treasurer's office, AS&U 31st Annual M&O Study

The average weighted base salary for Medina CSD's custodial staff in FY 2001-02 was $30,669, which is $395, or approximately one percent, less than the peer district average. Medina CSD's average weighted base salary is approximately $2,000 lower than two peer districts, Stow-Munroe Falls CSD and Strongsville CSD, which are both located near Medina CSD in northeastern Ohio. However, Medina CSD's custodial salaries are $1,226 more than the AS&U median for school districts with more than 3,500 students. There are a number of factors which can impact custodial employee salaries, including employee longevity, experience, training, licensing or certification and job responsibilities. Based on the figures in **Table 4-15** and the custodial workload, it appears Medina CSD's custodians are adequately compensated.

F4.12 Medina CSD does not have an updated formal custodial handbook which outlines job responsibilities and proper cleaning procedures. However, the assistant business manager and building and grounds supervisor are in the process of revising an older custodial handbook. A well documented handbook can help increase efficiency and productivity and ensure the appropriate tasks are being completed in a timely manner.

R4.7 The assistant business manager and the building and grounds supervisor should complete revisions to the custodial handbook and work for its district-wide implementation. The handbook should include the following:

- Basic information about the operations department and its organizational structure;
- Work rules and procedures;
- Contractual issues;
- Copies of administrative forms;
- Proper cleaning procedures and frequency of tasks;
- Checklists for properly caring for and using equipment and supplies;

- Preventive maintenance schedule; and
- Minor maintenance responsibilities.

Each custodian should receive a copy of the custodial handbook. Additionally, the handbook should be used when training new custodial employees to ensure uniform cleaning procedures are used throughout the District. A custodial handbook would also simplify the training process. The assistant business manager and building and grounds supervisor should update the handbook as needed, but at least with each new classified contract period.

Maintenance Operations

F4.13 **Table 4-16** shows the FY 2001-02 average square footage per maintenance FTE for Medina CSD, the peer districts and the AS&U median for school districts with more than 3,500 students.

Table 4-16: FY 2001-02 Square Footage per Maintenance FTE

Medina CSD	**55,651** [1]
Peer Districts:	
- Pickerington LSD	190,922
- Stow-Munroe Falls CSD	83,992
- Strongsville CSD	135,080
Average for Peer Districts	**136,665**
Difference	**(81,014)**
AS&U 31st Annual Cost Study >3,500 Students	**113,376**
Difference	**(57,815)**

Source: Staffing rosters, building inventories and AS&U 31st Annual M&O Study
[1] AOS used 13.5 maintenance FTEs for this calculation, based on the reduction of 2.0 FTE to account for grounds work.

Medina CSD's maintenance employees are responsible for maintaining an average of 55,651 square feet per FTE, which is 81,014 square feet, or 59 percent, less than the peer average and 57,815 square feet, or 51 percent, less than the AS&U median for school districts with more than 3,500 students. When Pickerington LSD is excluded from the peer average, the average decreases to 109,536 square feet per maintenance FTE, which is still 53,885 square feet more than Medina CSD's average.

According to Medina CSD administrators, the District staffs maintenance repairmen at 80,000 square feet per FTE. However, when the 2.0 laborer FTEs are subtracted from the 13.5 total maintenance FTEs (**Table 4-1**), Medina CSD's square footage per maintenance repairman only increases to 65,329 square feet. This figure is still significantly lower than the peer average and the AS&U median for school districts with more than 3,500 students.

A number of factors, including grounds work, the use of outside contractors and preventive maintenance programs, all impact the amount of square footage that can be maintained. Medina CSD performs all heating, ventilating and air conditioning (HVAC) work in-house while Pickerington LSD contracts for its HVAC work. Additionally, Medina CSD does not have any employees who are dedicated exclusively to completing grounds work. The District's custodial staff is responsible for grounds work in the areas immediately surrounding the school buildings, and the maintenance staff is responsible for the rest of the grounds work, including athletic field preparation. Strongsville CSD's maintenance staff has grounds work responsibilities, with the exception of athletic field preparation, similar to Medina CSD's, but maintains over twice the square footage per maintenance FTE as Medina CSD.

Medina CSD added one maintenance FTE in FY 2002-03, for a total of 16.5 maintenance FTEs (14.5 excluding the 2.0 FTE for grounds work), and plans to add an additional maintenance FTE in FY 2003-04, for a total of 17.5 maintenance FTEs (15.5 excluding the 2.0 FTE for grounds work). The District is increasing maintenance staffing to accommodate the completion of the 546,884 square foot high school complex, sections of which will come online throughout the 2002-03 school year. Final completion is scheduled for fall of 2003. When the square footage per maintenance FTE is recalculated for FY 2002-03 based on the addition of 2.0 FTEs and the revised square footage for the District (1,125,373 square feet), Medina CSD maintains 72,605 square feet per maintenance FTE. This figure is still significantly lower than both the peer average and the AS&U median. By maintaining such a low square footage per maintenance FTE ratio, Medina CSD limits the funds available for other facilities and educational purposes.

R4.8   Medina CSD should evaluate the volume of work and the type of work performed by its maintenance staff. Based upon comparisons to the peer districts, Medina CSD could reduce its maintenance staff, and its plans to hire additional staff, by 6.0 FTEs to a total of 9.5 maintenance FTEs. This will increase the District's square footage per maintenance FTE to 118,460 square feet. The District's square footage once the high school complex is completed, 1,125,373 square feet, and the FY 2003-04 planned staffing level of 15.5 FTEs (excludes the 2.0 FTE for grounds work) was used to arrive at this figure. The 118,460 square feet per maintenance FTE ratio is slightly higher than the AS&U median for school districts with more than 3,500 students, and is 13 percent less than the peer average. However, because a substantial portion of the square footage in Medina CSD will be new, 118,460 square feet per maintenance FTE is not an unreasonable ratio.

Financial Implication: If Medina CSD reduces 6.0 maintenance FTEs, the District could reduce facilities related expenditures by approximately $267,000 annually. The estimated savings assumes an average salary of $34,168 (**Table 4-17**), and benefits equal to 30 percent of the salary amounts.

F4.14 **Table 4-17** compares Medina CSD's maintenance average base salary to the peer districts' maintenance average base salaries and to the AS&U median for school districts with more than 3,500 students.

Table 4-17: FY 2001-02 Maintenance Average Base Salaries

	FY 2001-02 Average Weighted Base Salary
Medina CSD Weighted Average	**$34,168**
Peer Districts:	
- Pickerington LSD	$33,576
- Stow-Munroe Falls CSD	$33,673
- Strongsville CSD	$40,281
Peer District Average	**$35,843**
Difference	**($1,675)**
AS&U 31st Annual Cost Study >3,500 Students	**$37,136**
Difference	**($2,968)**

Source: FY 2001-02 Staff Demographics Report for Medina CSD, peer district treasurer's office, AS&U 31st Annual M&O Study

The average weighted salary for Medina CSD's maintenance staff in FY 2001-02 was $34,168, which is $1,675, or approximately 5 percent, less than the peer district average. However, Strongsville CSD's average weighted salary is approximately $6,500 higher than Pickerington LSD and Stow-Munroe Falls CSD. When the peer average weighted salary is recalculated without Strongsville CSD, it decreases to $33,625, which is $543 less than Medina CSD's average weighted salary.

Medina CSD's average weighted salary is $2,968 less than the AS&U median for school districts with more than 3,500 students. There are a number of factors which can impact maintenance employee salaries, including employee longevity, experience, training, licensing or certification and job responsibilities. Based on the salary figures in **Table 4-17** and the maintenance workload in **Table 4-16**, it appears Medina CSD's maintenance staff is adequately compensated.

F4.15 Medina CSD and a local software company developed an electronic work order system, Maintain+, for the District. Head custodians typically submit work order requests to the operations department secretary, who prints, numbers and forwards them to the maintenance coordinator. The maintenance coordinator reviews the requests, prioritizes them and assigns them to maintenance staff members. The building and grounds supervisor and business manager also receive copies of work order requests and can refuse requests they deem unnecessary. Maintain+ also tracks Medina CSD's preventive maintenance program through the work order requests.

After the work order is completed, the assigned maintenance staff member(s) complete the request form, indicating the work performed and length of time to complete it, and submits it to the department secretary. Completed requests are entered into the work

order system. The building and grounds supervisor sends a monthly work order summary to the business manager and building principals. The electronic work order system allows Medina CSD to track its preventive maintenance program, aids troubleshooting efforts and helps identify system breakdowns. Additionally, the system serves as a method for tracking repair costs and maintenance staff productivity.

C4.1   Implementing an electronic work order system has allowed Medina CSD to streamline its work order request process and eliminate the downtime associated with processing, approving and delivering written requests. Using the system, the building and grounds supervisor can determine the number of open and completed work orders, the total number assigned to each repairman and the labor costs associated with each completed request.

F4.16   Medina CSD does not have a formal replacement plan for operations department equipment and vehicles. The building and grounds supervisor meets with the transportation supervisor annually to discuss the state of the operations department's vehicles. Vehicles which require extensive repair or those with deteriorating bodies are sold and replaced using the state bid list. A formal replacement plan would help Medina CSD better plan for equipment and vehicle purchases, as well as communicate its needs to the Board and the public.

R4.9   Medina CSD should develop a formal replacement plan for operations department equipment and vehicles to help ensure equipment and vehicles are replaced before their useful lives expire. The replacement policy should consider factors such as the manufacturer's projected life, the useful life based on the District's experience and repair histories. Additionally, the replacement plan should identify the funding source to be used for replacements.

Financial Implications

The following table represents a summary of implementation costs and annual cost savings. This table illustrates the savings Medina CSD could potentially realize. For the purposes of this table, only recommendations with quantifiable impacts are listed.

Summary of Financial Implications for Facilities

Recommendation	Annual Costs Savings
R4.6 Implementation of an energy management and conservation program	$200,000
R4.8 Reduce maintenance staffing by 6.0 FTEs	$267,000
Total	**$467,000**

Conclusion

Overall, Medina CSD's maintenance and operations expenditures are significantly higher than the peer average and the AS&U median for school districts with more than 3,500 students. The high costs can be attributed to salaries and benefits and utility expenses. High salary and benefit expenditures, 19 percent higher than the peer average, are due in part to maintenance overstaffing. Medina CSD could decrease its maintenance salary and benefit expenditures by reducing 6.0 FTEs maintenance employees. It is possible that Medina CSD is incurring higher than necessary expenditures for benefits such as sick leave and vacation leave. However, Medina CSD does not use the non-certificated leave benefit object codes in USAS to track how much it spends when custodial or maintenance staff members are absent. As a result, Medina CSD's ability to readily identify costly benefits and develop strategies to realize cost savings is hindered. Medina CSD should account for all expenditures in accordance with the guidelines prescribed in the USAS manual.

Despite participating in a H.B 264 projects and having an energy management system, Medina CSD paid $1.63 per square foot for utilities in FY 2001-02. This is approximately 15 percent higher than the peer average. The District should immediately implement an energy management and conservation program which could save Medina CSD approximately $200,000 annually in utility expenses.

Medina CSD has not been proactive in planning for long-term facility use and needs. Although the District generates annual enrollment projections, it does not have a comprehensive facilities master plan or updated, formal school building capacities. Medina CSD should develop a FMP and update it annually to reflect changes in funding, student enrollment or educational philosophy. Due to the District's rapid growth, enrollment projections and building capacity and utilization rates should be included in the FMP. Furthermore, Medina CSD should formally adopt a building capacity calculation methodology that takes into consideration the District's needs and educational programs.

The operations department uses an electronic work order system to track work order requests and repair histories, as well as the District's preventive maintenance program. As a result, Medina CSD has streamlined its work order request system and eliminated downtime associated with processing, approving and delivering written requests.

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Transportation

Background

Medina City School District (Medina CSD) provided transportation to 4,874 public and non-public riders in FY 2001-02. For the purpose of illustrating various operational issues, comparisons are made throughout the section with selected peer school districts. Stow-Munroe Falls City School District (Stow-Munroe CSD) and Strongsville City School District (Strongsville CSD) were identified as peers based upon comparable districts identified by the Ohio Department of Education, review of various demographic information and input from Medina CSD personnel. Reynoldsburg City School (Reynoldsburg CSD) was identified as a best practice district for transportation operations based on demographic and operational information reviewed in previous performance audits.

Medina CSD has a formal policy to provide transportation for those students "whose distance from their school makes this service necessary within the limitations established by state law and the regulations of the State Superintendent of Instruction." All kindergarten students are transported to school without regard to the distance from home to school. Students in grades one through twelve who live beyond one mile from home are also provided transportation. Exceptions to the limits with regards to safety have been established historically or through current examination of the District's transportation practices. In addition, exceptions to the policy may be made in the case of a temporarily or permanently disabled student who has been so certified by a physician. Other policies governing transportation include:

- Bus Driver Certification;
- Student Transportation Safety and Welfare;
- Transportation for Field and Other District-Sponsored Trips;
- Non-Routine Use of School Buses;
- Transportation by Private Vehicle; and
- Drug and Alcohol Testing of CDL License Holders

Organization Function

Medina CSD employs a full-time transportation manager who oversees the District's transportation operations and manages the bus drivers. The transportation manager at Medina CSD reports to the director of business affairs and is in charge of all aspects of transportation for Medina CSD students including bidding and purchasing of vehicles, staffing, budgeting and state reporting. The transportation manager is also responsible for overseeing the mechanics, bus

drivers, bus aides and support personnel. Transportation support personnel include the following positions:

- A head bus driver who helps ensure operation of the school bus fleet is in compliance with the ORC and the rules and regulations of the Medina CSD Board of Education;
- A secretary who performs customer service duties for the transportation office; and
- A computer operator who handles contacts with staff, students, parents and the public.

In addition, Medina CSD employs 47 regular and 13 substitute drivers. See **Table 5-7** and **F5.10** for analysis and discussion on Medina CSD's staffing levels in comparison to the peer districts.

Summary of Operations

Medina CSD uses a fleet of 46 active and 15 spare buses to provide transportation to its regular and special needs students, both public and non-public. Overall, Medina CSD served 4,874 students and traveled over 493,380 miles in FY 2001-02. The transportation department serves ten district public sites and six private/parochial sites.   The total cost of the transportation program at Medina CSD was $1,740,008 although the District was reimbursed $1,088,170 or approximately 63 percent of the total by the State.

Table 5-1 provides key FY 2001-02 operating statistics and ratios for Medina CSD and the peer districts. These figures will be used for comparative data throughout the transportation section.

Table 5-1: FY 2001-02 Basic Operating Statistics

	Medina	Reynoldsburg	Stow/Munroe	Strongsville	Peer Avg
Students Transported					
Regular Needs, Yellow Bus	4,719	5,282	4,585	6,140	5,152
Regular Needs, Other Methods	43	32	34	37	34
Special Needs	155	57	82	177	105
Total Students Transported	**4,917**	**5,371**	**4,701**	**6,354**	**5,292**
Expenditures					
Regular Needs, Yellow Bus	$1,463,050	$1,185,263	$1,500,340	$2,186,535	$1,627,313
Regular Needs, Other Methods	$7,922	$8,944	$6,244	$9,802	$8,330
Total Regular Needs	**$1,470,972**	**$1,194,207**	**$1,506,584**	**$2,196,337**	**$1,635,643**
Total Special Needs	269,036	123,982	434,731	531,272	363,328
Total Expenditures	**$1,740,008**	**$1,318,189**	**$1,941,315**	**$2,727,609**	**$1,998,972**
State Reimbursements					
Regular Needs	$993,715	$981,289	$890,130	$1,091,165	$987,528
Special Needs	$94,455	$85,574	$121,830	$154,838	$120,747
Total State Reimbursements	**$1,088,170**	**$1,066,863**	**$1,011,960**	**$1,246,003**	**$1,108,275**
Miles Traveled					
Regular Needs, Yellow Bus	493,380	380,700	535,860	627,300	514,620
Buses					
Active, Regular Needs	40	33	49	54	45
Active, Special Needs	6	3	5	7	5
Spare	15	8	15	14	12
Total Buses	**61**	**44**	**69**	**75**	**63**
Square Miles in District	52	27	22	25	25
School Sites					
Public	10	8	8	12	9
Non-public	6	2	13	10	8
Total School Sites	**16**	**10**	**21**	**22**	**18**
Regular Needs Ratios					
Cost per Mile, Yellow Bus	$2.97	$3.11	$2.80	$3.49	$3.16
Cost per Active Bus	$36,576	$35,917	$30,619	$40,491	$35,896
Cost per Student, Yellow Bus	$310	$224	$327	$393	$316
Cost per Student, All Methods	$309	$225	$326	$356	$315
Students per Active Bus	118	160	94	114	114
Special Needs Ratios					
Cost per Student	$1,736	$2,175	$5,302	$3,002	$3,449

Source: Medina CSD and peers T-1, T-2, and T-11 forms

As shown in **Table 5-1**, Medina CSD costs per mile, per student yellow bus, per student for all methods of transportation and per students with special needs are lower than the peer averages. In addition, the students per active bus ratio is greater than the peer average. Although Medina CSD's square mileage is greater than the peer average, the total number of miles traveled is less than the peer average. The total number of miles traveled is a factor in the cost per mile. The lower number of miles traveled is due in part to the routing tiers average, a measure of routing efficiency as shown in **Table 5-4**. Others factors affecting transportation efficiency include the absence of a formal bus replacement policy and the impact of transportation facilities on operations, which are further discussed in **F5.8** and **F5.10**, respectively.

