Portland Public Schools Bond Construction Program:

PERFORMANCE AUDIT #1

June 2014

Hirsh and Associates,

Richard Tracy and Bill Hirsh

MEMORANDUM

To: Carole Smith, Superintendent;
CJ Sylvester, Chief, School Modernization

From: Bill Hirsh and Richard Tracy

Date: June 2014

Re: **School Bond Construction Program -** Performance Audit #1

Attached is our performance audit report of the School Bond Construction Program for the Portland Public School district. This is the first of four annual audits and covers the period from the start of the bond (November 2012) through March of 2014.

We would like to thank the management and staff of the school district and of the Office of School Modernization for their assistance and cooperation in conducting this audit.

We look forward to meeting with the School Board to more fully discuss the report's findings and recommendations.

cc:
Jim Owens, Executive Director, Office of School Modernization

Contents

SUMMARY

The Portland Public School district has embarked on an ambitious eight year capital improvement program to modernize, replace, and improve school buildings. With the passage of Ballot Measure 26-144 in November of 2012, the district was authorized to issue $482 million in general obligation bonds to finance the costs of planning, design, and construction. This report is the first annual performance audit of how well the district is managing and implementing the School Building Improvement Bond program.

Our evaluation of the bond program shows that the district has made a strong start. Specifically, we found that the district has:

- Successfully completed the first summer improvement project on-budget, on-time, and in accordance with ballot measure promises (page 20)
- Completed Master Plans for the modernization of Roosevelt HS and Franklin HS (page 55)
- Selected two Construction Manager/General Contractor (CM/GC) firms to help design and construct the first two high school modernizations (page 50)
- Established a sound management structure and a foundation of policies and procedures to guide the implementation of the program (pages 28 and 36)
- Communicated extensively with the community about the status of bond program work (page 79)
- Engaged families, the community, teachers and staff, students, and other stakeholders in the planning and design of buildings (page 81)

In addition, our review of the bond program policies and procedures and our analysis of a sample of transactions and contracts indicate that the program is generally complying with protocols for receiving and paying invoices, procuring design and construction services, and informing the community about the progress and status of bond projects. While many policies and procedures are in place and working as intended, we also noted a number of opportunities to improve certain processes, strengthen compliance, and add new procedures to reduce risk and potentially improve performance. Some of the most significant opportunities for improvement include:

- Adopt and implement standard operating procedures for managing bond projects which would include requirements for a project management plan, an approach to quality management, budgeting and scheduling protocols, and project safety and risk plans (page 62)
- Improve the rigor of the Balanced Scorecard reporting tool to provide more complete, understandable, and transparent performance information (page 38)
- Adopt the State of Oregon Attorney General's Public Contracts Model Rules and increase the change authority limits for various OSM and FAM positions (page 43)
- Review project scheduling processes to better meet the needs of project directors/managers (page 35)
- Implement new change order approval processes to ensure work is approved by authorized staff before work begins (page 69)
- Better manage on-site construction by clarifying the roles of the project director/manager, coordinator, and construction manager (page 70)
- Continue to explore opportunities to establish compatibility between PeopleSoft financial accounting and reporting software and e-Builder project management software (page 73)

We make a number of recommendations in the body of the report that are compiled and summarized in the Recommendations section of the report on page 83. We note throughout the audit that a number of the recommendations have been implemented or are in the process of being implemented since the audit test period was finished.

This is the first of four performance audits of the School Building Bond Construction program. Because the program is still in its early stages, we placed emphasis this year on evaluating the program's first completed project and determining the existence and adequacy of policies and procedures to manage, guide, and control the program. In future years, as the program begins design and construction of additional summer projects and the major modernization projects, we will assess how well administrative and controls systems are working and how well the program is meetings goals and objectives.

INTRODUCTION

In November of 2012, the voters of the of the Portland Public School district approved Ballot Measure 26-144 authorizing the Portland Public School district to issue up to $482 million in general obligation bonds to finance capital projects to replace, renovate, and upgrade schools and classrooms throughout the district. The intent of the eight-year program is to rebuild three high schools, replace one K-8 school, and improve roofs, seismic safety, access, and science classrooms at up to 63 other schools. This performance audit assesses the progress of the School Building Improvement Bond program to determine if the district is achieving the goals of the program and has established and implemented effective and efficient policies and procedures to manage the program. The overall purpose of the audit is to provide useful information to help strengthen the operations of the bond program and to assist in providing public accountability for the use of voter approved tax resources.

Background on the School Building Improvement Bond program

Over the past decade, the Portland Public School district conducted a number of evaluations of the condition and capacity of its school buildings and facilities. A comprehensive study by Magellan Consulting in 2008 reviewed the condition and adequacy of major systems in each PPS school building. This study and other internal assessments found that, on average, PPS schools were older than 65 years, more than half were built before 1940, and some are over 100 years old. Lack of stable capital funding for school facilities resulted in $1.6 billion in deferred maintenance. In addition to facility condition studies, in 2009 the district performed three other building assessments. The Historical Building Assessment identified the character-defining features of all school buildings constructed prior to 1979 to determine comparative levels of

historical integrity and evaluate their eligibility for National Register of Historic Places. The study also identified key architectural features at 40 schools that would be useful in future facility improvement decisions. The Americans with Disabilities Act Assessment identified current accessibility deficiencies and described required upgrades and associated costs to reach full compliance. The Seismic Safety Study of existing school facilities evaluated 12 representative Portland school buildings to identify seismic deficiencies, develop preliminary rehabilitation options, and identify probable costs for construction for these options on a square foot basis extrapolated across all schools.

LONG RANGE FACILITY PLAN

In June 2012, the Portland School board adopted a Long Range Facilities Plan as required by Oregon statute to identify the school district's facility needs for the next ten years. With the assistance of a citizen advisory committee, district staff evaluated the adequacy of existing educational facilities, planned for future capital facilities spending, and addressed how the student population will be housed over the next decade. The Long Range Facility Plan established a set of Facility Goals and Guiding Principles to guide facility planning and capital investment decisions. In brief, the Plan states that PPS should create effective, accessible, and inclusive learning environments for 21st century education, that help all students achieve. The plan serves as the foundation for the current school construction bond program and any future capital improvement bonds.

BALLOT MEASURE 26-144

Approved by Portland Public School District voters in November 2012, the measure authorizes the Portland Public School district to issue up to $482 million of general obligation bonds to improve schools. The bonds are intended to finance capital costs that:

- Replace leaking, worn or deteriorating school roofs
- Renovate or replace schools
- Strengthen schools against earthquakes
- Repay loans for capital costs

- Increase access to schools for students, teachers and visitors with disabilities
- Upgrade science classrooms at middle grade schools

The bond measure specifically names three schools that would be renovated (Franklin HS, Grant HS, and Roosevelt HS) and one school that would be replaced (Faubion PK-8). The measure also provides funding to begin planning for upgrades at all other high schools in the coming years.

The bond measure provided for citizen accountability and oversight, and annual audits of bond projects and expenditures. The 2012 School Building Improvement Bond program has other resources from various sources that provide additional support to bond funds for the capital improvement program. The total resources of the program from all sources are shown in the table below.

Figure 1 2012 Capital Improvement Program resources from all sources

General Obligation Bonds	$482,000,000
SRGP funds and PPS contribution (seismic upgrades)	$1,585,068
Facilities and Maintenance capital funds	$4,458
SB1149 funds (energy efficiency and renewable energy)	$801,810
Education specifications	$300,000
Bond premium/debt savings	$14,416,562
TOTAL	**$499,107,898**

Source: OSM Operations Summary, March 2014

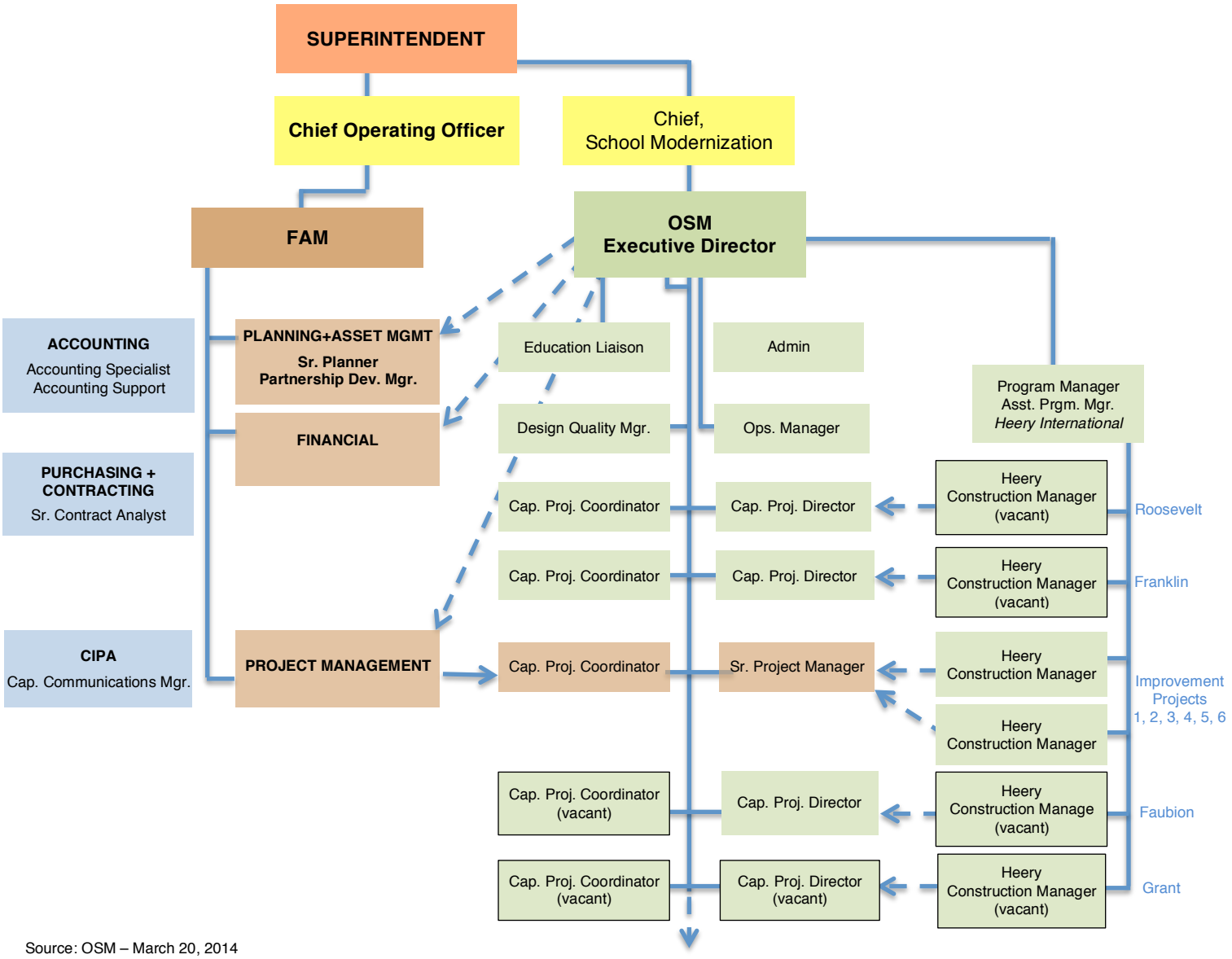
OFFICE OF SCHOOL MODERNIZATION

The Office of School Modernization (OSM) is responsible for managing the School Building Improvement Bond program under the overall direction of the Superintendent, and the specific direction of the Chief Operating Officer (COO). Effective March 1, 2014, a new position of Chief, School Modernization (CSM) was created to provide more direct and specific high level management of the bond program. The new position replaces the responsibilities of the COO in regard to oversight of the bond program. The daily management of the bond program is delegated to the Executive Director of OSM. In cooperation with the district's Facility and Asset Management (FAM) department, OSM has established plans, policies, and procedures to execute the capital construction program. The program must comply with established federal, state, and local laws, and district policies, rules, and procedures regarding procurement, construction contracting, budgeting and financial reporting, land use and building codes, and equity in public purchasing and contracting. Appendix A summarizes public procurement and contracting state statutes and rules, and rules promulgated by the school district.

To carry-out the bond construction program, OSM has formed a "blended" organizational structure composed of staff from OSM, FAM, and representatives from district Accounting and Finance, Purchasing and Contracting, and Community Involvement and Public Affairs. As shown below, the Executive Director of OSM provides management direction for the program supported by 18 positions that, in turn, provide project management, administrative and financial support to the Executive Director and OSM. The OSM program receives additional program and construction management support from a contracted firm, Heery International. This structure is intended to provide coordinated management, control, and administrative support to ensure all of the program's 21 projects are completed successfully.

The organizational chart below shows the blended organizational structure of the program.

Figure 2 Blended Bond Team organizational chart



Source: OSM – March 20, 2014

BOND PROJECTS – BUDGET AND SCHEDULE

The School Building Improvement Bond program as of March 2014 is composed of 21 separate projects. These projects include:

- Full modernization of three high schools – Roosevelt, Franklin, and Grant
- Replacement of Faubion PK-8 elementary school
- Six Summer Improvement Projects to replace roofs, correct seismic deficiencies and accessibility problems, upgrade science classrooms, and related other building conditions
- Master planning for six high schools – Benson, Jefferson, Lincoln, Madison, Cleveland, and Wilson
- Two swing site improvements, and transportation upgrades to provide temporary facilities for the students at Franklin and Grant High Schools and at Faubion PK-8
- Three other separately budgeted projects account for program management and contingencies, repayment of line of credit debt, and the costs for preparing Educational Specifications

Each of the Summer Improvement projects will have a designated Project Manager (PM) who will be accountable and responsible for achieving project goals such as safety, scope, quality, budget and schedule. Each of the major modernization projects (Faubion, FHS, RHS, GHS) will have a designated Project Director (PD) with the same responsibilities, albeit on larger and more complex projects. Each PD/PM will have a Project Coordinator (PC) to assist with the management of the project.

Project teams will be responsible for the complete life-cycle of the project – planning, design, bid, construction, and post occupancy. For projects with construction phases, the Project Director/Manager and team will be assisted by a Construction Manager provided by Heery International. Current plans call for two CMs to be provided for IP 2014.

In addition, the program includes one project – Bond 2012 - to account for program management, administration, contingencies, and other reserves. The program also created two other projects. One accounts for the repayment of loans for capital costs at schools

prior to the passage of the bond and the other accounts for Education Specifications used in the planning and design of schools

The table below lists the 21 separate projects managed by the OSM, their current start and completion dates, and current budget estimates as of March 2014.

Figure 3 School Building Improvement Bond program: Projects, schedules, and budgets

PROJECT	Start date	Finish date	BUDGET (in millions)		Bond funded
			Original	Current	
Franklin HS	Jul 2013	Sep 2017	$81.6	$91.0	Yes
Grant HS	Jul 2015	Sep 2019	$88.3	$79.1	Yes
Roosevelt HS	Jun 2013	Sep 2017	$68.4	$82.2	Yes
Faubion PK-8	Mar 2013	Sep 2017	$27.0	$26.6	Yes
6 Improvement Projects, 2013-18	2013	2018	$67.7	$70.2	Yes
6 HS Master plans	2014	2020	$1.2	$1.0	Yes
Swing sites and transportation			$9.6	$6.4	Yes
Marshal swing site	Sep 2013	Jul 2015	0	$2.5	Yes
Educational Specifications	Feb 2013	Mar 2014	0	$0.3	No
Debt repayment	*n.a.*	*n.a.*	$45.0	$45.0	Yes
2012 Bond Program*	*n.a.*	*n.a.*	$93.2	$94.5	Yes
TOTAL			**$482.0**	**$499.1**	

Source: OSM Operations Summary March 2014

* Includes program management and administration, reserves, contingencies.

Stakeholder engagement and accountability structures

The district has put in place several mechanisms to provide public accountability for the use of bond funds and to encourage stakeholder engagement and public involvement in the implementation of the program. In addition to annual financial and performance audits, two of the primary methods to provide public accountability are the Bond Accountability Committee and the Balanced Scorecard performance reporting. Stakeholder engagement and public involvement are supported through Design Advisory Groups and the district communications plan for the bond program.

BOND ACCOUNTABILITY COMMITTEE

In accordance with the requirements of the Ballot Measure 26-144 authorizing the bonds, the district has formed a seven member community-based volunteer Bond Accountability Committee (BAC). The BAC is chartered by the school board to assist in monitoring the planning and progress of the school bond program relative to the voter approved work scope, budget, and schedule objectives. The BAC charter charges the committee to meet at least quarterly to actively review the implementation of the program and to provide advice to the board on a number of topics including the appropriate use of bond funds, alignment with goals and policies established by the board, compliance with safety, historic integrity and access rules, and standards and practices for efficient and effective maintenance and construction.

The BAC is comprised of individuals with a reputation for integrity and fairness, and with experience in building design, construction, public contracting, finance, and auditing. At the completion of this year's audit period, the BAC had produced four public reports on the status and progress of the bond program. BAC meetings are announced publicly and are open to public participation.

