



Mary Taylor, CPA
Auditor of State

PARMA CITY SCHOOL DISTRICT
PERFORMANCE AUDIT

MARCH 2, 2010



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Auditor of State

To the Residents and Board of Education of the Parma City School District:

On November 2, 2009, the Parma City School District engaged the Auditor of State's Office to conduct a performance audit of its facilities and purchasing operations. The performance audit was designed to review and analyze the selected areas in relation to relevant laws, District policies, peer school districts, industry benchmarks, and leading or recommended practices.

The performance audit contains recommendations which the District can consider in its efforts to strengthen internal controls and improve operational efficiency and effectiveness. While the recommendations contained in the audit report are resources intended to assist in identifying improvements, the District is encouraged to independently assess operations and develop additional alternatives.

An executive summary has been prepared which includes the project history; a district overview; the scope, objectives and methodology for the performance audit; and a summary of the key recommendations, noteworthy accomplishments, assessments not yielding recommendations, issues for further study, results of the voucher packet review, and financial implications. This report has been provided to the District and its contents discussed with the appropriate elected officials and administrators. The District has been encouraged to use the results of the performance audit as a resource for further improving overall operations.

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. This performance audit is also accessible online through the Auditor of State of Ohio website at <http://www.auditor.state.oh.us/> by choosing the "Audit Search" option.

Sincerely,

A handwritten signature in cursive script that reads "Mary Taylor".

Mary Taylor, CPA
Auditor of State

March 2, 2010

Executive Summary

Project History

On November 2, 2009, Parma City School District (PCSD or the District) engaged the Auditor of State's Office (AOS) to conduct a performance audit of facilities and purchasing operations. The performance audit was designed to review and analyze the selected areas in relation to relevant laws, PCSD's policies, peer school districts, industry benchmarks, and leading or recommended practices.

District Overview

PCSD is governed by a five-member elected Board of Education. Its primary purpose is to provide educational and related services to preschool through grade twelve students residing within the District boundaries. The District is located within Cuyahoga County encompassing the cities of Parma, Parma Heights, and Seven Hills. The District's total preschool to grade twelve enrollment was 12,328 in fiscal year (FY) 2009-10 (as of December 8, 2009).

The District's facilities include 1 preschool and child care building, 13 elementary schools (grades K-6), 3 middle schools (grades 7-8), and 3 high schools (grades 9-12). In FY 2008-09, PCSD spent \$6.48 per square foot on facility operations. Although this is higher than the national median reported by the American School and University Magazine (\$4.42), this is similar to the Statewide 3-peer average (\$6.45) and lower than the Cuyahoga County 3-peer average (\$7.04). The Director of Operations leads facility operations and reports to the Superintendent, while the Custodial Manager and Maintenance Supervisor report to the Director of Operations. The District currently has 55 cleaning positions, 30 custodial positions, and 19 maintenance positions.

The Business Office and Treasurer's Office are primarily responsible for managing and overseeing the purchasing activities for the District. Through a public and competitive procurement process, the Business and Treasurer's Offices are responsible for ensuring the District obtains the greatest value for its money. The District uses a decentralized purchasing process. In addition, PCSD has general purchasing, credit card, cooperative purchasing, local purchasing, supplier relations, and bidding policies, along with administrative guidelines that are linked to Ohio Revised Code (ORC) and Ohio Administrative Code (OAC) requirements. Furthermore, the District is in the process of updating its purchasing policies and implementing the eSchoolMall system.

Objectives

Performance audits are defined as engagements that provide assurance or conclusions based on an evaluation of sufficient, appropriate evidence against stated criteria, such as specific requirements, measures, or defined business practices. Performance audits provide objective analysis so that management and those charged with governance and oversight can use the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.

The overall objective of this performance audit was to review the facilities and purchasing operations and, where warranted, develop recommendations to ensure compliance with required practices, and increase efficiency and effectiveness. The following assessments were conducted in this performance audit:

- **Facilities:** staffing levels, overtime costs, expenditures per square foot, energy management practices, building capacity and utilization, planning activities, work order system, procedure manuals, performance standards, and training; and
- **Purchasing:** purchasing policies, controls and oversight over the procurement process, and compliance with key statutes, policies, and procedures.

The recommendations in the performance audit comprise options that PCSD can consider in its efforts to strengthen internal controls, and improve operational efficiency and effectiveness.

Scope and Methodology

This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that AOS plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions based on the audit objectives.

Audit work was conducted between November 2009 and December 2009, and data was drawn from fiscal years 2008-09 and 2009-10. To complete this report, the auditors gathered a significant amount of data pertaining to the District, conducted interviews with numerous individuals, and reviewed and assessed available information. Peer data and other information used for comparison purposes were not tested for reliability, although the information was reviewed for reasonableness.

The performance audit process involved significant information sharing with the District, including preliminary drafts of findings and proposed recommendations related to the identified

audit areas. Furthermore, periodic status meetings were held throughout the engagement to inform PCSD of key issues impacting selected areas, and share proposed recommendations to improve or enhance operations. Throughout the audit process, input from PCSD was solicited and considered when assessing the selected areas and framing recommendations. Finally, the District provided verbal and written comments in response to various recommendations, which were taken into consideration during the reporting process. Where warranted, AOS modified the report based on the District's comments.

Several districts were selected to provide benchmark comparisons for certain areas assessed in the performance audit. Berea City School District, Lakewood City School District, and North Olmsted City School District were used as Cuyahoga County peers. Additionally, Dublin City School District (Franklin County), Lakota Local School District (Butler County), and Westerville City School District (Franklin County) were used as Statewide peers. These school districts were selected based upon demographic and operational data, and input from PCSD. Furthermore, external organizations and sources were used to provide comparative information and benchmarks, such as the following:

- Ohio Revised Code (ORC);
- Ohio Administrative Code (OAC);
- Ohio Ethics Commission (OEC);
- American School and University Magazine (AS&U);
- National Center for Education Statistics (NCES);
- United States Department of Energy (DOE);
- Government Finance Officers Association (GFOA); and
- National Institute of Governmental Purchasing (NIGP).

The Auditor of State and staff express appreciation to PCSD's staff for their cooperation and assistance throughout this audit.

Noteworthy Accomplishments

Noteworthy accomplishments acknowledge significant accomplishments or exemplary practices. The assessment of the District's energy management practices and costs warrants a noteworthy accomplishment. Specifically, the District has implemented NCES and DOE recommended energy management practices with regard to energy use tracking, monitoring, and inefficiency auditing. In addition, the District has taken a variety of steps to improve energy use through a ten phase HB 264 energy conservation program which included lighting upgrades; temperature controls; repairs and modifications to existing heating, cooling, and ventilation equipment; insulated roofing replacement to the majority of buildings; and boiler replacement at Parma Senior High School. Phase 10 of the HB 264 program is in the process of being installed, which will include the replacement of the facilities management systems and upgrades in the automatic

temperature controls in all buildings. Moreover, the District's five-year Planned Service Agreement with Johnson Controls calls for Johnson Controls to provide PCSD with annual energy reporting services for past HB 264 projects. Lastly, the District purchases natural gas and electricity through consortiums.

As a result of its energy management practices, PCSD's electricity, gas, and water/sewage expenditures per square foot are lower than the Cuyahoga County 3-peer averages. The District's electricity and water/sewage expenditures per square foot are also lower than the Statewide 3-peer averages.

Assessments Not Yielding Recommendations

The assessment of PCSD's purchasing and credit card policies in relation to ORC and OAC requirements did not warrant changes or yield recommendations. Specifically, the District has general purchasing, credit card, cooperative purchasing, local purchasing, supplier relations, and bidding policies that are linked to ORC and OAC requirements.

Summary Results of Voucher Packet Review

To determine whether staff adheres to purchasing policies, related statutory requirements, and sound internal controls, AOS reviewed a total of 56 voucher packets from FY 2008-09 and the first quarter of FY 2009-10. Overall, the voucher packet review showed that the District did not have significant and systematic deficiencies, with three exceptions. Along with these three exceptions, the review revealed other anomalies. **R3.1**, **R3.4** and **R3.5** would help the District address these exceptions and anomalies. Furthermore, each of the 26 voucher packets reviewed for compliance with the two quote policy showed that at least two quotes were obtained or two quotes were not required because of the nature of the purchase (e.g. professional services and memberships). Likewise, the two bid packets reviewed by AOS showed that the District complied with ORC §3313.46 and §3327.08, and the Board's purchasing policy (Policy 6320). See pages 3-2 to 3-3 in the **purchasing** section for additional detail regarding the voucher packet review.

Key Recommendations

Each section of the audit report contains recommendations that are intended to provide the District with options to strengthen internal controls, and enhance its operational efficiency and effectiveness. In order to obtain a full understanding of the assessed areas, the reader is encouraged to review the recommendations in their entirety. The following summarizes the key recommendations from the performance audit report.

In the area of Facilities, PCSD should:

- Review the various activities performed by facility staff to accurately capture the time for each function, which can be aided by an electronic work order system (see **R2.7**). Subsequently, the District should compare the staffing levels to industry benchmarks and established performance standards (see **R2.9**). Assuming the District's verbal estimates of time for certain activities are accurate, PCSD should consider reallocating some of its cleaning and grounds keeping duties to members of the maintenance staff.
- Seek to alter provisions in its negotiated agreement with the Ohio Association of Public School Employees that contribute to the high overtime costs. Specifically, the District should negotiate to eliminate the minimum call-in pay and compensate staff for actual hours worked, or at least reduce the minimum call-in pay. Likewise, the District should negotiate to exclude leave time as counting toward overtime. PCSD should also eliminate the provisions that dictate how to cover for custodial absences and building permits. This would allow the District to take more cost-effective measures in covering absences and building permits (where needed), such as flexing schedules or using substitutes. Further, reallocating staff, if justified (see **R2.1**), should allow for reductions in cleaning staff and grounds keeping overtime.
- Review its current enrollment projections and update them as necessary to reflect actual enrollment in FYs 2008-09 and 2009-10. The District should update its enrollment projections annually, based on industry recommended methods. Maintaining up-to-date enrollment projections will provide sound data to inform decision-makers and help frame plans regarding facilities.
- Evaluate the capacity and utilization of its schools buildings as they relate to its educational programs and priorities. The District should also consider the impact of provisions in House Bill (HB) 1 and projected enrollment (see **R2.3**) on its school building capacity and utilization. Any building changes should involve stakeholders in the process and be based on relevant factors.
- Develop a formal preventive maintenance (PM) program that addresses all routine, cyclical, and planned building maintenance functions. In doing so, PCSD should consider the process recommended by NCES and record PM activities, as well as all maintenance tasks, in an electronic work order system (see **R2.7**). The District should also ensure that the contracted PM tasks are performed in accordance with the Planned Service Agreement and industry standards.
- Purchase a computerized maintenance management system (CMMS) that has the ability to track the information recommended by NCES. When making the purchase, the District should ensure the vendor provides employees with appropriate training so that all

functions are used to the fullest extent possible. The data tracked through a CMMS would help the District estimate future costs and timeframes for projects, formalize the preventive maintenance program (see **R2.6**), and accurately determine staffing assignments for various functions (see **R2.1**).