Performance Measures

The following performance measures were used to conduct the analysis of the transportation department at Medina CSD:

- Comparison of transportation policies and practices to State minimum standards, guidelines and peers;
- Adequacy and accuracy of reporting operational information to secure state transportation aid;
- Cost effectiveness of transportation services;
- Assessment of fleet management functions; and
- Adequacy of technology in place to manage transportation.

Findings / Commendations / Recommendations

Review of Transportation Policies

F5.1　School districts must file a series of forms each year with the Ohio Department of Education (ODE) to track operational data for transportation. The T-1 form details the number of regular needs students receiving transportation and the mileage incurred by the buses providing this service. The T-2 form breaks down all the costs associated with the services outlined on the T-1 form. The T-11 form outlines operations and the associated costs for the provision of special needs transportation.

Once submitted to ODE, these forms are used to determine State funding amounts from the School Finance Foundation. The regular needs reimbursement amount received by Medina CSD for FY 2001-02 is based on a number of factors determined by ODE which include ridership, miles traveled and school district wealth. As shown in **Table 5-3**, Medina CSD's transportation reimbursement in FY 2001-02 was $993,715, or 67.6 percent of total regular needs transportation expenditures. ODE finances special needs transportation based on a ratio of special needs students and the costs related to transporting them. In FY 2001-02, Medina CSD's total special needs transportation reimbursement was $94,455, or 35.1 percent of special needs transportation costs.

A review of Medina CSD's T forms and the worksheets that were used to prepare them, in comparison to District financial reports, indicated that expenditures associated with transportation were accurately reported. Accurate T-forms ensure that the transportation reimbursements from the State are calculated correctly based on either the number of students transported or the miles driven. In addition, expenditure amounts are used to develop the State-wide formula used to calculate reimbursements for the following year. Accurate T forms are also important to ensure that ODE maintains appropriate statistics on Ohio's school districts.

F5.2　Minimum standards have been established by the State for transportation. Students in grades kindergarten through eight that live more than two miles from school will be provided transportation by the school district where they reside. Medina CSD transports all students in grades one through twelve who live one mile or more from school. Currently, all kindergartners ride to and from school by bus, regardless of how far they live from school. Beginning in FY 2003-04, kindergartners that live more than one mile will be picked up for morning kindergarten and dropped off from afternoon kindergarten. Every kindergartner will also ride during the mid-day runs (this is drop off for morning kindergarten and pick up for afternoon kindergarten). However, only kindergartners that live more than one mile from school will continue be transported both ways. The mid-day bus runs will be in effect because of safety issues, such as the lack of noon time

crossing guards or other less formal types of supervision, such as parents, older siblings or neighbors to transport kindergartners home. The change in kindergarten bus procedures is part of a plan to bring kindergarten ridership to the one mile limit which is in line with the rest of the District. The new kindergarten procedures are similar to what is in practice at Stow-Munroe CSD.

To provide transportation for high school students using the career center for classes, buses are shuttling students in combination with mid-day kindergarten runs. This method eliminated the need for additional runs and subsequent costs. According to the transportation manager, approximately $5,100 in additional costs were avoided by scheduling career center shuttles with kindergarten runs.

Table 5-2 provides detail regarding the costs associated with various levels of transportation service provided by Medina CSD.

Table 5-2: Costs for Levels of Transportation Service

	Type of Service	Cost of Service	Less ODE 63% reimbursement	Savings from eliminating Service
Option 1				
	Service for high school students living between 1 and 2 miles from school	$95,416	$60,112	**$ 35,304**
Option 2				
	Service for all high school students[1]	$254,443	$160,299	**$94,144**
Option 3				
	Service for K through 8[2] students living between 1 and 2 miles from school	$477,081	$300,561	$176,520
	Service for all high school students	$254,443	$160,299	$94,144
	Total Service 3	$731,524	$460,860	**$270,664**

Source: Medina CSD
[1] Transportation services for high school students is not mandated by Ohio law.
[2] Transportation services for K-8 students who live less than 2 miles from school is not mandated by Ohio law.

As shown in **Table 5-2,** if transportation services to high school students were reduced to provide transportation to only those high school students living over two miles, the District could save approximately $35,000 annually (Option 1). If high school transportation was reduced to the state minimum, the District could save approximately $94,000 annually (Option 2). By reducing transportation services to state minimums for kindergarten through grade 12, Medina CSD could reduce transportation costs by approximately $270,000 annually (Option 3). Considering the rapid growth experienced by the District and associated increases in capital costs (see the **facilities** section), revising the current transportation policy would allow Medina CSD to allocate additional resources to support direct instructional activities.

R5.1   The District should review its transportation policy to determine if reductions in service are appropriate. If the District adopts any of the above mentioned options, savings could be realized ranging from approximately $35,000 to $270,000. As Medina CSD prioritizes expenditures to ensure direct instructional activities are adequately supported, the District should review its transportation policy to determine if the District can continue to provide its current level of transportation services that exceed State minimum standards. Medina CSD should realize cost savings by adjusting its transportation policy to more closely reflect State minimum standards. The savings realized through reduction in transportation services could be reallocated to support direct instructional activities. Before implementing any reduction in transportation service, the District should determine the feasibility of such a reduction with regards to the safety of students, particularly in areas or neighborhoods where there are no sidewalks.

Financial Implication: Based on the FY 2001-02 ridership figures, if transportation services to high school students were reduced to provide service to only those high school students living more than two miles from school, the District could save approximately $35,000 annually.   If Medina CSD's financial circumstances change, Option 2 and 3 should be reviewed for additional cost savings.

F5.3   Medina CSD provides each student with a one page trifold "handbook" which outlines expectations for student conduct while on the bus. The details concerning transportation include the following:

- Eligibility for ridership;
- Schedules, routes and alternate drop-offs;
- Services parents and pupils can and cannot expect;
- Safety precautions for loading, unloading, crossing the road and emergency evacuations; and
- School discipline procedures.

However, the handbook does not require the signature of the student and parent/guardian to signify the receipt, review and agreement to abide by the guidelines.

Although bus drivers are responsible for the safety of riders, the authority for discipline is placed with the building principal of the involved student(s). Inconsistencies may result from two possible situations; the discretion of the various building principals to apply discipline and the lack of record keeping to track the number of occurrences, referrals and their conclusions.

When a student is disciplined, a discipline form is completed by the driver and forwarded to the principal of the school, where the actual discipline occurs. When the student is disciplined at the school or suspended from bus privileges, the transportation department

is also notified. The transportation manager has reviewed software that would facilitate monitoring discipline issues by school, student or bus driver. However, this software is not in use.

R5.2 The transportation handbook should be revised to require the signatures of the student and parents/guardians to indicate their understanding and acceptance of the policies and procedures regarding student transportation.

In addition, the transportation manager should continue to evaluate discipline software for possible implementation. Discipline software would enable the transportation department to effectively review discipline issues by school, student or bus driver. Until a decision is reached concerning software, the transportation manager should work with the building principals to develop uniform discipline policies and procedures that can be administered and monitored consistently.

Assessment of Ridership and Routing

F5.4 Table **5-3** outlines the ridership for Medina CSD and the peer districts.

Table 5-3: FY 2000-01 Total Regular & Special Needs Riders

	Medina CSD	Reynoldsburg CSD	Stow-Munroe CSD	Strongsville CSD	Peer Average
Public	4,169	4,517	4,019	4,901	4,479
Non-Public	550	765	559	1,239	854
Community School	0	0	7	0	0
Total Regular Needs Riders	**4,719**	**5,282**	**4,585**	**6,140**	**5,333**
Total Special Needs Riders	**155**	**57**	**82**	**177**	**105**
Total Riders	**4,874²**	**5,339²**	**4,667²**	**6,317²**	**5,439**

Source: District T-1 and T-11 Forms and interviews
[1] These students are all regular needs riders.
[2] The total number of riders does not include resident students that use payment in lieu of transportation to attend their schools of choice.

As illustrated in **Table 5-3**, Medina CSD transports fewer regular-needs and non-public riders than the peer average, but more special needs riders that the peer average. However, as shown in **Table 5-1**, the higher population of special needs riders does not appear to negatively impact the cost of transportation.

F5.5 Routing tiers represent the average number of runs and the series of pick-up points to a school, which exist for each route. The number of routing tiers is affected by the proximity of students to schools, the layout of the run, staggered school bell schedules and the length of the bus ride. **Table 5-4** outlines the routing methodologies for Medina CSD and the peer districts.

Table 5-4: Routing Comparison

	Medina CSD	Reynoldsburg CSD	Stow-Munroe CSD	Strongsville CSD
Routing tiers average	2.64	4.0	1.83	2.59

Source: Medina CSD and peer district routing plans

As illustrated in **Table 5-4**, Medina CSD has the second highest routing tier average when compared to the peers. Medina CSD's routing tier average of 2.64 indicates that a bus in the District will make an average of 2.64 runs per route (start point to end point). Three and four-run routes are used to the extent that times and availability permit. Medina CSD does use cluster stops in subdivisions/developments when appropriate. According to the transportation manager at Reynoldsburg CSD, all routes are four runs to reflect the four levels of schooling. A run to the high school, junior high, middle school and elementary school comprise each route. A significant factor affecting the routes per run average is the number of square miles in a district. While Reynoldsburg CSD is 27 square miles in size and can easily accommodate 4-run routes, Medina CSD's square mileage is much larger at 52 square miles. However, the route optimization features available through Edulog software, as discussed in **F5.14**, could provide Medina CSD with additional routing efficiencies.

Examination of General Transportation Operations

F5.6 Medina CSD does not have procedures in place to facilitate the collaboration of education and transportation. In FY 2001-02, the District provided private transportation to students in the pre-school program because of an end-of-day scheduling conflict. The preschool day had originally been slated to end the same time (3:30 PM) as the elementary school where it was housed. However, teaching personnel conflicts caused a change in the preschool end time to 3:00 PM. The close ending times necessitated the use of a contracted service for preschool busing. According to the transportation manager, the transportation department was excluded from the planning process. The addition of the preschool routes resulted in an additional transportation cost of $96,000. For FY 2002-03, Medina CSD change the preschool day to coincide with the elementary school to avoid the previous year's costs.

In addition, door-to-door transportation is sometimes offered to students with special needs during Individual Education Plan (IEP) conferences. Because Medina CSD does not employ aides on its buses to assist with special needs transportation, door-to-door service requires the contracting of private transportation services which is very costly for the District. Taxi service provided through the district was approximately $4,000 per student and the private transportation of the preschoolers was approximately $2,600 per student. The transportation manager is working with the District's director of student

services to increase awareness of District IEP participants to the issues associated with the cost and planning of transporting for these students.

R5.3   Other District representatives involved in IEP conferences should be aware of the costs and constraints associated with providing transportation to students with special needs. The transportation manager and the director of student services should continue to work together to develop practical policies and procedures for special needs transportation. Such policies and procedures should ensure that before a commitment to door-to-door transportation is made through the IEP process, transportation options and cost estimates would be discussed with the transportation manager. In addition, changes in educational programs, and bell times should be communicated with the transportation manager to further ensure transportation is coordinated in an efficient manner for both regular and special needs students.

Review of Bus Fleet Stock and Maintenance Operations

F5.7   **Table 5-5** compares the ratio of active buses to spare buses for Medina CSD to similar ratios for the peers.

Table 5-5: Active Bus to Spare Bus Ratio

	Medina CSD	Reynoldsburg CSD	Stowe-Munroe CSD	Strongsville CSD
Number of Active Buses	46	36	54	61
Number of Spare Buses	15	8	15	14
Active buses per spare	3.06	4.5	3.6	4.36

Source: T-2 forms for Medina CSD and the peers.

As **Table 5-5** indicates, Medina CSD has the lowest active to spare bus ratio in comparison to the peers, with one spare bus for every 3.06 active buses. Spare buses comprise approximately 25 percent of the entire fleet for Medina CSD. According to the transportation manager, an unofficial policy requiring one spare bus to every five in the fleet was in effect before he came to the District. The transportation manager also stated that ODE suggests a 1:10 ratio for spare buses, although through his experience he believes 1:8 is more realistic. Reynoldsburg CSD has the highest spare to active bus ratios of 1:4.5, or approximately 18 percent, which is still higher than recommended standards. The ratios indicate that Medina CSD may be committing an unnecessarily high amount of resources to its bus fleet. In addition, the average age and mileage of its bus fleet indicates that Medina CSD does not have a significant need for a high number of spare buses (see **F5.8**). However, because of various programs and policies adopted by Medina CSD such as field trips, and a high degree of student participation in extra-curricular activities, including sports and band as noted in the **human resources** and **financial systems** sections, spare buses are frequently used. The inability to perform

many in-house repairs, and thus control repair turn around time as discussed in **F5.9**, also puts a strain on the active bus fleet and requires the increased use of spare buses.

Currently, the District is purchasing 6 to 8 new buses a year at approximately $63,000 per bus. Six of the buses are for replacement and two are to accommodate District growth. The State issues bus purchase allowances to school districts through ODE's State Foundation funding, and the District's financial forecast includes projected funds to purchase school buses. In FY 2001-02, the District spent $335,031 on school buses and received a bus purchase allowance of $71,207 from ODE. The transportation manager uses spare buses removed from service as trade-ins on new vehicles which provide a higher rate of return than an outright sale. The trade-in value of a spare bus toward the purchase of a new bus is approximately $6,000 to $7,000. However, spare buses sold outright do not have the same value. The last two buses sold at auction were luggage buses (the seats had been removed to transport band and/or athletic equipment) and only received $1,500 per bus.

R5.4   Medina CSD should consider reducing the percentage of spare buses it maintains by reducing future bus purchases. Medina CSD could continue to add two buses per year to accommodate student population growth, but could extend the life of active buses and suspend the purchase of replacement buses for eight years or until FY 2010-11. In FY 2010-11, the bus fleet at Medina CSD would comprise 62 active buses and 15 spares. This would reduce Medina CSD's spare bus fleet to approximately 19 percent of the total fleet, which is similar to Strongsville and Reynoldsburg. In addition, bus purchases and spare bus retirement should be incorporated into a formal bus replacement plan as discussed in **F5.8**. Furthermore, the size and composition of the bus fleet would also be impacted by any reductions in service that the District would implement as discussed in **F5.2**. Finally, the District should closely monitor student growth to ensure that it is allocating an appropriate level of resources to future bus purchases.

Financial Implication: By extending the life of its current active buses and reducing the number of buses purchased by four buses in FY 2003-04 through FY 2010-11, Medina CSD would avoid annual capital expenditures of $252,000 per year, for a total of approximately $2 million based on bus purchases of $63,000 per bus.

F5.8   Medina CSD does not have a formal, written bus replacement policy. Historically, buses were purchased when money was available without recognizing the impact on future needs and/or future repair schedules. A bus replacement plan would allow the transportation department to plan and budget for routine maintenance and distribute the impact of bus maintenance, repair and purchase over several years.

Medina CSD owns 46 full-sized yellow buses for student transportation, and 15 buses as spares. Of the 46 buses, 6 are equipped for, and dedicated to, the provision of special

needs transportation. The buses vary in age from 1 to more than 10 years. While there are currently no State minimum standards for the replacement of school buses, a general consensus among ODE, private bus contractors and transportation departments is that buses should be replaced at 12 years of age or 250,000 miles for diesel buses and 200,000 for gasoline buses. Despite these general guidelines, a school district can use a bus for student transportation as long as it passes a mandatory annual inspection provided by the Ohio State Highway Patrol.