BALANCED SCORECARD AND OTHER PUBLIC REPORTING

The Office of School Modernization has initiated several approaches to report bond program progress information to the school board and to the public. Specifically, OSM provides monthly update reports to the school board and quarterly progress reports to the Bond Accountability Committee. These reports provide information on the budget and schedule status of the program and individual projects. The district also maintains a bond program web page on the district website that contains information on the status of summer improvement projects and major modernization projects.

A major feature of these updates and other public reporting by OSM is the Balanced Scorecard performance measure and reporting tool. The Balanced Scorecard tool reports on the overall performance of the bond program and on four specific perspectives related to Budget, Schedule, Stakeholder involvement, and Equity in public contracting. A variety of strategic objectives, performance measures and performance targets are tracked and reported on a monthly basis in order to provide objective indicators on what is progressing successfully and where improvements may be necessary. A color rating key is used to indicate where progress is meeting or achieving district goals (green), where concerns are noted (yellow), and where trouble exists (red). A summary of the four primary Balanced Scorecard perspectives and objectives is presented in the table below.

Figure 4 Balanced Scorecard performance perspectives and objectives

Perspective	Objective
BUDGET	Design and construction costs within budget
SCHEDULE	Design and construction are completed on schedule
STAKEHOLDER	Project scope, design and construction meet educational, maintenance, and DAG needs
EQUITY	Projects addressing MWESB, apprenticeship, and student participation goals
OVERALL	Overall assessment of performance meeting the four perspectives

EQUITY IN PUBLIC PURCHASING AND CONTRACTING

The Portland Public School district has established a policy and administrative directives to ensure greater equity in its purchasing and contracting activities. In accordance with this policy and administrative directives implementing the policy, the district has three objectives:

1. **Business equity**: The district will provide professional opportunities for all district expenditures and purchases. The district administrative directive established an aspirational goal that 18 percent or more of the payments made for consulting services (PPS Division 48) and construction contracts (PPS Division 49) will be paid to firms certified by the state as minority or women owned businesses, or as emerging small businesses (MWESB).
2. **Contractor workforce equity**: The district will ensure apprenticeship opportunities in the construction trades and promote construction employment opportunities for people of color and women. The district administrative directive to implement the policy states that, upon being awarded a public improvement contract with a value of greater than $200,000, the contractor will ensure that a minimum of 20 percent of labor hours in each apprenticeable trade are performed by state-registered apprentices, and the contractor will participate in outreach and other efforts to create an apprenticeship program that reflects the diversity of the Portland metropolitan area.
3. **Career learning equity**: The district will provide career learning opportunities for students, particularly young people of color and women, in various career paths including but not limited to architecture, engineering, building trades and construction work and other related services. The district administrative directive requires that all district contractors, procured under divisions 48 or 49 of the District rules, with contracts exceeding $100,000, will be required to register on the district's career database and offer career learning opportunities such as job shadows, guest speaker, informational interviews, and career and workforce days and fairs.

PROJECT DESIGN ADVISORY GROUPS

The planning and design or the three high schools undergoing major modernization and the one elementary school that will be replaced will involve input from families, the community, school teachers and staff, students, and other stakeholders. To ensure that the unique needs of schools are considered in the planning and design of these schools, Design Advisory Groups will be formed to provide feedback and input in the design process. To date, DAGs for Roosevelt HS, Franklin HS, and Faubion PK-8 have been meeting to discuss the services to be provided to students, the historical significance of the buildings, the characteristics of the surrounding buildings, and opportunities for partnerships with other organizations. The DAGs will be involved in the planning process from master planning through the development of the project design. In addition to the DAG meetings, the district also holds Public Design Workshops and open houses to further involve interested citizens, students, and school families in the master planning and schematic design development. The project design team will hold workshops and open houses to obtain ideas, perspectives, and comments about the school history, special unique features, and other perspective to consider in the design of the building.

BOND COMMUNICATIONS PLAN

In cooperation with the district's Community Involvement and Public Affairs department, OSM developed a draft bond communications plan. The objectives of the plan are to:

- Keep the community informed on the status of bond projects
- Keep the community informed about the alignment of spending to bond priorities and highlight community oversight
- Build strong community ownership of the bond project

To achieve these objectives the plan will make web-based postings, distribute printed materials, use social media, newsletters, flyers, open houses and tours, and presentations to parent groups, business organizations, and neighborhoods associations. The intent of the plan is to keep all stakeholders informed on the status of the plan. Stakeholders include students, teachers, administrators, staff, parents and community members, PTAs and

related groups, neighborhood and business associations, community organizations, and potential partners.

Audit objectives, scope, and methods

This audit has four primary objectives:

1. To determine if the bond program is completing projects on-budget, on-schedule, and in accordance with the objectives of the voter approved bond measure
2. To determine if the district has in place adequate and appropriate policies and procedures to guide the management and implementation of the program
3. To evaluate if the district is following established policies, procedures, and other rules in managing and implementing the bond projects
4. To identify opportunities to enhance and improve the performance of the program

To address these objectives, we interviewed:

- Chief Operating Officer (now the Chief, School Modernization)
- Office of School Modernization, management and staff
- Facilities and Asset Management, management and staff
- Purchasing, management and staff
- Accounting, management and staff
- Program/Construction Management firm
- Financial Auditor
- Community Involvement and Public Affairs management and staff
- Bond Accountability Committee
- Finance and Budget, management and staff

In addition, we reviewed numerous documents including the Long Range Facilities Plan, Educational Specifications, Historical Building assessments, OSM policies and procedures, PPS rules and directives for purchasing and procurement, PPS accounting controls and processes, and state public contracting statutes. We tested invoices and contracts for a sample of specific projects conducted in the summer of 2013. We also

tested purchasing and contracting documents for architectural design, construction, and CM/GC selection. We utilized e-Builder, the project management software used by the bond program, to obtain information on invoicing review and approval, budget and cost reporting, project change orders and budget amendments, and public involvement.

This is the first of four annual audits and covers the period from the start of the bond (November 2012) through March of 2014. Because only one project (Summer Improvement Project 2013) was substantially complete during the course of our audit, we placed more emphasis in this first audit on determining the existence and the adequacy of policies and procedures to manage and implement the program. As the program begins the design and construction phases of the modernization and replacement projects, we will place more effort on how well policies and procedures are working for these major projects and how successful the program is achieving its goals and objectives. Throughout the four years of performance audits we will test financial transactions, public improvement contracts, and other documents to ensure the program is complying with established rules and procedures, and to identify opportunities to reduce risk, strengthen controls, and improve performance.

This audit was performed in accordance with a personal services contract approved by the Portland School board (October 7, 2014). We planned and conducted fieldwork from mid October 2013 through March 2014. We conducted report writing and quality control in April and May 2014. We conducted this work following professional standards for performance auditing and obtained sufficient evidence to provide a reasonable basis for our findings and conclusions. We make a number of recommendations pertaining to public procurement and contracting that should not be construed as offering legal advice. The district may wish to obtain legal counsel before implementing those recommendations.

AUDIT RESULTS

The Portland Public School district has substantially completed the first year of its planned bond projects on time, within budget, and in accordance with stated objectives. Master planning and design for the major modernization projects at Franklin, Roosevelt, and Faubion are well underway, and summer projects for 2014 are approaching construction in accordance with the planned master schedule.

We found that district has established a foundation of policies and procedures to guide the management and implementation of the 2012 Bond program. While many policies and procedures are in place and working as intended, there are opportunities to improve certain rules, procedures and processes, and to add new procedures to guide the program over the next eight years. We believe these changes would reduce risk, strengthen controls, and potentially improve the performance of the program.

Our specific tests of a sample of financial transactions and contracts during the first full year of operation showed that the program is, with some exceptions, largely complying with protocols for paying invoices, procuring and managing design and construction services, and communicating with internal and external stakeholders. Invoices are paid accurately and generally on time, procurements were fair and competitive, and public outreach has been extensive. We believe that OSM should also consider several actions to strengthen some practices to better comply with board policies and district procedures, and to reduce potential financial and schedule risk.

The following sections describe in more detail our performance audit findings for the first year of bond operations. We offer a number of recommendations for improvement that are also summarized in the Recommendations section of this report on page 83.

Achieving bond program objectives

The Portland School district achieved many of its stated objectives in the first full calendar year of implementing the School Building Improvement Bond program. We found that the 2013 summer Improvement Project was substantially complete on time, overall bond spending is within the established budget, and projects currently underway are consistent with the voter-approved Bond proposal. The targeted student capacity of 1,500 established in the Long Range Facility Plan was increased by board resolution to 1,700 for Franklin and Grant high schools and reduced to 1,350 for Roosevelt high school. Our review of one major construction contract showed that construction quality was appropriate and safety incidents were minor. While the program made positive strides toward addressing aspirational goals for achieving equity in public contracting and purchasing, it is premature to evaluate success in achieving apprenticeship trade and student participation in bond funded projects.

ON-TIME COMPLETION

In accordance with the Bond Proposal and the program schedule established by the Office of School Modernization (OSM), the first project of the planned bond program – the 2013 Improvement Project – achieved substantial completion on time. The project substantially completed the construction at six schools during the summer in time for school opening in the fall. As shown in the table below, roof replacements, seismic upgrades, ADA accessibility improvements, and science classroom improvements were constructed at Alameda, Bridlemile, Laurelhurst, Lewis, Wilson HS, and Ockley Green.

Figure 5 2013 Summer Improvement Projects

	Roof and seismic	Roof	Seismic rehab	ADA accessibility	Science classrooms
ALAMEDA	✓		✓		
BRIDLEMILE		✓			
LAURELHURST		✓			✓
LEWIS		✓			
WILSON HS		✓		✓	
OCKLEY GREEN					✓

Source: OSM Project Management Plan

In addition, at the completion of our fieldwork in March 2014, the bond program had also initiated planning and design work on five other projects – IP 2014, Roosevelt HS modernization, Franklin HS modernization, Faubion PK-8 replacement, and Marshall HS modernization for swing site use. Master plans are complete for Roosevelt and Franklin.

As of the January 2014 report to the Bond Accountability Committee, the Roosevelt and Franklin projects are currently behind the baseline scheduled completion for the schematic design phase, and the Faubion project has not completed its master plan in accordance with the baseline schedule. As shown below, Roosevelt and Franklin are 24 days behind scheduled in completing the schematic design and Faubion is 36+ days behind in completing its Master Plan. According to OSM, a factor contributing to schedule slippage for the high schools is the delay in completing the Educational Specifications, which in turn was related to concerns about classroom utilization and teacher office space, the adequacy of space provided for career and technical education (CTE), and an increase in planned student capacity for both high schools that was approved by the Board of Education in November 2013.

Figure 6 Schedule status: Franklin, Roosevelt and Faubion

	Baseline schedule finish date	Revised schedule finish date	Days behind schedule
ROOSEVELT	Schematic design by Feb 28, 2014	Schematic design by March 24, 2014	24
FRANKLIN	Schematic design by Feb 28, 2014	Schematic design by March 24, 2014	24
FAUBION	Master planning by 2014	Master planning *TBD*	36 +

Source: Bond Accountability Committee Meeting Packet, January 15, 2014

According to OSM, these delays in completing schematic schedules and master plan should not impact construction completion or occupancy milestones. As of March 2014, current schedules for FHS and RHS call for the compression of the construction document design phase from 8 to 7 months, to bring the high school projects back on the original schedule for construction and completion.

SPENDING WITHIN BUDGET FOR ALLOWABLE ITEMS

As of March 2014, nine of 21 planned Bond program projects have had actual spending in accordance with the overall program budget. However, only one project – IP 2013 - is substantially complete at this early stage in the program. This project is forecasted to be 8.7 percent under budget, approximately $1.1 million less than the current revised budget. The original budget was increased by $3,595,366 (from $9,467,471 to $13,062,837) to include separate seismic grant funding, addition of science labs at Ockley Green school, and increased costs transferred from the COO contingency as identified by estimates at the schematic design drawings phase. The table below shows all currently active projects - the original budget, current budget, estimate at completion, actual spending to date, and percent forecasted under budget as of March 1, 2014. Appendix B provides a full program cost summary for all projects.

Figure 7 Active Projects: School Building Bond Improvement Program, March 1, 2014

PROJECT	Original Budget	Current Budget	Estimate at completion**	Actual spending to date	% forecasted (under)/over budget
FRANKLIN HS	$81,585,655	$91,163,158	$82,046,842	$629,290	(10%)
ROOSEVELT HS	$68,418,695	$82,242,754	$74,026,637	$412,879	(10%)
FAUBION PK-8	$27,035,537	$26,645,880	$24,956,370	$818,758	(6.3%)
IP 2013	$9,467,471	$13,062,837	$11,930,613	$11,930,613	(8.7%)
IP 2014	$13,620,121	$15,737,734	$13,861,057	$891,854	(11.9%)
MARSHALL SWING SITE	*n.a.*	$2,500,000	$3,567,550	$14,167	42.7%
BOND PROGRAM MANAGEMENT *	$93,181,361	$94,527,463	$69,596,854	$3,372,586	(26.4%)

Source: OSM Bond Program Update, March 7, 2014

* Includes bond program staffing and payroll costs, management and administrative costs, reserves, contingencies, and escalation.

** Estimate at completion is based on the current actual use of project contingencies. Additional contingency spending may occur during the course of project design and construction.

The Marshall swing site improvement project is the only active project that, as of March 2014 , is forecasted to be over budget. These improvements are intended to provide temporary space at vacant Marshall high school for students that are displaced when Franklin and Grant high schools are undergoing modernization. OSM management believes that additional funding is available from reserves, contingency, or from the budget of the second swing site project so that the budget for Marshall will be adjusted and balanced.

Our detailed review of 26 invoice payments for six contracts associated with IP 2013 indicates that expenditures were consistent with ORS definition of allowable capital costs. Specifically, Article XI, Section 11L of the Oregon Constitution, defines capital costs as land and assets with a useful life of more than one year, including costs associated with acquisition, construction, improvement, remodeling, furnishing, equipping, maintenance or repair.

In addition, we reviewed the staffing costs associated with the management and administration of the program to determine if these internal costs can be reasonably supported with general obligation bond proceeds. As of March 2014, 18 administrative and management positions are supported by the bond program. Of this total, 15 positions are in the Office of School Modernization and the Facilities and Asset Management departments. These positions provide management, operations and financial support, and project direction for the program and the current active projects. An additional 3 positions at PPS provide financial, procurement and contracting, and public outreach support for the bond program but are supervised by managers in other departments, specifically the Finance, Procurement and Contracting, and Community Involvement and Public Affairs. Our discussions with these three staff indicate that all of their time is spent on activities directly associated with supporting bond projects and the bond program, and their duties appear to be related to expenditures authorized by the bond ballot measure.

CONSISTENCY WITH BOND PROPOSAL AND LONG RANGE PLAN

Each of the currently active projects managed by the Office of School Modernization is consistent with the Bond measure proposal approved by voters in November of 2012. Specifically, the type and school location of modernization, replacement, and improvement projects currently in progress align with the bond measure and the district's public communications. We did not find any other projects or activities being administered by OSM that were not specifically identified in the voter approved ballot measure or in the district's public communications with the community.

In addition, the active projects we reviewed are generally consistent with elements of the long range plan. However, high school student capacity for Franklin and Grant has been increased by the board of education from the 1500 students stipulated in the Long Range Plan to 1,700 target student capacity and 1,700 core capacity. (Roosevelt student capacity was set by the BOE at 1,350 and core capacity at 1,700.)[1] Based on new student enrollment information, the Board of Education approved a resolution in November 2013 that increased student capacity, added approximately 60,000 square feet, and increased the total budget for high school modernization by $10 million, from $247 to $257 million. The additional $10 million was funded from the $20 million Board of Education program level contingency, leaving an additional $10 million for future changes if needed.

QUALITY AND SAFE CONSTRUCTION

While it is too early to reach any conclusions on the overall quality of construction and the degree to which construction work was performed safely, our review of one major construction contract at one of the school sites for IP 2013 showed that construction quality was considered appropriate by OSM and safety incidents were minor. Our review of field reports and our on-site walkthrough of work performed at Alameda school showed work in place addressed the general scope as identified in the program management plan.

[1] Student capacity relates to instructional space for classrooms and teacher offices. Core capacity represents common spaces such as cafeteria, physical education, performing arts, and media center.

Our next audit will include additional assessment of construction scope in the summer 2014 Improvement Project.

EQUITY GOALS ADDRESSED

To address the districts equity objectives in purchasing and contracting discussed in the Introduction, OSM had established specific requirements in its purchasing and bidding documents, and its executed contracts to encourage the participation of MWESB firms in the bond program, to ensure apprenticeship opportunities in bond program consulting and construction contracts, and to require bond program contractors and consultants to offer students career learning opportunities. The program is collecting data and monitoring accomplishments for each of the projects in the bond program. The Balanced Scorecard performance measurement and reporting tool will be discussed in more detail on page 38.

The performance to date of the School Building Construction Bond program in achieving the objectives of the Equity in Purchasing and Contracting policy is mixed. As of March 1, 2014, the percent of bond invoice payments made to MWESB owned consultants and contractors averaged about 11.5 percent, less than the aspirational goal of 18 percent established by the district's Administrative Directive. As shown in the table below, approximately $15.6 million in invoice payments have been made to firms that hold consultant and construction contracts under PPS Division 48 and Division 49 purchasing rules. Contractors (Division 49) submitted invoices totaling $10,552,389 of which $976,070 was paid to MWESB firms (9.2%). Consultants (Division 48) submitted invoices totaling $4,704,366 of which $810,996 was paid to MWESB firms (17.2%).