In the area of Purchasing, PCSD should:

- Update its purchasing policies and guidelines. These and other purchasing policies should clearly delineate Board expectations; Superintendent, Treasurer, Director of Operations, and other relevant staff (e.g., principals) responsibilities; and consequences for noncompliance. In addition, the District should review the policy regarding price quote requirements for items over \$5,000, clarify and update where necessary, and then formally inform staff of the policies. The District should also create a policy that requires staff to include documentation of the multiple quotes when sending the requisition and maintain such documentation in the voucher packets. Further, the District should annually review and update the policies and guidelines, as necessary. Administrators should ensure that staff follows the policies and guidelines. Lastly, the District should address deviations from the policies by enforcing the consequences detailed in the policies.
- Develop a comprehensive supplier selection policy and associated administrative guidelines to objectively identify and approve suppliers for District use. Furthermore, the District should consider expanding the use of its website to solicit quotes and bids.
- Develop a policy requiring timely payments in order to stress the importance of taking advantage of supplier discounts and avoiding late fees and other charges. The policy should also identify an appropriate timeframe for paying invoices without a defined due date. Furthermore, the policy should be accompanied with administrative guidelines and communicated to District staff. As a part of the administrative guidelines, the District should alter its purchase order and invoice reconciliation procedures to be based on payment due dates. Lastly, the District should issue and approve purchase orders prior to making a purchase.
- Revise its purchasing process to centralize oversight of the process, such as reviewing purchase orders for final approval to ensure goods are purchased in a cost-effective manner (see **R3.6**) and multiple quotes were obtained (see **R3.1**); evaluating the District's compliance with other purchasing policies; and matching purchase orders to invoices and packing slips prior to approving payment (also see **R3.4**). These duties should be segregated among various employees to guard against fraud and abuse. As an additional control, an employee outside of the purchase order-invoice-packing slip reconciliation process should periodically review the amounts actually paid relative to the amounts on

the invoice. Finally, the requisitioner should continue to acknowledge receipt of products or completion of services as an additional measure of control.

- Seek competitive bids for the most commonly used items. Once bids are awarded, the District should compile them into catalogs, and distribute them to all departments to guide purchasing decisions. Prior to purchasing items, the District should compare bid pricing to pricing from consortia.

Issues for Further Study

Auditing standards require the disclosure of significant issues identified during an audit that were not reviewed in depth. These issues may not be directly related to the audit objectives or may be issues that the auditors do not have the time or resources to pursue. PCSD's expenditures for telephone service and property insurance qualify as issues for further study. Additional detail pertaining to these issues is presented in the **facilities** section of the report.

Summary of Financial Implications

The following table summarizes the performance audit recommendations that contain financial implications. Detailed information concerning the financial implications, including assumptions, is contained within the individual sections of the performance audit.

Table 1-1: Summary of Performance Audit Recommendations

Recommendation	Estimated Annual Costs	Estimated Annual Savings
R2.2 Reduce overtime costs		\$56,500
R2.7 Purchase an electronic work order system	\$6,700	
Total	\$6,700	\$56,500

Source: AOS Recommendations

Facilities

Background

This section of the performance audit focuses on Parma City School District's (PCSD or the District) facility operations. Throughout this section, PCSD's operations are evaluated against selected peer school districts,¹ recommended or leading practices, and operational standards from applicable sources, including the American School and University Magazine (AS&U), the National Center for Education Statistics (NCES), the United States Department of Energy (DOE), and the Government Finance Officers Association (GFOA).

Organizational Structure and Staffing

The Maintenance and Operations Department is led by the Director of Operations, who reports to the Superintendent. The Custodial Manager and Maintenance Supervisor report to the Director of Operations. The Custodial Manager oversees the District's custodians, cleaners, and five maintenance workers. Custodians are responsible for "skilled trade" type activities, such as changing light bulbs, basic plumbing, electrical work, painting, and carpeting. They also split their time between maintenance-type duties and cleaning duties. Cleaners are responsible for housekeeping and cleaning duties. The five maintenance workers who report to the Custodial Manager are responsible for preventive maintenance work, such as changing filters, cleaning the univents, and maintaining the rooftop heating and cooling units. The Maintenance Supervisor oversees the remaining maintenance employees. The District currently has 55 cleaning positions, 30 custodial positions, and 19 maintenance positions. Furthermore, all of the custodians and four of the maintenance workers are responsible for the District's grounds keeping duties.

Key Statistics

Table 2-1 presents key statistics used to assess staffing levels, based on FY 2009-10 data.

¹ See the **executive summary** for a list of the peer districts and an explanation of the selection methodology. The Cuyahoga County peer average comprises Berea City School District, Lakewood City School District, and North Olmsted City School District. The statewide peer average comprises Dublin City School District (Franklin County), Lakota Local School District (Butler County), and Westerville City School District (Franklin County).

Table 2-1: Key Statistics

Buildings	
Total Number of Buildings	23
High Schools	3
Middle Schools	3
Elementary Schools	13
Other Buildings ¹	4
Square Footage²	
Total Square Feet Maintained	1,872,306
Total Square Feet Cleaned	1,857,947
Workload Ratios	
Total Square Feet Cleaned per FTE (44.1 FTE)	42,163
<i>NCES Planning Guide Benchmark³</i>	<i>29,500</i>
Total Square Feet Maintained per FTE (40.1 FTE)	46,692
<i>AS&U Cost Survey National Median⁴ (Five-Year Average)</i>	<i>95,000</i>
Total Acreage Maintained per FTE (3.8 FTE)	86
<i>AS&U Cost Survey National Median⁴ (Five-Year Average)</i>	<i>40</i>

Source: PCSD, National Center for Education Statistics, and American School and University Magazine

¹ Includes the District's preschool and child care building, Arlington at Parkview.

² The total square feet cleaned differs from the total square feet maintained because the career-technical lab areas at Parma Senior High are not cleaned by District staff on a daily basis.

³ According to the *Planning Guide for Maintaining School Facilities* (NCES, 2003), 28,000 to 31,000 square feet per FTE custodian is the norm for most school facilities. The level of cleanliness that is achievable with this workload ratio is acceptable to most stakeholders and does not pose any health issues.

⁴ The AS&U medians are based on a five-year average derived from a national survey which is released in April of each year (FY 2004-05 to FY 2008-09).

Table 2-1 shows that PCSD cleans significantly more square feet per FTE than the NCES *Planning Guide* benchmark and maintains more than double the acres per FTE than the AS&U benchmark. Conversely, **Table 2-1** shows that PCSD's ratio of square feet per maintenance FTE is 51 percent lower the AS&U benchmark. See **R2.1** for further discussion.

Financial Data

Table 2-2 compares PCSD's facility expenditures per square foot for FY 2008-09 to the AS&U national median and peer averages.

Table 2-2: FY 2008-09 Expenditure per Square Foot Comparison

	PCSD	AS&U	Cuyahoga County 3-Peer Average	Statewide 3-Peer Average
Salaries and Benefits	\$3.58	\$2.07	\$4.06	\$3.19
Purchased Services ¹	\$0.68	\$0.23	\$0.64	\$1.10
Utilities	\$1.50	\$1.43	\$1.87	\$1.66
Supplies & Materials	\$0.29	\$0.33	\$0.32	\$0.38
Capital Outlay	\$0.25	N/A ²	\$0.11	\$0.13
Other	\$0.17	\$0.36 ²	\$0.04	\$0.01
Total Facility Expenditures	\$6.48	\$4.42	\$7.04	\$6.45
All Functions – Utilities	\$1.92	\$1.43	\$1.96	\$1.69

Source: PCSD and peer district EFM inclusion reports, ODE, and the AS&U 38th report (2009)

Note: Totals may vary due to rounding.

¹ Unlike five of the six peers, PCSD did not code expenditures in the Property Insurance object code (see **Issues for Further Study**).

² AS&U defines other as: “Most often identified as clerical costs, equipment repair and rental, insurance and travel.”

Table 2-2 shows that PCSD’s total facility expenditures per square foot in FY 2008-09 were significantly higher than the AS&U national median. In contrast, the District’s total expenditures per square foot were lower than the Cuyahoga County peer average and comparable to the statewide peer average. Additionally, **Table 2-2** shows that PCSD’s expenditures per square foot were higher than the AS&U national median for every line-item, with the exception of supplies and materials, and other. However, the higher purchased service expenditures per square foot are due to the category including tasks not captured by AS&U. Specifically, AS&U indicates that purchased services reflects costs for specialized jobs to maintain or repair building systems or equipment, such as HVAC maintenance or repair. When only including these applicable costs for PCSD, the District’s purchased service expenditures per square foot falls to \$0.18, which is lower than AS&U. Furthermore, PCSD’s expenditures per square foot were higher than the Cuyahoga County peer average for purchased service, capital outlay, and other. The Director of Operations noted that the District’s capital outlay expenditures vary from year to year. Finally, PCSD’s expenditures per square foot were higher than the statewide peer average for every line-item, with the exception of purchased services, supplies and materials, and utilities (facilities function). When comparing utility costs for all functions, **Table 2-2** shows that the District’s costs per square foot are higher than AS&U and the Statewide average.

PCSD’s high overtime costs contribute to the higher salaries and benefits costs per square foot (see **R2.2**). The District’s higher utility costs per square foot are partially attributed to telephone costs (see **Issues for Further Study**). However, developing a formal energy conservation policy and educating staff and students can help the District possibly reduce utility costs. Likewise, improving purchasing policies and practices (see the **purchasing** section), developing a facility master plan (see **R2.5**) and a formal preventative maintenance program (see **R2.6**) and purchasing a computerized maintenance management system (see **R2.7**) can help the District potentially reduce costs in purchased services and capital outlay. Along with the abovementioned

factors, the age and condition of the District's buildings likely contribute to the higher expenditures for purchased services and capital outlay. For instance, the average age of the District's buildings is 56 years.

Audit Objectives for the Facilities Section

The following list of questions was used to evaluate the facility functions at PCSD:

- How do the District's facility expenditures compare with those of the peers?
- How can the District improve the cost effectiveness of facility operations through improved human resource management?
- Do enrollment trends and building capacities suggest that the District should change how it plans to use its buildings?
- Does the District have operational procedures, performance standards, and training programs to ensure efficient building operations?
- Does the District meet leading or recommended practices for capital planning and maintenance?
- Does the District's energy management program meet leading or recommended practices?

Noteworthy Accomplishments

Noteworthy accomplishments acknowledge significant accomplishments or exemplary practices. The assessment of the District's energy management practices and costs warrants a noteworthy accomplishment. Specifically, the District has implemented NCES and DOE recommended energy management practices with regard to energy use tracking, monitoring, and inefficiency auditing. In addition, the District has taken a variety of steps to improve energy use through a ten phase HB 264 energy conservation program which included lighting upgrades; temperature controls; repairs and modifications to existing heating, cooling, and ventilation equipment; insulated roofing replacement to the majority of buildings; and boiler replacement at Parma Senior High School. Phase 10 of the HB 264 program is in the process of being installed, which will include the replacement of the facilities management systems and upgrades in the automatic temperature controls in all buildings. Moreover, the District's five-year Planned Service Agreement with Johnson Controls calls for Johnson Controls to provide PCSD with annual energy reporting services for past HB 264 projects. Lastly, the District purchases natural gas and electricity through consortiums.

As a result of its energy management practices, PCSD's electricity, gas, and water/sewage expenditures per square foot are lower than the Cuyahoga County averages. The District's electricity and water/sewage expenditures per square foot are also lower than the Statewide averages. See **Table 2-10** for additional details.

Issues for Further Study

Auditing standards require the disclosure of significant issues identified during the audit that were not reviewed in depth. These issues may not be directly related to the audit objectives or may be issues the auditors do not have the time or resources to pursue. PCSD's expenditures for telephone service and property insurance qualify as issues for further study.