Table 5-6 shows Medina CSD's bus fleet by its model year and age as of July 17, 2002.

Table 5-6: Medina CSD Bus Fleet by Model Year and Mileage

Model Year	# of Regular Needs Buses	Average Mileage	Age
2002	8	0	0
2001	14	11,108	1
2000	7	31,950	2
1999	5	53,238	3
1997	10	71,529	5
1995	3	94,943	7
1993	9	115,735	9
1992 or earlier	5	93,999	10+

Source: Medina CSD records

As shown in **Table 5-6**, all of Medina CSD's buses are significantly below the prevailing mileage guidelines for replacement. Forty-four of the buses are five years old or less. Forty-six of the buses are considered assigned or active, while fifteen buses are spares. Ten of the buses have more than 100,000 miles; however, no buses have over 150,000 miles.

R5.5 Medina CSD's transportation department, in conjunction with the District's business office and treasurer, should develop a formal bus replacement plan that outlines when each bus will be replaced and the funding source for the replacements. Due to the quantity of buses in use at Medina CSD, it may not be feasible to replace all buses over 12 years of age annually and this should be taken into account in the bus replacement plan. Because the older buses at Medina CSD have relatively low mileage, the District has some flexibility in the bus replacement plan without impacting student safety. At the end of this engagement, Medina CSD provided a bus replacement plan to AOS.

F5.9 Medina CSD does not use a bid or request for proposal process for the repair and maintenance of buses. However, purchasing policies generally provide assurance that the District is receiving the goods and services it pays for at the most economical cost. The transportation department completes some repairs in house, including routine maintenance such as oil changes, tires and alternators. Large jobs such as engine and

brake work are out-sourced due to space constraints in the District's one bay garage. In 1991, area repair facilities were surveyed to determine the availability and cost of a variety of services. The list developed from this effort has not been updated since that time. The purchasing policies of the District do not provide specific guidelines to the transportation department regarding contracting for repairs or the bulk purchase of items such as fuel, lubricants, wiper fluid, tires or paper products. See the **financial systems** section of this performance audit for further information regarding the purchasing policies in Medina CSD.

R5.6 The District should develop an RFP process for standard services and inventory or negotiate term agreements with selected vendors to "lock-in" prices for services, labor and supplies for each year. The transportation department should work with the Medina CSD business office to develop policies that ensure a uniform method for receiving and documenting bids for repair jobs. Any survey used should include the price quoted for goods or services, with and without a school discount, the date and the contact person. The list should be updated annually to provide the District with current and accurate information. In addition, the transportation department should update its list of suppliers to incorporate changes in prices and local vendors for the supplies and services it regularly uses. If Medina CSD participates in a purchasing association, the transportation department should be provided with appropriate, timely information to make informed purchasing decisions.

F5.10 The efficiency and effectiveness of Medina CSD's transportation department is hindered by the lack of appropriate facilities as noted by the following conditions:

- The garage for servicing buses is three blocks away from the transportation offices and parking area for the buses. Although the distance from the bus operations offices does not currently cause any supervision problems with the mechanic staff, the lack of direct oversight could be an issue with the addition of less-experienced staff. The location of the repair garage may also prevent bus divers from making unscheduled appointments for minor repairs or maintenance such as fluid or tire pressure checking or other concerns.

- Although the garage has two bays, one bay is occupied by the District's facilities maintenance department. The one bay for transportation prevents drivers from washing buses, because the bay is used for repairs and there is no room in the driveway for bus washing. The transportation manager received a quote to out-source the power washing of every bus each month during the school year. The price was $12 per bus per month, which would amount to approximately $9,600 for the year.

- The one bay also creates service delivery problems for the mechanics. The mechanics are able to complete routine jobs such as oil changes and fluid checks. However, large jobs such as brake repairs must be out-sourced. Because the number of large vehicle service providers is limited, the school District has few options to negotiate better prices. Labor charges by most dealers in the area range from $55 to $85 per hour. Medina CSD's mechanics earn approximately $35 per hour. If the District had more bays and additional mechanics or mechanics helpers, the District could potentially reduce the amount of money spent on out-sourced maintenance and repairs. The transportation manager and head mechanic recorded labor charges on each repair invoice for each bus for FY1996-97 through FY 2000-01. The total spent on labor alone for the out sourced repairs during the period was $166,218 or roughly $37,500 per year. In addition, overtime earned by the transportation mechanics averaged $16,000 for the FY 1999-00 through FY 2001-02.

- The transportation department and offices are located at Clagett Middle School. While the transportation department occupies the space of two to three classrooms, several detached modular classrooms accommodate students. The cost of leasing each modular unit is $1,000 per month. The recess area is also used to park individually owned vehicles. The parking lot for buses separates the paved recess area from a grassy area. Because of the configuration of the transportation office space, there is not an area large enough for departmental meetings or training.

- The current parking area for the buses is almost full. There will be nowhere to park the two buses that will be added to the fleet for FY2003-04 to service projected growth.

- The current parking area is limestone gravel which, staff reports retains moisture and causes rot in the chassis of the vehicles. This condition, in combination with the use of salt on roads, can significantly reduce the life of a bus.

- Medina CSD has no fuel storage facility. Without fuel storage, the District cannot take advantage of bulk fuel purchases. Currently, the District pays $1.339 per gallon of diesel fuel. The District uses an unmanned *Landmark* station for fuel, where it receives a $0.03 per gallon discount. Drivers are issued fuel cards and the transportation department receives the bills, which are checked for appropriateness. The State contract price for diesel is $0.60 per gallon (with an exemption for federal tax of $0.24). In FY 2001-02, the District used 78,049 gallons of diesel fuel. Had the District been able to purchase fuel at the State contract price, it could have saved approximately $56,000. A two bay fueling

station with a 12,000 gallon tank, canopy, card reader system to monitor fuel consumption and provide security and a tank monitor for leakage would cost approximately $30,000. The installation of the tank and equipment would be approximately $90,000 according to an area contractor specializing in fuel station construction and maintenance.

Georgetown Exempted Village School District built a bus storage facility in 1999 for approximately $200,000 or approximately $25 per square foot. The metal pole-style building is 8,000 square feet and contains a 50 ft. x 70ft. shop area, 175 ft x 90 ft storage area, restrooms, and an office area. Radiant heat installed at the ceiling maintains a comfortable working temperature. Twin Valley Community Local School District built a two-bay bus maintenance garage in 2000 for approximately $35,000 or approximately $12 per square foot. The 50 ft. x 60 ft building contains one restroom and an office area for the mechanic.

R5.7 The relocation of the transportation department and its increasing needs should be incorporated into the development of Medina CSD's facilities plans. Plans for the transportation department should include fuel storage and expanded repair capabilities. With appropriate transportation facilities, Medina CSD could reduce the outsourcing of repairs, extend the life of its buses, enable more preventative maintenance and general upkeep and take advantage of annual cost savings through bulk fuel purchases. In addition to providing space for the transportation department to accommodate continued growth, the District can free up classroom space that is currently occupied by the transportation department.

Financial Implication: The cost of constructing a fuel storage facility would be a one-time outlay of approximately $120,000. However, based on current fuel consumption rates and prices, the District could save approximately $56,000 annually on fuel purchases. The cost of constructing a transportation facility to accommodate a service area, storage and offices of approximately 4,000 square feet in size would require a one-time capital outlay of approximately $100,000 at $25 a square foot. However, annual cost savings could be achieved through the elimination of leases for three modular units of $36,000. If an additional mechanic was employed as the result of the increased capacity for in-house services, the cost of employment could be offset by the reduction in overtime usage and contracted repairs. At the end of this engagement, Medina CSD provided information to AOS indicating that construction costs could be higher, depending on other factors such as site acquisition costs.

Review of Staffing and Other Personnel Matters

F5.11 **Table 5-7** shows Medina CSD's transportation staffing in comparison to the peers.

Table 5-7: Comparison FY 2000-01 Transportation Staffing Levels

Staffing	Medina CSD		Reynoldsburg CSD		Stow-Munroe CSD		Strongsville CSD		Peer Average	
	No.	FTE	No.	FTE	No.	FTE	No.	FTE	No.	FTE
Supervisor/Assistant	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Bus Driver	60.0	34.0	39.0	24.4	56.0	32.9	68.0	48.0	54.3	35.1
Mechanic/Assistant	2.0	2.0	2.0	2.0	4.0	4.0	6.0	6.0	4.0	4.0
Administrative Assistant	3.0	3.0	2.0	1.0	1.0	1.0	3.0	2.4	2.0	1.5
Aides	0.0	0.0	0.0	0.0	8.0	4.0	7.0	3.6	5.0	2.5
Total	66.0	40.0	44.0	28.4	70.0	42.9	85.0	61.0	66.3	44.1
Total Number of Students Transported	4,874[1]		5,339[1]		4,667[1]		6,317[1]		5,439	
Students Transported per Bus Driver FTE	143		219		142		132		155	
Students Transported per Total FTE	122		188		109		104		123	
Square Miles in District	52		27		22		25		25	

Source: District transportation Departments
[1]The total number of riders does not include resident students that use payment in lieu of transportation to attend their schools of choice.

> **Table 5-7** indicates that staffing for the secretary-clerk/ administrative assistant position at Medina CSD is higher than the peer average by 1.5 FTE. Currently, the transportation department at Medina CSD employs a head bus driver, a secretary and a computer operator, which are listed as administrative assistants for the analysis. The peers do not employ computer operators because the transportation department secretary generally provides computer duties. According to the transportation manager, the computer operator plans to leave in FY 2002-03. If Medina CSD does not fill this position, the reduction of one clerical employee would create annual savings of approximately $33,000 in salary and benefit costs.   In addition, the reduction would increase the student transported per FTE to 125 which would be slightly above the peer average of 123.

> While the two mechanics at Medina CSD are responsible for a fleet of 61 buses, because of facility constraints which necessitates out-sourcing, the mechanics perform fewer maintenance activities per bus than the peers, as further noted in **F5.10**. As a result, Medina employs a lower number of mechanics than the peers.

Medina CSD does not use aides on buses that are dedicated to the transportation of riders with special needs. Most students with special needs are included on regular routes. However, when disabilities make special transportation necessary, Medina CSD has six buses and one van for special needs transportation.

R5.8   Medina CSD should reduce its clerical staffing in the transportation department to 2.0 FTEs. This can be accomplished by not filling the computer operator position. With appropriate training, the secretary position could assume the computer operator position duties. When customer service needs and computer input are greater, such as the month of August when bus routes are developed and school begins, the transportation department could borrow clerical personnel from another department or use temporary employees.

Financial Implication: By reducing the clerical support staff of the transportation department by one FTE, Medina CSD would realize annual savings of approximately $33,000 in salary and benefit costs.

F5.12   Bus driver staffing for Medina CSD's transportation department appears reasonable when compared with the Stow-Munroe and Strongsville CSDs. Medina CSD is lower than the peer average for students transported per bus driver FTE as shown in **Table 5-7**. The ratio is affected by the efficiency exhibited by Reynoldsburg CSD transportation services. The efficiency of Reynoldsburg CSD can be largely attributed to the small size of the district, the placement of the schools and the number of runs per route (4) achieved. Although the larger size of Medina CSD makes it difficult to achieve four runs per route, maximizing the use of the *Edulog* routing software could result in operational enhancements (see **F5.14** and **R5.9**).

Medina CSD has experienced a large amount of growth in recent years and is projected to continue growing at approximately 200 students per year. With approximately 118 students transported per bus route, this growth requires the District to purchase two buses and hire two bus drivers per year. The transportation department uses the District's growth projections to plan for additional routes, runs, buses and drivers. In FY 2002-03, one new regular education route and one special needs route was added.

Medina CSD has placed a permanent advertisement for substitute bus drivers on its web page. According to the transportation manager, it is difficult to attract and retain regular and substitute drivers because the pay and the number of hours are low and the District does not offer benefits unless employees work a 30-hour week. Although the pay is for four hours, because it is for a split day the whole day is in essence is committed. In addition, the increased responsibilities and risks arising from discipline issues on the bus make the job unattractive.

The District had 10 to 12 substitutes; however, during the course of the audit five became regular drivers. The remaining drivers are limited substitutes, and are not available every day and/or all day. In addition, approximately eight drivers are employed in the District's food service department.

R5.9   The District should develop the recruiting efforts for bus drivers beyond its web site. Avenues for recruitment could include the following:

- School newsletters;
- *Bee Informed*, the District-wide newsletter
- Announcements at parent organization meetings; and
- The bulletin board available through *Medina Cable Access* channels 36 or 37.

Recruiting current part-time District employees or offering current drivers other opportunities within the District could expand a part-time position into a full-time position, which would provide the employee with benefits. As indicated in **F5.13**, the District has already developed a program to retain classified personnel through training and monetary incentives. By expanding the number of hours an employee works, and thereby making benefits available, the District may continue to attract and retain qualified employees.

F5.13   Medina CSD bus drivers attend yearly in-service training for professional development. The District encourages participation in advanced drivers' courses and bus driver Rode-o's to keep drivers skills sharp. Medina CSD has also instituted a support staff training academy. The academy enables support staff to increase their knowledge and skills about the District and a variety of other subjects. Participating staff members are compensated for attending. By accumulating 96 course hours over a three year period, support staff can increase their hourly pay by almost $1 per hour.

The District has implemented the State Transportation Operation and Safety Rules requiring training for van drivers. The drivers must be licensed and are not permitted to drive until the District receives the certificate from the State. Some teachers and coaches use the vans for classes such as Occupational Work Experience (OWE) and Occupational Work Adjustment (OWA) and small team sports. One vehicle is used for a special needs route.

Review the Role of Technology in Routing Management

F5.14   Although Medina CSD uses *Edulog* routing software to manage the various bus routes and runs, it does not use the route optimizing features to determine further efficiencies that could be achieved as noted in **F5.2** and **F5.5**. Route optimizing features may assist

with the development of scenarios to promote cost savings, such as calculating the number of students by grade that live more than two miles from school and identifying routing efficiencies to increase the number of students transported per bus. The staff member responsible for maintaining the *Edulog* system is not familiar with all of its features and is currently receiving training to enhance her skills. *Edulog* provides technical support and free upgrades to software license holders. In addition, two-day seminars are held in several locations around the country for *Edulog* users interested in becoming more proficient in software use.

The transportation manager is reviewing the *FleetPro* software for maintenance and inventory cost control. However, the software will soon include an upgrade for paperless tracking of fuel and maintenance. The transportation manager is interested in the upgraded version because of the reduction in paper and the ease of electronic monitoring. However, the transportation manager is hesitant to purchase the software because the lack of in-house maintenance facilities and the outsourcing of large repairs as discussed in **F5.7** which could negatively impact the return on investment.

Because MCSD does not have on-site fuel, *PetroVend* or any other type of fuel monitoring software is not appropriate.

R5.10 The transportation department should continue to provide training on *Edulog* to the position responsible for the data base management as well as the transportation manager to ensure routing effectiveness and efficiency is optimized. In the event that Medina CSD acquires the facilities necessary to provide large repairs in-house, the transportation manager should obtain *FleetPro* or similar maintenance and inventory management software. *FleetPro* would offer accurate monitoring of routine maintenance and *VendPro* would, among other features, provide necessary controls over fuel inventory.

Financial Implications

The following table represents a summary of implementation costs and annual cost savings. This table illustrates the savings Medina CSD could potentially realize. For the purposes of this table, only recommendations with quantifiable impacts are listed. The magnitude of cost savings associated with some recommendations could be affected by the implementation of other interrelated recommendations.

Summary of Financial Implications for Transportation

Recommendation	One-Time Implementation Costs	Annual Costs Savings
R5.1 Route reduction		$35,000
R5.4 Spare bus reduction		$252,000
R5.7 Fuel storage facility	$120,000	$56,000
R5.7 Transportation garage	$100,000	$36,000
R5.8 Staff reduction		$33,000
Totals	**$220,000**	**$412,000**

Conclusion Statement

Overall, Medina CSD meets or exceeds a majority of ODE and general industry standards as well as the performance of peer districts. However, there are areas for improvement and/or cost savings that could be achieved as discussed throughout this performance audit.

Efficiency, effectiveness and cost savings could be realized by limiting the availability of some transportation services. The reduction of transportation services could provide at least $35,000 in annual savings. Additional reductions and savings could be achieved as the financial circumstances of the District warrant.