Figure 8 Percent of bond program payments to MWESB firms (consultants and contractors): January 2013 to March 2014

TYPE OF CONTRACT/PURCHASE	Total amount of invoices paid	Payments to MWESB firms	% of payments to MWESB firms
Division 48 – A&E and survey and related services	$4,704,366	$810,996	17.2%
Division 49 – Public Improvements	$10,552,389	$976,070	9.2%
Total 48 and 49 contracts	$15,603,545	$1,787,066	11.5%

Source: OSM Operations Summary, March 2014

It is premature to evaluate the performance of the program in promoting workforce equity in bond program contracts because the district only recently contracted with the City of Portland to administer and monitor this program. OSM indicates that it will be able to report on the objective beginning in July 2014.

It is also difficult to reliably report on the provision of career learning opportunities to PPS students bond program contracts because information provided by the non-profit agency responsible for the workforce registry database has not been accurate. Although it appears that all contractors and consultants that should have registered with the database have fulfilled their responsibilities, our discussions with PPS officials and review of email communications indicates that the database at the completion of our audit work did not include all the contractors with contracts. Officials from the non-profit registry agency are aware of the problems and have committed to improving the registry. In addition, the registry agency reports we reviewed showed that only some schools and students made requests to participate in one of the career learning opportunities offered by the registered consultants and contractors. OSM told us that they will pursue other methods to get students involved with career learning in addition to requiring contractors and consultants to register with the workforce database.

We will spend additional time in subsequent audits evaluating the performance of OSM in achieving equity in purchasing and contracting goals.

Establishing and following bond program policies and procedures

The Office of School Modernization has developed a variety of policies, procedures, systems, and practices to manage and implement the School Building Improvement Bond program. These systems are intended to provide the district and OSM with reasonable assurance that the bond program goals are achieved efficiently and effectively, and that the risks to the program are minimized and adequately controlled. To determine the adequacy and completeness of these systems, and to assess the degree to which they are used and with which they are complied, we evaluated the following broad categories of OSM policies, procedures, systems, and practices, and tested a sample of financial transactions, contracts, and processes:

1. Program management
2. Purchasing and Procurement
3. Planning and Design
4. Project and Construction Management
5. Cost and Budget Management
6. Public Engagement and Communication

The sections that follow discuss the most significant policies and procedures in place at OSM, identify opportunities for improvement, and provide specific recommendations to strengthen compliance, control, and performance.

1. Program management

To guide the management of the School Building Improvement Bond program, the Office of School Modernization developed a Program Execution Plan and a Program Management Plan. The program execution plan provides an overview on how the program will operate, how the program will be composed of multiple projects, the sequencing of these projects, methods for public and internal engagement and oversight, procurement and contracting strategies, and the structure for budget and bond finance. The Program Management Plan is a longer and more comprehensive guide for the management of the program including details on organizational structure and staffing, master budgeting and scheduling, methodologies, performance and accountability reporting, and standard operating procedures for planning, designing, constructing, and completing bond projects. Our analysis of the adequacy and completeness of program management policies and procedures follows.

PROGRAM MANAGEMENT PLAN (PMP)

The baseline Program Management Plan published in October of 2013 contains considerable information on the general context of the bond program and how it will be managed. It is a foundation document and serves as the initial framework for establishing methods of control and documentation for all subsequent program activities that will be pursued to achieve the goals of the bond program. It addresses a broad range of topics including procurement, scheduling, cost, construction quality, project management, contract management, record keeping, and project closeout. It also defines bond program goals and objectives, and the roles and responsibilities of the management and staff of the bond program. The PMP references a number of documents that will further guide internal and external decision making such as project standard operating procedures, educational specifications, design and maintenance standards, communication plans, and safety and quality policies.

Our review of the PMP and the associated documents referenced in the PMP indicates that while many elements of the PMP are in place, it is not a complete or updated

document. It is intended to be annually updated but the 2014 update has not occurred. While the PMP is intended to be a living document that will be revised and updated as the program proceeds, there are several important elements of the latest version of the PMP that are late in development, missing, or are incomplete. In our view, the program and staff would benefit if the following major pieces of the PMP were completed within the 2014 calendar year, if not substantially sooner:

- Project management plans
- Standard operating procedures
- Maintenance and design standards
- Budget management and schedule compliance procedures
- Program safety guidelines

Each of these documents is discussed in more detail later in this report.

In addition, the Project Management Plan should also include hardcopy documents or links to documents that have been completed since the October version was published. For example, the PMP Appendix should include copies or links to the following documents that have been completed – Educational Specifications (Vision and High School specifications and specifications for other grade levels) and the final Communications Plan.

At the completion of our audit work, OSM had prepared a revised PMP that is currently under review. It is expected that the revised PMP will be posted by the end of May 2014.

RECOMMENDATION 1

To ensure the program has a solid foundation to guide the implementation of the program over the next several years, OSM should update the Program Management Plan and include missing documents.

MASTER BUDGET

OSM developed a reasonable methodology in initially establishing project budgets for the major capital improvements of the bond program. Our review of the assumptions and targeted costs and percentages contained in these assumptions, indicates they were consistent with ranges used within the industry and in line with independent cost construction estimates. The methodology described below was used to estimate the project costs at the time of passage of the bond by voters.

The primary elements of the initial budget estimating model used for the three high schools in this bond are as follows:

- Student enrollment capacity – The number of students enrolled will affect the amount of space needed. Planning at the time of the passage of the bond was for student capacity of 1500 at Franklin and Grant high schools, and 1200 at Roosevelt.
- Building size – Building size also affects the cost of design and construction. Planning estimates at the time of passage of the bond assumed 228,535 sf building size at Roosevelt and 240,000 square feet or the existing facility square footage, whichever was larger, for Franklin and Grant. Franklin was estimated at 240,000 sf and Grant was estimated at 274,489 sf.
- Building cost – Costs were estimated at $220 per square foot, the middle of a range of cost for high school construction, circa November 2012, provided by an independent estimator of Portland construction costs.
- Site cost – Exterior site work such as parking lots, walkways, lighting, drainage, and athletic fields were estimated at $8 per site square footage.
- Soft costs – Include architectural and engineering services, planning and design, financing, fees, and management costs. Initially estimated at 20 percent of the building cost plus the site costs.
- Contingency – Amounts to cover the cost of unforeseen design and construction factors. Project contingency was estimated at 15 percent of the total building, site, and soft costs.

- Furniture, fixtures and equipment (FF&E) – Costs for movable furniture, fixtures, and other equipment. Estimated at $12 per building square footage.

The master budget includes estimates for all major and minor projects for the entire bond program as well as anticipated costs associated with management and administration, construction cost escalation reserves, and program and project contingencies. The table below shows the initial baseline bond program budget for oversight and management, cost escalation reserves, and contingencies.

Figure 9 Bond Program oversight, reserves, and contingency budgets

	Original budget	Current budget	Notes on changes
Program management and oversight	$15,117,563	$27,750,745	Reflects transfer of management and traffic engineering budget amounts from projects to program budget
Construction cost escalation reserve	$45,000,000	$32,919,033	Reflects initial transfer of escalation reserves to projects
Chief, School Modernization contingency	$5,063,798	$1,987,566	Reflects transfer to projects for additions to scope
Board of Education contingency	$20,000,000	$10,000,000	Reflects increase in HS student capacity
Other reserves *	$8,000,000	$21,870,119	Reflects unexpected premium at bond sale
TOTAL	**$93,181,361**	**$94,527,463**	

Source: OSM Operations Summary March 2014 and January 2014 BAC meeting packet

* Includes $13,870,119 in reserves from bond premium, $3,000,000 reserves for future bond issuance costs, and $5,000,000 for anticipated City of Portland transportation cost reserves.

As shown above, the $45 million escalation reserve is intended to provide additional funding for project budgets to account for construction cost inflation from the estimated cost date (November 2012) to the mid-point of construction. In addition to the escalation reserve and the 15 percent contingency established in each project's budget, a second contingency of $20 million was created at the program level for use by the board of

education to address changed programmatic needs based on updated enrollment data and other unforeseen conditions. A third program level contingency of $5,063,798 was created for use by the Chief Operating officer (now the CSM) to deal with project specific changes due to a variety of factors including additions to a project's scope as the project design identifies more specific requirements. The COO (CSM) contingency is also the repository for any potential project level savings and underspending. These savings can subsequently be redistributed to later projects, if needed.

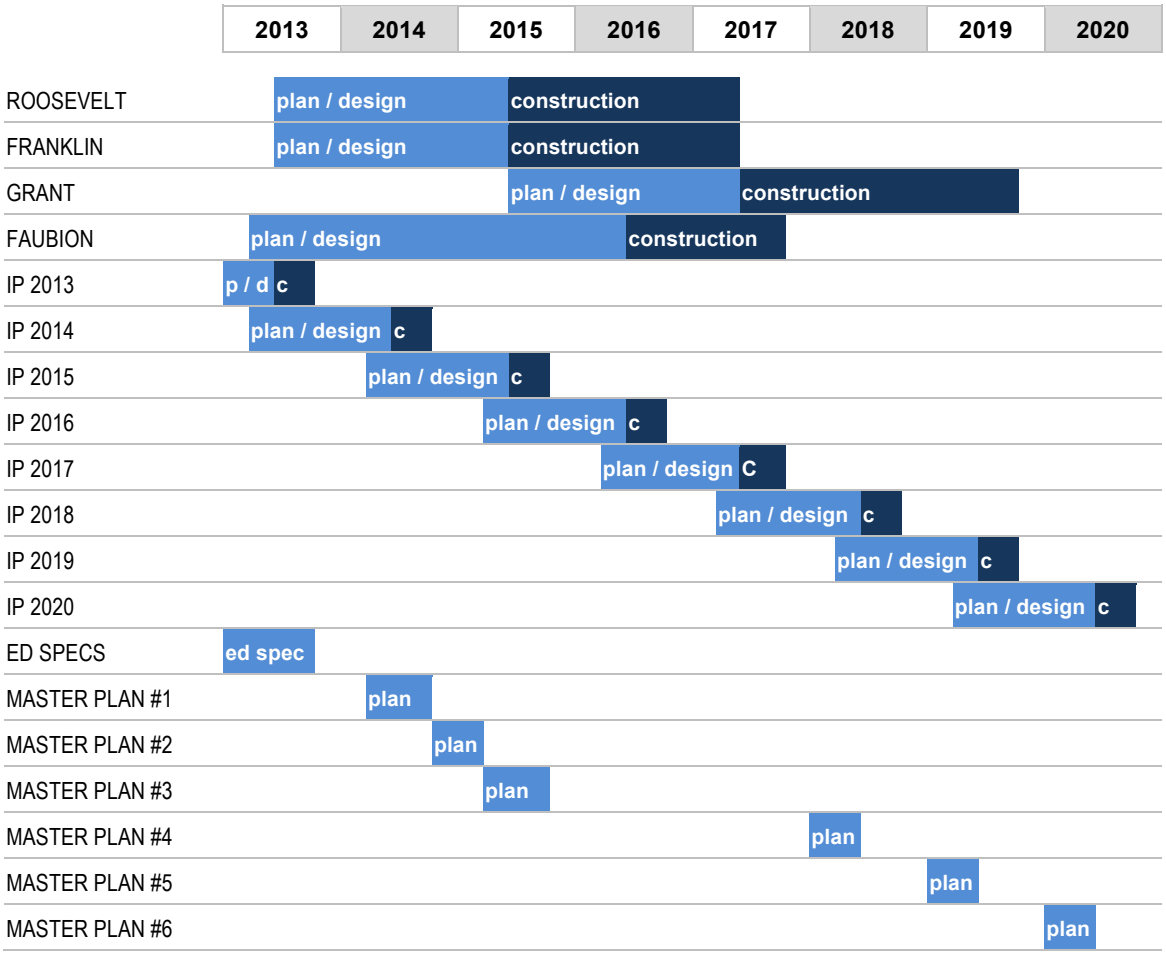
We believe the program level budget contingencies and reserves are reasonable and appropriate to plan for unforeseen events and to control the budget risks inherent in major capital improvement programs. Based on our experience, it is not uncommon for capital programs involving school building modernization and rehabilitation to experience higher costs than initially planned as designs are refined and enrollment projections increase.

Over the first year of the bond program, the major project budgets have evolved as new targets for planned student enrollment, building size, and building costs have been factored into the original methodology. These changes have resulted in modifying several of the assumptions used to develop project budgets for the major high school modernization projects. We did not spend sufficient time this year to evaluate and provide an assessment of the updated project budgets and the application of new funding from contingencies and reserves. We will place additional audit effort on these topics next year.

MASTER SCHEDULE

OSM developed an initial conceptual schedule for the program and its multiple projects prior to the approval of the bond in November 2012. The conceptual schedule provided relevant start and completion dates for the major phases of each of project. For the three major modernization projects and the replacement project these major phases included Master Planning, Schematic Design, Land and Building Department Permits, Design Documents, Construction Documents, Construction, Owner Move-In, and Project Close-out. A summary program schedule is presented below.

Figure 10 Conceptual program construction schedule



Source: PPS Bond Program website

An initial Baseline Schedule was developed by OSM in April 2013 provides more detail on phases, activities, start and finish dates, and milestones for the bond program's projects. This Baseline Schedule was prepared with the assistance from the Program Manager, the on-site consultant from Heery International. To develop the Baseline Schedule, Project Directors/ Managers provide detailed information on the planned tasks and events of their projects to the Program Manager and this information is provided to Heery's off-site sub-consultant, Scheduling and Information Systems (SIS). Using Primavera project scheduling software, SIS prepares the Baseline Schedule and transmits it back to Heery and OSM. Changes and updates to the schedule follow this same flow from Project Directors, to the Program Manager, to SIS, and return.

Based on discussions with Project Directors and the Program Manager from Heery, OSM did not hire an in-house scheduler partly due to budget limitations. Program and project scheduling was to be provided by Heery as needed and requested on a time and materials basis using a sub-consultant with Primavera 6 project scheduling software experience.

Although the process appears to work as intended for the development of program level schedules, based on conversations with the PDs and the Program Manager, there is some dissatisfaction with the project level scheduling. This is attributable, in part, to differences of opinion about the project level scheduling needs of the PDs and the ability of Heery and its sub-consultant to address those needs. The PDs for FHS and RHS have stated that they are attempting to do their own scheduling on a newly acquired version of Primavera 6 software. From the perspective of the PDs, despite the additional work, they believe this methodology for scheduling will result in more detailed project schedules in a faster manner.

Based on our understanding of the current processes for project level scheduling, we believe there may be opportunities to both streamline and improve the scheduling processes. As the major modernization and replacement projects complete the design phases and approach construction, it is important that project scheduling is timely, coordinated, and accepted by the principal staff responsible for managing the projects. Assuming that communication issues can be resolved, utilizing an off-site subcontractor may be an acceptable approach. However, if project directors are willing and capable of doing their own detailed project schedules, it may be more cost effective than contracted scheduling.

RECOMMENDATION 2

Evaluate the current project level scheduling process to determine if the needs of the projects are being met. Consider alternatives for preparing and updating project schedules including contracting with an outside provider, preparation by project managers and directors, or a combination of efforts.

As shown in the organization chart on page 9 of the Introduction, the bond program organization is composed of a blended team from the Office of School Modernization, the Facilities and Asset Management department, and designated staff from three other PPS departments. Additional program and construction management assistance is provided under a contract with Heery International. The Executive Director of OSM directly manages the program reporting to the Chief School Modernization (formerly the COO) and ultimately to the Superintendent.

Our interviews with OSM, FAM, and other PPS department staff and officials indicate that this blended organizational structure within PPS is generally working as designed. We observed that the principal focus of the organization is on implementation of specific projects as intended by the "project centric" nature of the organization. Our review of program job descriptions and interviews with staff performing in the positions showed that duties described in job descriptions were generally consistent with actual job performance, at least insofar as most PPS employees were concerned. Although the program experienced some initial difficulties in fully integrating staff from different departments, it appears that efforts to improve coordination and communication between OSM staff, Communications staff, and Finance staff have been useful.

In addition, FAM states that they fully support the blended approach because it gives them more insight and experience with program and project management systems used by OSM, and will prepare them to better manage the buildings when the work is completed. A FAM program manager oversees the project manager working on the summer improvement work, thereby providing FAM with more opportunity for feedback and control of improvements on buildings it will manage.

In accordance with their contract with PPS, Heery International assists OSM in the management, planning, design, construction execution and close-out of bond projects. Through an on-site Program Manager and Assistant Program Manager, Heery has helped the bond program in a number of ways in the first full year of implementation. For

example, Heery has helped customize and develop the e-Builder project management software, assisted in the development of program and project budgets and forecasts, and assisted in the development of the program management plan and internal policies and procedures. In addition, Heery has participated in public and internal meetings and committees and assisted in the preparation of project and program schedules and status reports. Heery also provides on-site Construction Managers for the summer Improvement Projects and for the major modernization and replacement projects when initiated. According to OSM management, Heery offers high level technical and management expertise.