The District's cost for telephone service in FY 2008-09 was \$779,453 or \$0.41 per square foot, which is significantly higher than the Cuyahoga County peer average of \$0.11 per square foot and the Statewide peer average of \$0.08 per square foot. Based on a high level review, monthly telephone service fees, including cellular service, do not account for the total cost. Therefore, the District's significantly higher telephone expenditures could be due to coding differences or potential errors in the Uniform School Accounting System (USAS). Similarly, unlike five of the six peers, PCSD did not code expenditures in the Property Insurance (424) object code. According to the Treasurer, property insurance costs are coded in the Liability Insurance (851) or Fidelity Bond Premium (853) object codes, which are grouped in the Other (800) object codes under Insurance (850). PCSD should review its telephone expenditures to determine the reason for its higher expenditures and subsequently implement corrective actions, and ensure that property insurance is classified in the appropriate object code.

Recommendations

Staffing

R2.1 PCSD should review the various activities performed by facility staff to accurately capture the time for each function, which can be aided by an electronic work order system (see R2.7). Subsequently, the District should compare the staffing levels to industry benchmarks and established performance standards (see R2.9). Developing a formal procedures manual should also help PCSD ensure that staffing allocations are appropriate (see R2.9). Assuming the District's verbal estimates of time for certain activities are accurate, PCSD should consider reallocating some of its cleaning and grounds keeping duties to members of the maintenance staff. Doing so would bring staffing levels in line with industry standards and potentially reduce overtime costs (see R2.2).

The District currently employs 55 cleaners, 30 custodians, and 19 maintenance workers. However, the Custodial Manager indicated that the custodians spend the majority of their time on maintenance-type duties and have limited cleaning duties. Furthermore, the custodians and maintenance workers are responsible for the District's grounds keeping duties. According to the Custodial Manager, every custodian spends approximately three hours each week on grounds keeping duties, performing tasks in the immediate area of the building such as mowing grass and shoveling snow. During the growing season (April-October), the Custodial Manager estimates four maintenance employees are dedicated to grounds keeping duties, such as mowing the athletic fields and large open areas.

Table 2-3 shows the actual FTEs dedicated to the various facilities functions compared to the number of FTEs required to meet the benchmarks identified in **Table 2-1**. The FTEs for each classification include the estimates provided by the Custodial Manager.

Table 2-3: PCSD Staff Comparison to Industry Benchmarks

Classification	Actual FTEs	FTEs to meet Benchmark	Difference
Cleaning Staff	44.1	63.0	(19.1)
Maintenance Staff	40.1	19.7	20.4
Grounds Keeping Staff	3.8	8.1	(4.3)
Total	88.0	90.8	(2.8)

Source: PCSD, National Center for Education Statistics, and American School and University Magazine

Table 2-3 illustrates that while PCSD's staffing in each classification varies considerably when compared to the respective benchmarks, the District employs 2.8 fewer total facility FTEs when combining all classifications. Because PCSD does not have an electronic

work order system, the District is not able to accurately track and calculate the time it takes for staff to complete maintenance and grounds keeping duties (see **R2.7**). Furthermore, the District has not developed a formal procedures manual or performance standards for its maintenance and grounds keeping functions to help ensure appropriate staffing levels (see **R2.9**). However, building walkthroughs that were performed during the performance audit did not reveal significant issues with cleanliness.

By tracking time for specific tasks coupled with developing performance standards, PCSD would be able to determine whether it needs to reallocate staffing assignments.

R2.2 PCSD should seek to alter provisions in its negotiated agreement with the Ohio Association of Public School Employees that contribute to the high overtime costs. Specifically, the District should negotiate to eliminate the minimum call-in pay and compensate staff for actual hours worked, or at least reduce the minimum call-in pay. Likewise, the District should negotiate to exclude leave time as counting toward overtime. PCSD should also eliminate the provisions that dictate how to cover for custodial absences and building permits. This would allow the District to take more cost-effective measures in covering absences and building permits (where needed), such as flexing schedules or using substitutes. Further, reallocating staff, if justified (see R2.1), should allow for reductions in cleaning staff and grounds keeping overtime. The District should also review other factors that may be further contributing to the high overtime costs, such as sick leave use and other paid leave time, and the annual appropriation level for overtime. Lastly, the District should ensure that the fees for rentals and Byers Field fully offset operating costs, including overtime².

PCSD's facility staff accrues overtime for the following reasons:

- Snow plowing/removal;
- Building rental or other activity, such as for extended child care, open house, or parent-teacher conferences;
- Activities at Byers Field, the District's sports complex, that require set up and general maintenance; and
- Employee sick leave.

Avoiding overtime for snow plowing/removal is difficult and related expenditures can fluctuate from year to year depending on snowfall. Overtime associated with building rental is generated from the building permit and pre-approval is not required. Furthermore, the Business Office invoices extended day care for custodial overtime. This

² It was outside the scope of the performance audit to review these fees. According to the Director of Operations, the District recently increased fees to ensure they cover costs.

amount totaled approximately \$242,000 in FY 2008-09. According to the Director of Operations, PCSD charges a rental fee and a fee for custodial, cleaning, and security if required. If the group is a youth oriented community organization, the District can waive the rental fee and just charge the cost of the personnel. The Director of Operations also noted that PCSD recently increased the fees to ensure they cover costs. Although Byers Field requires overtime for maintenance employees, other school districts that rent the Field pay a usage fee which is charged back to the Maintenance Department budget. Facility staff also earns overtime covering sick leave absences. The Maintenance Supervisor noted this can be costly to the District because the negotiated agreement provides for three hours of call in pay and overtime is paid out at a higher rate.

According to PCSD's negotiated agreement, all school buildings will be attended by a custodian during all school hours and open hours for which a building permit is issued. In addition, a custodian is required at the Central Office building during regular school hours and open hours for which a building permit is issued and the permit states more than 10 adults will be in attendance. According to the Director of Operations, a building permit is issued for all after hour activities, including board meetings, to document overtime and required work (e.g., table set-up, etc.). Further, the negotiated agreement states, "an employee called in to work for non-scheduled/emergency work shall receive a minimum of three (3) hours of pay." The negotiated agreement also permits building principals to schedule three special events per school year and requires a minimum of three hours of pay for such events, for custodians at the elementary schools.

By comparison, while the agreement at North Olmsted CSD indicates that overtime assignments result from approved building permits at the middle and high schools, it does not stipulate staffing requirements related to the building permits, including the central office building. Additionally, the agreements at Berea CSD and Lakewood CSD do not mention facility staffing requirements that correspond to building permits.³ In addition, the agreements at Berea CSD and North Olmsted CSD⁴ provide a minimum call-in pay of only two hours while the agreement at Lakewood CSD does not mention minimum call-in pay. Moreover, the agreements at these three districts do not mention minimum pay for special events.

Along with the abovementioned provisions, the District's negotiated agreement indicates that "for purposes of determining overtime, holidays, paid sick days, personal days, vacation days, and calamity days shall be considered as hours worked." However, Berea CSD's agreement notes that sick and personal leave hours are not counted as hours worked for calculating overtime, while the agreements at North Olmsted CSD and

³ While the agreement at Berea CSD does not mention custodial, maintenance or grounds staffing requirements, it contains compensation and scheduling provisions regarding building permit duty for nutrition services staff.

⁴ The agreement on the State Employment Relations Board website for North Olmsted CSD shows an end date of July 31, 2007.

Lakewood CSD do not specifically indicate whether leave days can count towards overtime. Lastly, PCSD's negotiated agreement includes specific instructions for assigning other bargaining unit staff to provide coverage for custodial absences. In contrast, the three peer agreements are silent on the process for providing coverage during absences.

The Director of Operations indicated that he, the Maintenance Supervisor, and the Custodial Manager monitor overtime hours. The annual overtime budgetary appropriation is broken out by building. The Director of Operations divides this appropriation by twelve to give the Maintenance Supervisor and Custodial Manager a general idea of how much can be spent on overtime each month. However, because school is only in session for nine months and the snow season comprises approximately four months, overtime needs will be greater in some months than in others. The Director of Operations further noted that he monitors the percentage of the overtime appropriation that has been used and works with the Maintenance Supervisor and Custodial Manager to limit overtime expenses as much as possible.

Table 2-4 compares PCSD's substitute and overtime costs as a percentage of salaries to the Cuyahoga County peer average and the Statewide peer average in FY 2008-09.

Table 2-4: Substitute and Overtime Cost Comparison to Peer Averages

	PCSD	Cuyahoga County 3-Peer Average	Statewide 3-Peer Average
Substitute Costs	\$65,297	\$193,907	\$448,483
Substitute Costs as a % of Salaries	1.4%	7.3%	9.1%
Overtime Costs	\$732,063	\$80,041	\$269,961
Overtime Costs as a % of Salaries	16.0%	3.0%	5.6%

Source: FY 2008-09 ODE EFM Inclusion Reports for PCSD and the peer districts

As shown in **Table 2-4**, PCSD's substitute costs as a percentage of salaries are significantly below the Cuyahoga County and Statewide peer averages. However, the District's overtime costs as a percentage of salaries are significantly above the peer average. When combined, the District's substitute and overtime costs comprise 17.5 percent of salaries, higher than the Cuyahoga County peer average (10.3 percent) and the Statewide peer average (14.7 percent). Additionally, *Best Practices- Maximizing Maintenance* (Facilities Net, 2003) states that overtime costs should be less than 2 percent of total maintenance and operations salaries.

The District's level of rentals and use of Byers Field can contribute to the higher percentage of overtime costs. If PCSD has set the respective fees to fully recoup the costs, there would be no net financial impact on the District. However, the District could realize a cost savings by addressing the aforementioned provisions in the negotiated agreement that could impact activities outside of the rentals and Byers Field.

Furthermore, assuming the District's verbal time estimates are accurate, PCSD's allocation of staff per function (see **R2.1**) can also contribute to the higher overtime costs.

Table 2-5 compares PCSD's substitute and overtime costs over the past two fiscal years.

Table 2-5: Historical Comparison of Substitute and Overtime Costs

	FY 2007-08	FY 2008-09	Change	Percent Change
Substitute Costs	\$66,207	\$65,297	(\$910)	(1.4%)
Overtime Costs	\$808,928	\$732,063	(\$76,865)	(9.5%)
Total (Substitute & Overtime)	\$875,135	\$797,360	(\$77,775)	(8.9%)

Source: FY 2007-08 and FY 2008-09 ODE EFM Inclusion Reports for PCSD

As shown in **Table 2-5**, the District's substitute and overtime costs decreased over the past two fiscal years. However, the overtime costs as a percentage of salaries are still significantly above the previously discussed benchmarks.

Financial Implication: If the District reduced substitute and overtime costs to 15 percent of salaries, similar to the Statewide peer average but still lower than the Cuyahoga County peer average, it would save approximately \$113,000 per year. However, if PCSD is fully recouping overtime costs related to rentals and Byers Field, the District would have to reduce overtime costs in other areas to achieve this level of net savings. To be conservative, the net cost savings is estimated at approximately \$56,500, half of the initial amount.

Building Capacity

R2.3 PCSD should review its current enrollment projections and update them as necessary to reflect actual enrollment in FYs 2008-09 and 2009-10. The District should update its enrollment projections annually, based on industry recommended methods (e.g., cohort survival ratio, regression analysis, etc.). Maintaining up-to-date enrollment projections will provide sound data to inform decision-makers and help frame plans regarding facilities.

PCSD's most recent enrollment projections were completed by an outside entity for school year 2007-08 using three methods that provide full enrollment projections through FY 2012-13. Prior to that, OSFC completed enrollment projections in 2001 as part of the District's facilities assessments.