Medina CSD does not have a formal, written bus replacement policy. A bus replacement plan would permit the District to allocate capital replacement and major routine repairs over the useful life of the bus fleet while allocating the associated costs over several fiscal periods. Because the older buses at Medina CSD have relatively low mileage, the District has some flexibility in the bus replacement plan without impacting student safety. Medina CSD could reduce the spare bus to active bus ratio by extending the life of active buses, and reduce the spare buses and avoid annual capital outlay expenditures for buses in FY 2003-04 by approximately $252,000.

Bus driver staffing of Medina CSD's transportation department appears reasonable when compared with the peers. However, the number of employees in administrative positions is higher than the peer average. By reducing one clerical position, Medina CSD could save approximately $33,000 annually while still providing appropriate clerical service.

Medina CSD should include the transportation department in plans for education programs for groups or individuals that rely on the transportation of students. In FY 2001-02, a scheduling conflict for the pre-school program resulted in a $96,000 increase in transportation costs because private busing was the only alternative.

The transportation department should also be included in the long range planning for facilities in the District. As Medina CSD continues to grow, so does the need for adequate space for the storage, maintenance and repair of the bus fleet. The current bus facilities do not allow for the bulk purchase and storage of fuel which could provide annual cost savings of approximately $56,000 after a one-time investment in facilities and software of approximately $120,000. In addition, with appropriate garage space and location, more routine maintenance and repairs could be performed in-house.

Medina CSD realizes the importance of training by instituting a support staff training academy. A number of training opportunities are also available to transportation staff to enhance skills and augment retention. In addition, the transportation department should continue to provide training opportunities on *Edulog* routing software to appropriate personnel to ensure that Medina CSD benefits from current technology.
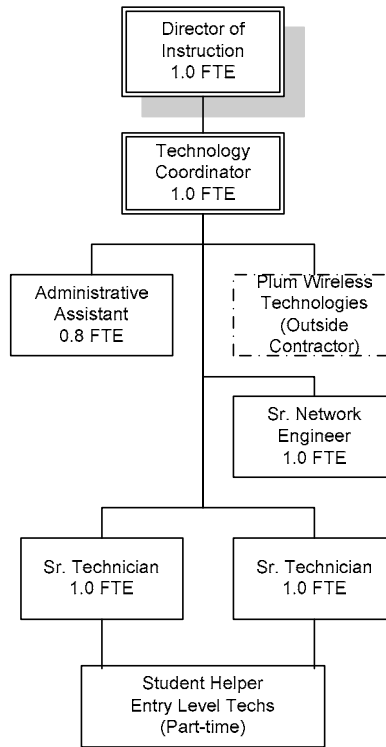
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Technology Utilization

Background

Organizational Chart and Staffing

Technology implementation and management at Medina City School District (Medina CSD) are performed by the technology department. The technology department provides assistance for all district-wide technologies including: computer hardware, computer software, SMART boards, Liquid Crystal Display (LCD) projectors, and other audio-visual equipment. The department maintains the Medina CSD network and servers, in addition to over 2,200 computers and peripherals, such as printers and scanners. The department was created in 1996 under the direction of a technology coordinator. As technology use has expanded, so have the staffing levels within Medina CSD's technology department. **Chart 6-1** depicts the current staffing and organization of the technology department.

Chart 6-1: District Technology Department Organization

```
                    ┌─────────────────┐
                    │  Director of    │
                    │  Instruction    │
                    │  1.0 FTE        │
                    └────────┬────────┘
                    ┌────────┴────────┐
                    │  Technology     │
                    │  Coordinator    │
                    │  1.0 FTE        │
                    └────────┬────────┘
            ┌────────────────┼─────────────────┐
   ┌────────┴────────┐            ┌─────────────────┐
   │ Administrative  │            │ Plum Wireless   │
   │ Assistant       │            │ Technologies    │
   │ 0.8 FTE         │            │ (Outside        │
   └─────────────────┘            │ Contractor)     │
                                  └─────────────────┘
                           ┌─────────────────┐
                           │ Sr. Network     │
                           │ Engineer        │
                           │ 1.0 FTE         │
                           └────────┬────────┘
                    ┌───────────────┴──────────────┐
           ┌────────┴────────┐         ┌────────────┴────┐
           │ Sr. Technician  │         │ Sr. Technician  │
           │ 1.0 FTE         │         │ 1.0 FTE         │
           └─────────────────┘         └─────────────────┘
                    ┌──────────────────────────────┐
                    │ Student Helper               │
                    │ Entry Level Techs            │
                    │ (Part-time)                  │
                    └──────────────────────────────┘
```

Source: Medina CSD, Department of Technology Organizational Chart

In addition to the 5.8 FTEs shown in **Chart 6-1**, the technology department employs two integration specialists (1.0 FTEs) who report to their building principal. Medina CSD plans to hire a junior technician by the end of 2002. This position will report to the technology coordinator. The junior technician will be responsible for computer repairs and maintenance. Medina CSD is adding this position in the technology department to assist the technician staff with repairs and maintenance on computer equipment. As the District has added equipment, the amount of work for technicians has increased to a level that the department needed to add an additional staff member to keep up with the amount of work.

Medina CSD's technology department is headed by a technology coordinator who reports to the director of instruction. Under the technology coordinator are the technology administrative assistant, the senior network engineer, two senior technicians, one junior technician (to be filled at a later date), and all outside contractors. In addition to these technical employees, each building has a technology representative and a technology mentor (in some cases this is the same individual). Each of the two middle school buildings has integration specialists, included in the staffing analysis (see **F6.1**), who perform some teaching duties and technical assistance.

Organization Function

The technology department is responsible for supporting all technical operations for computers and networks including installation, instruction, maintenance and repair. In addition to technical operations, the department is responsible for planning and budgeting functions for future technology upgrades and purchases. The technology coordinator heads the technology department and reports directly to the director of instruction. Specific job responsibilities include:

- Coordinating technology instruction and integration;
- Coordinating hardware and software procurement;
- Facilitating organization meetings;
- Researching organizational needs and providing the most cost-effective solutions;
- Developing, negotiating, and adhering to budgets;
- Coordinating with engineers, technicians, and organization representatives;
- Developing end-user interest in implementing appropriate technology;
- Pursuing supplemental funding; and
- Assisting in development and implementation of strategic plans.

The senior network engineer reports to the technology coordinator and helps to implement and support the organization's wide area network (WAN). The senior network engineer is an employee of the Medina Educational Service Center (Medina ESC) and is contracted to provide services to Medina CSD. Specific job functions include:

- Analyzing needs and developing network objectives;
- Remaining current on networking technologies;
- Monitoring existing networks;
- Providing advanced technical troubleshooting and repair;
- Coordinating with consultants and organization representatives;
- Recommending network changes (upgrades and additions);
- Designing and implementing connectivity to internal and external systems;
- Monitoring software licensing compliance;
- Participating in the Medina County Schools' Educational Service Center Technology Department and other assigned technology teams; and
- Providing project leadership.

Senior technicians report to the technology coordinator and provide advanced technical support and leadership to the assigned organization. Senior technicians are employees of the Medina ESC and services are contracted to Medina CSD. Specific job functions include:

● Providing an organized internal computer repair and maintenance program;

● Administering the network;

● Providing advanced software support, both technical and application;

● Recommending appropriate hardware and software; and

● Participating in Medina County Schools' Educational Service Center Technology Department and other assigned technology teams.

The technology administrative assistant reports to the technology coordinator. The technology administrative assistant is an employee of the Medina ESC and services are contracted to Medina CSD. Job functions require the position to:

● Be a liaison between the technology coordinator and administrators in the system when purchasing technology equipment and software;

● Generate the purchase orders for technology purchases, maintenance, and repairs;

● Keep records of purchases, packing slips, and licenses;

● Keep accurate records of inventory including serial numbers of technology equipment;

● Forward an inventory of technology serial numbers to the Medina CSD business office for insurance purposes;

● Administer the Title II grant and monitor the technology mentor program; and

● Answer the telephone and arrange appointments, and provide some technical assistance when appropriate.

Other positions that support the technology department by performing technical and teaching functions include:

Building Technology Representatives: This function is an additional duty for selected teaching staff. These individuals take work order requests and assist with requests as their skills and time allow. For these individuals, the District provides a substitute one time a month to allow them to help with technology in another classroom or to attend training. These individuals are the central contact in the building for collecting work order requests and forwarding the requests to technicians if time does not permit them to address the issue.

Technology Mentors: Selected staff receive a $600 annual stipend to conduct after-school training sessions for software use, general technology use or to provide teachers with one-on-one

help in becoming familiar with or integrating technology into the classroom. Technology mentors are teachers in the District that have special skills or an interest in technology.

Integration Specialists: This position reports directly to the assigned building principal and job duties vary based on the building. Their primary function is to integrate technology in the classroom. At Claggett Middle School, the integration specialist teaches in the morning and assists with technology work requests, helping teachers with technology integration and other duties as they arise in the afternoon. At Root Middle School, the integration specialist teaches only one class daily and spends the remainder of the day assisting with work requests and helping teachers with technology as needed.

According to the technology department, the building technology representatives and the technology mentors are often the same individuals. Currently, there are 12 mentors and 9 building technology representatives.

Summary of Operations

All of the major technology-related functions at Medina CSD are the responsibility of the technology department. This includes the support and maintenance of current systems as well as the integration of new technology. The technology department is responsible for supporting, maintaining, and acquiring all technology hardware and the majority of software used throughout the District for both instructional and administrative purposes. General functions include:

- Maintenance of hardware;
- Implementation of new technology;
- Help Desk services;
- Suggestion and approval of technology purchases (hardware and software);
- Professional development;
- Oversight of the technology mentor program; and
- Facilitation of the technology committee.

Technical Architecture

The network configuration for Medina CSD has developed from a simple modem dial-in-network to an intermediate online-configuration. According to the technology coordinator, the current configuration should allow the District ample expansion for several years. In 1996, elementary buildings were limited to a single station, while middle schools, high schools and central office locations numbered approximately twelve stations per site. This initial connectivity linked the District to a data acquisition (DA) site, Lake Erie Educational Computer

Association (LEECA), which provided text-based and online services. LEECA provides fiscal services, student services, media services, technology services, and internet access. Currently, the District's network consists of Single Mode (SM) fiber. Twelve strands of SM fiber are extended to virtually every facility in the organization. The WAN encompasses six elementary buildings, six modular units, two middle schools, the senior high school, two maintenance facilities and the board of education, and runs at gigabyte speeds between facilities. Medina CSD is in the process of upgrading voice systems, and will be better able to support data, video and voice solutions across the gigabyte network.

The main WAN of Medina CSD is divided into two parts, the north and south sides of the District. The 17 District servers are centrally located at the technology office. The main purpose of the server farm is to supply secure login, print and file sharing for the users. The filtering server is Novell's BorderManager which runs the Cyber Patrol application. There are also two web servers. Medina CSD's academic and administrative servers run on Novell, NT2000 (advanced) and NT 4 operating systems. All classrooms and administrative workstations have access to building and district level servers as well as LEECA. Internet service is provided through three T-1 lines that are connected to the data acquisition site, LEECA, and distributed through the District's fiber network.

Table 6-1 outlines the number of buildings connected in Medina CSD's network and the total number of users at each of those buildings.

Table 6-1: Network Users

Building/Grade Level	Number of Buildings	Number of Users		
		Students	Staff/Teachers	Total
Elementary Schools	6	0[1]	398	**398**
Middle Schools	2	1,830	223	**2,053**
High Schools	1	1,930	269	**2,199**
Administration	2	N/A	104	**104**
Total	**11**	**3,760**	**994**	**4,754**

Source: Medina CSD technology department
[1] Kindergarten through fifth grade use generic student logins and are therefore not included in the totals.

Medina CSD has over 4,700 users accessing the network, including all students in grades 6 through 12, as well as instructional, administrative and support staff. Kindergarten through fifth grade students use generic student logins and are only able to gain access to limited student networks. Users are only able to access those systems necessary to perform individual jobs or instructional activities. Only teachers and staff are provided with email accounts by Medina CSD. Access to sensitive systems, such as student grading and staff payroll, is limited to those individuals with a need to use those systems. These systems are also protected with usernames and passwords.

Student software varies by building and grade level and is generally provided by the District. LEECA provides administrative software such as payroll, accounting, student scheduling and grading. Food service software, Café Terminal, is obtained from an outside vendor by the food services director. The District's bus routing software, EDULOG, is obtained through the Medina ESC. The maintenance department uses MaintPlus 2000 from an outside vendor for a work order system. Software used in Medina CSD is discussed in detail in the **Software** section of this report as well as the **financial systems**, **human resources**, **facilities** and **transportation** sections of this performance audit.

Financial Data

Table 6-2 shows Medina CSD's technology department expenditures for FY 2001-02 and budgeted amounts for FY 2002-03.

Table 6-2: Technology Expenditures FY 2001-2002 and FY 2002-2003

Accounts	Local Funds FY 2002	State Funds FY 2002	Total FY 2002	Total FY 2003	Difference	Percentage Change
Salaries/Benefits	$256,741	$6,800	$263,541	$294,528	$30,987	11.76%
Purchased Services	$15,396	$15,864	$31,259	$206,835	$175,576	561.67%
Supplies/ Materials	$84,542	$3,605	$88,147	$112,688	$24,541	27.84%
Capital Outlay	$63,441	$93,988	$157,429	$170,588	$13,159	8.36%
Total	**$420,120**	**$120,257**	**$540,376**	**$784,639**	**$244,263**	**45.20%**

Source: Medina School District Financial Records, FY 2001-02 and FY 2002-03

Although not reflected in **Table 6-2**, expenditures for FY 2000-01 were comparable to the FY 2001-02 expenditures presented in **Table 6-2**. From FY 2000-01 to FY 2001-02, there was an overall decrease in expenditures, due to carryover money from Ohio SchoolNet grants being spent in FY 2000-01. In addition, funds were carried forward from FY 2001-2002 to FY 2002-03 because fiber installation and wiring was not completed when anticipated. As a result, overall expenditures in FY 2001-02 decreased, and the budget for FY 2002-03 was increased.

Explanations for significant variances in **Table 6-2** are as follows:

- *An 11.8 percent increase in salaries from FY 2001-02 to FY 2002-03 budget:* In FY 2002-03 both junior technicians received promotions to senior technicians in addition to the District's cost of living increases.

- *A 561.7 percent increase in purchased services from FY 2001-02 to FY 2002-03 budget:* Money was set aside for the fiber installation and other wiring in FY 2001-02 was carried over from FY 2001-02 to the budget for FY 2002-03, therefore accounting for the increase.

- *A 27.8 percent increase in supplies and materials from FY 2001-02 to FY 2002-03 budget:* Additional networking items, parts for computers, and updating older equipment contributed to the increase in supplies and materials.

The technology department is responsible for purchasing the majority of hardware and software in use in Medina CSD; however, some software and hardware is purchased by individual school building principals with building funds. Before an individual school in the District purchases hardware or software, the technology coordinator must approve the purchase. This process is in place to ensure that hardware and software purchased outside the technology department is compatible with the District's network.

Funding for Medina CSD's technology department is derived primarily from local sources (81 percent of total funding) and from the State (19 percent of funding), largely in the form of grants. **Table 6-3** details the appropriated amounts for the technology department in FY 2002-03. In comparison to the peers, Medina CSD is receiving comparable grant funding from similar sources. Stow Munroe receives approximately 20 percent of its technology funding from grant resources and Strongsville receives approximately 14 percent.

Table 6-3: FY 2002-03 Medina CSD Technology Department Appropriations

Fund	Salaries	Purchased Services	Supplies and Materials	Capital Outlay	Total
Local Funds					
General Fund	$291,106	$178,604[1]	$105,392[2]	$79,275[3]	$654,377
Other Grants	$0	$0	$0	$0	$0
Local Total	$291,106	$178,604	$105,392	$79,275	$654,377
State Funds					
SchoolNet Plus	$0	$0	$7,297	$91,080	$98,377
SchoolNet Prof. Develop.	$3,422	$3,450	$0	$0	$6,872
Connectivity	$0	$24,780	$0	$233	$25,013
State Total	$3,422	$28,230	$7,297	$91,313	$130,262
Total All Funds	**$294,528**	**$206,834**	**$112,689**	**$170,588**	**$784,639**

Source: Medina CSD Financial Records, FY 2002-03
[1] Includes $81,604 in carry over encumbrances from FY 2001-02.
[2] Includes $1,392 in carry over encumbrances from FY 2001-02.
[3] Includes $6,475 in carry over encumbrances from FY 2001-02

Key Comparison

This report uses best practices from school district technology programs as determined by the Florida Office of Program Policy Analysis and Government Accountability (OPPAGA) and the Texas School Performance Review. Each applicable section is headed by a table including several best practices and Medina CSD's status regarding the practice.