While Heery has provided valuable assistance to the OSM at the program level during its first year, the scope, deliverables, and timing of the assistance provided by Heery could be better defined and more clearly articulated. The Heery contract lists over 115 services they will render when directed by the district but does not identify specific deliverables or products, timelines for completion, and performance expectations. According to Heery, as of February 2014, they had not been assigned a list of priorities from OSM. At the completion of our work, we were informed that OSM and Heery had established priorities.

Although a number of tasks were performed by the Heery program management staff and construction manager assigned to IP 2013, OSM/FAM staff report that some of their expectations were not met due, in part, to the lack of clear deliverables and reporting accountability. See additional discussion of construction manager performance on page 69.

Without a more defined set of deliverables, timeframes, and performance expectations, it is difficult to assess the performance of the firm in meeting its responsibilities under its fixed price contract. This difficulty can also lead to confusion over who is responsible for tasks, when and how tasks will be performed, and how performance will be measured.

RECOMMENDATION 3

The OSM Executive Director should develop an annual work plan for Heery Program and Construction Management assistance consistent with the existing contract. The work plan should identify work priorities for the year and define specific tasks and deliverables that will be accomplished, dates for completion, performance expectations, and establish an objective methodology for assessing the consultant's performance and success in providing support to OSM/FAM and staff at the program and project management levels.

PERFORMANCE REPORTING

Our review of the Balanced Scorecard measurement and reporting tool indicates that it provides useful performance information for internal and external users. OSM updates the Balanced Scorecard monthly and consistently provides the reports to the BOE, BAC, and outside parties. The metrics offer insights on the progress of the program in meeting some of the fundamental goals of bond program – staying on budget, keeping on schedule, responding to stakeholder needs, and addressing equity considerations in contracting with firms and in the participation of apprentices and students in bond projects. Our detailed review of the balanced scorecard metrics and the data compiled and used in the reports shows that there are opportunities to strengthen and improve the transparency of the reporting system. While the objectives measured and methodologies used by the tools are fundamentally sound, some changes in the Balanced Scorecard administration could produce more reliable, complete, and useful information.

Budget perspective: It is difficult to verify that the color keyed performance score is accurate because OSM does not maintain a spreadsheet or other document that compares the performance measure data to the performance target data. This data may be contained in the e-Builder project budget database but it is difficult to identify this information and confirm which amounts were used for the comparisons. In addition, more precise descriptors of some of the performance measures and targets would give the reader a better understanding of what is being measured. For example, the performance target for *construction cost current estimate* measure is defined as *per schedule*. A more precise

descriptor for the target might be *within current budget*. Similarly, the performance measure titled *Master Plan* might be better defined as *projected or estimated master plan cost*.

Schedule perspective: Scoring of the schedule perspective does not appear to accurately reflect the performance of projects in completing phases in accordance with baseline schedule completion targets. While the completion of schematic design for two high schools is over four weeks behind, the most recent March Bond Program Update does not include a color of yellow indicating difficulty. Similarly, the March Bond Program Update for the 2014 Summer Improvement Project gave a green rating to the schedule perspective rating indicating on-time completion for the first three phases in planning and design but these phases were over four weeks behind schedule. More accurate reflections of actual schedule completion performance would provide users of this information with more complete information for oversight and accountability purposes.

Stakeholder perspective: To improve the overall representativeness of the Balanced Scorecard ratings on the stakeholder perspective, it would be desirable to increase the number and completeness of the survey responses. OSM has administered a survey to obtain feedback from school principals and maintenance officials to assess if summer projects met educational and maintenance/facility needs. Three of the six principals from schools that received improvement work in the summer of 2013 provided complete surveys, two principals provided only partially feedback, and one principal provided no feedback. The maintenance director provided complete feedback on the summer 2013 projects. OSM has also prepared a survey to collect information from the Design Advisory Groups on how well the two high school projects are meeting DAG needs.

Equity perspective: OSM has established a system to record and track the invoice payments made to MSESB firms. Our review of the spreadsheet and invoice data shows the information is complete and reliable, and the Balanced Scorecard rating is an accurate reflection of the percent of payments made to MWESB firms. As discussed earlier, it is premature to access the participation in apprenticeable trades because information will not

be available and reported until July 2014. OSM has also established mechanisms incorporated into most consulting and construction contracts to require firms to register for the career opportunities database administered by a local non-profit agency. OSM has expressed lack of confidence that the database contains complete and reliable information on the number of firms registered or the number of students or schools that have taken advantage of career learning opportunities provided by the registered firms. Our review indicates that the database was incomplete, failing to include several firms that had registered. In turn, these firms that had registered but not been listed on the database, as a result may not have updated information on career learning participation events.

RECOMMENDATION 4

To improve the rigor and completeness of the Balanced Scorecard reporting tool, OSM should consider making the following improvements:

1. More clearly define the budget perspective performance measures and targets. To provide a more transparent basis for budget perspective scoring develop a spreadsheet that explains the source of the data and that compares the actual amounts to the actual targeted amounts.
2. Report more accurately on the schedule perspective by ensuring the color coded rating matches the actual schedule status against the baseline schedule.
3. Improve the reliability and relevance of stakeholder perspective ratings by encouraging greater and more complete stakeholder participation in surveys. OSM should consider implementing electronic, on-line survey tools to simplify survey administration and increase response rates.
4. Improve the usefulness and reliability of the equity perspective reporting by working with the non-profit registry that maintains information on career opportunities to include more complete information on registered companies.

2. Purchasing and contracting

Oregon Revised Statutes ORS 279 (A, B, C) govern the procurement of construction, consulting, and other goods and services by public agencies. These statutes define the classes of contracts subject to ORS 279 (A, B, C) and the provisions for selecting and procuring these services. All public agencies must either adopt their own purchasing and contracting rules or use the State of Oregon Attorney General's Model Public Contracts Rules. For public agencies that use their own rules, the public agencies must review and revise their own rules every time there is a change in the state model rules to ensure compliance with Oregon statutory changes. Appendix A contains an overview of the major provisions of state law governing public purchasing and contracting, specifically as it relates to public improvement projects (including alternative contracting methodologies), personal services, and goods and services.

In response to Board of Education policy, the Portland Public School district has developed its own set of rules for purchasing and contracting as permitted under state law. The district's Contracting and Purchasing Manual defines the type and nature of district contracts, establishes rules for selection and procurement of goods and services, and designates levels of authority to approve contracts and changes to contracts up to certain established dollar limits. The OSM bond program must use the district rules when selecting, contracting, and amending contracts for construction, engineering, architectural, and related services.

In order to determine if the bond program has established and is following purchasing and contracting rules in accordance with its own rules and state statutes, we reviewed and evaluated PPS's Purchasing and Contracting Manual, evaluated a sample of bond contracts to assess compliance with rules, and identified opportunities to improve bond program purchasing and contracting practices. The following describes the results of this review and offers recommendations for improvement.

PURCHASING AND CONTRACTING RULES

We found that the purchasing and contracting rules established in the district's Contracting and Purchasing Manual are generally consistent with state statutes and, in most instances, are nearly identical wording as the Attorney General's (AG's) Model Public Contracts Rules. The district has established its own specific rules for personal services contracts other than architectural/engineering and related services contracts. The district has provided for a comprehensive delegation of authority for the approval of contracts and contract changes.

Our review found instances where the district rules should be modified to better match the language and provisions of current and proposed AG's Model Public Contracts Rules, and to correct a minor language error. We informed the district Purchasing and Contracting department about several of these instances and they indicate that changes will be made within three months of the AG adopting new rules for 2014.

RECOMMENDATION 5

In order to better match the AG's Model Public Contracts Rules and to correct a language error, the Purchasing and Contracting department should modify the following sections of the PPS Purchasing and Contracting Manual:

1. PPS-47-0270(3) – Eliminate the requirement that intermediate solicitations over $75,000 be "written".
2. PPS-48-0110(4) – Correct the definition of engineer to indicate that an engineer practices "engineering" not "land surveying".
3. PPS-48-0130(1) – Permit the use of pricing as a selection criterion in selecting qualified architectural/engineering and related services when the cost of the services do not exceed $100,000.
4. PPS-47-0270(1) – Raise the lower limit for intermediate procurements from $5000 to $10,000. (This recommendation was implemented 3/31/14)
5. PPS-047-0265(2) – Increase the limit on amendments for small procurements to $12,000 or $12,500. (This recommendation was implemented 3/31/14).

In view of the technical and changing nature of Oregon statutes relating to public contracting practices, we believe the district should consider adopting the Attorney General's Model Public Contracts Rules rather than establishing their own Purchasing and Contracting rules. Several other school districts have adopted the AG's rules in addition to retaining specific district rules for contracts for personal services. Adopting the AG's rules offers several advantages. First, it eliminates the requirement to review and update the district manual each year to ensure the manual is consistent with changing state statutes. Relying on the expertise of the AG to develop rules rather than internal district personnel would ensure quality rules are in place as turnover occurs in the district Purchasing and Contracting department. Second, AG rules are a state-wide industry standard and vendors contracting with the District would be more familiar with the organization and language of the model rules. The AG's rules might reduce the risk of claims and protests, and/or better facilitate the efficiency and effectiveness of District purchasing.

RECOMMENDATION 6

Consider adopting the Attorney General's Model Public Contracts Rules while retaining separate rules for selection and procurement of contracts for personal services.

We also believe that the district should consider raising various limits on delegated change order authority. Increasing the change order authority would help the district keep pace with the inflationary trends in the cost of goods and services and reduce delays in obtaining approval for changes in the scope and cost of projects. For example, the current maximum change order authority of $10,000 given to Project Managers and Directors can easily be exceeded in a day or two, thereby theoretically requiring review and approval by the Program Directors on a daily basis to "renew" the change order authority. In our view, delegating additional authority to "on-the-ground" levels of management can improve the efficiency of the program without comprising the accountability for bond spending.

The table below shows the current change order authority limits and suggests higher amounts for the district to consider. Because of the varying degrees of expertise on the part of

Project Directors/Managers and Coordinators, the OSM and FAM may want authority to assign lower limits by individual project up to the maximum allowable by district policy or rule.

Figure 11 Current Change Order and Suggested New Limits

POSITION	Current limit on CO authority	Suggested limit increase
Chief, SM	$150,000 as of 5/14	$500,000
Chief Operating Officer	$150,000	$150,000
FAM/OSM Directors	$100,000	$150,000
FAM/OSM Program Director	$50,000	$100,000
Project Director/Manager	$10,000	$20,000
Project Coordinator	None	$10,000

For the purposes of comparison, we reviewed the rules for delegated authority for changes that the Beaverton School district used in their recently completed major bond construction program. The BSD delegates change order authority of $1 million to its Executive Director for Facilities (roughly equivalent in construction oversight scope to the PPS CSM), and $150,000 to the Director in charge of construction (roughly equivalent to the PPS Executive Director of OSM).

RECOMMENDATION 7

The district should consider increasing the change order authority for various positions currently identified in PPS 8.50.105 Administrative Directive.

REVIEW OF A SAMPLE OF BOND CONTRACTS

In order to assess the degree to which the bond program is following established purchasing and contracting rules, we reviewed several contracts administered by OSM. We evaluated the selection processes and contracts for the formal procurement of one large construction contract, two architectural/engineering contracts, and one large contract for related services. We also reviewed the alternative contracting methods used to select the CM/GC contractor for Franklin High School modernization project.

We found that the district generally followed district rules and state statutes to ensure fair and competitive selections in compliance with rules and statutes. The district used its own standard templates for bidding and contracting for public improvement projects, and for requesting proposals and contracting with architectural and engineering firms. The District developed a new template for the RFP, contract, and general conditions for the CM/GC construction based on documents used by the State of Oregon Department of Administrative Services. While most practices are working as intended, we found several opportunities to standardize and strengthen practices that would help reduce risk and better manage contract costs. We found some inconsistencies between the solicitation and contract documents. There were relatively more inconsistencies in the newly developed CM/GC procurement and contract documents. These inconsistencies suggest that more thorough review and coordination of documents would be helpful. The following discussion and recommendations identify opportunities for improvement.

Unit pricing (Invitation to Bid 2013-1604): The ITB language in Article 1.11.12 states that the unit prices which are submitted with base bids will not be considered as part of the total bid for the project. This language does not provide an incentive for the proposer to submit actual or competitive amounts for unit pricing because the amounts will not considered in the bid evaluation. Consequently, the district may be required to use unit prices in change orders that may be excessive.

RECOMMENDATION 8

ITB language should indicate that unit prices will be used as stated on the bid submittal or, at the sole discretion of the District, will be negotiated at a fair and reasonable unit price as change orders are requested.

Alternates pricing (Invitation to Bid 2013-1604): The ITB language states that bids will be evaluated to identify the lowest response bid base on the total base bid and that the total bid will not include alternates. Again, this does not provide an incentive for the proposer to submit actual or competitive pricing for the alternates work. Consequently, a bidder with the lowest responsive base bid could submit the highest price for alternative work and still win the bid.

RECOMMENDATION 9

ITB language should indicate that the lowest responsible bid will be based upon the base bid and alternatives selected at the time of award. Procedures discussed with OSM could be put in place to ensure that the selection of alternates would be based on price, value, and need, and not used to effect the selection of one contractor over another.

Maximum allowable profit and overhead (General Conditions - Construction Contracts based on ITB): The General Conditions stipulate the allowable profit and overhead (P/OH) for change orders resulting from Construction Change Directives but there is no similar requirement for negotiated Change Orders. Most change orders result from negotiated agreements and not from Construction Change Directives. For the test contract we reviewed for IP 2013, all 28 CORs (change order instruments in place at the time) were

the result of negotiated agreements. Our review of a sample of Change Order Requests for several contracts for IP 2013, showed different P/OH allowed for comparable work by subcontractors on different contracts. OSM/FAM attempted to work toward the same total P/OH number for each contract but was challenged without a proscriptive amount in the General Conditions. As a result, maximum profit and overhead should be specified for negotiated Change Order work.

RECOMMENDATION 10

Revise the General Conditions language to ensure that it specifies a maximum allowable profit and overhead for negotiated Change Order pricing. As of the date of the final draft of this audit report, OSM informs us that OSM and Purchasing are working to address this recommendation.

Selection ranking methodology and scoring criteria (RFP for A/E services): The district used a scoring methodology to select architectural firms for summer 2013 projects that asked raters to assign points to several categories of criteria (e.g. experience) up to a maximum number of points based on the raters' best professional assessment of the proposals and interviews with the candidates. The top ranked firm was selected based on the highest number of total points assigned by the raters. While this scoring method resulted in selection of a firm that was consistently ranked highest both in points and by the majority of raters, this method does allow one rater to theoretically skew the total points assigned by giving no points to one firm and the highest points to their preferred firm, potentially resulting in the selection of a firm that is not preferred by the majority.

To eliminate this potential problem, various public agencies are using an alternative scoring methodology that results in ranking firms, by rater, in order of preference and assigning one point for the highest ranked firm and 2 points for the second highest firm and so on. The firm with the lowest total points would be selected.

In addition, the district provides little guidance to the raters on the criteria to be used for assigning full or partial points when scoring various categories. Consequently, there

can be significant variation on the points awarded by raters to the same category. A general set of guidelines describing what elements to look for and baselines for how to assign full or partial points might bring more consistency to how categories are scored.

RECOMMENDATION 11

For formal selection processes using a Request for Proposal procedure, the district should consider using a ranking methodology that scores firms in order of preference as opposed to pure point totals from individual rater's point totals. In addition, provide guidelines on how to score specific categories to ensure greater consistency in scoring individual categories.

Use of prior experience and references in selection (RFP for A/E services): References from prior clients were obtained and provided to raters to consider in scoring proposals. However, it is not clear how this information was used by the raters in scoring the proposals. To ensure consistency in how this information is used or not used in the scoring process, more direction to raters is needed. As of the date of the final draft of this audit report, OSM informs us that Purchasing has begun to implement this recommendation in the verbal instructions to the rating committee.

RECOMMENDATION 12

In addition to providing raters of proposals with guidelines on how to score specific categories of information, the district should also provide instructions on how raters should use reference information in their scoring of proposals. The changes should be incorporated into written Purchasing SOPs.

Approach to builders risk insurance: Public agencies can either carry the cost of builders risk insurance (i.e., coverage for fire, theft, natural peril) or require the contractor to carry this insurance. The district has informed us that they are carrying builder risk insurance for all construction contracts to make it more affordable for some contractors to bid or propose on district work, thereby potentially increasing the competitive base and

opportunities to address MWESB aspirational goals. A secondary benefit is that, on the whole, the District is likely to pay a lower premium than contractors.

For all the contracts of IP 2013, the District paid $7500 for the premium cost for builders all-risk insurance. The insurance carried a $25,000 per occurrence deductible for which the District required the contractor to pay the first $5,000 of the deductible, per occurrence, should the contractor file a successful claim against the District's builder risk policy. For IP 2013, one contractor experienced three separate incidents of significant water intrusion due to rain events resulting in total claims of approximately $236,000. The claims for the first two events were accepted by the insurance company and the district paid a net deductible of $40,000. The District program manager and construction manager from Heery have provided documentation stating that they believe one or more of the water intrusion events were due to contractor negligence.