Table 2-6 presents PCSD's ten-year enrollment history.

Table 2-6: PCSD Ten-Year Historical Enrollment

Grade	FY 1999-00	FY 2000-01	FY 2001-02	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
K	883	783	880	816	822	818	775	815	720	751
1	901	916	856	930	898	827	803	807	833	801
2	948	884	931	840	915	880	804	840	815	829
3	1,018	955	912	938	844	927	885	829	834	858
4	1,015	1,061	973	914	955	867	914	909	857	860
5	959	1,030	1,086	1,003	970	962	866	929	934	876
6	1,021	984	1,067	1,108	993	968	957	917	942	938
7	1,026	1,073	1,041	1,139	1,128	1,029	998	1,017	975	1,006
8	1,009	1,056	1,109	1,075	1,174	1,167	1,056	1,026	1,030	1,008
9	1,226	1,268	1,443	1,425	1,393	1,496	1,501	1,414	1,313	1,336
10	1,105	1,065	1,020	1,155	1,203	1,148	1,243	1,239	1,202	1,148
11	973	992	975	914	1,049	1,113	1,047	1,130	1,165	1,089
12	923	901	946	945	913	991	1,020	975	1,046	1,060
Total	13,007	12,968	13,239	13,202	13,257	13,193	12,869	12,847	12,666	12,560

Source: ODE Enrollment Data

As shown in **Table 2-6**, PCSD's enrollment fluctuated throughout the ten-year period. However, enrollment declined each year, after FY 2003-04. Likewise, the District's FY 2009-10 student enrollment of 12,116 represents a decline of 444 students, or 3.5 percent from FY 2008-09. Furthermore, the OSFC enrollment projections completed in 2001 by DeJong and Associates projected an annual increase of 103 students in grades K-12 from FY 2000-01 through FY 2010-11. Specifically, K-12 student enrollment was projected to be 13,427 in FY 2008-09, while actual enrollment was 12,560 students, for a difference of 867 students. The District's 2007-08 projections also show enrollment declining in each year, under all three methods.

According to *Using Demographics to Project School Enrollments* (School Business Affairs, 2002), a school district should annually update projections to reflect changing conditions in the economy or housing market that can seriously affect enrollment. It recommends the following process:

1. Collect historical enrollment data;
2. Contact the state department of health and vital statistics;
3. Select an enrollment projection method;
4. Meet with local planning and construction department officials;
5. Determine the age of the community; and
6. Perform enrollment calculations.

According to *Planning and Managing School Facilities* (Kowalski, 2002), the cohort survival ratio methodology is widely used by school districts and is regarded as one of

the most reliable methods for estimating enrollment.⁵ A cohort is defined as a group of people sharing a particular common characteristic or demographic within a defined period of time, such as all students in the same grade level. As a cohort of students advances to the next grade level, the size of the cohort in the first year is used as a basis for estimating the size in the following year. Cohort survival ratio assumes that the rate of student progression, or “cohort survival,” from one grade to the next will be consistent with rates of progression in previous years. Thus, the rates from the last five years are calculated. Each “cohort survival ratio” is the size of the grade in the present year divided by the size of the next lower grade in the previous year. While a ratio of 1.0 indicates a static cohort, a ratio of less than 1.0 represents a declining cohort and one greater than 1.0 represents an increasing cohort. These ratios are averaged and then used to project future enrollment based on the past enrollment.

Planning and Managing School Facilities further notes that calculating kindergarten ratios is a challenge because the size of the cohort prior to kindergarten is unknown. One of the simplest approaches to estimating kindergarten enrollment is to create an average for the past six years and use this as a constant for kindergarten enrollment⁶.

Table 2-7A shows the AOS projected student enrollment, based on the cohort survival ratio method for grades 1-12 and the six year trend for kindergarten, for FY 2010-11 through FY 2014-15.

Table 2-7A: AOS Five Year Enrollment Projection

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2011	705	746	776	817	863	889	885	935	1014	1338	1098	1032	976	12,073
2012	688	728	747	791	834	875	901	931	960	1313	1126	1009	955	11,857
2013	670	710	729	761	808	846	887	948	956	1243	1104	1034	933	11,631
2014	653	692	711	743	777	819	858	934	974	1238	1046	1014	957	11,416
2015	636	674	693	724	758	788	831	903	959	1261	1041	960	939	11,168

Source: AOS

As shown in **Table 2-7**, the District’s enrollment is projected to continue to decline over the next five years.

Table 2-7B compares the AOS projections to the three sets of projections from the District’s 2007-08 report.

⁵ While regression analysis has been compared as an alternative to the cohort survival ratio (CSR) method, the latter is generally considered less complicated and, therefore, more straightforward and transparent for public review. CSR is determined to be reliable for districts of at least 100 students and for the short term (1-5 years).

⁶ Using a mean that represents changes in historical kindergarten enrollment as the basis for the projection is presented as a slightly better approach for projecting kindergarten enrollment.

Table 2-7B: Comparison of AOS and District Projections (Grades K-12)

	FY 2010-11	FY 2011-12	FY 2012-13
AOS Projections	12,073	11,857	11,631
PCSD Method 1	11,763	11,579	11,325
PCSD Method 2	11,759	11,550	11,298
PCSD Method 3	11,761	11,564	11,313

Source: AOS and District projections

Table 2-7B shows that the AOS projections are higher than all three of PCSD's projections in each year. This is primarily due to the District's projections under each method in FY 2008-09 and FY 2009-10 being higher than its actual enrollment. **Table 2-7B** also shows that the District's three sets of projections do not vary significantly.

Reviewing its enrollment projections and updating them annually can assist the District in anticipating necessary facility changes.

R2.4 PCSD should evaluate the capacity and utilization of its schools buildings as they relate to its educational programs and priorities, and incorporate them into a facilities master plan (see R2.5). The District should also consider the impact of provisions in House Bill (HB) 1 and projected enrollment (see R2.3) on its school building capacity and utilization. Any building changes should involve stakeholders in the process and be based on relevant factors (e.g., HB 1 and related operating standards, current and projected enrollment, building adequacy, financial factors, learning environment, academic programs, educational performance and instruction, and demographics).

PCSD does not have up-to-date enrollment projections or functional capacities for its school buildings, standard elements used to determine building capacity and utilization rates. The District operates 1 preschool/child care building, 13 elementary schools (grades K-6), 3 middle schools (grades 7-8), and 3 high schools (grades 9-12). Before the beginning of the 2009-10 school year, the District closed two buildings, one elementary and one preschool. The elementary schools, middle schools, and high schools are organized into three clusters.

To calculate the District's building capacity, AOS used a methodology derived from DeJong and Associates (*Defining Capacity*, DeJong & Craig, 1999). District capacity is calculated based on touring buildings, confirming floor plans, and discussing the use of classrooms with building representatives. *Maximum capacity* is calculated based on a count of the physical rooms capable of housing 25 students and represents the maximum capacity if every available room was used as a classroom. In contrast, *functional capacity* takes into account the functional use of each room. Since special education classes do not have a functional capacity of 25 students, an average of 9 students per room is used to

represent the capacity of these rooms, based on standards in Ohio Administrative Code 3301-51-09.

Based on the capacity methodology, elementary and middle school buildings are expected to include rooms for art, music, gym, library, and computers in addition to the academic K-8 classrooms. These rooms are visited by students from the classrooms and therefore are not included in the functional capacity count. Other uses for rooms include resource rooms and offices for pulling out students for improving literacy or speech. These rooms are considered as supplemental rooms and are also not included in the functional capacity.

In the high school buildings, rooms used for gym, music, art, library, and computer labs are scheduled for classes and are thus included in the functional capacity. As with elementary buildings, special education rooms are calculated at the average of 9 students per room and rooms used for offices are not included in the functional capacity. Once a capacity based on teaching stations is established, it is multiplied by an 85 percent utilization factor to account for teacher prep periods and scheduling flexibility.

Table 2-8 shows the District's functional capacity.

Table 2-8: PCSD School Building Functional Capacity & Utilization

Building	Enrollment	Capacity	Utilization Rate
Elementary School Buildings			
John Glenn Elementary	351	393	89.3%
Dag Hammarskjold Elementary	262	343	76.4%
Dentzler Elementary	381	377	101.1%
Green Valley Elementary	396	409	96.8%
James E. Hanna Elementary	329	350	94.0%
John Muir Elementary	539	584	92.3%
Parma Park Elementary	463	468	98.9%
Pearl Road Elementary	396	393	100.8%
Pleasant Valley Elementary	619	683	90.6%
Renwood Elementary	390	400	97.5%
Ridge-Brook Elementary	376	425	88.5%
State Road Elementary	514	477	107.8%
Thoreau Park Elementary ¹	742	734	101.1%
Elementary School Total	5,758	6,036	95.4%
Middle School Buildings			
Greenbriar Middle	726	756	96.0%
Hillside Middle	549	529	103.8%
Shiloh Middle	717	575	124.7%
Middle School Total	1,992	1,860	107.1%
High School Buildings			
Normandy High	1,304	1,547	84.3%
Parma High	1,526	1,934	78.9%
Valley Forge High	1,536	1,483	103.6%
High School Total	4,366	4,964	88.0%

Source: PCSD building maps and enrollment data

¹ Thoreau Park Elementary is the only school building using two classrooms in a modular unit for regular instruction. This increases the School's overall capacity to 784 and decreases the utilization rate to 94.6 percent.

As shown in **Table 2-8**, the District's utilization rate, based on its functional capacity, ranged from 88 percent for the high schools to 107 percent at the middle schools. However, decisions on the use of rooms affect the functional capacity of a building regardless of the building's maximum capacity. For instance, the District may be using the buildings in a different manner to avoid overcrowding. In addition, class sizes can contribute to some buildings exceeding 100 percent of capacity. For instance, the Superintendent indicated that the average classroom size in the middle school is 26-28 students, while **Table 2-8** is based on 25 students per classroom.

Table 2-9 shows PCSD's maximum building capacity, whereby the District uses all classrooms at the elementary and middle schools for regular instruction or special education instruction, and all modular units for regular instruction. This assumes that all art, music, and supplemental (Title I, tutoring, speech/language, etc.) services are provided in a space other than a classroom. To determine maximum capacity at the high schools, the 85 utilization factor is not applied.

Table 2-9: PCSD School Building Maximum Capacity & Utilization

Building	Enrollment	Capacity – Building Only	Utilization Rate	Capacity – Modular Only	Overall Capacity – Building & Modular	Overall Utilization Rate
John Glenn Elementary	351	493	71.2%	0	493	71.2%
Dag Hammarskjold Elementary	262	518	50.6%	0	518	50.6%
Dentzler Elementary	381	552	69.0%	0	552	69.0%
Green Valley Elementary	396	509	77.8%	100	609	65.0%
James E. Hanna Elementary	329	500	65.8%	50	550	59.8%
John Muir Elementary	539	709	76.0%	0	709	76.0%
Parma Park Elementary	463	493	93.9%	0	493	93.9%
Pearl Road Elementary	396	443	89.4%	50	493	80.3%
Pleasant Valley Elementary	619	883	70.1%	0	883	70.1%
Renwood Elementary	390	425	91.8%	0	425	91.8%
Ridge-Brook Elementary	376	575	65.4%	50	625	60.2%
State Road Elementary	514	477	107.8%	100	577	89.1%
Thoreau Park Elementary	742	859	86.4%	100	959	77.4%
Elementary School Total	5,758	7,436	77.4%	450	7,886	73.0%
Greenbriar Middle	726	1,081	67.2%	0	1,081	67.2%
Hillside Middle	549	779	70.5%	0	779	70.5%
Shiloh Middle	717	850	84.4%	0	850	84.4%
Middle School Total	1,992	2,710	73.5%	0	2,710	73.5%
Normandy High	1,304	1,820	71.6%	0	1,820	71.6%
Parma High	1,526	2,275	67.1%	0	2,275	67.1%
Valley Forge High	1,536	1,745	88.0%	0	1,745	88.0%
High School Total	4,366	5,840	74.8%	0	5,840	74.8%

Source: PCSD building maps and enrollment data

As shown in **Table 2-9**, the District’s maximum capacity for all school buildings, even without modular units, is significantly higher than the functional capacity in **Table 2-8**. Specifically, overall elementary capacity increases by 1,400 to 7,436 students, middle school capacity increases by 850 to 2,710 students, and high school capacity increases by 876 to 5,840 students. As a result, utilization rates decrease to 77.4 percent, 73.5 percent, and 74.8 percent, respectively. When modular units are included, elementary capacity increases by 450 to 7,886 students and the utilization rates decreases to 73.0 percent.