In addition, peer comparisons will be used throughout the report to assess Medina CSD's operations. Comparisons will be made to Stow-Munroe Falls City School District (Stow-Munroe Falls CSD) and technology best practice districts of Strongsville City School District (Strongsville CSD) and Gahanna-Jefferson City School District (Gahanna-Jefferson CSD).

Performance Measures

The following is a list of performance measures that were used to conduct the review of technology at Medina CSD:

- Assessment of Medina CSD organizational structure and technology staffing levels;
- Effectiveness of Medina CSD planning and management;
- Assessment of technological infrastructure (hardware, networking, and system software);
- Assessment of major software applications and functional systems;
- Assessment of Medina CSD financial management and budgeting process; and
- Adequacy of training.

Findings/ Recommendations/ Commendations

Staffing and Organization

F6.1 **Table 6-4** presents technology staffing levels for Medina CSD's technology department and the peers.

Table 6-4: Technology Staffing

Position	Medina		Gahanna-Jefferson		Stow-Munroe Falls		Strongsville		Peer Average	
	Staff	FTE	Staff	FTE	Staff	FTE	Staff	FTE	Staff	FTE
Director	1.0	1.0	2.0	1.8	2.0 [3]	1.8	1.0	1.0	1.7	1.6
Building Techs[1]	5.0 [2]	4.0[2]	6.0	4.4	15.0 [4]	4.3	6.0	4.8	9.0	4.5
Network and Systems Services	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.3	0.3
Support	1.0	0.8	1.0	0.9	0.0	0.0	0.0	0.0	0.3	0.3
Total	**8.0**	**6.8**	**9.0**	**7.1**	**17.0**	**6.1**	**8.0**	**6.8**	**11.3**	**6.7**
Total District FTEs	748.1		662.0		675.7		768.1		701.9	
District FTE per Technician FTE	187.0		150.5		157.1		160.0		156.0	
Students per Technician FTE (ADM)	1,599.9		1,461.7		1,377.7		1,471.5		1,438.3	
Computers per Technician FTE	460.7		328.8		342.1		376.5		349.9	

Source: Medina, Stow-Munroe, Strongsville, Gahanna-Jefferson School Districts technology staffing and human resources information

[1] This category includes only those individuals who work on district computers and technology.

[2] In addition to the technicians this includes one employee that will be hired in the District by year-end and two integration specialists.

[3] The District does not currently have a technology coordinator because of staffing reductions; however, this position is included in the analysis because Stow-Munroe CSD would like to fill the position in the future.

[4] This includes 14 student workers that assist during the school year.

Overall, staffing levels are comparable to the peer districts in total FTEs; however, the ratios for district FTE, students and computers per technician FTE are higher than the peer districts. This indicates that Medina CSD is servicing more district personnel, students and computers per technician FTE than the peer districts. The building technician FTE calculated for Medina CSD includes the two integration specialists at the middle schools. Although the FTE calculation incorporates the amount of time the integration specialists spend performing technical type duties, these individuals report to building principals and responsibilities vary day-by-day so the FTE calculation may actually be higher because it is difficult to determine the actual number of hours spent on technical repairs. (See **F6.3** for a detailed description of Medina CSD's integration specialists.)

Medina CSD spends a great deal of time and money maintaining and improving its current technology systems. With current staffing levels, technicians have difficulty responding to technical requests as evidenced by the work order backlog. The effect of insufficient staffing to handle work order requests is the possibility of unused and non-functioning technology. In addition to the backlog, the department has had difficulty installing new computers received throughout the year because of staffing.

The technology department has a small fund set-aside annually for part-time help amounting to approximately $25,000. During the course of this performance audit, the department was not using this fund for part-time employees. At $7.50 an hour, two to three part-time (20 hours a week) employees could be added to assist with technology staffing needs. If the District added 1.5 FTEs as part-time employees, the District would maintain 331 computers per technician, which is just below the peer average in **Table 6-4**.

Medina CSD uses technology mentors and technology representatives to assist with integrating technology into the classroom. By using teachers in these types of positions, other teachers within the District can learn directly from their peers how to effectively use technology in the classroom. In addition, the mentors and technology representatives help to ease some of the burden placed on the technology department by answering basic software questions. Oftentimes, teachers are better able to assist fellow teachers because they have more practical experience with the software and its use, while technicians are more responsible for the technical aspects.

<u>**C6.1**</u>   Medina CSD is commended for its innovative use of technology mentors and technology representatives in the District. Using technology mentors and technology representatives enables the technicians to focus on keeping the hardware operational and allows fellow teachers to resolve simple software issues and help others with integration.

<u>**R6.1**</u>   One alternative to addressing staffing needs is using the $25,000 allocated to part-time employees in the technology department. When determining the number of hours and days worked, the department should consider when the work load necessitates additional employees. For example, part-time employees can be used prior to the start of school to move equipment, install new equipment as needed and assist at the beginning of the year as teachers and students are re-acclimating themselves to the equipment.

F6.2   Medina CSD's technology department currently maintains 461computers per technician. Based on Ohio SchoolNet's average technicians per computer (1:148), Medina CSD's optimal technology staff would be 12 FTEs. This level may be appropriate as the end-goal for the District; however, it is out of reach at this time. In addition, the SchoolNet ratio is also out of line with the peer district averages. A more appropriate interim goal may be that used by Strongsville CSD, which is currently working toward the ratio of 1

full-time technician per 50 classrooms, which equals 1 technician per 250 workstations. Based on this ratio, Medina CSD would need approximately seven full-time technicians.

The Texas School Performance Review identifies 10 key technology related management practices that have emerged from various school district reviews. One means identified to improve technology is to set standards for staffing and technical support in order to keep systems up and running. According to the Texas School Performance Review, school districts should set standards for information technology staffing. The district must determine how many PCs one technician can support, the appropriate ratio of employees to technicians, as well as other considerations. Resource allocation, including personnel, should fluctuate with changes in the student population, the number of administrative users, and the amount of equipment in use. The benefits of setting these standards include equitable distribution of resources, fewer special requests, better budgeting capabilities, and fairer productivity standards that can be easily monitored.

R6.2 Another alternative to **R6.1**, is investigating alternative funding sources for additional staff to achieve one technician for every 50 classrooms goal. For example, Ohio SchoolNet offers a grant (ASSIST) that provides funds for hiring student interns to support technology. By using this type of grant, the District could gain additional technical staff and assist in training students in an occupational area, without expending money from the General Fund.

Furthermore, Medina CSD should continually evaluate current staffing levels and set a goal for computers per technician. Any goal should take into consideration the usage, training, and support needs of the District. The goal set by the District should be included in the Medina CSD Technology Plan along with the steps the District will take to achieve the goal.

F6.3 The two integration specialists in Medina CSD work for the individual building principals and their functions vary significantly, depending on their building assignment. One integration specialist spends more time in a teaching environment while the other spends more time with technical issues and technology integration. The decentralization of this position does not give the technology department much control over the position. The integration specialists assist with as many technical repairs and help desk issues as time and skills allow. Central management of this position would allow for common usage to meet the goals, purpose, and objectives of the position and standardize its usage in the District. Additionally, the District does not have a formal job description for the integration specialist position, which allows each building principal to use this position as they see fit. A formalized job description should outline the job duties of the integration specialist and identify who they report to. A job description will also help to standardize the position among the buildings.

The integration specialist position is generally filled by a teacher, because of the primary focus of technology integration. Integration specialists are similar to mentor and technology representatives (see **F6.1**), in that they are better able than technicians to assist other teachers in the District on how to use specific technology in the classroom. Since teachers function as integration specialists, they can use their teaching experience to better understand how technology can help achieve educational goals in the classroom. Often, technicians are able to fix technical problems, but they do not always possess the knowledge of how to best use the software to meet the needs of the teachers and students. Integration specialists fill this need and are an important component for Medina CSD to achieve technology integration in the classroom.

Integration specialists currently only serve the two middle schools in the District, although the original intention was for this position to also serve the elementary schools. When the position was first created, the intention was for the integration specialist to work in the middle school in the morning and then spend the afternoons rotating between the elementary schools. Because there is no central management, the functions of these positions are not consistent throughout the District, and not all of the buildings are receiving the benefits of this position

R6.3   Medina CSD should consider reorganizing and placing the integration specialist positions under the control of the technology department. The technology department should work closely with building principals and the director of instruction to ensure that the position meets the needs of the building and the District. To further formalize the integration specialist position, a job description should be created detailing specific job duties and clarifying to whom employees are supposed to report.

As its financial situation improves, Medina CSD should consider the addition of integration specialists for both the elementary and high schools. The additional integration specialists can be current teachers that have an interest and skill in technology. The addition of an integration specialist at each building level will further assist the District in its efforts to integrate technology into the classroom. By adding two integration specialists, one for the elementary schools and one for the high school, all buildings in the District will be able to receive the benefit of this position. The salary of the integration specialist is dependent on the current teacher's negotiated contract and the integration specialist's years of service. In the meantime, the District may consider rotating the current integration specialists between buildings to ensure everyone is receiving equal services.

Planning and Management

F6.4   **Table 6-5** displays current Medina CSD practices in strategic planning as compared to established OPPAGA best practices in the area.

Table 6-5: Strategic Planning Best Practices at Medina CSD

Best Practice/Goal	Current Medina CSD Practice
The school district has a comprehensive technology plan that is board-approved and provides direction for administrative and instructional technology decision making. This plan addresses areas such as individual school technology needs, resource allocations, funding, professional development for users, technical support, infrastructure and network communication, and information management and delivery. The plan should be updated annually and be three years in length.	Medina CSD has a technology plan that is board-approved and includes the infrastructure, educational integration of technology, network communication and professional development pieces. However, the plan does not address future technology needs, resource allocation, technical support and information management delivery. (See **R6.4** and **R6.5**) The current plan has not been updated since 2000. (See **R6.6**)
The school district annually conducts an assessment to identify school district and school-level technology needs.	Medina CSD does not conduct a formal assessment to identify school-level technology needs. **(See R6.4)**
The school district has solicited and used broad stakeholder input in developing the technology plan.	The Medina CSD technology committee has representatives from each building, administrators, and local businesses.
The objectives of the technology plan are measurable and reflect the desired outcomes for educational and operational programs.	The three objectives included in the Medina CSD technology plan are broad and vague. Measurements are not included. (See **R6.7**)
The school district's annual budget provides funds for major technology initiatives as reflected in the plan.	Medina CSD provides funds for technology initiatives; however, because specific technology initiatives are not outlined, budget information has not been included in the technology plan. (See **R6.7**)
The school district has taken advantage of opportunities to improve technology operations, increase efficiency and effectiveness and reduce costs.	Medina CSD's technology department has been proactive in upgrading the network and acquiring additional equipment and technologies. In addition, Medina CSD has been effective in obtaining grant funding, which reduces the technology costs for the District.
The school district investigates grant opportunities for technology funding and stays current with state and federal funding initiatives.	Medina CSD receives several active grants on an annual basis to fund technology.

Source: OPPAGA Best Practices for School District Technology and Medina CSD planning documents.

F6.5   Medina CSD's Technology Plan 2000 is largely a historical document. It details how technology is currently used; however, it does not address essential planning functions. In comparing Medina CSD's Technology Plan to best practices, the plan meets the practices in certain areas and falls short in others.

The Medina Technology Plan 2000 meets the OPPAGA best practices in that it is board-approved, provides information on funding sources for the department, provides

information of professional development, and provides a detailed explanation of the infrastructure of the District technologies. However, the Medina CSD Technology Plan does not include a framework for administrative decisions, goals, a plan for future District technology acquisitions, or an allocation plan for resources. In addition, the plan does not outline future funding or specific professional development plans. The plan also does not include an assessment of the current equipment or particular needs of the District. Medina CSD's Technology Plan does not meet all of the aforementioned best practice criteria because the document has not been used as a strategic plan and working document.

By including all of the elements of a technology plan as outlined by OPPAGA best practices, the technology plan will make the essential move from a historical document to a planning tool that can be used to measure District technology performance. This type of planning document will allow all individuals in the District to see where the District is headed with technology resources and initiatives. A strategic plan will also help support budget requests and allow for staffing, acquisition, and allocation plans by allowing District personnel and other interested parties to see end goals and progress made toward the goals.

R6.4   Medina CSD should expand its current Technology Plan to include a framework for administrative decisions, goals and plans for future district wide and building level technology acquisitions; a plan for allocation of current and new resources; and an assessment of the district and individual buildings to identify technology needs. By enhancing the District's Technology Plan to include this framework, the District will benefit by being able to use the plan to support budget requests, acquire and allocate equipment, and assist with staff allocation and planning. It will also enable Medina CSD personnel not directly involved with technology to be informed of plans and programs. Medina CSD's technology committee should ensure that feedback from the building technology committee is incorporated into the planning process.

F6.6   Medina CSD's 2000 Technology Plan outlines six goals that the plan should address: (1) curriculum integration, (2) training and staff development, (3) web development, (4) technology department procedures, (5) infrastructure, and (6) student opportunities involving technology integration. However, the 2000 Technology Plan does not fully address all of these areas. For example, the plan does not cover web development or technology department procedures. Professional development and student opportunities are addressed briefly, but could be expanded to help make the plan a working document. While these goals have been identified, the technology committee has not yet taken the time to expand and address these goals with specific timelines or steps by which to achieve them. A plan that specifies these goals but does not address the steps the District should take to achieve them or set out performance measures to identify when the

District has met these goals does not allow for planning of future staffing, budget and resource allocations, which are all essential parts of successful technology integration.

R6.5   The goals and objectives set forth in the technology plan should be broken down into measurable tasks with timelines and approximate costs associated with each. In addition, the District should develop performance indicators for each objective to measure the degree of success in achieving the goals and to identify when the District has fully met the goals. The technology plan should be a working document that serves as a guide to the District's planning of technology acquisition, structures and procedures to aide the department in achieving district goals for technology integration.

F6.7   Medina CSD's Technology Plan was last updated in 2000 with annual additions of technology committee notes. The technology committee has viewed this document as historical rather than a specific planning tool. OPPAGA best practices state that technology plans should be updated annually and include at least three years of future planning. By updating the plan annually, the District will be able to:

- Define timelines and milestones against which it can measure progress;
- Make the appropriate adjustments to ensure that the plan is in line with the overall direction of the District; and
- Decrease the risk of having objectives and goals in the plan that are no longer aligned with District requirements.

An annual review also allows the District to track progress and make any necessary changes to ensure that the goals and timelines are achieved. If this is not completed, the technology department risks not achieving its goals and objectives.

R6.6   The technology plan should be revisited and updated annually by the technology committee and cover a three year timeline, and be completely redone every three years to ensure alignment with District goals and objectives. This will help to ensure that the technology plan's goals and objectives are in-line with the District's goals and objectives. It will also help the technology committee track progress and ensure that goals and timelines are achieved.

F6.8   The current Technology Plan does not include measurements that the District should use to gauge technology operations. The City of Middletown has developed comprehensive performance measures for its technology operations. **Table 6-6** outlines some of the information included in the City of Middletown's Performance Measures.

Table 6-6: Performance Measures for Information Systems

Service Quality	Objective	Input
Responsiveness to Requests for Service (RFS)	RFS responded the same working day that they are received.	Statistics from Incident Tracking Schedule.
Resolution of critical hardware and software RFS	Critical hardware and software RFS are resolved within 24 hours.	Statistics from Incident Tracking Schedule.
Resolution of system maintenance and modification RFS	System maintenance and modification RFS are resolved within the time limits acceptable to customer.	Collection from completed Maintenance and Modification forms. Manual data collection and tabulation.
Quality of systems analysis and programming	System maintenance and modification RFS meet the design and specifications established by the customer.	Collected from completed Maintenance and Modification forms. Manual data collection and tabulation.
User satisfaction	Users are satisfied with hardware and software support services.	Manual data collection and tabulation from quarterly user satisfaction survey.
Timeliness of computer operations	Scheduled production jobs are completed within the time limits established by the customer.	Manual data collection and tabulation from completed Operations Production Schedule.