The cost of builders risk insurance to contractors is difficult to estimate. It depends on individual experience and claims history. Based on our understanding, it is likely that the total cost of District for insurance (premium plus deductibles) for IP 2013 would have been comparable to the cost that contractors would have placed in their bids if they were required to carry their own insurance.

Premium costs and deductibles for the District could go up in the future depending on claims. Given that the District has opted to carry the builders risk insurance, insurance costs could be kept at lower levels by reducing claims and the potential for claims. To accomplish this, the District could raise the contractors' contribution to the district's deductible, essentially creating financial incentive for contractors to be more diligent in preventing claims. Additional oversight of construction could also identify and help reduce potential risks.

RECOMMENDATION 13

To help control the cost of builders risk insurance, the District should consider increasing the share of deductible, per occurrence, that contractors must pay in the event of a builders risk insurance claim.

CM/GC SELECTION AND CONTRACTING

Public agencies wishing to use an alternative contracting method such as the Construction Manager/General Contractor (CM/GC) project delivery must authorize an exemption, and demonstrate that the exemption is unlikely to encourage favoritism or substantially diminish competition, and that the exemption will result in substantial cost savings to the agency. In order to pursue the CM/GC approach for the Franklin HS and Roosevelt HS projects, OSM brought to the board findings to demonstrate these conditions, for which the board held the required public hearing and adopted a resolution, on August 19, 2013, approving the findings and authorizing the use of the CM/GC process for FHS and RHS.

Our review of the exemption findings indicates that while the use of the CM/GC contracting approach is reasonable and appropriate for the historic high school bond modernization projects, the specific finding submitted by OSM to justify substantial cost savings could be improved. Specifically, with respect to the statutory requirement for demonstrating substantial cost savings, the district's primary rationale for justifying the exemption and use of the CM/GC approach was that staff's past experience with CM/GC resulted in timelier, better coordinated and less costly projects. State statutes, however, indicate that findings demonstrating substantial cost savings should relate to the specific characteristics of the project such as descriptions, locations, analysis of costs, and other factors distinguish the project from other projects pursued by the program.

In addition to the state statutory requirement to demonstrate substantial cost savings, the district must also comply with its own rule, PPS-49-0630(3), which requires the district to address the substantial cost savings requirement by a combination of 1) an analysis or reasonable forecast of future cost savings, as well as present cost savings, and 2) additional findings that address industry practices, surveys, trends, past experiences, evaluations of completed projects and related information regarding the expected benefits and drawbacks of a particular alternative contracting methods. Findings must relate back to the specific characteristics of the projects at issue in the exemption request.

To reduce the potential that parties would object to or fault CM/GC findings, we believe the district should provide additional supportive commentary to address the criterion of substantial cost savings in future requests to use alternative contracting methods. Analysis could include factors related to controlling budgets for historic high school preservation, complexities and cost challenges for renovating historic urban campuses, and financial efficiencies gained by involving the CM/GC in the entire design process.

As required by state statutes, public agencies in requesting exemptions to low bid public contracting requirements, must also ensure that competition for the work will not be limited in pursuing the CM/GC approach. Our review of the solicitation process administered by the district showed that they made significant effort to communicate with potential vendors about the bond program and met with many to explain the program and encourage participation. Six or more firms capable of performing CM/GC work attended the mandatory pre-proposal meeting. The district received two proposals from qualified firms for the Franklin HS project and three proposals for the Roosevelt HS project.

Both firms selected by the district to perform the CM/GC services at the high schools have extensive experience with CM/GC educational projects and are well qualified to do the work. In addition, the proposals were of high quality and the proposed fees were competitive. However, OSM staff informed us that they would have preferred to have had three or more proposals for each project to demonstrate a more robust competitive base. To learn why only two firms submitted proposals for the Franklin project after six firms had attended the pre-proposal conference, the OSM Program Manager made informal outreach to these firms. Initial feedback indicates that some firms chose not to participate due a variety of reasons. The Program Manager has incorporated his findings and suggestions for improving competition in a memo which has been filed on e-Builder.

In addition to our review of the findings submitted to justify the use of the alternative CM/GC approach, we reviewed the Request for Proposals to serve as the CM/GC and the executed contract for the Franklin HS CM/GC project. The following sections describe

some opportunities to improve the RFP language in future solicitations and some suggestions to amend the existing contract when the Guaranteed Maximum Price amendment is executed. As stated earlier in the audit, some of the opportunities for improvement involve more detailed and thorough coordination of the solicitation and contract documents.

RECOMMENDATION 14

To ensure the next RFP for CM/GC services is complete, consistent, and clear, we recommend the following changes:

1. To ensure a clear understanding of when substantial completion is required, establish a specific and consistent date in the RFP. Substantial completion is specified as Spring 2017 in one part of the RFP and March 2017 in another.
2. To ensure that the CM/GC fee is based on the estimated Cost of Work at the time of development of the Guaranteed Maximum Price, the fee definitions in the RFP and contract should be the same. Although the contract defined the fee as "based on the estimated Cost of Work at the time of the development of the GMP," the RFP defined the fee as based on the "% of completed construction work."
3. To provide clear directions to proposal raters, clarify how the preconstruction fee and the CM/GC fee will be used in the assessment of total fee and the rating of the proposed fees.

In addition to the above recommendations that relate to suggested changes to the next RFP for CM/CG services, we also identified a number of opportunities to clarify the language in the existing contract with the CM/GC firm at the time that the Guaranteed Maximum Price amendment is negotiated. These recommendations are presented below.

Procuring subcontractors – The District contract states that subcontracts will be competitively bid by the CM/GC, unless the District gives prior approval for an alternative method. In order to provide the CM/GC more flexibility in selecting subcontractors and addressing the district's MWESB aspirational goals, the district may wish to establish dollar limits for which the contractor can procure subcontracts by either direct appointment

or by competitive quotes. The contract could continue to provide means by which the District could further waive these requirements as warranted.

RECOMMENDATION 15

Consider, in future contracts, or in the GMP amendment for existing contracts, providing more proscriptive guidelines for the CM/GC to be able to procure subcontracts by specific methods other than advertised competitive bid.

Basis of payment for General Conditions work – The contract indicates that the CM/GC will be paid on a lump-sum basis for general conditions work. Such work could include work required to support construction such as clean-up, supervision, and minor work not part of a subcontract. Some of the costs of general conditions work are predictable and easily estimated, and can be agreed to at the time the GMP is established and paid as a lump sum basis. Other elements of general condition work are less predictable, more varied, and less suited to estimation and lump sum payment. To provide for this uncertainty, we believe some general conditions work could be reimbursed on an actual cost basis. (Auditor Note: The term "general conditions" in this discussion refers the basic contracting duties that the general contractor must perform for a construction contract such as supervision, providing a job trailer, general project layout, and site sanitation.)

RECOMMENDATION 16

Redefine the contract to clarify what general conditions work will be paid lump sum and what other general condition work will be reimbursed on an actual cost basis, subject to a maximum allowance within the negotiated GMP.

Allowable mark-up on change order work – As written, articles 6 and 7 of the Contract can be construed as contradictory as to the intent of what should occur in terms of P/OH for additive changes to the GMP based on fixed or unit pricing. Article 6 states that notwithstanding any provision of the General Conditions, the CM/GC fee shall be increased by the fee percentage applied to the increase to the GMP. Article 7 of the Contract describes price adjustments, and limits the CM/GC markup (P/OH) to the

CM/GC's fee increase unless the increase is due to fixed or unit pricing, in which case the General Conditions apply. The General Conditions state that depending on whether or not the CM/GC performs the work, either a markup of 5 percent or 10 percent will be allowed the CM/GC. Contractors of lower tiers are also permitted markups without total limit for all subcontractors combined.

The district informs us that it is the district's intention that the CM/GC's markup for additive changes to the GMP be increased by the fee percentage applied to the increase in the GMP. Using a proscribed markup of 5 percent or 10 percent rather than the CM/GC fee percentage can make a significant monetary difference in the event of substantial additive change orders to the GMP. In addition, it is an industry standard to limit the CM/GC profit and overhead markup to the same percentage as CM/GC fee for additive changes. The contractors' fees for the FHS and RHS projects are approximately 2 percent.

RECOMMENDATION 17

For current contracts in the GMP amendment, and for future contracts, clarify District intent for P/OH to be allowed to the CM/GC for additive changes to the GMP. Consider placing a maximum total percentage limit that can be charged for P/OH for all tiers of subcontractors.

3. Planning and Design

With the exception of the summer Improvement Projects for 2013 and 2014, most planning and design work for the bond program is not yet complete. Planning and design for Franklin and Roosevelt high schools and Faubion PK-8 is in progress. As discussed in the Introduction, the district developed a number of plans and studies to guide the planning and influence the design of the bond program and its projects. Chief among these documents were the Long Range Facility Plan, the Historic Building Assessment, the assessment of ADA deficiencies, and the Seismic Safety Study. In addition, the district initiated a process to establish Education (Facility) Specifications (Ed Specs) to serve as a foundation for master planning and school design, and began updating the district Design Standards and Guidelines to help in designing and constructing PPS capital projects.

Our analysis shows that most of these documents are in place and were used in the planning and design of the initial bond program bond projects. For example, our review of specific contracts for design and construction demonstrated how these design plans impacted planning and design decisions:

- Design work at Alameda School retained skylight openings, historic window openings, selection of roofing materials, and other details and moldings, consistent with historic preservation goals. District staff consultations with the State Historic Preservation Office resulted in a finding that the proposed work at Alameda would not have an adverse effect on the historic wing of the school.
- Plans at Franklin HS call for renovation of the 1915 Main Building, the 1916 West Wing, and the 1924 Auditorium (East) Wing. In addition, there are historic entries to both the south and north ends of the building. Current plans call for maintaining the inherent characteristics of the facades (exterior walls) and fenestration (windows) in the historic wings. While some elements of the interiors of the historic building can be preserved, much of the non-original finish will require replacement. The design team is also planning for seismic upgrading of the historic buildings and improvement of ADA deficiencies.

- According to the approved Master Plan for Franklin HS, a comprehensive sustainability workshop was held to identify goals and strategies that can be integrated into the design process for the school. The district has an aspirational goal that all comprehensive high school modernizations will achieve Leadership in Energy and Environmental Design (LEED) Silver certification. New construction projects (i.e. Faubion PK-8) will achieve LEED Gold certification. The modernization and new construction projects will achieve at least 1.5 percent solar or equivalent installation or upgrade as required by statute.
- Design work and subsequent construction at Alameda School resulted in a number of seismic rehabilitation improvements, including upgraded footings in certain areas, installation of interior and exterior shear walls, installation of roofing seismic membranes, and the connection of roofing infrastructure to walls.
- Roofing construction at Alameda is consistent with current (FAM) design standards, including the 100% SBS (Styrene Butadiene Styrene) standard for low pitch roofing. As per the Design Standards, OSHA compliant roof access and fall protection has been installed in some sections.

Completion of two of the guiding documents was delayed. Specifically, phase two of the HS Ed Specs was not approved by the board until February of 2014, approximately one month after the completion of the Master Plans for the two high schools now in design. Also, the updating of the District Design Standards is not yet complete, although current FAM guidelines have been used by for the design of IP 2013, 2014, and the initial design work for the high schools. The delay in the development of the Ed Specs resulted in an approximate one month delay in the start of the schematic design phase. OSM intends to make up the one lost month by compressing the construction document phase from 8 months to 7 months. While we have not as of March 2014 identified any significant impact on the timely completion of either project, design teams spent additional time and effort resolving several issues related to the changed size and design of the high schools. In addition, due to the absence of the updated Design Standards, design teams may spend additional effort to incorporate updated standards into the designs.

The following discusses the status of these policy guides.

EDUCATIONAL (FACILITY) SPECIFICATIONS

The development of Educational Specifications (Ed Specs) for the design and modernization of school buildings and facilities is an important first step in developing Master Plans and Schematic Designs for school modernization and replacement. The Ed Specs are intended to provide a vision of the desired characteristics of the district's learning environment, aspirational desires for the design of PPS schools, and specifications for the quantity and size of educational and support spaces within schools.

The district undertook the development of Educational Specifications in several phases in the following order – overall vision, high school specifications, and finally middle school, K-8, and K-5 schools. A community-wide exercise helped identify the key planning and design characteristics that all school should have and resulted in the adoption of a Facility Vision Statement and Vision Themes by the school board in September of 2013. Appendix C includes an excerpt from the Ed Spec vision statement and goals. Phase two, the area programs for the comprehensive high schools was competed and adopted in February, 2014 and subsequent lower grade school specifications are planned for completion in the early Spring of 2014.

Although the Ed Specs for comprehensive high schools was intended to be complete concurrent with the start of Master planning for Roosevelt and Franklin modernization projects, completion was delayed for several months in order to discuss and address the following issues:

- The amount of space to be allocated to career preparation and career technical education.
- The manner and degree to which classrooms will be used by teachers and students, and the potential addition of teacher office space.
- The target student capacity and core capacity for individual high schools. Core capacity refers to the larger spaces within the core of the building that serve all students and generally cannot be increased in size if student

enrollment were to increase. These spaces include the media center, the cafeteria, gymnasium and other central services spaces.

- Specific opportunities identified during the education specification and master planning process to either increase or consolidate space in order to ensure the goals for target square footage are in line with available bond funding.

These issues were discussed and addressed in the final HS Ed Specs and by the board of education establishing new targets for student capacity and high school square footage for the high schools being modernized in this bond program.

- As required by Board resolution, the Educational Specifications establish a minimum of 6,000 square feet for career learning and career technical education space for comprehensive high schools. This target may be modified upon further research, potential school board decisions on career education curriculum, and the specific needs of individual schools.
- The Educational Specifications assume that all classrooms will be used 100 percent of the time and teacher preparation will occur in teacher offices. However, the specifications are intended as a guide for design teams and it is expected that the number and size of spaces should be adapted to meet site specific building constraints and program needs.
- While the HS Ed Spec program area assumptions are based on a 1,500 student enrollment, the Board of Education established by a November 2013 resolution, a target capacity of 1,700 students for Franklin and Grant and 1,350 students for Roosevelt, and a core capacity for all three schools of 1,700 students. Appendix A of the Ed Specs provides a number of suggestions for consideration when planning capacities for high schools other than 1,500 students. Capacity targets at FHS and GHS are based on slight increases to current actual enrollment. The capacity target at RHS is based on projecting a significantly higher "capture rate" for the RHS attendance boundary area.
- The board also established common building square footage pricing and square footage goal for FHS and GHS of 245,279 square feet, and a goal of 223,491 square feet for RHS, and increased net funding for the three high school modernizations by $10,000,000 from the board contingency reserves. The original bond square footage was based on approximately 240,000 square feet for FHS, 274,489 square feet for GHS, at $220 per square foot, and 228,535

square feet at $190 per square foot at RHS. The new changes result in parity in square footage pricing and closer to parity on size for the three comprehensive high schools in the bond.

RECOMMENDATION 18

In order to improve the efficiency of the master planning and design efforts of future modernization and replacement projects, we recommend that the district consider the following actions:

1. Hold more timely and complete discussions with internal and external stakeholders on school design topics such as the number, type, and size, of classrooms; classroom utilization rates; career learning and technical education delivery; and core space needs. The completed high school specifications will provide a sound foundation for these discussions but complete Educational Specifications for middle and elementary schools should be final before initiating these discussions with lower grade levels (e.g., Faubion PK-8). Ensure that updates if any to the HS Ed Specs, including target capacity and core size occur well before the start of the master planning process for the remaining comprehensive high schools, which is scheduled to occur later during this eight year bond program.
2. Reconcile student and core planning capacities currently established by the BOE with the different capacities contained in the Long Range Facility Plan and the Educational Specifications for comprehensive high schools. Ensure that all documents are consistent and compatible with one another before beginning the work at GHS and the master planning for the remaining comprehensive high schools.

DISTRICT DESIGN STANDARDS AND GUIDELINES

District Design Standards and Guidelines (Design Standards) are intended to provide detailed guidance for the design and construction of PPS capital projects. The Design Standards specify the requirements for mechanical, electrical, plumbing, finishes, openings, furnishing, and equipment, and other building elements that should be standard in PPS buildings. Used with the Educational Specifications they provide detailed guidance to design teams, architects and contractors, engineers, and others in the course of designing and constructing capital projects at PPS.

We found that while the district has been working for an extended period of time on updating the previous (FAM) Design Standards, final design standards, particularly in regard to new construction, were not complete as of March 2014. The district has worked with a consulting firm to review, revise, and update the standards, and several drafts have been produced. However, significant parts of the final guidelines are awaiting review and approval by the district.

In addition, while the incomplete draft Design Standards were used in the planning and design of the summer 2013 and 2014 improvement projects, and the initial planning for the high schools, the design teams for the two high school modernization projects are waiting to incorporate the new Design Standards into project plans and specifications. Without complete and final standards, ongoing bond projects may miss opportunities to standardize materials and building methods or may pursue design solutions that are not considered best practice by the district. In light of the bond program goal to produce quality and sustainable facilities at the lowest reasonable cost, complete Design Standards would help design teams balance cost with long term functionality.