Based solely on the maximum capacity figures in **Table 2-9**, the District could close up to three of its smallest (in terms of maximum capacity) elementary buildings, excluding the impact of modular units. For example, the District could save approximately \$179,000 by closing the smallest elementary building, based on PCSD’s average expenditures per square foot and the building’s square footage. Conversely, housing all of the middle

school students in two rather than three buildings would result in the District exceeding 100 percent (103 percent utilization) of the combined maximum capacity. Likewise, housing all of the high school students in two rather than three buildings would result in the District exceeding 100 percent (107 percent utilization) of the combined maximum capacity. However, if the District's average class size at the middle school and high school levels exceeded 25 students, it may be able to close a middle school and high school. Lastly, continued declines in PCSD's enrollment (see **R2.3**) would decrease utilization rates, thereby increasing opportunities for building closures.

It should be noted that functional and maximum capacities differ from occupancy. Chapter 10 of the Ohio Building Code defines and outlines the occupant load of a facility based on maximum floor area allowances per occupant for various types of spaces for means of exit from a facility. In December 2008, ADA Architects, Inc. calculated an allowable occupancy for Parma Park Elementary of 1,557 occupants, including 852 occupants in classrooms. The classrooms occupancy for Parma Park Elementary is 1.8 and 1.7 times higher than the functional and maximum capacities AOS calculated in **Tables 2-8** and **2-9**, respectively.

According to *Closing Schools: A Community Engagement Process* (Furey, Dickinson, and Ryland, Educational Facility Planner, 2007), "any determination made regarding school closings must be done with integrity, focused on engaging the community in the decision making process." It also notes that data used by the Milwaukee Public Schools in its building closure process included the following:

- Building adequacy: age of original building/additions, gross building square feet, school site, building system efficiencies, and ADA accessibility;
- Enrollment factors: including current enrollment vs. use capacity and declining enrollment factors;
- Financial factors: including recent major expenditures, individual school utility budgets, and maintenance expenses;
- Learning environment: school climate and school safety;
- Academic programs, performance and instruction; and
- Demographics: including transportation, proximity to other schools, historically significant buildings, and local culture considerations.

Further, *Educational Facility Master Planning* (SchoolFacilities.com, 2005) states that, "properly portraying building utilization and capacity is an important tool by which a district can promote building efficiency to the community and increase the likelihood of passing a bond referendum."

Ohio House Bill (HB) 1, passed in July 2009, includes requirements for the State Board of Education to set minimum standards for education, including a provision for all-day

kindergarten. HB 1 also includes a new school funding formula which is based on student-to-teacher ratios that are lower than current minimum operating requirements. For instance, to determine funding levels for “core” teacher positions, the legislation uses a ratio of 25 students per teacher in 4th through 12th grades, and 19 students per teacher in kindergarten through 3rd grades for FYs 2009-10 and 2010-11. The student-to-teacher ratio for kindergarten to 3rd grades declines to 1:17 for FYs 2011-12 and 2012-13, and further declines to 1:15 thereafter. The aforementioned ratios are based on formula ADM. By comparison, the current operating requirements indicate that the maximum allowable ratio is 25 regular education students per classroom teacher, on a district-wide basis.

Providing all-day kindergarten and maintaining lower student-to-teacher ratios would require additional classroom space at PCSD. However, HB 1 established waivers for districts that would potentially incur excessive facility costs to implement this guideline. The Superintendent stated the District is requesting a waiver because of space and cost constraints. Furthermore, ODE has not yet passed new operating standards.

Planning

R2.5 The District should follow through on its intent to develop a formal facilities master plan that contains pertinent elements, links to its strategic plan, and incorporates stakeholder input, the structural condition survey, the results of this performance audit, and any future Ohio Schools Facilities Commission (OSFC) study. The plan should be reviewed and updated annually to ensure it continues to meet the District’s program needs and identifies available funding. In the meantime, the District should use the structural condition survey to help develop a comprehensive, short-term capital plan that prioritizes the completion of needed capital repairs, replacements, and/or upgrades for each year. Doing so will help ensure activities are completed in a cost-effective and timely manner during the development of a formal facilities master plan.

PCSD does not have a facilities master plan or accompanying capital plan. The Director of Operations noted that the District plans to spend approximately \$350,000 per year on structural repairs. In addition, the Director of Operations stated the District has focused mainly on emergency repairs instead of large capital improvements because of financial constraints. The District has a permanent improvement levy that generates approximately \$6.0 million a year. The Director of Operations indicated that all structural repairs are paid from the District’s permanent improvement funds.

The District has several current elements of a facilities master plan and capital plan that could be combined and updated or supplemented as a starting point to developing a master plan. In 2001, OSFC completed facilities assessments (i.e., makeup, condition, and replacement / repair cost for its buildings and their components) on PCSD’s

educational buildings. In addition, OSFC completed a ten year enrollment projection for PCSD (FY 2001-02 through FY 2010-11, see **R2.3**). The District contacted OSFC in fall 2009 to perform an updated facilities assessment and enrollment projections. However, due to the large size of PCSD, OSFC notified the District that it could not complete a facilities assessment at this time. The Director of Operations noted that the District will be added to the OSFC's list of schools and that OSFC will have approximately 24 months to complete the assessment of PCSD's facilities. In addition, the District hired the Osborn Engineering Company in 2007 to evaluate the structural condition of 21 school buildings and the Byers Field complex. The report identified repair work that was needed and prioritized the repairs based on the significance of the observed distress and budget constraints. The structural condition survey prioritized repairs into three levels, repairs that should be addressed within the next two years, repairs that should be addressed within two to five years, and repairs that should be addressed within five to ten years. The Director of Operations indicated that the District references this study when determining which capital improvements need completed. However, the District has not identified which structural repairs will be completed each year of the ten year timeframe. In addition, the structural condition survey only includes capital repairs associated with the structural condition of the buildings; it does not identify capital equipment repairs or upgrades needed.

The District is also in the initial stages of developing a strategic plan. According to the Director of Operations, the District plans to create a facilities master plan based on the results of the strategic planning process, the performance audit, and the OSFC audit.

Creating a Successful Facilities Master Plan (DeJong & Staskiewicz, 2001) states that school districts should develop long-term facilities plans that contain information on capital improvements and financing, preventative maintenance and work orders, overall safety and condition of buildings, enrollment projections, and capacity analysis. The plans should be developed based on foundations of sound data and community input. If developed properly, a facilities plan has the potential to significantly impact the quality of education in a school district. As a road map, the facilities master plan should specify the projects that have been identified, the timing and sequence of the projects, and their estimated costs. A district-wide facilities plan is typically a 10-year plan that should be updated periodically to incorporate improvements that have been made, changes in demographics, or other educational directions.

The Government Finance Officers Association (GFOA), in its recommended practice on *Multi-Year Capital Planning* (2006) states that all governments should develop and adopt a multi-year (at least three, but preferably five years or more) capital plan to ensure effective management of capital assets. A prudent capital plan will identify and prioritize expected capital needs based on a government's strategic plan, establish project scope and cost, detail estimated funding by source, and project future operating and maintenance

costs. Further, in its recommended practice, *Capital Project Budget* (2007), GFOA recommends that all governments prepare and adopt a formal capital budget. GFOA notes that a properly prepared and adopted capital budget is essential to ensure proper planning, funding, and implementation of major projects.

By developing a more comprehensive facilities plan, the District will be better positioned to address facility needs and advance its educational mission.

R2.6 PCSD should develop a formal preventive maintenance (PM) program that addresses all routine, cyclical, and planned building maintenance functions. In doing so, PCSD should consider the process recommended by NCES and record PM activities, as well as all maintenance tasks, in the work order system (see R2.7). The District should also ensure that the contracted PM tasks are performed in accordance with the Planned Service Agreement and industry standards. Consistently planning, performing, and tracking preventive maintenance activities will help the District minimize facility and equipment deterioration, efficiently schedule projects, and track associated costs.

PCSD maintenance staff performs certain PM tasks, such as rooftop unit filter changes and coil cleaning. According to the Maintenance Supervisor, the PM tasks are performed by five maintenance employees. These tasks were performed by Johnson Controls through a five year Planned Service Agreement, effective July 1, 2007 through June 30, 2012. However, in June 2009, the Board of Education reduced the scope of the Planned Service Agreement for the remaining three years and reduced its cost by \$205,040 annually. The Director of Operations noted the change allowed the District to avoid layoffs and is expected to result in a net savings of approximately \$40,000 after accounting for the in-house labor and supplies costs.

Per the revised Planned Service Agreement, Johnson Controls will continue to perform the following PM tasks:

- Provide premium coverage on the Metasys Energy Management System;
- Provide energy reporting on HB 264 projects;
- Assign a building environment specialist to monitor, identify, and report additional savings opportunities;
- Provide boiler combustion gas analysis;
- Provide chiller tower service and chiller maintenance on three chillers;
- Calibrate annually pneumatic automatic temperature control equipment;
- Provide PM to classroom unit ventilators in all District facilities;

- Provide PM annually to primary heating equipment, including AHU rooftop units, and boiler and pumps in all District facilities; and
- Consolidate and provide Remote Operations Center monitoring and notification for all fire alarm systems in all District facilities.

The Maintenance Supervisor indicated the District has a list of items that need to be maintained throughout the buildings, but it is not all inclusive. Additionally, PM activities are not consistently documented through the work order system or in a written preventive maintenance plan.

The Planning Guide for Maintaining School Facilities (NCES, 2003) indicates that a good maintenance program is built on a foundation of preventive maintenance. Once the items that should receive preventive maintenance have been identified, planners must then decide on the frequency and type of inspections and maintenance activities to be performed. Manufacturers' manuals are a good place to start when developing this schedule because they usually provide guidelines about the frequency of preventive services, as well as a complete list of items that must be maintained. Once the information is assembled, it must be formatted so that preventive maintenance tasks can be easily scheduled. Ideally, scheduling is handled by a computerized maintenance management program which can track information about the equipment and building to be serviced, the date the service was provided, the name of the technician, and the cost of the materials (see **R2.7** for additional discussion).

Work Order System

R2.7 PCSD should purchase a computerized maintenance management system (CMMS) that has the ability to track the information recommended by NCES. When making the purchase, the District should ensure the vendor provides PCSD employees with appropriate training so that all functions are used to the fullest extent possible. The data tracked through a CMMS would help the District estimate future costs and timeframes for projects, formalize the preventive maintenance program (see R2.6), and accurately determine staffing assignments for various functions (see R2.1).