Source: City of Middletown IT Department

Although these performance measures are suitable for Middletown, they would need to be revised to meet Medina CSD's needs and strategic plan. For example, training objectives should be added as well as internet and email issues and long and short term goals for administrative and instructional technologies.

Medina CSD does not currently break down performance measurements in the Technology Plan to this level. Such detail would allow Medina CSD and the technology committee to effectively and easily determine how well the District is meeting established goals and where improvement is needed. This approach to measurement would also turn the Technology Plan from a historical document into a planning document and an effective measurement tool. The data gathered from such measurement could be used to assist the technology department in supporting funding requests or acquiring additional funding through grants.

R6.7 Medina CSD's technology department and technology committee should consider developing a method to obtain and analyze performance results. It is important that the measures be aligned with the District Technology Plan. Establishing performance measures can ensure that the technology staff is meeting its own goals and those of Medina CSD. Performance measures are an important component of establishing trust and accountability. Initially, technology staff should focus on common indicators. The types of performance measures most commonly used in government include:

- **Inputs**: resources used (what is needed);
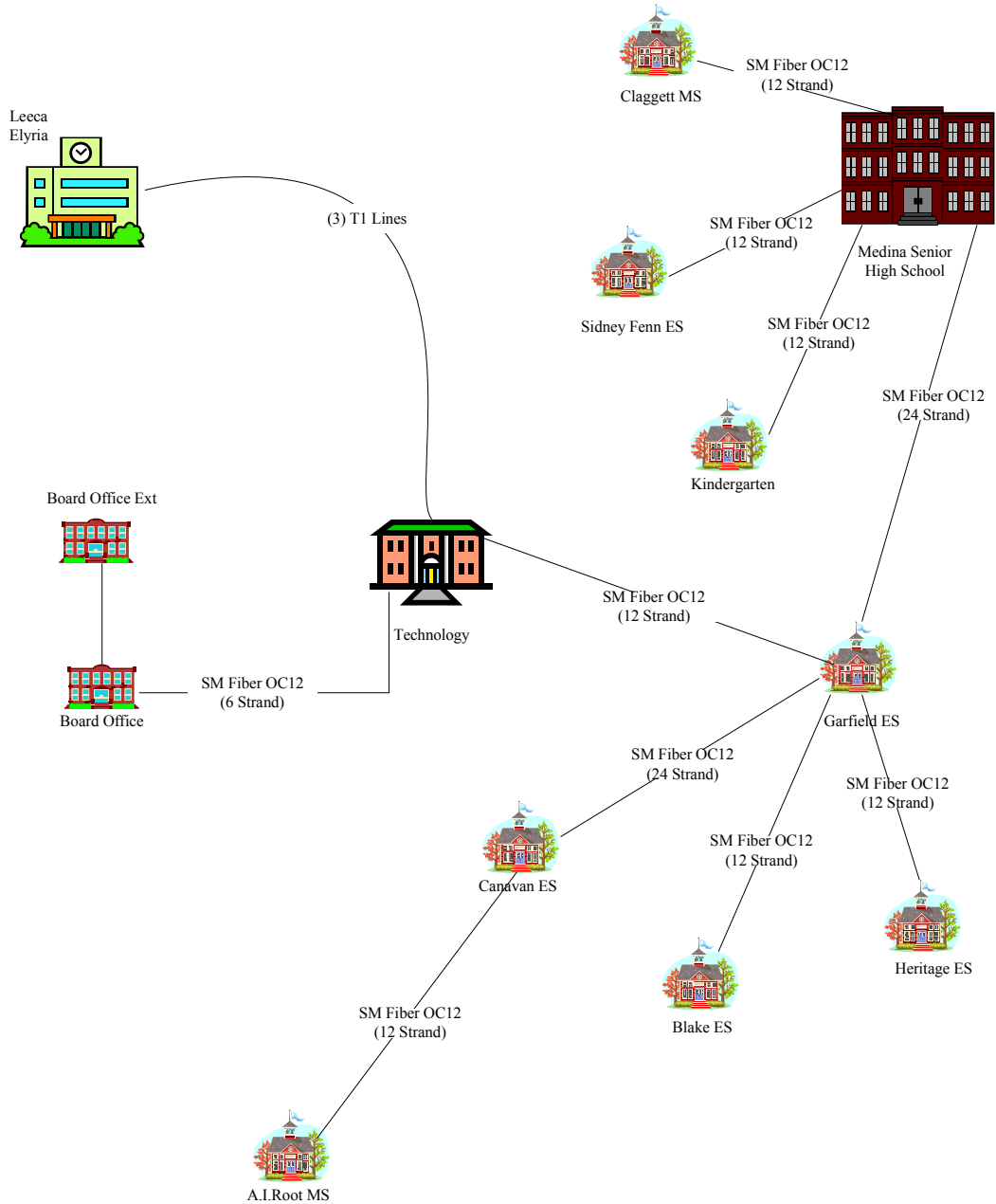- **Outputs**: activities completed (what is produced);

- **Outcomes**: results achieved;
- **Efficiency**: how well resources are use; and
- **Quality**: effectiveness (how much services improved).

Each measure is designed to answer a different question. It is not always necessary to use all types of performance measures to determine if an objective is being achieved. Good performance measures need to be specifically defined and identified. Clear explanations are necessary to indicate what is being measured, the source of the information, and how the value is calculated. The use and reporting of performance measures may increase efficiency and should keep management, staff, and technology users better informed. Performance measures are a great tool to track the productivity of Medina ESC employees to ensure that end goals are being achieved.

Hardware and Technical Architecture

F6.9　　**Chart 6-2** diagrams the network structure at Medina CSD.

**Chart 6-2: Medina City School District
Wide Area Network Schematic**

Claggett MS

SM Fiber OC12
(12 Strand)

Leeca
Elyria

(3) T1 Lines

SM Fiber OC12
(12 Strand)

Medina Senior
High School

Sidney Fenn ES

SM Fiber OC12
(12 Strand)

SM Fiber OC12
(24 Strand)

Kindergarten

Board Office Ext

Technology

SM Fiber OC12
(12 Strand)

SM Fiber OC12
(6 Strand)

Board Office

Garfield ES

SM Fiber OC12
(24 Strand)

SM Fiber OC12
(12 Strand)

Canavan ES

SM Fiber OC12
(12 Strand)

Heritage ES

SM Fiber OC12
(12 Strand)

Blake ES

SM Fiber OC12
(12 Strand)

A.I.Root MS

Connectivity Gear: Cisco and Dell 10/100 switched ports throughout. Units are linked via G-Bics and run at gigabyte speeds between switches, closets (MDF(S)/IDF(S), and buildings.

Management software: HP Openview, Novell, Network Sniffer

Source: Medina CSD Wide Area Network Schematic

Fiber optic cables allow more data transfer at one time than the traditional T1 lines. In addition, the fiber network provides the ability to transfer data digitally rather than in analog format. This type of network provides the District with more options for networking above the traditional T1 lines and has placed the District ahead of the curve with networking.

C6.2   Medina CSD should be commended for its advanced architectural networking structure. By providing a fiber network, the District has exceeded its peers and best practices by providing this type of network structure. The current structure should be ample to grow with the District as it continues to advance in technologies.

F6.10   Medina CSD uses Track-It technology maintenance software to receive work order requests for various buildings and to track the status of these reports. Track-It software can be used to analyze needed staffing levels, total number of work order requests for a given period, and types of repairs. However, the District does not do so at this time.

Based on the Texas School Performance Review best practices, technology departments should prepare reports that analyze district-wide technology problems. By using trend analysis, technology department resources can be deployed quickly to resolve issues and to prevent recurrences of known issues. Identifying and analyzing key performance indicators gives organizations the ability to make adjustments based on what the analysis uncovers. Results of trend analysis include improved operational focus, effectiveness and efficiency, a reduced call volume and a reduction in associated maintenance costs. If Medina CSD used the maintenance software to analyze trends, the information collected could be used as support for additional staffing, equipment and other needs identified by the trend data.

R6.8   The technology department should use all elements of the Track-It software, especially the report modules. These reports should be used for analysis and be tied to the District Technology Plan. The results from the analysis should be used in the future to support additional staffing and equipment. The technology department should pursue any training on this system that is needed in order to use it to the greatest potential.

F6.11   Medina CSD currently uses the SchoolNet hardware standards as a guide for internal hardware standards. (See **F6.12** and **F6.13** for additional discussion on how these standards should be used in other District technology policies.) These standards define the low and high end for both personal computers and laptops. The standards are not, however, reflected in the District's Technology Plan. By integrating the hardware standards into the Technology Plan, the District will be able to use them for both the donation policy described in **F6.12** and the replacement policy described in **F6.13**. This will help ensure that all hardware decisions are based on the same set of standards throughout the entire District.

R6.9   Medina CSD should integrate formal hardware standards into the Technology Plan. These standards should be assessed in conjunction with the yearly plan update and modified when necessary to ensure that they are always reflective of current Medina CSD instructional and administrative needs. By applying a uniform set of standards for future technology decisions, the District will be better able to monitor its equipment donation policy and develop an equipment replacement schedule.

Resource Allocation and Hardware Policies

F6.12   Currently, Medina CSD does not have a formal policy in place for accepting donated technology equipment from outside parties. Acceptance of such donations is left to the discretion of the technology department. While it is appropriate that the department be involved in these decisions whenever possible, it is also advisable to have a formal standard that all donations must meet in order to be accepted by Medina CSD. Donated equipment is a benefit to school districts as long as the equipment meets district needs and does not cost more to maintain than the equipment is worth.

A written standard ensures that, should technology staff not be available to assess the donation, others will not accept donations that do not meet basic requirements. The standards for donations should be consistent with the SchoolNet hardware standards the District has accepted (see **F6.11**). Equipment donations are a valuable tool for acquiring needed equipment in school districts with chronically limited funding. Therefore, it is important to ensure that such equipment meets the needs of students and teachers and does not result in additional costs to Medina CSD for software and maintenance. The National Center for Education Statistics (NCES) recommends that districts refer to established protocol when accepting donated equipment. NCES also recommends asking the following questions before accepting donated equipment:

- Does the donation comply with Medina CSD standards?
- Will the donation be covered by existing maintenance and warranty agreements?
- What provision is the donor making for ongoing maintenance and support?
- What are the costs to Medina CSD for accepting the donation?
- What will Medina CSD need to provide in order for the donation to be used?

R6.10 Medina CSD should develop and implement a formal policy for accepting donated technology equipment. This policy should include clear descriptions of basic standards and should be tied to overall District hardware standards as defined by Medina CSD technology staff (see **F6.11**). The policy should require answers to the questions listed above regarding warranties, maintenance, and potential costs. Such a policy should be communicated to all involved staff and potential donors to ensure consistent implementation. These policies should be posted on the Medina CSD website for access

by potential donors and should help eliminate any potential problems with equipment donations.

F6.13 Medina CSD does not currently use a formal equipment replacement schedule for upgrading technology equipment on a regular basis. Technology personnel reported that equipment replacement is currently completed on an irregular basis when the funds become available. As a result, this process has not been adequate to replace workstations at an acceptable rate. Until FY 2001-02, District funding was not available for replacement.

NCES recommends that school district hardware be updated every three years. However, for most school districts, five years is a more reasonable goal as practiced by Strongsville CSD. In order for Medina CSD technology staff to adequately plan for hardware replacement every five years, funding must be consistently budgeted. Based upon a calculation completed by the District two years ago, it would cost at least $300,000 annually to achieve a five year replacement schedule. This calculation was based on Ohio SchoolNet's goal of one computer for every five students, which would equate to replacing one computer in each classroom every year and could be substantially higher in the upcoming years with the addition of the high school. According to the technology department, workstations should be replaced on a rotating basis, phasing out the oldest units in the District every year. By replacing old equipment using time schedules, Medina CSD could better monitor its hardware to ensure the District is not maintaining equipment that is over five years old.

Increasingly, school districts are becoming dependent on technology to accomplish vital administrative and instructional tasks. As hardware ages, it is difficult for older units to operate interactive software and webpages, thereby diminishing the effectiveness of the units. Given the amount of time, money and human resources that Medina CSD has invested in technology and its infrastructure, keeping that technology up-to-date and running at optimum levels is important to the success of students and staff alike. In order to accomplish this, Medina CSD must ensure that hardware is replaced on a regular and reasonable schedule. The District has taken steps to assist with the problem of units not meeting particular needs by moving older computers to locations where the computer can meet the needs of that particular population. However, as units age, the District will have to continue investing money in the older machines just to keep them operational.

R6.11 Medina CSD should develop and implement a formal replacement schedule for District hardware. District management should support the plan with adequate funding whenever possible. In addition, Medina CSD should investigate alternative funding sources such as grants for a replacement initiative. Medina CSD should consider the investment in technology a primary concern given the focus placed on it from both the administrative and instructional perspectives. In addition, it should consider the cost of keeping old

equipment running. The replacement schedule should be prepared by the technology committee in conjunction with the Technology Plan and include a cost-benefit analysis for alternate means of acquiring equipment, such as leasing. The replacement schedule and cost-benefit analysis should be revisited regularly, perhaps as often as the Technology Plan is updated, to ensure that Medina CSD is approaching hardware acquisition and replacement in the most cost-effective manner.

Financial Implication: The District has 1,373 computers for students. If Medina CSD followed a five-year replacement schedule, it would cost the District approximately $220,000 annually to replace one-fifth of total student computers annually at a cost of $800 per unit. In addition, the District has 448 administrative units. The cost of replacing one-fifth of administrative units annually at an approximate cost of $1,200 per unit would be $108,000. For the District to follow a five-year replacement schedule for all of the units in the District, it would be approximately $328,000 annually. This cost would increase as additional units are obtained.

F6.14   The technology department has experienced significant growth in the last five years as the use of technology in the classroom has increased in the District. As the District gained technology assets, these were inventoried and placed in buildings. However, in the summer, teachers often change grade levels and sometimes even buildings, and the classroom equipment may or may not move with the teachers. As a result, the technology department sometimes cannot locate particular equipment. By not knowing where equipment is located in the District, there is an increased risk of theft. Tracking the location allows Medina CSD to check to ensure that the inventory is in its proper location.

The technology department maintains an Access database for all equipment issued by the department. The database includes the following information:

- Equipment type – computer, laptop, printer, monitor, miscellaneous (palms, LCD projectors, Smart Boards);
- Manufacturer and model;
- Serial number;
- Operating system;
- IP address;
- Other;
- Building location;
- Technology asset number;
- City asset number;
- Date (began recording in 1999);
- Purchase order number (began recording in 2000);

- Cost (began recording after 2000); and
- Grade level (in the process of updating).

All equipment the technology department distributes is labeled with a green tag (technology inventory tag) in addition to district inventory tags that are placed on items over the district cost threshold.

After 1999, the technology office began keeping more detailed records of technology inventory. During the course of this audit, the technology department began the process of verifying the inventory maintained by all teachers and staff. This is a result of questions that arose during the audit. Beginning in November 2002, an inventory request form will be placed on the District internet for teachers and staff to complete. The form will require employees to identify all equipment (computers, printers, LCD projectors, Palm Pilots) in their possession and the location (grade level, building room) of such equipment. This information will download into a database that the technology department will compare with the current inventory database. This will provide the technology department with the most current technology inventory and a better understanding of where equipment is located. The data will also assist the department in determining needs of various facilities. Once the inventory records have been updated, a policy will be implemented requiring all technology equipment to remain in the assigned room. If a teacher moves to a different room, they will not be permitted to take the computer equipment with them. At this time, the department has not formalized this policy, but it plans to in the near future.

One of the top 10 ways Texas School Performance Review has identified to improve public schools is to control inventory. Essentially, this means the District should know what it has and where it is. Computers and related items are often misplaced or stolen. This drain on resources can often be stopped by establishing an inventory control system and by compiling frequent fixed-asset inventories. Districts should maintain a control inventory of all computers and other equipment prone to theft. The control inventory should contain a list of every computer, its location and the individual responsible for that item. Periodically, a designated employee should visit each campus and compare existing equipment to items on the control list.

R6.12 A formal policy should be developed and implemented that outlines the procedures for reporting the relocation of technology equipment within a building or between buildings and staff members. The District should consider not allowing equipment to move with teachers and staff members who relocate. Equipment should remain in the assigned location for control purposes. This will help with planning and equitable resource allocation. Because the District has not kept detailed records of inventory location, it is difficult to determine where additional resources are needed. Detailed records of equipment locations are essential in an effort to maintain inventory controls and equality

of technology allocation between buildings in the District. Medina CSD should ensure that the control inventory includes a list of every piece of computer equipment, its location and the individual responsible for that item.