RECOMMENDATION 19

In order to provide timely and complete guidance to project design teams, OSM and FAM should strive to complete PPS Design Standards and Guidance in time for inclusion in the design for Roosevelt and Franklin high school, Faubion PK-8, and summer Improvement Project 2015.

4. Project and Construction Management

The success of the School Building Improvement Bond program is to a large degree dependent on effective and efficient project management. As discussed in the Introduction, the bond program assigns a project director or project manager (PD/PM) for each bond project. The PD/PM is responsible for initiating, planning, executing, controlling and closing-out each project. To ensure the success of project management, the district and OSM have hired experienced project directors/managers, developed and implemented a number of management systems and processes, and integrated existing district controls, such as finance and procurement systems, into the organizational structure of the bond program. Under the supervision of the Executive Director of OSM, the mission of each bond PD/PM is to ensure that each project in completed on-time, within budget, safely, and at a desired level of quality.

While it is premature to judge the overall performance of project management, the one bond project completed to date (IP 2013) was substantially complete on schedule, within the revised budget established by PPS. Construction accidents were minor and completed work addressed the needs identified in the bond proposal – seismic upgrades, roof replacements, building access improvements, and improved science classrooms. Stakeholders associated with work at individual schools report high satisfaction with summer IP 2013 work.

Our review of policies, procedures, and practices put in place to manage bond projects, and our assessment of their application in a sample of contracts shows that while some practices are in place and working as intended, there are a number of ways that OSM can strengthen project management to ensure future bond projects are managed efficiently and effectively. The sections below identify some of the major project management practices employed by OSM and, where appropriate, suggest ways these can be improved.

STANDARD OPERATING PROCEDURES

As of March 2014, OSM has not developed a manual of Standard Operating Procedures (SOPs) to guide the delivery of projects under the traditional design/bid/build construction strategy or the alternative CM/GC delivery approach. According to OSM, draft SOPs are currently being reviewed by district staff, with the intent of adoption by the end of May or June 2014. SOPs are integral to the overall bond Program Management Plan because they: establish a common and consistent framework for project management, provide standard approaches and metrics to achieve project goals, ensure a means to continually assess and improve program performance, and they form the basis for training and consistent program operation. Although the program prepared draft SOPs in early 2014, these procedures are not complete, were not reviewed by management and PD/PMs, and are not currently used in the management of active projects. The lack of SOPs did not significantly impact the success of the summer 2013 Improvement Project but as the complexity and workload demands of the program increases, standard operating procedures will help program and project directors/managers. PPS project management staff assigned to IP 2013 developed and implemented a number of interim and stopgap SOP-type procedures to ensure project success. In our view, SOPs in several areas would likely lead to greater efficiencies and lower risks in the future. Some of the more significant procedures that are not in place include:

- Project management plan: A key feature of the district Program Management Plan and the draft SOPs is the development of a project management plan for each project. None of the completed or currently active bond projects have a project management plan. The plan was to serve as the "road map" for the project to keep the team focused on the critical goals and activities. Elements of the plan include project overview, budget information, master schedule, risk identification and mitigation, review and reporting requirements, and criteria for success. The intent of the plan is to ensure all team members understand and will cause the work to proceed in a consistent, efficient and effective manner. An important element in ensuring success is the development and implementation of methods and procedures for preventing or minimizing major issues and for addressing such issues if they occur.

- Project safety and security plan: Although called for in the draft SOPs, none of the completed or active projects have developed a project safety plan. The lack of safety plans may be most significant for the summer Improvement Projects given the number of different sites under construction and the variety of contractors performing the work. Safety plans would include identification of potential site and security issues based on planned improvements, an approach to hazardous materials assessment, standard methods for accident and injury reporting, and collaboration with district Risk Management department to clarify and establish insurance requirements. Contractors at each site should also provide a site safety plan to the district prior to initiating construction. Our assessment of the test project for IP 2013 shows a partially completed contractor safety plan was posted on District software but not until the project was over 50 percent complete.
- Quality management: There are several positions in OSM responsible for some level of quality design, control and assurance including the District Design Quality Manager, the PD/PMs and the CMs. In part due to lack of the completed District Design Standards and SOPs, there is a lack of clarity on the details of who is to do what in terms of quality management. As a result, quality management has been left to each project management team, resulting in the potential for inconsistency in approach and application due to different personal approaches on each project. The program and projects would benefit from clear SOPs describing, in detail, quality standards and quality-related roles for staff and consultants.
- Project communications: Given the visible and public nature of the bond program, it is important the each project has an agreed upon method for communicating with internal and external stakeholders and the public. Collaboration with the district's Community Involvement and Public Affairs (CIPA) department has resulted in distribution of public information on the district Website, through flyers and information sheets, and emails and social media. Additional plans for how to communicate with internal stakeholders including building principals and FAM departments would be useful.
- Budget management: Currently OSM has no policy with respect to PD/PM project contingency allocation and management, resulting in inconsistent application across projects. More guidance on accepted approaches for project budgeting and the use of contingencies would benefit PD/PMs and provide more uniform control over project budgets.

- Schedule compliance: Delays in completing various stages in the life-cycle of projects may contribute to increases in project costs and potentially impact baseline completion dates. OSM lacks clear procedures and guidelines on what specific steps will be taken at the program and project levels to monitor, report on, and correct schedule delays.

In finalizing Standard Operating Procedures for the bond program, there may be opportunities to coordinate their development with an existing in-house guide prepared by the Facilities and Asset Management department. This guide entitled the Project Managers Partner is intended to be used by project managers in the FAM when managing deferred maintenance capital projects not associated with the bond program. The guide contains additional information that is not relevant to the bond program but both the bond SOPs and this guide have overlapping and common topics that could be standardized and rationalized with each other.

According to OSM, draft SOPs are currently being reviewed by district staff with the intent to adopt the SOPs by June 2014.

RECOMMENDATION 20

To guide the delivery and management of bond program projects, we recommend that project plans and SOPs be developed and implemented by the end of calendar year 2014, if not sooner. Those SOPs necessary for the successful implementation of IP 2014 be completed and put into use immediately.

PROJECT MANAGEMENT SOFTWARE

The OSM and FAM purchased and implemented a proprietary project management software, e-Builder. E-Builder is a web-based, customizable project management software that provides a wide range of features to help owners manage, control, and report on construction projects. While OSM has not implemented all of the modules that are available through e-Builder, major modules have been developed and used in the bond program including electronic filing of project documents; processes for establishing and

changing project budgets; submitting and approving requests for information, submittals, and change orders; and submitting and approving invoices and expenditures. E-Builder also retains and records support documentation for these processes and is capable of producing a wide range of management reports. The software helps the bond program to control many of the transactions common in the construction process, to retain documents to support decision making, and to report on status at any given time.

Based on our review of e-Builder, we believe it to be a powerful tool for budget management, project documentation, and cost control. As it is further developed and implemented, it can potentially be a powerful and timely tool for project management. While it requires time and effort to input information on various processes, it provides extensive support documentation that produces a wealth of management information and helps with public accountability. Program managers speak highly of e-Builder as a management and documentation tool. However, at the project management level, PD/PMs have a number of concerns about the workload demands of e-Builder as designed by OSM due to the multiple requirements to review and approve various processing steps before an action can be moved forward.

In our view, e-Builder is a valuable tool, for which improvements can be made so that it is more efficient and effective, and better addresses PD/PM and PPS needs. In terms of on-going perceived benefit, e-Builder helps control project budgets and costs by establishing approval controls at various stages and requiring support documentation for decisions. E-Builder provides an electronic record of financial transactions that can be obtained, summarized, and reviewed relatively easily. If consistently used by all staff, e-Builder is a common repository for all project documentation including construction site visits, meeting notes, stakeholder communications, and procurement and selection records.

OSM recognizes the need to continually monitor and improve the efficiency and capabilities of e-Builder. OSM continually reviews and revises e-Builder processes, provides periodic e-Builder training to FAM and OSM staff, and has developed a list of activities to enhance the features of e-Builder. In terms of e-Builder as a documentation

tool, we believe it would be useful if OSM were to develop a more defined indexing and filing protocol for documents in e-Builder. We found that documents are not filed with consistency in e-Builder.

RECOMMENDATION 21

In order to increase the value of e-Builder as a common repository for all project documentation, OSM should establish requirements for filing and indexing all project documents and for encouraging the consistent use of e-Builder by project staff for document storage

In addition, based on our review of how some e-Builder processes were applied in the architectural and construction contracts we reviewed, we believe improvements should be considered in the Request for Information steps and in the Change Order processes discussed below.

Requests for Information (RFI) – It is common during construction for contractors to request information from architect/engineers to interpret design documents or to ask for directions on how to proceed on certain tasks. Some RFIs have no cost impact while others may evolve into a changed design and a corresponding cost that would be addressed in a change order request. The district programming of e-Builder currently requires PD/PMs to acknowledge the RFI before the architect/engineers and contractors can move forward to resolve the request. According to conversations with the IP 2013 PM staff, this RFI acknowledgement step unnecessarily increases daily PM workload.

RECOMMENDATION 22

Depending on individual project team preferences, develop and implement streamlined steps for RFI processing where the PD/PM is copied rather than required to act on certain steps.

Change Order Requests (COR) and Change Orders (CO) – District policy and rules anticipate that construction contracts will require amendments, called Change Orders. The district has authorized staff at different levels of management to authorize and approve Change Orders up to specified dollar amounts. District construction contracts require Change Orders to be authorized and approved before work proceeds.

The district uses a process in e-Builder called Change Order Requests (CORs) to authorize and approve individual or related change order items. For practical purposes, CORs are change orders in terms of providing prior written authorization for construction contract changes.

For one sample contract reviewed for IP 2013, there were 28 separate CORs. Review of documentation provided on e-Builder shows that the PM reviewed all the proposed work and negotiated reasonable and appropriate pricing. According to the PM and the FAM program manager in charge of the IP project, the FAM program manager with a higher level of approval authority than the PM reviewed the CORs and verbally approved them.

The district's programming of e-Builder did not have a process in place for recording authorization and approval at any level higher than the PM, who was limited to a total dollar authority of $10,000 per contract. As a result, approximately 26 of the 28 CORs for the sample project did not have authorized approval prior to the work occurring.

We note that all the CORs were subsequently incorporated into two Change Orders which were executed by authorized PPS staff, albeit after the project was substantially complete.

As a result, the district did not comply with contract language requiring approval of change order instruments before work begins, and assumed additional risk, in allowing work to begin before a signed agreement is in place. The district also did not comply with board policy by allowing staff to exceed delegated authority for obligating the district for change orders.

We believe these compliance problems are largely due to problems with the e-Builder programming and lack of internal procedures rather than staff non-compliance. There was no mechanism in the district's e-Builder process for the FAM Program Manager to approve the CORs, nor for the OSM Executive Director to approve those requiring a higher level of authority. In addition, there were no procedures in place for ensuring appropriate compliance, nor any back-up paper system to provide for appropriate levels of COR authorizations in light of the weaknesses in e-Builder programming.

According to our conversations with both the FAM Program Manager and the PM, the FAM Program Manager was aware of or consulted about most, if not all, CORs, before they were implemented. In our view, had the PM not allowed the change order work to occur until appropriate signatures were in place, given the limitations of the programming and no other alternative systems, project substantial completion may have been delayed and cost may have increased.

At the completion of our audit, the OSM has developed and is testing a revised e-Builder process called Potential Change Order (PCO), which would replace and combine the existing COR and CO processes. If implemented as intended, the PCO will check for and require appropriate signature authority, and forward approval to the next highest level of signature authority if the signer exceeds his/her delegated authority. E-B would again check to ensure that person had not exceeded his/her authority and forward on as appropriate. Ideally, the system will also "renew" the authority of staff with lower levels of authority once "co-signed" by the individual at the higher and authorized level of authority. The PCO would allow for the timely and appropriate approval of change work so that work can begin when approval is granted, and not before, as is now the practice.

RECOMMENDATION 23

To ensure the district complies with contract language and board policy regarding change order approval, the new PCO procedure should be fully tested and found functional before IP 2014 change order work proceeds. OSM should ensure that project staff understand new requirements and comply with district protocols. OSM should also consider developing and implementing a back-up system in the event that the new PCO process does not ensure that changes are approved by the appropriately authorized staff.

To more effectively and efficiently manage change order processing, we have made a separate recommendation (# 7) that PPS consider increasing change order authority for designated PPS staff, and adding a limited level of authority for the PC position.

Once the new system is implemented and fully working, in order to avoid potential confusion, PPS contract documents should be amended to reflect the terminology of the new system.

CONSTRUCTION MANAGER ROLES AND RESPONSIBILITIES

The staffing plan for summer Improvement Projects and the major modernization and replacement projects call for a PD/PM, a PC, and one or more Construction Managers (CMs). The CMs are provided under the Program/Construction Management contract with Heery International. CMs work as a members of the project team. In accordance with the Program Management Plan job description and the Heery proposal and contract, the Construction Manager will provide, as directed by OSM, a broad range of activities to support the project team such as on-site review and oversight of construction progress, constructability reviews, change order review and assistance with negotiation, daily site inspections and field reports, and oversight of the contractor's safety program.

Based on our interviews with OSM staff and the review of one construction project in the summer of 2013, some duties of the Construction Manager were not performed as expected. For example, daily progress reports were not always prepared, and often contained minimal or incomplete information describing the work performed at the site. A document produced by OSM titled a summary of "lessons learned" after completion of the 2013 Improvement Project, stated that "regular site visits, daily logs, photos, and email

conversations providing clear documentation of decision making and agreements are extremely helpful as issues arise such as damaged equipment or systems, insurance claims, and change order disputes".

The initial Heery contract requires CM services to be provided to the summer projects only through August of each year. Consequently, the CM was not available to assist with 2013 project closeout including obtaining warranties, coordination of final inspections, compliance reviews, and obtaining closeout documents. This may have contributed to the late closeout of IP 2013. Final closeout and completion was further delayed due to the heavy workload demands on the Project Manager and Coordinator to begin planning and design coordination for IP 2014. To assist with project closeout, the contract period for the Heery CMs for IP 2014 has been extended to mid October 2014.

In order to clarify the roles and responsibilities of the Construction Manager and other members of the bond team, Heery prepared a draft Responsibility by Participant matrix to guide the 2014 Improvement Project. The matrix identifies a number of activities for planning, procurement, construction, communication, contract administration and closeout, and then assigns lead or support responsibility to various positions involved with the project. The Project Manager, Construction Manager, and the Architect/Engineering team are identified most frequently for a lead or support role. At the completion of the audit work, the Responsibility Matrix was still under review with the plan to refine and incorporate into project team management plan when final.

RECOMMENDATION 24

To ensure the roles and responsibilities of the Project Managers/Directors, Coordinators, and Construction Managers are fully understood, the OSM should complete the Responsibility by Participant Matrix that identifies the specific expectations for each role including tasks, timelines, and report documentation. This recommendation should be implemented in conjunction with recommendation #3.

5. Cost and budget management

The School Building Improvement Bond program has put in place a number of policies and procedures to manage and control cost and budget. In addition, to the centralized accounting, budgeting, and purchasing controls employed by the district, the primary elements of OSM practices are embodied in the e-Builder project management software processes, standardized internal and external reporting, and an organizational structure that daily coordinates with the district's Finance and Accounting departments. We reviewed these control systems and tested a sample of financial transactions for compliance with established requirements.

e-BUILDER PROCESS CONTROLS

Insofar as cost and budget management are concerned and as discussed in the previous section, e-Builder is web-based project management software that can be customized by users to include a number of separate processes for budget approvals and budget changes, commitments and commitment changes, and invoice approvals. (Other processes for change order requests and change orders were discussed in the previous section.) To ensure that OSM practices were aligned with centralized PPS controls, e-Builder was programmed so that various actions must be reviewed and approved by a designated authority before e-Builder will allow various actions to proceed. For example:

- A Project Budget approval is initiated by PD/PMs or other designated District staff to establish an authorized amount that is planned to be spent, reviewed by Accounting and approved by the FAM Director or the OSM Executive Director.
- A Project Budget change is initiated by PD/PMs or other designated District staff to add to or subtract a planned spending item. It must be reviewed and approved by the FAM Director and/or OSM Executive Director before final processing by Accounting.
- Commitment approvals formally authorize spending and are generated by purchase orders, contracts, or work orders . Accounting and district Finance review the commitment for accuracy, verify funding is available, and

establish the commitment in the district financial accounting system (PeopleSoft).The commitment is reviewed and approved by the FAM director, if applicable, and by the OSM Executive Director before Finance executes the commitment.

- Invoice approvals authorize the payment of invoices submitted by vendors and contractors. Multiple parties are involved in receiving the invoice, checking for completeness and accuracy, verifying that funding is available, and the item is bond compensable. Accounting is responsible for recording the receipt of the invoice, Program Managers and Directors ensure the correctness of the invoice, Finance ensures it is compensable under the bond and appropriately applied to a commitment, and FAM and the OSM Executive Directors approve payments when lower level managers have exceed approval amount authority.