The District does not have an electronic work order system. Rather, employees email the Maintenance Supervisor when they have a request for maintenance work. Once a request is submitted, the Maintenance Supervisor reviews the request and assigns the task based on the expertise and time availability of staff. The District does not track and report the cost of labor, supplies, and materials. Furthermore, the District's preventive maintenance program is not integrated into its email based work order process (see **R2.6**). The Director of Operations indicated that the District does not have a good system in place to follow up on work order requests and that there is a lack of accountability.

The *Planning Guide for Maintaining School Facilities* (NCES, 2003) notes that work order systems help school districts register and acknowledge work requests, assign tasks to staff, confirm that work was done, and track the cost of parts and labor. The *Planning Guide* goes on to indicate that, at a minimum, work order systems should account for:

- The date the request was received;
- The date the request was approved;
- A job tracking number;
- The job status (received, assigned, ongoing, or completed);
- The job priority (emergency, routine, or preventive);
- The job location (where, specifically, is the work to be performed);
- The entry user (the person requesting the work);
- The supervisor and craftsperson assigned to the job;
- The supply and labor costs for the job; and
- The job completion date/time.

However, the *Planning Guide* also indicates that a computerized maintenance management system (CMMS) may be a more efficient approach to managing the work order process. Such systems have become increasingly affordable and easy to use. The *Planning Guide* goes on to indicate that in terms of utility, a good CMMS program will:

- Acknowledge the receipt of a work order;
- Allow the maintenance department to establish work priorities;
- Allow the requesting party to track work order progress through completion;
- Allow the requesting party to provide feedback on the quality and timeliness of the work;
- Allow preventive maintenance work orders to be included; and
- Allow labor and parts costs to be captured on a per-building basis (or, even better, on a per-task basis).

According to the *Planning Guide*, “a computerized maintenance management system (CMMS) is necessary when staff are responsible for managing more than about 500,000 square feet of facilities. At that point, facilities, assets, staff, and scheduling become complex enough to warrant an investment in CMMS software, equipment, and staff training.” By comparison, **Table 2-1** shows that PCSD maintains nearly 1.9 million square feet.

Financial Implication: A CMMS could cost approximately \$6,700 annually, based on a vendor’s advertised price. However, the exact price will depend on the features desired by PCSD and the contract terms negotiated with the vendor.

Energy Management

R2.8 The District should establish a formal energy conservation policy which outlines goals and objectives. In doing so, the District should review information from industry sources (e.g., NCES and the U.S. Department of Energy). Subsequently, the District should develop supporting procedures, and discuss the policies and procedures with the administration, faculty, staff, and students to educate and train them about energy conservation. This would ensure implementation of the appropriate energy management practices.

Table 2-10 compares PCSD's utility expenditures per square foot for FY 2008-09 to the peer averages and AS&U national median.

Table 2-10: Utilities per Square Foot in FY 2008-09

	PCSD	Cuyahoga County 3-Peer Average	Statewide 3-Peer Average	AS&U National Median
Electricity	\$0.64	\$0.83	\$1.15	NA
Gas	\$0.78	\$0.88	\$0.33	NA
Subtotal Energy	\$1.42	\$1.71	\$1.48	\$1.19
Water / Sewage	\$0.08	\$0.14	\$0.12	NA
Telephone	\$0.41	\$0.11	\$0.08	NA
Subtotal Utilities	\$0.49	\$0.25	\$0.21	\$0.18
Total Energy/Utilities	\$1.92	\$1.96	\$1.69	\$1.37

Source: PCSD, peer districts, and the AS&U 38th report (2009)

Note: Totals may vary due to rounding

Table 2-10 shows that PCSD's total energy/utilities cost per square foot in FY 2008-09 were between the two peer averages. This is due to the District's telephone expenditures because energy (electricity and gas) and water/sewage costs per square foot were lower than both the Cuyahoga County and Statewide peer averages. See **Issues for Further Study** for additional information regarding telephone expenditures. In contrast to the peer averages, PCSD's energy cost per square foot was higher than the AS&U national median.

Although PCSD regularly tracks energy usage and has implemented several steps to improve energy management (see **Noteworthy Accomplishments**), the District does not have an energy conservation policy that includes detailed goals and objectives. Furthermore, PCSD has not undertaken any programs to inform staff and students of the importance of energy conservation and/or the impact waste has on the District's budget.

According to the *Planning Guide for Maintaining School Facilities* (NCES, 2003), the cost of energy is a major item in any school budget. Thus, school planners should embrace ideas that can lead to reduced energy costs. Several guidelines will help a district

accomplish more efficient energy management, including the establishment of an energy policy with specific goals and objectives. *School Operations and Maintenance: Best Practices for Controlling Energy Costs* (U.S. Department of Energy, 2004) indicates that there are different types of energy conservation programs. Energy tracking and accounting programs are comprehensive and require the collection, recording, and tracking of monthly energy costs in all school district facilities. The data allow staff to compare energy performance in all buildings and identify problems at individual facilities. On the other hand, voluntary energy awareness programs operate on the premise that increasing the general energy awareness of faculty, staff, and students will result in voluntary changes in behavior and reductions in energy consumption. An example of this approach is affixing “Turn the Lights Off” stickers to lighting switch plates.

Employee Training

R2.9 PCSD should develop a written procedures manual for facility operations. The manual should contain guidelines on the performance of tasks and directions on any equipment to be used in completing the tasks. Furthermore, PCSD should develop formal performance standards and measures, which should be consistent with procedures identified in the manual. Formal performance measures and standards would clarify staff expectations and enable the District to objectively evaluate performance and overall operations. This, in turn, would improve decision-making and ensure the appropriate allocation of resources (see R2.1).

PCSD does not have a handbook or formal procedures to guide maintenance, custodial, and cleaning employees in completing their assigned tasks. Instead, each cleaning employee has a written checklist which provides a room-by-room listing of assigned tasks, how often they should be completed, and what level of cleanliness is expected. The work checklists are created by the Custodial Manager with Breeze Software Custodial Solutions. The Custodial Manager assigns the amount of time a task should take to complete and the program generates a list of what each employee should be able to accomplish in an 8 hour day. Custodians oversee the work of the cleaners. The Custodial Manager spot checks the work of the maintenance staff and custodians. The District is planning to develop performance measures for maintenance staff and custodians in the near future. While the checklist provides useful information to guide cleaning staff, it does not detail the procedures to carry out the tasks.

According to *Planning Guide for Maintaining School Facilities* (NCES, 2003), every maintenance and operations department should have a policies and procedures manual that governs day-to-day operations. The manual should be readily accessible to all maintenance, custodial, and cleaning employees. Further, the Association of School Business Officials International developed a *Custodial Methods and Procedures Manual*

(ASBO, 2000) that recommends establishing a manual. Specifically, a manual should outline staffing standards, daily duties and tasks, job descriptions, job schedules, evaluations, cleaning procedures, and work methods for various job tasks.

The International Sanitary Supply Association (ISSA) developed a handbook designed to help train and guide custodians and cleaners. The handbook details the correct cleaning methods as well as the proper use of custodial equipment and offers guidelines and tips on the following:

- Floor finish application;
- Auto scrubbing;
- Carpet care and maintenance;
- Damp/wet mopping;
- Proper dilution methods;
- Dust mopping;
- Oscillating & multiple brush floor machines;
- Scrubbing/stripping;
- Spray buffing/high speed burnishing;
- Wall washing;
- Washroom cleaning;
- Wet/dry vacuums; and
- Window cleaning.

The Planning Guide also states that in order to assess staff productivity, an organization, through its managers and supervisors, must establish performance standards and evaluation criteria. For example, a cleaner's performance might be measured by the amount of floor space or number of rooms serviced, the cleanliness of those facilities, and his or her attendance history. *The Planning Guide* presents guidelines for developing performance standards, which state that supervisors must do the following:

- Establish goals;
- Create an evaluation instrument (e.g., a checklist or form);
- Be as detailed and specific as possible;
- Define the performance scale (e.g., 0 = Poor to 5 = Excellent);
- Be flexible and make note of extenuating circumstances;
- Convey expectations to affected staff members; and
- Review the performance standards on a regular basis.

PCSD is in the process of creating a strategic plan. As part of that process, the District is evaluating all areas of operations and seeking opportunities for improved efficiency. Coupled with performance standards, a formal handbook for the custodial and

maintenance department would effectively communicate management expectations for work quality and performance, thereby enabling maintenance, custodial, and cleaning employees to effectively and efficiently prioritize and perform their duties.

R2.10 PCSD should expand its training program for facility employees to include additional topics recommended by industry organizations. Furthermore, the District should formally document its training program as part of its written procedures manual (see R2.9). Taking these measures would better ensure the development of a highly skilled workforce.

PCSD provides its facility staff with training on blood borne pathogens, lock out/tag out, and fault protections. However, the District's training program is not formally documented. Furthermore, District administrators acknowledged there is a need for additional training for maintenance employees in areas such as preventive maintenance and problem identification.

According to *Planning Guide for Maintaining School Facilities* (NCES, 2003), newly hired employees should receive an orientation/tour of the facilities and different work areas, instruction on how to use the equipment required to perform their job duties, task-oriented lessons, information on supervisor expectations, and information on how and when they will be evaluated. It also states that continuing education should be provided to all employees and should cover some or all of the following topics:

- Building knowledge;
- First aid;
- Emergency response;
- Biohazard disposal;
- Technology use; and
- Universal precautions.

The Planning Guide further notes that appropriate training to custodial and maintenance employees promotes employee safety, teaches staff how to deal with changing needs, provides a stimulating experience to people who perform repetitive tasks (thus improving employee morale and retention rates), and prepares staff for future promotions.

By documenting its employee training program and providing additional training to staff where needed, PCSD would better ensure that staff is trained in the appropriate activities. It should be noted that District administrators have high expectations for their employees and have made a sincere effort to identify and organize appropriate training activities to assist employees in improving the quality of their work.

Financial Implications Summary

The following table presents a summary of annual costs and annual cost savings identified in this section of the report.

Summary of Financial Implications

Recommendation	Annual Costs	Annual Cost Savings
R2.2 Reduce overtime costs		\$56,500
R2.7 Purchase an electronic work order system	\$6,700	
Total	\$6,700	\$56,500

Source: AOS Recommendations

Purchasing

Background

This section of the performance audit focuses on Parma City School District's (PCSD or the District) purchasing operations. The objective of this section is to assess the District's purchasing function against statutory and policy requirements, leading or recommended practices, and industry standards. Sources for comparative information include the Ohio Revised Code (ORC), Ohio Administrative Code (OAC), National Institute of Governmental Purchasing (NIGP), and the Ohio Ethics Commission (OEC).

Summary of Operations

The Business Office and Treasurer's Office are primarily responsible for managing and overseeing the purchasing activities for the District. Through a public and competitive procurement process, the Business and Treasurer's Offices are responsible for ensuring the District obtains the greatest value for its money. The District uses a decentralized purchasing process. Any District employee can request a purchase order and employees are responsible for supplier selection. At the high school level, employees submit a request to the clerk/treasurer at their school. At the elementary and middle school levels, employees submit the request to the building secretary. At all levels, the building principal is required to approve the request, the secretary or clerk/treasurer enters the requisition into the state software system, and the Treasurer's Office converts the requisition to a purchase order and distributes the copies. The Business Office matches purchase orders to invoices. The District requires two quotes be obtained for purchases over \$5,000.