F6.15 The Medina CSD technology department does not have a formal policy for resource allocation. When determining where hardware will be placed in the District, the technology coordinator considers the need and the age of the current units in the facilities and tries to achieve equality in the distribution; however, previous considerations were based only on the number of computers per building rather than head counts per building. Equitable distribution is hindered by not having the precise location of all equipment (see **F6.12**). Since the current allocation is based on total computers per building rather than head count, inequities occur because some facilities have more students and therefore, a higher ratio of students per computer. **Table 6-7** outlines number of students per computer and shows the inequities.

Table 6-7: Students per Computer by Building

	Head Count	Total Student Workstations	Number of Students per Computer	Difference from District average[1]
Elementary Total	**3,244**	**509**	**6.37**	1.21
Garfield	569	84	6.77	1.61
H.G. Blake	602	93	6.47	1.31
Heritage	477	83	5.75	0.58
Canavan	752	96	7.83	2.67
Sidney Fenn	581	91	6.38	1.22
Kindergarten Center[2]	263	62	4.24	(0.92)
Middle School Total	**1,628**	**357**	**4.56**	(0.60)
Claggett MS	800	161	4.97	(0.19)
A.I. Root MS	828	196	4.22	(0.94)
Senior High School Total[3]	**2216**	**507**	**4.37**	(0.79)
District TOTAL	**7,088**	**1,373**	**5.16**	

Source: Medina CSD Technology Office, building principals, EMIS
[1] This is the difference between the individual buildings "Students per Computer" from the overall District average of 5.16.
[2] Includes Preschool student headcount
[3] High School totals include the total number of classrooms when the second phase opens and the 240 units that will be placed in the high school Fall 2003.

Planning for future acquisition and allocation is essential to demonstrate where Medina CSD is headed with technology. As mentioned in **F6.5**, OPPAGA best practices state that a technology plan should include resource allocation. Through planning, the technology department and the District will be better able to budget for upcoming acquisitions. If the entire District is aware of where and when resources will be acquired, the overall effectiveness of planning will be improved. Some staff may be dependent on certain technologies and make adjustments based on resources available in coming years. If staff is able to see the overall plan and when they will receive additional equipment, the overall perception of equality could be increased.

Medina CSD purchased 240 Dell computers in 2002. The majority of these are currently stored in the District Technology Office until the newly renovated high school comes on line in the summer of 2003. When these computers are distributed next year they will be a year old before they are used by the District. If the District adopts the recommendation of a five year replacement policy, then these units will essentially get four years of use rather than the full five years. Without a formal allocation policy the technology department cannot be sure resources are equitably distributed. Without a detailed inventory (See **R6.10**) and formal planning documents, it is difficult to determine if facilities have the same amount or quality of resources as other facilities.

R6.13 Medina CSD's technology department should implement a formal resource allocation plan. This plan should outline for the next three to five years, particular needs in the District, the age of current resources (inventory database) and present a plan for allocation based on projected resources that will be required in that time period. Such a plan would help the District ensure that resources are distributed on a timely basis. The allocation plan should also include a timeline for securing and distributing the resources. The plan should be broken down by building level and be based on head counts per building to ensure equal access to computers throughout the District. Factors that should be considered when devising this plan are the needs of individual buildings, timing in the fiscal and school year and construction of new buildings. The formal allocation should be linked to the replacement policy. If the District implemented and followed a replacement plan as outlined in **R6.11** the equity of resources between buildings should be enhanced. Both policies working together should ensure that all buildings have updated equipment every five years.

Software

F6.16 **Table 6-8** details best practices concerning software selection, purchase, and use at school districts as well as Medina CSD's current status regarding those practices.

Table 6-8: Software Best Practices

Best Practice	Current Medina CSD Practice
The school district acquires technology in a cost-effective manner that best meets instructional and administrative needs and the technology plan	Software purchases are required to be approved by the building technology committee, which looks to see if the software will meet educational needs. The technology department verifies that the software is compatible with the network. The District ensures that technology is acquired in a cost effective manner through its participation in Ohio SchoolNet pricing.
The school district has established standards for acquiring digital instructional materials, software, and hardware for administrative and instructional use.	Prior to purchasing software, the building technology committee examines the educational soundness of the program, and the technology department verifies network compatibility. Medina CSD does not have written standards (see **R6.9**).
The school district provides opportunities for personnel to preview, evaluate, and recommend acquisition of technology strategies, instructional materials, and software.	The building technology committees accept recommendations from staff and evaluate these for educational soundness while the technology department evaluates network compatibility.
The school district coordinates between schools and uses purchasing strategies to lower costs of acquiring technology and instructional learning systems.	All software purchases are required to go through the technology department, where staff tries to get the best possible price. Medina CSD uses vendors that Ohio SchoolNet has pricing contracts with. In addition, the District searches several vendors for prices before purchasing items.
The school district equitably distributes technology resources to schools within the District.	Medina CSD purchases software licenses and then uses the Fortress software to oversee, control and limit the number of users at a given time based on the number of licenses maintained by the technology department. This ensures the equal distribution of software.

Source: OPPAGA Best Practices for School District Technology and Medina CSD Planning Documents

F6.17   Medina CSD currently has a contract with LEECA to provide administrative software to the District. This software is purchased as a package on a per ADM fee schedule at $9.00 per ADM. In total, Medina CSD spent $59,000 on the base package of LEECA services in 2002. The District only purchases the base package because of concerns about the compatibility of other software available through LEECA. **Table 6-9** identifies all of the programs Medina CSD purchased from LEECA for school year 2002-2003 compared to the programs actually in use in Medina CSD at the time of the audit.

Table 6-9: Medina Software Applications

Functional Area	Modules Available from LEECA/Purchased by Medina for the 2001-2002 School Year	Modules Currently in Use by Medina (as of September 2002)
Financial	Payroll (USPS) Accounting (USAS)	USPS, USAS
Student Information	Student scheduling (AAL) Grade reporting (AAL) Attendance reporting (AAL) Multilis (Library)	AAL and Multilis
Other Operations (Transportation, Food Service, etc…)	Internet access On-line services	Internet access On-line services

Source: LEECA contract with Medina CSD and other LEECA information

According to **Table 6-9**, Medina CSD is using all software purchased from LEECA. Staff acknowledged that additional software will soon become available through LEECA which should meet the needs of the District where current software falls short. Additional software is available through LEECA for an extra fee including Lunch Cruncher and supply, vehicle and equipment inventory.

Medina CSD currently purchases food service and inventory software from outside vendors. In order to maintain relatively low costs and to meet administrative needs, the District must first determine what the specific needs are and then search for software to meet those needs at the most economical price.

R6.14 Medina CSD should continue to use LEECA software as long as it meets District needs. District-wide staff should work with the technology staff to identify additional needs and investigate what software will best suit those needs at the most economical price. Using software that meets the needs of the District and is available through LEECA in the base package enables Medina CSD to benefit from cost-effective access software.

F6.18 Medina CSD currently purchases food service software from an outside vendor. Very little student data transfers from AAL (student software) to the food service software. Therefore, food service personnel must manually input student data into Café Terminal, the software in use. Because common data is not shared, time and energy are wasted with double entry. The bulk of this entry is at the beginning of the school year and as students transfer in or out of the District. While staff reports that this is not a large time requirement, it is an example where sharing of common data may be useful and increase efficiency.

R6.15 Sharing common data among administrative databases should be encouraged. The lines of communication should be opened to ensure that various departments within Medina CSD have access to the information they need without additional work. The technology

department or another District designee should facilitate this communication and sharing of data.

F6.19   Medina CSD requires all instructional and administrative staff to request approval from the technology coordinator prior to purchasing software. If employees want to purchase software, they are encouraged to request a demo. The building technology committees for each building test software requests for consistency with District curriculum and educational soundness. The request is then passed to the technology department to ensure the software will work with the network and application launcher. This process ensures District software meets educational standards and will work with the network. If this process is not followed, software may be purchased that does not work with the network or meet expectations. Requiring approval by the technology coordinator for all purchases gives the department the benefit of tracking all software and coordinating efforts between buildings.

The majority of software purchases are handled through the technology department. Technology department staff attempts to find the best price for software, although in some instances teachers have found a better price and make referrals to the technology department. Central purchasing and approval allows the District to ensure it is receiving the best price.

C6.3   Medina CSD's centralized software and hardware purchasing effort allows staff input into technology purchases and allows the technology department to ensure the software and hardware will work as intended with other systems in the District.

System Security

F6.20   **Table 6-10** presents best practices concerning technology use policies in school districts along with the current situation at Medina CSD.

Table 6-10: Management Information Systems Best Practices

Best Practice	Current Medina Practice
The school district has written procedures and a standards manual.	Medina CSD has a written acceptable use policy for students and staff. However, the technology department does not have any written policies and procedures specific to the functions and duties within the department. (See **R6.16** and **R6.18**)
Appropriate segregation of duties based on school district's size exists within the data processing function.	Medina CSD uses access levels to ensure that only appropriate people have access to certain types of applications and information.
The school district protects systems from unauthorized users by using room locks, passwords, firewalls, and other needed means as conditions warrant.	Medina CSD's proxy serves as a firewall for protection in addition to passwords and usernames to gain access to those areas identified for each user.
Controls exist to limit access to and prevent release of confidential and sensitive data.	Medina CSD uses usernames and passwords. Medina CSD uses access levels to ensure that only appropriate people have access to certain types of applications and information.
The school district ensures that independent databases are effectively managed to provide reliable and accurate data and ensure efficient operations.	Medina CSD operates several different databases. Some data is shared as needed; however, there is not a coordination of common data and therefore, not all information is always shared. (See **R6.15**)
The school district can demonstrate that its information systems deliver IT products and services in a timely manner.	Medina CSD uses web-based "Track'It" maintenance software to track technology related work order requests. This system has the potential to run reports to show when the request was received, who completed the request and when. Currently, the technology department does not use this function of the software. (See **R6.12**)
The school district has a way to gauge user satisfaction with the delivery of IT products and services.	Each building in Medina CSD has a building technology committee that solicits input from staff in the building and then passes the information up to the technology department. However, input from the building committees could be used more effectively. (See **R6.4**)

Source: OPPAGA Best Practices for School District Technology and Medina CSD Planning Documents

F6.21   Medina CSD's technology department does not have a formal disaster recovery plan. While department staff members have discussed actions it may take in the event of a disaster, these plans have not been formalized.

The Texas School Performance Review developed the disaster recovery elements found in **Table 6-11** based on NCES recommendations. The table outlines the provisions that should be included in a disaster recovery plan.

Table 6-11: Key Elements of a Disaster Recovery Plan

Step	Details
Build the disaster recovery team.	Identify a disaster recovery team that includes key policy makers, building management, end-users, key outside contractors and technical staff.
Obtain and/or approximate key information	Develop and exhaustive list of critical activities performed within the district. Develop an estimate of the minimum space and equipment necessary for restoring essential operations. Develop a time frame for starting initial operations after a security incident. Develop a list of key personnel and their responsibilities.
Perform and/or delegate key duties.	Develop an inventory of all computer technology assets, including data, software, hardware, documentation and supplies. Set up a reciprocal agreement with comparable organizations to share each other's equipment or lease backup equipment to allow the district to operate critical functions in the event of a disaster. Make plans to procure hardware, software and other equipment as necessary to ensure critical operations are resumed as soon as possible. Establish procedures for obtaining off-site back-up records. Locate support resources that might be needed, such as equipment repair, trucking and cleaning companies. Arrange with vendors to provide priority delivery for emergency orders. Identify data recovery specialist and establish emergency agreements.
Specify details within the plan.	Identify individual roles and responsibilities by name and job title so everyone knows exactly what needs to be done. Define actions to be taken in advance of a disaster. Define actions to be taken at the onset of a disaster to limit damage, loss and compromised data integrity. Identify actions to be taken to restore critical functions. Define actions to be taken to re-establish normal operations.
Test the plan.	Test the plan frequently and completely. Analyze the results to improve the plan and identify further needs.
Deal with damage appropriately.	If a disaster actually occurs, document all costs and videotape the damage. Be prepared to overcome downtime; insurance settlements can take time to resolve.
Give consideration to other significant issues.	Do not make a plan unnecessarily complicated. Make one individual responsible for maintaining the plan, but have it structure so that others are authorized and prepared to implement it if it is necessary. Update the plan regularly and whenever changes are made to the system.

Source: Texas School Performance Review for the Eagle Pass Independent School, July 2001

A computer disaster could result in lost productivity and an inability to perform important District functions. To protect electronic information, top-level administrators must invest time and expertise into the development of a well-conceived, comprehensive and customized security policy.

Although Medina CSD does not have a formal disaster recover plan, the District uses other security measures, such as firewall protection between the Internet and main servers to protect systems from viruses. The technology department has also purchased additional software to protect internal systems from viruses. For instance, Medina CSD uses anti-virus software to protect the system from any external virus introduced primarily through email.

R6.16 Using the elements identified in **Table 6-11**, along with other resources, the technology department should develop and implement a detailed disaster recovery plan specific to technology functions in the District. This plan should include provisions for all major district and building systems including LEECA. By establishing a disaster recovery plan Medina CSD would be better able to deal with potential disasters and reduce the potential impact that a disaster may have on productivity.

F6.22   Medina CSD has effective provisions in place to ensure that only approved students and staff have access to technology applications in the District. For instance, every staff member and student in Medina CSD is assigned a user ID and password to access the system, which they are then able to use from any terminal in the network. Users are given different levels of access depending on their position in Medina CSD. For example, students do not have email accounts with Medina CSD, and therefore, are not given access to the email system. In addition, only appropriate personnel are granted access to sensitive administrative systems. For example, only those directly involved with student grading and scheduling are granted access to this application. The same is true for budgeting, payroll and other potentially sensitive systems. Access to these is controlled by user IDs and passwords. Staff may have "read only" access to some systems, and only top management is allowed unrestricted access to all systems when necessary.

F6.23   Controlled physical access to technology hardware systems is a key component in ensuring system safety and integrity. Medina CSD currently controls physical access to District level hardware system and servers. These are all centrally located on the second floor of the technology center in a secure room. The center is kept locked when someone is not at the front desk to meet visitors. Once the second phase of the new high school is completed, some technology hardware will be stored in this facility. This room is specifically designed for the purpose of housing this equipment and will have the proper safeguards. The District has provided sufficient safeguards with controlled access for their systems. While no one can determine when a disaster will occur, the District must be prepared if something does happen. The central location of all servers is efficient for the District; however, the District does not have a plan if something were to happen to the technology center. (See **R6.16**)

F6.24   Medina CSD has Acceptable Use Policies (AUP) in place for both student and staff technology use. These policies are similar to those in peer districts regarding content. The policies outline acceptable use of computers, printers, the Internet, and for staff, email. Students and parents are required to sign the student AUP. However, staff members are not required to sign the AUP.

Strongsville CSD has incorporated its AUP into both the student and staff handbook. By doing this, students and staff do not have to sign separate documents acknowledging the policy, but rather it is part of the handbook for students and for staff, and a part of the overall employment contracts. Implementing the AUP into both student handbooks and staff contracts would increase understanding of the District's policy. Without a signed AUP, it is difficult for districts to enforce the policy.

School districts need clear policies and procedures for the purchase of technology, its acceptable use, the application of copyright laws, and the control of software and hardware inventories. The District will find it hard to defend itself against criticism when an employee acts outside an unwritten rule, because there is little proof that the individual was acting without express authority.

R6.17   Medina CSD should integrate the student AUP into the student handbook. Staff AUPs should have a sign-off sheet that acknowledges their acceptance of the policy. If students, parents and staff recognize the AUP and accept it as a condition of attendance or employment, Medina CSD ensures understanding and acceptance of the policy by all users. Without a signed AUP, it is difficult for the District to enforce the policy. It is not enough to have the policy, the District must ensure that students and staff understand and agree to it.

Financial Management and Budgeting

F6.25   The technology coordinator submits budget requests to the director of instruction who then submits the proposal for the annual budget review. The technology budget is developed by the technology coordinator and not the technology committee. By not allowing feedback from the technology committee, there is the possibility that District goals may not be achieved.

As discussed in the **Planning and Management** section, it is difficult to determine the financial resources needed if the appropriate planning is not completed to identify the District's technology goals. Because the District has not taken the appropriate planning steps and has not involved the technology committee in the budgetary process, technology resources may not be appropriately tied to District goals.