The e-Builder processes discussed above provide independent review and approval steps that separate the duties of the initiator, the reviewer, and the approver. Appropriate levels of management and authority must review and approve various steps electronically in e-Builder before budgets are approved or changed, spending commitments are made and revised, and payments are made to contractor and vendors. The processes include some redundancies to ensure amounts are accurate and transactions are allowable, reasonable, and allocated to the appropriate funding source, building site or department, and budget line item. OSM updated and revised several of the processes over the past year as the organization gained experienced with the software to provide more rigorous approvals and controls. OSM provided training and updates to staff to ensure project, accounting, and administrative staff had a common understanding of the applicable processes.

We selected 26 invoices from seven different contractors and architectural/engineering firms for review for the 2013 summer Improvement Project. We reviewed each invoice to determine if the invoice had appropriate e-Builder approvals, contained complete and accurate information, was approved on a timely basis, and provided sufficient support documentation. We found that invoices were approved by authorized personnel and support documentation was provided to verify validity of the payments. Pay applications were notarized and approved appropriately by the A/E firm and the Project Manager and

timely paid. In addition, we found no errors in the computation of services provided and invoiced amounts. While some invoices were paid slowly in the initial months of the program, timeliness increased as OSM developed new procedures to account for multiple sites and funding sources.

OSM initially was challenged with processing payment of invoices from one architectural firm because the firm provided different services for six different school sites and services at each site attributable to different funding sources. The invoices did not clearly indicate how A/E expenditures should be allocated to particular school sites, and OSM had not anticipated how to handle invoices that included work for multiple sites related to multiple different construction contracts. To address this problem, a cover sheet incorporating an excel spreadsheet was developed by the PM, that provided detail on site, funding, and projects so that expenditures could be appropriately applied and allocated.

e-BUILDER AND PEOPLESOFT INCOMPATIBILITY

The Portland Public School district uses the proprietary software system PeopleSoft to provide district-wide accounting, budgeting, and financial reporting, purchasing and contracting, and human resources and payroll support. All authorized fiscal year budgets, contracts, commitments, and expenditures must be reflected in this comprehensive system to ensure accurate and controlled accounting and financial reporting. E-Builder project management software and PeopleSoft are separate systems and do no directly communicate with each other. Transactions in one system are not automatically recorded in the other and manual re-entry is required. In order to ensure that budgets, commitments, and expenditures in the two system match, entries must be made into both for the same transaction. For example, most bond program expenditures such as construction costs originate in e-Builder and must also be recorded in PeopleSoft to ensure the district's financial statement accurately reflect bond activity. Similarly, some district internal expenditures that are shared by the bond program such as telephone and copier expenses originate in PeopleSoft and must be entered into e-Builder to ensure the bond program fully captures and records all of its costs.

To address initial start-up issues and the compatibility problems between PeopleSoft and e-Builder, the OSM program staff and district Finance staff formed a Bond Finance Committee to coordinate efforts and to develop solutions. Among other processes, staff developed a "crosswalk" between the software codes used by e-Builder and the codes used by PeopleSoft so that similar transactions and entries were handled the same in each system. Staff from the bond program and from central accounting communicate frequently and submit documentation to each other to ensure transactions are recorded in both systems. In addition, finance personnel located in the bond program performs a monthly reconciliation between the PeopleSoft records and e-Builder records to determine if the budgets, commitments, and expenditures for the bond program are the same in both systems.

Our discussions with bond program staff and with district Finance staff indicated a common concern with the lack of compatibility between PeopleSoft and e-Builder. They said that the duplicative entry into both systems is inefficient, subject to error, and may slow payments. In addition, there is time spent reconciling the two systems to ensure they match. Each group expressed interest in obtaining compatibility between the systems but was not optimistic that a solution could be developed, tested, and implemented in a timely basis. PeopleSoft is undergoing an update currently that should be completed before integration with e-Builder could be considered. E-Builder would also need to develop new software to communicate with PeopleSoft protocols.

RECOMMENDATION 25

To improve efficiency and reduce duplicative efforts, the district should continue to explore opportunities to upgrade PeopleSoft and e-Builder to establish compatibility between the two systems.

INTERNAL AND EXTERNAL COST AND BUDGET REPORTING

In order to improve management decisions and strengthen program transparency, the bond program produces management information on program and project costs and the status of bond budgets. The types of information produced by the program to monitor and review costs and budgets include the following:

- Monthly Project Updates – Each month, Program Managers and Directors submit data and narrative on the status of individual projects. Financial information includes the project budget, encumbered amounts, the estimate to complete, amounts over/under budget, and the amount expended to date. This, and other information, is reviewed during meetings with bond program management and serves as the basis for the Monthly Program Update
- OSM Operations Summary – Each month the Operations Manager prepares a program update reporting on Balanced Scored ratings, the status of project budgets, project allocations and spending, and other operational information on the bond program. This update is distributed to all bond project and program for use at the monthly bond program meeting.
- Monthly Financial Update – Monthly meeting between OSM, FAM, and the Finance office discusses information on program funding, project budgets, commitments, and expenditures. The meeting reviews the Operations Summary and a reconciliation of e-Builder financial information with PeopleSoft financial records.
- Board of Education and Bond Accountability Reports – This reports provide information on Balanced Scorecard ratings, project budget and schedule status, detailed project management cost reports, and other information on the status of the bond program and its projects. Reports are reviewed at public meetings of the BOE and BAC.

Based on our review of these reports, we believe that they provide timely and useful information to help monitor, manage, and implement the bond program. These reports have sufficient internal and external distribution to ensure that current bond program costs and budgets can be evaluated and used as working tools in program and project management.

DISTRICT CENTRAL CONTROLS AND BLENDED TEAM STAFFING

The integration of district central office staff with bond program staff has established a stronger control environment in the bond program. The Accounting Specialist from Finance assigned to OSM, brings expertise in district level accounting, budgeting, and financial reporting, and offers independent review over financial transactions to ensure they comply with district policies and procedures. The position reports to the district's Director of Accounting but works daily, on-site with members of the bond program. Similarly, the Senior Contract Analyst from the district's Purchasing and Contracting department, assigned to bond work, is responsible for formal procurements of architecture, engineering, public improvement and related services for bond capital contracts. The position reports to the Director of Purchasing and Contracting and ensures that formal bond program procurements and related contracts comply with state statutes, and district policies, rules, and procedures

6. Public Engagement and Communications

The district has developed and implemented a variety of methods and processes to engage and communicate with the public about the school bond program in general, and specific improvement projects within the bond. To guide this effort, OSM and the department of Community Involvement and Public Affairs (CIPA) developed a bond communication plan to accomplish the following objectives:

- Keep the community updated of the status of school improvement projects at each step of development
- Build community confidence in PPS ability to execute a major capital initiative
- Keep the community informed about alignment of spending to priorities and budgets and highlight community oversight
- Build strong community-ownership of the bond program
- Inform the community about how the bond supports improvement in delivering education

In addition to the activities established by the bond communication plan, the district implemented an expanded community involvement process involving Design Advisory Groups (DAG) at three of the four modernization and replacement projects that are part of the bond – Roosevelt HS, Franklin HS, and Faubion PK-8. The district planned for, and conducted additional community engagement and communication, through open houses, design workshops (charettes), and other public forums and interactive meetings. A similar process of community engagement will occur when the GHS project goes into development.

While it is premature to fully evaluate the success of the district's bond program public engagement and communication efforts, we analyzed the completeness and adequacy of the bond communication plan, the degree to which planned engagement and communications strategies were put in place, and identified potential opportunities to strengthen existing approaches.

BOND PROGRAM COMMUNICATION PLAN

In the spring of 2013, CIPA working with OSM developed a draft communication plan that identified the goal, objectives, strategies, and tactics for communicating and involving the community in the bond program. The plan identified the priority audiences for the communication, and specific methods for reaching each of these audiences. In brief, the priority audiences of the plan were students and families, principals and staff, instructional leaders and employee representatives, residents in neighborhoods with schools receiving upgrades, business and community leaders, and communities of color. These audiences were to be reached in a number of ways including social media, web-sites, school newsletters and list servers, staff meetings and emails, local media coverage, direct mailing, neighborhood meetings, editorial and opinion articles, and community partners.

The draft plan developed a calendar and timeline for delivery of information for engagement events from January 2013 through December 2013. CIPA also developed immediate, near-term and long-term priorities for the targeted period of August 2013 to December 2013, such as an updated website, development of school newsletters, and meetings with key stakeholders.

Our review of the elements and contents of the draft communication plan show that it contains many of the essential features for meaningful public participation. Specifically, the plan sets goals for what the plan is to achieve and then establishes various levels of participation that are intended to inform, consult, involve, and collaborate with the community. The plan also clearly identifies the range of stakeholders that are involved in the bond program and specifically lists strategies for engaging them.

Based on our review, we believe the plan could be more complete in a few areas. First, it is a draft document that has not been updated and finalized since its creation in the spring of 2013. CIPA staff indicated that an updated plan is in progress to address lessons learned in the first year of the program but as of the end of our audit period an updated plan was not complete. While the CIPA staff have produced engagement plans for Roosevelt, Franklin, and the 2013 and 2104 summer improvement projects, these plans are not

complete and do not clearly identify which strategies will be delivered, and when they will be delivered over the year. Finally, neither the comprehensive plan nor the specific project communication plans clearly discuss the commitment the district is making to stakeholders to inform, listen or acknowledge concerns, or show how their input will influence decisions. Specifically, according to district public engagement policy and best practices for public engagement, agencies should explain to the public the nature and scope of their participation and the type and level or commitment the district is making in response to the public engagement.

RECOMMENDATION 26

CIPA with the assistance of OSM should update and revise the bond communication plan to address lessons learned in the first year of the program and to clearly identify which strategies will be employed and when they will be delivered throughout the entire year. In addition, the CIPA and OSM should make clear to the community how input will be considered and how decisions will be influenced by public engagement.

PUBLIC ENGAGEMENT AND COMMUNICATION STRATEGIES

Our analysis shows that bond program public engagement and communication has been extensive. A variety of methods have been used to inform, consult, and involve stakeholders in the bond program and projects. Although we did not review all of the various methods employed to pursue public participation and engagement, the following are some of the most frequent and consistently used efforts:

- Provided information on summer projects to teachers and parents at back-to-school nights supplemented by flyers, fact-sheets, posters, and email announcements
- Held open-houses and multiple design workshops at Franklin and Roosevelt high schools, and Faubion PK8
- Created an extensive bond program website with information on bond project status, opportunities for involvement, invitations to public meetings and workshops, links to completed master plans, and contact information

- Built relationships with stakeholders by attending staff meetings, neighborhood and community association meetings, and including bond project information in school newsletters and district-wide email updates
- Prepared and released media news releases on project events and status to gain earned media recognition in news articles and editorials
- Used social media to inform and involve stakeholders of events and to solicit involvement
- Made presentations business, neighborhood, and parent groups
- Prepared descriptive signage, flyers, and posters for each project, in various languages ,which might be helpful to the different primary language speakers within each boundary area.
- Held one-on-one meetings with principals and vice principals to discuss projects and learn about project concerns and need for public information
- Invited parents and the community to site tours of schools with planned upgrades and modernization

In order to determine if these activities are having their intended effect, it would be helpful to evaluate stakeholder knowledge about the bond, satisfaction with opportunities for input and collaboration with the district, and the degree to which the public has confidence in the fiscal stewardship of the district. While the draft communication plan indicated that these outcomes would be measured, the district to date has not conducted verbal or written surveys, online surveys, or polling, to obtain this feedback from stakeholders. Research done on website and social media might also offer insights on the number of people who read website posts related to the bond program, and the frequency or extent of use of social media related to bond activities.

Based on initial conversations with OSM and CIPA staff, there may be some need to confirm or clarify the roles of the Project Directors, Managers, and Coordinators, and the roles of CIPA staff in conducting and leading public engagement. While the draft communication plan designated lead and support roles for conducting various communication and engagement strategies, it would be valuable to learn if these roles are

working as intended and if the parties are satisfied with the level of coordination and responsibility.

RECOMMENDATION 27

In order to improve public engagement with the bond program and its projects, OSM and CIPA should:

1. Evaluate the impact to date of public engagement activities on stakeholder knowledge of the program, satisfaction with opportunities for input and feedback, and confidence in fiscal stewardship of the district.
2. Assess the effectiveness of staff roles to lead and support public engagement, in order to identify ways to improve coordination and delivery.

DESIGN ADVISORY GROUPS

A central feature of the major modernization and replacement projects was the formation of Design Advisory Groups (DAGs). Each of the three major projects now in planning or design formed a DAG composed of students, teachers, parents, neighbors, community and business leaders, and other interested parties from the school boundary area. The DAG met periodically during the planning and design phases to ensure site-specific program needs were addressed and incorporated into each project. DAG meetings are public, and members are expected to serve for a minimum of 12 months. In accordance with the charter established for each DAG, members:

- Advise project management design team on characteristics unique to the school
- Help synthesize community-wide input
- Assist with community tours, public design events, public conversations, and ground breaking
- Work together to provide input into planning and design, and learn about renovation and construction projects

Our review indicates the project DAGs have met frequently and consistently from June 2013 through February 2014. The Franklin DAG met 9 times, the Roosevelt DAG 12 times, and Faubion DAG 6 times. Our review of meeting notes indicates that the DAG members and project management staff discussed a wide variety of site specific issues including building configuration and proposed use, square footage, educational specifications, neighborhood impacts, instructional space, parking, athletic and performing arts facilities, historic features, and other issues of concern to the group. The DAG group also were briefed on project budgets and schedules and project scope, and participated in presentations from the architectural firms responsible for project designs and in discussions leading to the Master Plan for Roosevelt and Franklin high schools. Overall, it appears that DAG participation was adequate. However, some meetings had fewer than half of the DAG members present.

The DAGs are important elements in the success of public engagement. It is important to ensure that DAG stakeholders believe that the design and construction of their respective projects address their concerns and needs. To that end, OSM will be issuing a survey to all DAG members to rate the master planning and project design phases to determine if the DAG members believe that they were adequately informed of the project scope and schedule, and that the project is consistent with community needs. In addition, DAG members will assess how well OSM and CIPA provided adequate opportunity for feedback and response to comments. The district should establish a standard for sufficient response and then ensure that there is sufficient response from DAG members to provide a representative opinion about stakeholder understanding and involvement in the bond program.

RECOMMENDATIONS

In order to help strengthen the management and improve the performance of the School Building Improvement Bond program, we recommend that the district take the following actions. For a more complete description of the condition leading to the recommendation see page number referenced after each recommendation.

PROGRAM MANAGEMENT

RECOMMENDATION 1 (p. 30)

To ensure the program has a solid foundation to guide the implementation of the program over the next several years, OSM should update the Program Management Plan and include missing documents.

RECOMMENDATION 2 (p. 35)

Evaluate the current project scheduling process to determine if the needs of the project are being met. Consider alternatives for preparing and updating project schedules including contracting with an outside provider, preparation by project managers and directors, or a combination of efforts.

RECOMMENDATION 3 (p. 37)

The OSM Executive Director should develop an annual work plan for Heery Program and Construction Management assistance consistent with the existing contract. The work plan should identify work priorities for the year and define specific tasks and deliverables that will be accomplished, dates for completion, performance expectations, and establish an objective methodology for assessing the consultant's performance and success in providing support to OSM/FAM and staff at the program and project management levels.

RECOMMENDATION 4 (p. 40)

To improve the rigor and completeness of the Balanced Scorecard reporting tool, OSM should consider making the following improvements:

1. More clearly define the budget perspective performance measures and targets. To provide a more transparent basis for budget perspective scoring develop a spreadsheet that explains the source of the data and that compares the actual amounts to the actual targeted amounts.

2. Report more accurately on the schedule perspective by ensuring the color coded rating matches the actual schedule status against the baseline schedule.

3. Improve the reliability and relevance of stakeholder perspective ratings by encouraging greater and more complete stakeholder participation in surveys. OSM should consider implementing electronic, on-line survey tools to simplify survey administration and increase response rates.

4. Improve the usefulness and reliability of the equity perspective reporting by working with the non-profit registry that maintains information on career opportunities to include more complete information on registered companies.

PURCHASING AND CONTRACTING

RECOMMENDATION 5 (p. 42)

In order to better match the AG's Model Public Contracts Rules and to correct a language error, the Purchasing and Contracting department should modify the following sections of the PPS Purchasing and Contracting Manual.

1. PPS-47-0270(3) – Eliminate the requirement that intermediate solicitations over $75,000 be "written".

2. PPS-48-0110(4) – Correct the definition of engineer to indicate that an engineer practices "engineering" not "land surveying".

3. PPS-48-0130(1) – Permit the use of pricing as a selection criterion in selecting qualified architectural/engineering and related services when the cost of the services do not exceed $100,000.

4. PPS-47-0270(1) – Raise the lower limit for intermediate procurements from $5000 to $10,000. (This recommendation was implemented on March 31, 2014.)

5. PPS-047-0265(2) – Increase the limit on amendments for small procurements to $12,000 or $12,500. (This recommendation was implemented on March 31, 2014.)