PCSD has general purchasing, credit card, cooperative purchasing, local purchasing, supplier relations, and bidding policies, along with administrative guidelines that are linked to ORC and OAC requirements. The District, through its policy committee, is in the process of updating its purchasing policies to ensure their continued relevance. While PCSD's purchasing policies and guidelines meet ORC and OAC requirements, the District has made an effort to exceed those requirements when possible. For example, for the last 90 days, the process for Business Office purchases over \$25,000 not subject to ORC bidding requirements has been similar to the ORC and District bidding requirements. The District advertises once with their list of specifications, receives product samples and sealed bids, and a committee reviews the bids and awards the contract.

PCSD is in the process of implementing the eSchoolMall system. The EasyPurchase application replaces the Uniform School Accounting System (USAS) requisition module and is used to

record requisitions, seek approval from the appropriate parties, certify the availability of funds, and create purchase orders. However, it ties to USAS for fund availability and generation of purchase orders. The District's primary goal is for staff to purchase items at the lowest price available. In addition, the software application includes various supplier catalogs. Furthermore, the District recently began requiring a documented second quote for all purchase orders (not just single item purchases) over \$5,000.

Results of Voucher Packet Review

To determine whether staff adheres to purchasing policies, related statutory requirements, and sound internal controls, AOS reviewed 56 voucher packets from FY 2008-09 and the first quarter of FY 2009-10: 41 voucher packets for purchase orders over \$5,000 issued in the first quarter of FY 2009-10, and 15 voucher packets for facilities expenditures over \$25,000 issued in FY 2008-09 (9) and FY 2009-10 (6). AOS tested the following attributes:

- Supplier on pre-approved supplier list;
- Supervisory approval;
- Difference between purchase order and invoice amounts;
- Difference between invoice amount and amount paid;
- Difference between requisition date and purchase order date;
- Difference between purchase order date and invoice date;
- Difference between invoice due date and date paid;
- Declaration of Material Assistance (DMA) forms for contracts over \$100,000;
- Chief Financial Officer's (Treasurer) signature;
- Certificate of available resources;
- Evidence of receipt;
- Blanket purchase orders in excess of three months;
- Use of cooperative purchasing;
- Two quotes for purchases over \$5,000; and
- Compliance with ORC §3313.46 and §3327.08.

Overall, the AOS test of the above attributes in the sample showed that the District did not have significant and systematic deficiencies, with three exceptions. Specifically, AOS found that of the 77 purchase orders associated with these voucher packets, 16.9 percent of invoices with specified due dates were paid late (see **R3.4**). In addition, AOS found evidence of requisitions in only 26 of the voucher packets. While some of this is due to the nature of the purchase (professional service and blanket purchase orders), the lack of a requisition is unexplained for others (see **R3.1**). Furthermore, AOS found 26 of the District-wide voucher packets contained

invoices dated before the purchase order date, which includes 6 voucher packets with blanket purchase orders (see **R3.4**).¹

Along with the above findings, the AOS test revealed other anomalies. Specifically, two purchases related to special education services were not approved. When comparing purchase order amounts to invoice amounts, AOS found that amounts reconciled or were explained (e.g., blanket purchase orders) with the exception of one purchase order amount being higher than the invoice amount. Additionally, when comparing invoice amounts to actual amounts paid, AOS found three instances of the actual amount paid being greater than the invoice amount. In one of these instances, the difference was reimbursed to the District. Moreover, AOS found three instances of the actual amount paid being less than the invoice amount, with one instance equaling an immaterial difference of one cent. See **R3.5** for recommendations on District oversight.

For the 41 voucher packets for purchase orders over \$5,000, AOS reviewed 26 packets² for evidence that at least two quotes were obtained. In every instance, at least two quotes were obtained or two quotes were not required because of the nature of the purchase (e.g. professional services and memberships). For the 15 voucher packets for facilities expenditures over \$25,000 issued in FY 2008-09 and FY 2009-10, AOS reviewed two bid packets. The remaining nine bid packets were not readily available for review due to the ongoing federal investigation. However, the two bid packets reviewed by AOS complied with ORC §3313.46 and §3327.08, and the Board's purchasing policy (Policy 6320). Furthermore, the District's most recently published financial audit (FY 2006-07) did not identify issues with contracts.

¹ Three of the 26 voucher packets which contained multiple purchase orders had one purchase order dated before the invoice dates.

² AOS did not test 15 voucher packets for evidence that at least two quotes were received because the quotes are filed with the requisitions, which are maintained by the originators. The time involved in attempting to follow up with each originator would result in AOS not meeting the timeframes of this performance audit. Those packets tested were centrally maintained in the Business Office or Department of Information Systems.

Audit Objectives for the Purchasing Section

The following list of questions was used to evaluate the purchasing function at PCSD:

- Do the District's purchasing policies contain elements of leading practices and reflect ORC and OAC requirements?
- Does the District consistently follow its purchasing policies?
- Does the District have adequate internal controls and oversight over the purchasing process?

Assessments Not Yielding Recommendations

The assessment of PCSD's purchasing and credit card policies in relation to ORC and OAC requirements did not warrant changes or yield recommendations. Specifically, the District has general purchasing, credit card, cooperative purchasing, local purchasing, supplier relations, and bidding policies that are linked to ORC and OAC requirements.

Recommendations

R3.1 PCSD should update its purchasing policies and guidelines. These and other purchasing policies should clearly delineate Board expectations; Superintendent, Treasurer, Director of Operations, and other relevant staff (e.g., principals) responsibilities; and consequences for noncompliance. For instance, the purchasing guidelines should indicate the position(s) responsible for reviewing requisitions for appropriateness of content and supplier, and should address the maintenance of requisitions. In addition, the District should review the policy regarding price quote requirements for items over \$5,000, clarify and update where necessary, and then formally inform staff of the policies. For example, the District should consider updating the policy to require at least three price quotes and apply them to purchase orders rather than single items. However, PCSD should weigh these potential changes against the impact on operations to ensure they are not overly cumbersome. Furthermore, the District should create a policy that requires staff to include documentation of the multiple quotes when sending the requisition and maintain such documentation in the voucher packets.

The District should develop a formal purchasing manual which includes the purchasing policies and guidelines to increase the likelihood that they will be understood and applied appropriately. The purchasing manual should be included on the District's web site to ensure wide distribution. All employees involved in the purchasing process should receive training on the manual and be required to sign acknowledgements indicating they understand the policies and guidelines, and will adhere to them. Further, the District should annually review and update the policies and guidelines, as necessary. Administrators should ensure that staff follows the policies and guidelines. Lastly, the District should address deviations from the policies by enforcing the consequences detailed in the policies.

Taken collectively, these measures would enhance PCSD's internal control structure and, in turn, minimize the risk of fraud, abuse, and mismanagement.

PCSD's purchasing policy (Policy 6320) requires the purchaser to seek at least two quotes for purchases of more than \$5,000 for a single item, except in cases of emergency, when price negotiations would not result in savings due to the nature of the materials purchased, or when the item is subject to a formal bid. According to the Director of Operations, the former Business Manager applied this policy literally and only required two quotes for a *single item* over \$5,000. However, the Director of Operations noted the District began requiring documentation of two quotes for *purchase orders* over \$5,000 effective July 2009. By comparison, the Akron City School District's policies require at least three price quotations on purchases of more than \$6,000 for a single item, with the same exceptions as in PCSD's policy. In addition, PCSD administrators acknowledged

that many employees are not aware of the policy requiring two quotes and no employee is responsible for ensuring that two quotes are obtained by the requisitioner (see **R3.5**). The District also does not maintain documentation of the two quotes in all voucher packets (see pages 3-2 to 3-3).

The District's policies and guidelines do not address the maintenance of requisitions. Further, AOS found evidence of requisitions in only 26 of the 56 voucher packets reviewed in the audit. While some of this is due to the nature of the purchase (professional service and blanket purchase orders), the lack of a requisition is unexplained for others. According to the EasyPurchase Quick Guide, requisitions can be retrieved as a part of the eSchoolMall system, which the District is in the process of implementing.

The purchasing policy further requires competitive bids for building, repairing, enlarging, improving, or demolishing a school building where the cost will exceed \$25,000 or is required by statute. The Board, by resolution, may award a bid to the lowest responsive and responsible bidder. However, the Director of Operations has taken this requirement a step further by using a competitive bidding process for all Business Office purchases over \$25,000. Contracts for professional services require Board approval. Furthermore, the District has a local purchasing policy that requires local suppliers and contractors be given preference only as other conditions (e.g., value for money) are equal.

Lastly, PCSD's purchasing guidelines are outdated. The guidelines state that the purchasing supervisor is responsible for reviewing requisitions for appropriateness of content and supplier. However, because the District does not have a purchasing supervisor and the Director of Operation's job description does not include oversight of the purchasing function, this responsibility is not clearly assigned. The purchasing guidelines also do not state who is responsible for verifying that multiple quotes are obtained for items over \$5,000. However, the District is in the process of revising its purchasing policy with the assistance of a professional organization and expects the revised policy to be approved in early 2010. Prior to this, it was last revised in 2006. Additionally, the District is moving away from the local purchasing policy and toward the use of the eSchoolMall system, which includes supplier catalogs and Ohio Schools Council suppliers.

School Board Policies [National School Board Association (NSBA), 2009] notes that, "Policies establish directions for the district; they set the goals, assign authority, and establish controls that make school governance and management possible. Policies are the means by which educators are accountable to the public."

According to the *Key Legal Issues for Schools* (Russo, 2005), well-developed, well-articulated policies are often indicators of the attitude and commitment of school boards

toward following effective management practices. To ensure that school board policies are effective, boards and educational leaders should consider the following recommendations:

- School boards and superintendents should include sufficient funds in their annual budgets to retain the services of professional agencies to review and revise their current policy documents and to provide, at a minimum, annual reviews and draft updates of policies on a quarterly basis.
- The general operating procedures of school boards should include annual reviews of all new and revised policies to determine whether modifications should be made on the basis of implementation experiences.
- Board policy manuals need to clearly separate the policies from the administrative regulations and procedures.
- A board member should be responsible for keeping the policy manual up to date.

R3.2 PCSD should adopt a Board-approved ethics policy that contains the elements suggested by the Ohio Ethics Commission (OEC). Once adopted, this policy and related laws should be distributed and discussed with all staff members. The District should require staff members to sign a form acknowledging that they have read and understand the policy and related laws within 15 days of receipt and at the beginning of employment for new hires. The policy should be posted on the District's website so that it is readily available for others.

The District has a Staff Ethics Policy, a Board Member Code of Ethics, and a Supplier Relations policy with ethical components. However, none of these policies contains all of the elements of the OEC model ethics policy. For example, these policies lack provisions to prohibit employees from holding or benefiting from a contract with, authorized by, or approved by the District; and being paid or accepting any form of compensation for personal services rendered on a matter before any board, commission, or other body of PCSD.