R6.18 Medina CSD should include the technology committee in the budgetary process for the technology department and ensure that monetary requests are linked to the goals and objectives outlined in the District's Technology Plan. In the budgetary planning process, the budget requests as submitted by the technology committee, in conjunction with the technology department, should be detailed and outline specifically what the money is allocated for. (See **F6.26** for additional discussion.)

F6.26 The current technology budget allocates a specific amount of money for an object code each fiscal year. As a result, the budget request only shows how much money is allocated to each object code and does not provide the detail of how the money will be specifically spent. Therefore, it is difficult to connect the allocation of funds to specific goals and objectives. If the District used a detailed budget process that specifically defines how funds are distributed for building software, network services, new computers, new printers, and other technologies, staff would be better able to determine if District needs and goals are being met. Furthermore, by providing more detail in the budget, the technology department will be better able to justify increases in expenditures when needed. See the **financial systems** section of this performance audit for more information on the District's budgetary processes.

R6.19 Medina CSD technology department should implement detailed budget requests. These budget requests should integrate specific goals and objectives from the District's Technology Plan. Detailed budgeting would benefit the technology department by allowing the department to better justify and support the budget, and ensure accountability.

F6.27 According to funding figures for FY 2001-02 (See **Tables 6-2** and **6-12**), Medina CSD appears to be making adequate use of State grant funding opportunities. In comparison to the peers, Medina CSD is receiving comparable grant funding from similar sources. Both Strongsville and Stow-Munroe receive connectivity and SchoolNet funds. Peers do not receive funding resources other than those that Medina receives. The technology coordinator is responsible for researching and securing technology grants for the District. **Table 6-12** presents the grants Medina CSD applied for and received in FY 2001-02.

Table 6-12: Technology Grant Funding for FY 2002

Grant	Purpose of Grant	Amount Granted
Connectivity	To maintain connectivity. Assists with the cost of switches and fibers.	$28,000
Professional Development	To provide technology training for teachers and technicians. This training includes new and existing technology	$8,592
SchoolNet Plus	To add and replace computers in the classroom.	$176,182
Virtual Middle School	Computer equipment for middle schools	$65,000
Total		**$277,774**

Source: Medina CSD Budget Account Summaries, FY 2002

In addition to the grants listed in **Table 6-12**, the District receives funds for EMIS and has received price discounts from the Smarter Kids Foundation for the purchase of SMART Boards. Furthermore, Medina CSD uses $8,900 in Title 2D grant funding from the U.S. Department of Education to support its technology mentor program.

The remainder of the 2002 SchoolNet Plus money has been allocated for additional computers. Overall, Medina CSD is obtaining and spending technology grant funds in an acceptable manner. The grants listed in **Table 6-12** represent a variety of sources and purposes. Medina CSD appears to have applied for the funds according to each grant's individual parameters. All of the grants obtained by Medina CSD in FY 2002 were from State sources.

Additional grant opportunities exist through Federal and private resources. Medina CSD could secure additional funding for technology needs, such as equipment replacements and professional development, if it pursues additional grant resources. Many teaching resource websites offer access to grant opportunities. For example, the US Department of Education and techLEARNING.com list many technology grants available to schools districts.

R6.20 Medina CSD should continue to research, apply for, and secure grant funding from additional resources, particularly the Federal government and private sources. Any additional funding and attempts to secure such should be accounted for in the District Technology Plan. Use of any funds acquired through grants should also align with goals and objectives as established in the Technology Plan.

Training and Professional Development

F6.28 **Table 6-13** presents best practices concerning technology professional development in school districts along with a description of the current status at Medina CSD.

Table 6-14: Professional Development Best Practices

Best Practice/Goal	Current Medina Practice
The school district and school-based staff receive professional development training for all technologies used in the District.	Medina CSD provides some basic GroupWise training and training from the vendor on new technologies like the SMART Boards; however, the training is sparse and sporadic. (See **R6.22**)
The school district verifies the availability of appropriate training before acquiring new equipment or software.	Medina CSD has used vendor training for the new SMART Boards in the high school. Technicians have received Dell training for repair and maintenance of Dell computers. (See **R6.21**)
The school district provides appropriate professional development that is based on feedback from central office and school-based staff and is aligned with the District's strategic and technology plan.	Professional development is on an individual basis in Medina CSD by teacher. Technology is generally included. (See **R6.21**)
The school district funds technology training.	Medina CSD funds training with professional development grant monies it receives. (See **R6.23**)
The school district provides a variety of opportunities in terms of time, location, and delivery mode for educators and other District staff to obtain technology training.	Medina CSD's technology department offers some training; other training is obtained through local providers. Medina CSD's technology mentors are available to teachers and staff for small group or individual training in some areas. A set training schedule for the school year has not been developed in Medina CSD. (See **R6.21**)
The school district provides professional development on integrating technology into the curriculum.	Medina CSD uses technology mentors at all levels and integration specialists in the middle schools to assist with technology integration into the classroom.
The school district provides specialized training for technology support personnel.	The goal of Medina CSD is to send each technology employee to one week of training annually; however, this is not formally addressed in planning. (See **R6.21**)

Source: OPPAGA Best Practices for School District Technology and Medina SD Planning Documents

F6.29   It is the goal of the technology department to send each of the technology staff members to one week of technical training annually. In the past, the District has sent technology staff to a Dell certification school. This allows the technicians to be Dell certified, call the help line, receive assistance from Dell over the phone and attempt to address the problem before calling a Dell technician for service.

In addition, Medina CSD's technology department provides some training for new staff in GroupWise and Novell network. The training is scheduled as needed. Other training is generally provided by outside vendors, such as local community colleges or one-day seminars. The District has taken advantage of training provided by vendors for new

technologies such as the SMART Boards. In addition to this training, technology training in the District is limited, sporadic, and unplanned. Without proper training, technology could go unused by staff and the goal of integration in the classroom would be difficult to achieve. Strongsville and Gahanna-Jefferson use training calendars to inform staff and teachers of specific training dates. This enables staff to adequately plan for training.

According to the Texas School Performance Review's top ten technology best practices, school districts need to understand that training is the key to success. Without adequate training, teachers and administrators could potentially allow expensive hardware and software to go unused or underused.

Steps need to be taken to place an emphasis on mastering existing technology. Without this emphasis, classroom integration of technology and the skill levels of the teachers and staff will not increase.

R6.21 Medina CSD's technology department should develop and implement an annual training calendar to address the technology training needs of the instructional and administrative staff. In doing so, the technology department should attempt to identify the changing technology needs of the District and address them appropriately. Training should encompass areas software and equipment that have historically been in the District and new technologies.

In addition to the training calendar, the District's Technology Plan should include goals and performance measures for training technical staff and teachers. The technology department should develop minimum standards for staff proficiency, training requirements, and continued skills improvement. An evaluation tool to measure competency in these minimum skills should be developed to assist the District in evaluating progress and assist in additional planning and training initiatives. Furthermore, the District should allocate funding for training sessions in the budget for all District employees. Annual progress in the number and types of training for teachers and staff should also be included in the annual technology plan update.

Financial Implication: If the District chose to have technology training provided by a District employee outside of normal in-service days, according to the teacher contract, the cost would be $3.54 per hour for internal training. For Medina CSD to provide 16 hours of internal training for 50 percent of the teaching staff, it cost the District approximately $12,000.

F6.30 Medina CSD currently funds technology training solely through professional development grants from Ohio SchoolNet. The peer districts receive similar professional development money from Ohio SchoolNet. However, the grants are typically small and

are only sufficient to train a few individuals and not sufficient to fund all of the District's technology training needs. (See **Table 6-12** for more information regarding the District's professional development grant). To address training needs, the District has attempted to use the train-the-trainer approach through the mentor program. As mentioned in **F6.29**, untrained staff may lead to inadequate use of technology. OPPAGA best practices state that districts should provide adequate and reasonable funds for technology training.

R6.22 Medina CSD's technology department should continue to investigate additional funding sources for technology professional development. The current grant funding received is limited and restricts opportunities for growth. Grant funds for training help to free up money in the General Fund for other priorities; however, the District should ensure that there are ample funds to meet training needs. Additional training funds may be found at the U.S. Department of Education website.

Instructional Technology

F6.31 Medina CSD uses a variety of technologies in the classroom for instructional purposes. The recent additions to the new and renovated high school are SMART Boards and LCD projectors. SMART Boards are interactive whiteboards that allow the user to control and write notes over projected applications by pressing on the board's touch-sensitive surface. Notes on the Smart Boards can be printed, emailed, or saved as an HTML file for future reference and distribution. The board can also be used as an electronic whiteboard where written notes can be saved to a computer. The technology department also purchased two classroom sets of Palm Pilots to be used in the classroom. Teachers must write a proposal for the use of the Palm Pilots and the technology committee votes on who is awarded the use for a certain period of time.

F6.32 Technical support for each building is provided by the technology department and technology representatives, who are designated teachers in each building. The technology representative does not receive any additional money, but the representatives are provided substitute teachers periodically so they can assist other teachers with technology integration needs or attend training. Each building is guaranteed one technician on campus at least one time per week, in addition to the technology representative. This individual has the opportunity to assist teachers with integration or technical issues as time permits. The two middle schools also have integration specialists that assist with technology integration.

Medina CSD has established an infrastructure to assist with the integration of technology in the classroom. By providing assistance of fellow teachers beyond the technical support provided by the technology department, the District is able to assist teachers with integration issues and further the use of technology in the classroom.

C6.4   Using teachers as technology representatives, mentors and integration specialists has provided adequate technical support for Medina CSD's schools. Assistance with technology integration is provided at a very low cost, helping to ensure the additional use of technology in the classroom.

F6.33   **Table 6-14** outlines the total number of computers for each peer district by building level.

Table 6-14: Computer Equipment Summary

	Elementary		Middle School		High School		Other	Total	
	Class[1]	*Admin[2]*	*Class*	*Admin*	*Class*	*Admin*	**Admin[3]**	*Class*	*Admin*
Medina	509	83	357	30	507	200	135	1,373	448
Stow Monroe	981	45	175	12	152	118	N/A	1,308	175
Strongsville	921	40	281	15	477	38	35	1,679	128
Gahanna-Jefferson	660	21	363	18	337	30	31	1,360	100
Peer Average	854	35	273	15	322	62	33	1,449	134

Source: Medina City Schools and Peer Data, September 2002
[1]The "Class" category includes all computers in classrooms and labs that are available for student use.
[2] The "Admin" category includes computers set aside for administrative purposes, this includes teachers, principles, and other staff in school buildings.
[3] "Other Admin" includes computers used in the Board of Education office and other offices outside of school buildings.

As shown in **Table 6-14**, Medina CSD has more computers than any of the peers; however, the total number of computers dedicated to students is less than the peer average, while the number of administrative units is almost 350 more than the peer average. **Table 6-15** outlines the number of workstations available for student use to the number of Average Daily Membership (ADM) in each of the districts evaluated during this audit.

Table 6-15: Students Per Workstation in Medina and Peers

	ADM	Total number of instructional use workstations	Number of Students per Workstation
Medina	6,324	1,373	4.61
Gahanna-Jefferson	6,490	1,360	4.77
Stow-Munroe	5,973	1,308	4.56
Strongsville	7,063	1,679	4.21
Peer Average	**6,509**	**1,449**	**4.49**

Source: School District Technology Data, September 2002

SchoolNet recommends that school districts provide one workstation per every five students in the district. According to **Table 6-15**, Medina CSD is under the recommended students per computer ratio; however, Medina CSD has the second highest number of students per workstations of the peers. Referring back to **Table 6-7**, the number of students per workstations is not representative of all District buildings (see **F6.15**). As outlined in **Table 6-7**, the District has attempted to allocate computers equally among buildings, but when the head count in each building is taken into account, the number of students per computer ranges from 4.22 to 7.83. Therefore, the 4.61 ratio of students per workstation is not representative of all District buildings.

Table 6-16 outlines the number of FTE's per administrative workstation for Medina and the peer districts.

Table 6-16: FTEs Per Administrative Workstations in Medina and Peers

	FTEs	Total number of administrative workstations	Number of FTEs per Workstation
Medina	748.1	448	1.67
Gahanna-Jefferson	662.0	100	6.62
Stow-Munroe	675.7	175	3.86
Strongsville	768.1	128	6.00
Peer Average	**701.9**	**134**	**5.24**

Source: School District Technology Data, September 2002

Medina CSD allocates a larger number of computers to staff than the peers, while remaining slightly above the peer average in students per computer (**Table 6-15**). The high number of administrative computers is due, in part, to the fact that every high school teacher in Medina CSD has been issued a laptop computer. The difference in cost between issuing a desktop and a laptop is between $300 and $1,000. The cost per teacher laptop was $1,800, while the cost to upgrade a basic desktop computer to the equivalent could be about $1,500. The new student computers the District purchased for the high school were approximately $800. According to the District, the benefits of issuing laptop computers to high school teachers include the following:

- Ability to take computers to any room in the building while remaining connected to the network;
- Ability to be mobile in the building, considering that Medina CSD high school teachers are not permanently assigned to specific rooms; and
- Ability to work on class notes, presentations, and assignments in work rooms, and then take them to the classroom to present on the LCD projectors and SMART boards.

Based on **Tables 6-14** and **6-16**, Medina has made a significant financial commitment to ensuring that its staff has the technology needed to perform their duties.

R6.23   In conjunction with **R6.11**, the District should continue to use technology to meet overall District goals. In doing so, the allocation of resources should be equitable among all students. The District as a whole has met the standards set forth by Ohio SchoolNet, and the next step is to ensure that all students have equal access to technology. Consequently, the District should strive to achieve equal distribution based on head counts per building. The number of computers allocated to students and administration should be addressed in the Technology Plan.

In addition, the District must consider the allocation of resources between administrative and educational functions and closely monitor technology resources allocated for administrative use. While providing staff with the appropriate technology to complete their jobs is an important aspect of integration, allocating a large amount of funds to staff technology impacts the amount of resources that can be dedicated to other important District needs.

F6.34   Medina CSD has been able to implement technology in a number of different facets within the instructional environment; however, it has not been able to assess the impact of technology on student achievement.   If the District moves the Technology Plan in the direction indicated by previous recommendations, the next step would be to consider measuring the impact of technology on student achievement. With the new EMIS reporting data, Medina CSD could use the information to track student deficiencies on standardized testing and then compare the technology and software used to determine if any correlations exist between student achievement and technology use.

Measures that could correlate student achievement and technology may include the following:

- The number of students per workstation;
- The percentage of time spent by students using instructional technology in the classroom; and
- The number of instructional programs used in Medina CSD classrooms.

R6.24   Medina CSD should expand the Technology Plan to include an assessment of the impact that technology is having on student achievement. The District should include specific performance measures that correlate student achievement and technology in its planning.

Financial Implications Summary

The following table represents a summary of the annual cost savings for the recommendations in this section of the report. For the purpose of this table, only recommendations with quantifiable financial impacts are listed.

Technology Financial Implications Summary

Recommendation	Annual Implementation Cost
R6.11 Implementation of a five-year computer replacement schedule	$328,000
R6.21 Annual internal technology training for at least 50 percent of the teaching staff	$12,000
Total	**$340,000**

Conclusion Statement

Medina CSD is meeting the needs of students with its current technology resources. Overall, the District has done a good job with technology integration and has been able to make significant advancements by acquiring grants for the last several years. The technical architecture and hardware resources meet best practices and are a good starting point for the District. However, with some minor planning, organizational structure and management practice changes the District would be able to improve its overall technology operations.

The current staffing in the technology department is able to provide adequate services based on the limited resources. By adding additional personnel and moving the integration specialists to the technology department, the services the technology department provides would improve.

The existence of a District Technology Plan and the establishment of a District and building technology committees demonstrates Medina CSD's proactive commitment to technology integration in the educational setting. By incorporating more planning and detail (standards, allocation of resources, disaster recovery), the District would be able to improve the overall operations of the technology department and the integration of technology into education. The enhanced planning practices should include detailed budgeting, resource allocation and replacement schedules at a minimum.

Medina has an effective platform for good technology usage in the educational setting. By linking the usage to student performance, the District will be able to meet current best practices. In addition, if the District was to provide additional technology training to teachers and staff, it could become a best practice school district in technology operations. To become a leader in school district technology, Medina CSD should continue to pursue additional grants to fund training, professional development, and new equipment.

By further developing its current technology plan and management practices, Medina CSD will be well on its way to meeting technology best practice standards set forth in this report.