According to the OEC model ethics policy³ for local governments, officials and employees must, at all times, abide by the protections to the public embodied in Ohio's Ethics Laws. These laws are codified in ORC Chapters 102 and 2921, and have been interpreted by the OEC and various Ohio courts. A copy of these laws should be provided to employees and their receipt acknowledged within 15 days of receiving the policy

³ The Ohio Ethics Commission's sample ethics policy for local government officials can be found online at: http://www.ethics.ohio.gov/ModelEthicsPolicy_localagencies.html

and/or beginning employment, as required by ORC § 102.09(D). The OEC recommends the ethics policy prohibit employees from engaging in the following activities:

- Soliciting or accepting employment from anyone doing business with the District;
- Being paid or accepting any form of compensation for personal services rendered on a matter before any board, commission, or other body of the District;
- Holding or benefiting from a contract with, authorized by, or approved by, the District;
- Voting, authorizing, recommending, or in any other way using his or her position to secure approval of a District contract (including employment or personal services) in which the official or employee, a family member, or anyone with whom the official or employee has a business or employment relationship, has an interest;
- During public service, and for one year after leaving public service, representing any person, in any fashion, before any public agency, with respect to a matter in which the official or employee personally participated while serving with the District; and
- Using, or authorizing the use of, his or her title, the name of the District, the District's acronym, or the District's logo in a manner that suggests impropriety, favoritism, or bias by the District or the official or employee.

An official written policy will help ensure that all staff members, particularly those entrusted with District funds, conduct themselves in a manner that avoids favoritism, bias, and the appearance of impropriety. Furthermore, a comprehensive ethics policy will help ensure that employees' actions are in the best interest of the District.

R3.3 PCSD should develop a comprehensive supplier selection policy and associated administrative guidelines to objectively identify and approve suppliers for District use. Subsequently, the District should include the policy and guidelines in a purchasing manual (see R3.1), distribute them to all staff members, and provide training for employees with purchasing responsibilities. Furthermore, the District should consider expanding the use of its website to solicit quotes and bids.

The District does not have a formal supplier selection and approval policy or process. Instead, the District indicated that suppliers are added at the request of the purchaser, with a review by the Director of Operations and Treasurer. As a result, the Director of Operations noted that suppliers are often arbitrarily selected. Moreover, from May 2009 to December 2009, the District used its website only two times to solicit quotes and bids.

According to *A knowledge-based decision support system for government supplier selection and bidding* (Wang, Wen, Chang, Huang, 2006), the selection of competent suppliers has long been regarded as one of the most important functions to be performed

by a purchasing department. However, supplier selection decisions are complicated by the fact that various criteria must be considered in the decision making process. Through a convenient e-procurement Internet-based system, a government agency can review and evaluate suppliers fairly and publicly. In addition, Wang, et. al outlines criteria that government agencies can use to evaluate suppliers once quotes or bids are received, including, but not limited to:

- Price;
- Quality;
- Performance History;
- Warranty and Claim Policies;
- Technical Capability;
- Procedural Compliance;
- Reputation and Position in Industry;
- Communication System;
- Operating Controls; and
- Geographic Location.

By developing a supplier selection policy and associated administrative guidelines, and applying the policy and guidelines consistently to all purchases, the District will better ensure that goods and services are obtained in an efficient and equitable manner.

R3.4 PCSD should develop a policy requiring timely payments in order to stress the importance of taking advantage of supplier discounts and avoiding late fees and other charges. The policy should also identify an appropriate timeframe for paying invoices without a defined due date. Furthermore, the policy should be accompanied with administrative guidelines and communicated to District staff. As a part of the administrative guidelines, the District should alter its purchase order and invoice reconciliation procedures to be based on payment due dates. Lastly, the District should issue and approve purchase orders prior to making a purchase.

The District does not have a policy requiring timely payment of invoices or other bills. Invoices and purchase orders are matched in the Business Office. A test of 77 purchase orders from Fiscal Year 2008-09 and the first quarter of Fiscal Year 2009-10 revealed that 16.9 percent of the associated invoices were paid after their due dates. The average length of time these bills were overdue was 23 days. In one instance, the District failed to receive a 2 percent supplier discount by missing a payment deadline. In addition, 9 of the 56 voucher packets reviewed by AOS showed that the suppliers reserve the right to assess a late fee of 1.5 percent per month. Although it does not appear that the District was charged a late fee by any of these suppliers, there is no guarantee that these fees will not be charged in the future. The abovementioned past due payments is due, in part, to the

District's reconciliation process. Specifically, according to the District, an employee in the Business Office uses an alphabetical process for matching invoices with purchase orders, rather than one that is based on payment due dates. The test further revealed that for the 66 invoices due on receipt, the District paid 38 (57.6 percent) within 30 days, 12 (18.2 percent) within 60 days, and 6 (9.1 percent) more than 60 days after receipt.

Furthermore, AOS found 26 of the 56 District-wide voucher packets that were reviewed in the audit contained invoices dated before the purchase order date, which includes 6 voucher packets with blanket purchase orders.⁴ According to District officials, this is partially due to the invoices being dated near the close of the fiscal year (June 30, 2009). Of the 26 voucher packets, 15 included invoices dated two weeks before or two weeks after the close of the fiscal year.⁵ Nevertheless, the District's purchasing policy (Policy 6320A) states the following:

- All purchases shall be by purchase order processed through the Purchasing Department.
- The Chief Financial Officer shall be the contracting agent for all financial obligations.
- The Chief Financial Officer shall be responsible for encumbering the funds as soon as the purchase order has been issued.
- A verbal financial commitment may be made only for emergencies or when it is impossible or impractical to precede the purchase with a purchase order.

By developing a formal policy on timely payments and carefully timing payments to ensure they are neither late nor too early, the District could take advantage of discounts, avoid penalties, and maximize its return on short-term investments. Moreover, by issuing and approving purchase orders before making purchases, PCSD would comply with its policy and reduce the risk of making inappropriate purchases.

R3.5 PCSD should revise its purchasing process to centralize oversight of the process, such as reviewing purchase orders for final approval to ensure goods are purchased in a cost-effective manner (see R3.6) and multiple quotes were obtained (see R3.1); evaluating the District's compliance with other purchasing policies; and matching purchase orders to invoices and packing slips prior to approving payment (also see R3.4). These duties should be segregated among various employees to guard against fraud and abuse. As an additional control, an employee outside of the purchase order-invoice-packing slip reconciliation process should periodically review the amounts actually paid relative to the amounts on the invoice. Finally, the

⁴ Three of the 26 voucher packets which contained multiple purchase orders had one purchase order dated before the invoice dates.

⁵ Seven of the 15 voucher packets included multiple invoices, but were counted because they contained at least one instance where an invoice date was two weeks before or two weeks after June 30, 2009.

requisitioner should continue to acknowledge receipt of products or completion of services as an additional measure of control.

By developing a central process, the District would better ensure that oversight is consistently and effectively applied. This, coupled with implementing the other recommendations in this performance audit, would enable the District to effectively operate under the decentralized structure that guides the daily purchasing activities.

The District uses a decentralized purchasing process whereby each building principal approves the requests, which are then forwarded to the Treasurer's Office to generate the respective purchase orders. The requisitioner is responsible for indicating receipt of products or completion of services and attaching packaging slips to the purchase order. Furthermore, under the current purchasing system, no employee is assigned to ensure that the District's policies (such as obtaining two quotes for purchases over \$5,000) are being properly and consistently applied. Lastly, the AOS sample test of voucher packets found a few irregularities when reviewing approvals and comparing purchase orders, invoice amounts, and amounts actually paid (see pages 3-2 to 3-3).

According to *Centralization of the Procurement Function* [National Institute of Governmental Purchasing (NIGP), 1998], the major benefits of centralizing the purchasing function are: effective control, cost savings, and use of a professional purchasing staff. Centralized procurement promotes effective control by placing authority for all procurement in a single entity which establishes uniform procedures and oversight. Centralized control improves relations with the supplier community by providing a single source of information for all suppliers. Cost savings can be realized through volume buys, establishment of term (requirements) contracts, the use of standard specifications (where practical) and standard contract terms. Although this NIGP publication focuses on centralizing the entire purchasing function, PCSD could apply the concepts to centralize oversight of its decentralized operations. Along with the other recommendations in the performance audit, this would better allow the District to operate under its decentralized structure for daily purchasing activities.

According to *Accounts Payable Best Practices* (Schaeffer, 2004), once the appropriate personnel approve the invoice, the entity should perform a three-way match on all invoices above a designated level. The accounts payable associate should match the purchase order against the invoice and packing slip to verify that the goods ordered have been received and the price and other fees (e.g., tax, insurance, freight) are as agreed. Differences should be resolved before the invoice is paid.

The lack of central oversight can lead to noncompliance with required and effective procedures (see pages 3-2 to 3-3, **R3.1**, and **R3.4**) and inconsistencies in purchasing

practices, which could subsequently impact the District's ability to take advantage of its overall purchasing power.

R3.6 PCSD should seek competitive bids for the most commonly used items. Once bids are awarded, the District should compile them into catalogs and distribute them to all departments to guide purchasing decisions. Prior to purchasing items, the District should compare bid pricing to pricing from consortia.

The District's purchasing policy (Policy 6320) includes a provision for quantity purchases. The Board requires the District to periodically estimate requirements for standards items or classes of items and make quantity purchases on a bid basis to procure the lowest cost consistent with good quality. The Director of Operations began soliciting bids for supplies and materials used by the Business Office in August 2009. However, the District does not bid for all commonly used items, such as office, floor cleaning/custodial, and classroom/teacher supplies. This is evidenced by purchase order activity in the first quarter of FY 2009-10. Specifically, the District issued 132 purchase orders to one office supply company that totaled \$63,931, 22 purchase orders related to floor cleaning/custodial items to one company that totaled \$20,308, and 71 purchase orders related to classroom/teacher supplies to one company that totaled \$21,048.

Furthermore, the District policy on cooperative purchasing (Policy 6440) authorizes the Superintendent to negotiate joint purchase agreements for services, supplies, and equipment. The District uses cooperative purchasing for utilities (natural gas and electricity), fuel for buses, and bus purchases. In addition, the District recently began emphasizing purchases through the Ohio Schools Council for all supplies and materials as a way to remove personal relationships with suppliers and control costs.

Although some goods and services purchased from suppliers not participating in purchasing consortia may be unique and necessary, consolidating suppliers for specific goods and services used by multiple departments would help the District maximize its purchasing powers.

District Response

The letter that follows is Parma City School District's official response to the performance audit. Throughout the audit process, staff met with District officials to ensure substantial agreement on the factual information presented in the report. When District officials disagreed with information contained in the report and provided supporting documentation, the audit report was revised.

Administration

Sarah Zatik, Ed. D., Superintendent
Christina Dinklocker, Ed. D., Deputy Supt.
Diane Byrnes, Interim Treasurer
Joseph J. Gouker, Director of Operations



Business Services

Serving Parma, Parma Heights and Seven Hills

Board of Education

Leo Palaibis, President
Kathleen A. Petro, Vice President
Karen S. Dendorfer
Rosemary C. Gulick
Sean P. Nicklos

February 5, 2010

Auditor of State, Mary Taylor, CPA
Lausche Building
615 Superior Avenue, NW
Twelfth Floor
Cleveland, Ohio

On behalf of the Parma City Schools, we would like to thank the entire Performance Audit Team for their time and effort in completing our recent Performance Audit. It was refreshing to work with a team that was knowledgeable in the intricate details of school system operations. Their knowledge and commitment was evident in each and every step of the process.

We have already begun to research and implement many of the suggestions listed in the report. Other suggestions will be studied and implemented in a second phase. We are confident that by implementing the strategies you have outlined, we will provide a better service to our community.

The goal of this Performance Audit was to evaluate our Business Practices for efficiency of operation and compliance. We have learned that our foundation is sound and you have offered good solid specific advice for improvement.

We thank you for your time and effort.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Sarah C. Zatik'.

Sarah Zatik
Superintendent

A handwritten signature in cursive script, appearing to read 'Joseph J. Gouker'.

Joseph J. Gouker
Director of Operations



**Auditor of State
Mary Taylor, CPA**

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