RECOMMENDATION 6 (p. 43)
Consider adopting the Attorney General's Model Contracting Rules while retaining separate rules for selection and procurement of contracts for personal services.

RECOMMENDATION 7 (p. 44)
The district should consider increasing the change order authority for various positions currently identified in PPS 8.50.105 Administrative Directive.

RECOMMENDATION 8 (p. 46)
ITB language should indicate that unit prices will be used as stated on the bid submittal or, at the sole discretion of the District, will be negotiated at a fair and reasonable unit price as change orders are requested.

RECOMMENDATION 9 (p. 46)
ITB language should indicate that the lowest responsible bid will be based upon the base bid and alternatives selected at the time of award. Procedures discussed with OSM could be put in place to ensure that the selection of alternates would be based on price, value, and need, and not used to effect the selection of one contractor over another.

RECOMMENDATION 10 (p. 47)
Revise the General Conditions language to ensure that it specifies a maximum allowable profit and overhead for negotiated Change Order pricing. (As of the date of

the final draft of this audit report, OSM informs us that OSM and Purchasing are working to address this recommendation.)

RECOMMENDATION 11 (p. 48)

For formal selection processes using a Request for Proposal procedure, the district should consider using a ranking methodology that scores firms in order of preference as opposed to pure point totals from individual rater's point totals. In addition, provide guidelines on how to score specific categories to ensure greater consistency in scoring individual categories.

RECOMMENDATION 12 (p. 48)

In addition to providing raters of proposals with guidelines on how to score specific categories of information, the district should also provide instructions on how raters should use reference information in their scoring of proposals. The changes should be incorporated into written Purchasing SOPs.

RECOMMENDATION 13 (p. 49)

To help control the cost of builders risk insurance, the District should consider increasing the share of deductible, per occurrence, that contractors must pay in the event of a builders risk insurance claim.

RECOMMENDATION 14 (p. 52)

To ensure the next RFP for CM/GC services is complete, consistent, and clear, we recommend the following changes:

1. To ensure a clear understanding of when substantial completion is required, establish a specific and consistent date in the RFP. Substantial completion is specified as Spring 2017 in one part of the RFP and March 2017 in another.
2. To ensure that the CM/GC fee is based on the estimated Cost of Work at the time of development of the Guaranteed Maximum Price, the fee definitions in the RFP and contract should be the same. Although the contract defined the fee as "based on the estimated Cost of Work at the time of the development of the

GMP," the RFP defined the fee as based on the "% of completed construction work."

3. To provide clear directions to proposal raters, clarify how the preconstruction fee and the CM/GC fee will be used in the assessment of total fee and the rating of the proposed fees.

RECOMMENDATION 15 (p. 53)
Consider, in future contracts, or in the GMP amendment for existing contracts, providing more proscriptive guidelines for the CM/GC to be able to procure subcontracts by specific methods other than advertised competitive bid.

RECOMMENDATION 16 (p. 53)
Redefine the contract to clarify what general conditions work will be paid lump sum and what other general condition work will be reimbursed on an actual cost basis, subject to a maximum allowance within the negotiated GMP.

RECOMMENDATION 17 (p. 54)
For current contracts in the GMP amendment, and for future contracts, clarify District intent for P/OH to be allowed to the CM/GC for additive changes to the GMP. Consider placing a maximum total percentage limit that can be charged for P/OH for all tiers of subcontractors.

PLANNING AND DESIGN

RECOMMENDATION 18 (p. 59)
In order to improve the efficiency of the master planning and design efforts of future modernization and replacement projects, we recommend that the district consider the following actions:

1. Hold more timely and complete discussions with internal and external stakeholders on school design topics such as the number, type, and size, of classrooms; classroom utilization rates; career learning and technical education delivery, and core space needs. The completed high school specifications will

provide a sound foundation for these discussions but complete educational specifications for middle and elementary schools should be final before initiating these discussions with lower grade levels (e.g., Faubion PK-8). Ensure that updates if any to the HS Ed Specs, including target capacity and core size occur well before the start of the master planning process for the remaining comprehensive high schools, which is scheduled to occur later during this eight year bond program.

2. Reconcile student and core planning capacities currently established by the BOE with the different capacities contained in the Long Range Facility Plan and the Educational Specifications for comprehensive high schools. Ensure that all documents are consistent and compatible with one another before beginning the work at GHS and the master planning for the remaining comprehensive high schools.

RECOMMENDATION 19 (p. 60)

In order to provide timely and complete guidance to project design teams, OSM and FAM should strive to complete PPS Design Standards and Guidance in time for inclusion in the design for Roosevelt and Franklin high school, Faubion PK-8, and summer Improvement Project 2015.

PROJECT AND CONSTRUCTION MANAGEMENT

RECOMMENDATION 20 (p. 64)

To guide the delivery and management of bond program projects, we recommend that project plans and SOPs be developed and implemented by the end of calendar year 2014, if not sooner. Those SOPs necessary for the successful implementation of IP 2014 be completed and put into use immediately.

RECOMMENDATION 21 (p. 66)

In order to increase the value of e-Builder as a common repository for all project documentation, OSM should establish requirements for filing and indexing all project

documents and for encouraging the consistent use of e-Builder by project staff for document storage.

RECOMMENDATION 22 (p. 66)
Depending on individual project team preferences, develop and implement streamlined steps for RFI processing where the PD/PM is copied rather than required to act on certain steps.

RECOMMENDATION 23 (p. 69)
To ensure the district complies with contract language and board policy regarding change order approval, the new PCO procedure should be fully tested and found functional before IP 2014 change order work proceeds. OSM should ensure that project staff understand new requirements and comply with e-Builder protocols. OSM should also consider developing and implementing a back-up system in the event that the new PCO process does not ensure that changes are approved by the appropriately authorized staff, and lower level authority is "renewed" before change order work proceeds.

To more effectively and efficiently manage change order processing, we have made a separate recommendation (# 7) that PPS consider increasing change order authority for designated PPS staff, and adding a limited level of authority for the PC position.

Once the new system is implemented and fully working, in order to avoid potential confusion, PPS contract documents should be amended to reflect the terminology of the new system.

RECOMMENDATION 24 (p. 70)
To ensure the roles and responsibilities of the Project Directors/Managers, Coordinators, and Construction Managers are fully understood, the OSM should complete the Responsibility by Participant Matrix that identifies the specific expectations for each role including tasks, timelines, and report documentation. This recommendation should be implemented in conjunction with recommendation #3.

COST AND BUDGET MANAGEMENT

RECOMMENDATION 25 (p. 74)
To improve efficiency and reduce duplicative efforts, the district should continue to explore opportunities to upgrade PeopleSoft and e-Builder to establish compatibility between the two systems.

PUBLIC ENGAGEMENT AND COMMUNICATIONS

RECOMMENDATION 26 (p. 79)
CIPA with the assistance of OSM should update and revise the bond communication plan to address lessons learned in the first year of the program and to clearly identify which strategies will be employed and when they will be delivered throughout the entire year. In addition, the CIPA and OSM should make clear to the community how input will be considered and how decisions will be influenced by public engagement.

RECOMMENDATION 27 (p. 81)
In order to improve public engagement with the bond program and its projects, OSM and CIPA should:

1. Evaluate the impact to date of public engagement activities on stakeholder knowledge of the program, satisfaction with opportunities for input and feedback, and confidence in fiscal stewardship of the district.
2. Assess the effectiveness of staff roles to lead and support public engagement, in order to identify ways to improve coordination and delivery.

MANAGEMENT RESPONSE

SCHOOL BUILDING IMPROVEMENT BOND

PORTLAND PUBLIC SCHOOLS
Office of School Modernization
501 North Dixon Street • Portland, OR 97227

June 3, 2014

Hirsh and Associates
PO Box 5575
Eugene, Oregon 97405

Dear Mr. Hirsh & Mr. Tracy:

Thank you for your thorough review of Portland Public Schools' 2012 School Improvement Bond Program. We are always looking for opportunities to improve work processes and recognize that we are accountable and responsible to produce quality work, on time, on budget and complying with procurement policies.

I have reviewed the draft version of the Performance Audit and appreciate the breadth and depth of your work. Your recommendations will assist us in managing the eight year program. Many of your audit recommendations dovetail nicely with work underway; you have also suggested some new actions we can take.

Based on our review of the draft version of Performance Audit #1 dated June 2014 we have developed responses to each of your 27 recommendations. Three of these are already completed. I expect 22 of these will have a goal of implementation by December 31, 2014. Our intent is to provide an update in January 2015. This will support your work during Audit#2.

Each response contains one of the following statements:

- Concur - Goal is to implement recommendation by December 31, 2014
- Concur with Comment - Goal is to implement recommendation by December 31, 2014 with qualifying comments
- Nonconcur - Recommendation may not be implemented with comments to explain
- Completed – Recommendation already implemented

The following table presents a tabulated summary of the PPS's responses.

Audit Recommendation	Topic	Dept	Response
#1	Program Management	OSM	Concur with comment
#2	Program Management	OSM	Concur
#3	Program Management	OSM	Nonconcur
#4	Program Management	OSM	Nonconcur
#5	Purchasing & Contracting	P&C	Concur with comment
#6	Purchasing & Contracting	P&C	Completed
#7	Purchasing & Contracting	OSM /P&C	Concur with comment
#8	Purchasing & Contracting	P&C	Concur
#9	Purchasing & Contracting	P&C	Concur
#10	Purchasing & Contracting	P&C	Concur with comment
#11	Purchasing & Contracting	P&C	Concur with comment
#12	Purchasing & Contracting	P&C	Concur
#13	Purchasing & Contracting	P&C	Concur with comment
#14	Purchasing & Contracting	P&C	Concur
#15	Purchasing & Contracting	Risk/OSM	Concur
#16	Purchasing & Contracting	OSM	Concur
#17	Purchasing & Contracting	OSM /P&C	Concur

Audit Recommendation	Topic	Dept	Response
#18	Planning & Design	P&C	Concur
#19	Planning & Design	P&C	Completed
#20	Project & Construction Management	P&C	Concur
#21	Project & Construction Management	P&C	Concur
#22	Project & Construction Management	OSM	Concur with comment
#23	Project & Construction Management	OSM	Concur with comment
#24	Project & Construction Management	OSM	Concur
#25	Cost & Budget Management	OSM	Completed
#26	Public Engagement & Communications	CIPA/OSM	Concur
#27	Public Engagement & Communications	CIPA/OSM	Concur

Attached is our written response to your findings and recommendations. Please contact me if you have any questions or comments. Thanks again for the hard work and time spent with our Team and your efforts to identify areas for improvement.

Sincerely,

Carole Smith

Carole Smith, Superintendent
Portland Public Schools

Attachment

PROGRAM MANAGEMENT

RECOMMENDATION 1 (p. 30)

To ensure the program has a solid foundation to guide the implementation of the program over the next several years, OSM should update the Program Management Plan and include missing documents.

STAFF RESPONSE: Concur with Comment

The current version of the PMP is the initial posted version for implementation. After months of staffing and meetings to discuss the content and comments, the October 16, 2013 version of the PMP went *"live"* on the shared X drive on the 17th of October, 2013 at 09:14 AM. An email to the Bond Blended Team announcing the posting of the PMP was sent on Thu 10/17/2013 10:10 AM with the subject *"Program Management Plan (PMP) Has Been Posted to the X: Drive"*. When posted for implementation, this PDF version of the PMP contained a copy of the 2012 Long Range Facilities Plan, 2009 Historic Building Assessment, and the Capital Construction Estimating Model. The High School Educational Specifications were approved by the Board of Education on February 3, 2014 and will be an appendix item when the next version of the PMP is posted.

RECOMMENDATION 2 (p. 35)

Evaluate the current project scheduling process to determine if the needs of the program and project are being met. Consider alternatives for preparing and updating project schedules including contracting with an outside provider, preparation by project managers and directors, or a combination of efforts.

STAFF RESPONSE: Concur

RECOMMENDATION 3 (p. 38)

The OSM Executive Director should develop an annual work plan for Heery Program and Construction Management assistance consistent with the existing contract. The

work plan should identify work priorities for the year and define specific tasks and deliverables that will be accomplished, dates for completion, performance expectations, and establish an objective methodology for assessing the consultant's performance and success in providing support to OSM/FAM and staff at the program and project management levels.

STAFF RESPONSE: Nonconcur

The Executive Director has reviewed this recommendation and has determined that Heery has been providing the Program and Construction Management assistance in accordance with the PPS/Heery agreement (ENG59584) and that the program will continue to be executed without an amendment for an annual work plan. OSM/FAM program and project management staff has been provided opportunities to report on their experiences and have done so.

RECOMMENDATION 4 (p. 40)

To improve the rigor and completeness of the Balanced Scorecard reporting tool, OSM should consider making the following improvements:

1. More clearly define the budget perspective performance measures and targets. To provide a more transparent basis for budget perspective scoring develop a spreadsheet that explains the source of the data and that compares the actual amounts to the actual targeted amounts.
2. Report more accurately on the schedule perspective by ensuring the color coded rating matches the actual schedule status against the baseline schedule.
3. Improve the reliability and relevance of stakeholder perspective ratings by encouraging greater and more complete stakeholder participation in surveys. OSM should consider implementing electronic, on-line survey tools to simplify survey administration and increase response rates.
4. Improve the usefulness and reliability of the equity perspective reporting by working with the non-profit registry that maintains information on career opportunities to include more complete information on registered

companies.

STAFF RESPONSE: Nonconcur

Staff does plan to implement recommendations 4.1 and 4.2 by the end of this year but does not concur with recommendations 4.3 and 4.4.

Maximum stakeholder feedback is the goal of OSM for all phases of all projects. OSM utilizes a feedback survey system implemented in other organizations and school districts. The current system is designed to obtain feedback without burdening the stakeholders with process and paperwork. Developing and implementing an on-line survey tool would likely be viewed as being onerous by stakeholders and decrease participation. OSM will continue to encourage feedback via in person conversations, phone calls and electronic communication.

To reflect the expectations of the Board of Education, the equity perspective reporting metrics regarding career learning opportunities has recently been modified to more accurately reflect the overall student engagement taking place.

PURCHASING AND CONTRACTING

RECOMMENDATION 5 (p. 42)

In order to better match the AG's Model Public Contracts Rules and to correct a language error, the Purchasing and Contracting department should modify the following sections of the PPS Purchasing and Contracting Manual:

1. PPS-47-0270(3) – Eliminate the requirement that intermediate solicitations over $75,000 be "written."

2. PPS-48-0110(4) – Correct the definition of engineer to indicate than an engineer practices "engineering" not "land surveying"

3. PPS-48-0130(1) – Permit the use of pricing as a selection criterion in selecting qualified architectural/engineering and related services when the cost of the services do not exceed $100,000.

4. PPS-47-0270(1) – Raise the lower limit for intermediate procurements from $5000 to $10,000. (This recommendation was implemented 3/31/14)

5. PPS-47-0265(2) – Increase the limit on amendments for small procurements to $12,000 or $12,500. (This recommendation was implemented 3/31/14)

STAFF RESPONSE: Concur with Comment

Purchasing staff will review recommendation 5(1) with legal counsel and, unless counsel advises otherwise, will implement with the next Purchasing and Contracting Rules update, after the AG adopts new Model Public Rules for 2014. Recommendations 5(2) and 5(3) will be implemented with the next Rules update.

RECOMMENDATION 6 (p. 43)

Consider adopting the Attorney General's Model Public Rules while retaining separate rules for selection and procurement of contracts for personal services.

STAFF RESPONSE: Completed

Purchasing staff will review this recommendation with legal counsel when the AG's 2014 model rules are released. We will retain our own rules if, after review of each instance where our rules differ from the model rules, it appears that the benefits gained from tailoring our rules to District needs and priorities outweigh the benefits of adopting the AG's model rules.

RECOMMENDATION 7 (p. 44)

The district should consider increasing the change order authority for various positions currently identified in PPS 8.50.105 Administrative Directive.

STAFF RESPONSE: Concur with Comment

Purchasing staff will consider the suggested change order limits and will confer with Office of School Modernization staff, Facilities and Asset Management staff, and legal counsel before recommending an increase to change order authority. The Delegation of Authority Administrative Directive applies to all District change orders, not just change orders on Bond projects. Any recommended changes to the AD must be

reviewed and approved by the Superintendent.

RECOMMENDATION 8 (p. 46)

ITB language should indicate that unit prices will be used as stated on the bid submittal or, at the sole discretion of the District, will be negotiated at a fair and reasonable unit price as change orders are requested.

STAFF RESPONSE: Concur

RECOMMENDATION 9 (p. 46)

ITB language should indicate that the lowest responsible bid will be based upon the base bid and alternatives selected at the time of award. Procedures discussed with OSM could be put in place to ensure that the selection of alternates would be based on price, value, and need, and not used to effect the selection of one contractor over another.

STAFF RESPONSE: Concur

RECOMMENDATION 10 (p. 47)

Revise the General Conditions language to ensure that it specifies a maximum allowable profit and overhead for negotiated Change Order pricing. As of the date of this audit report, OSM informs us that OSM and Purchasing are working to address this recommendation.

STAFF RESPONSE: Concur with Comment

Purchasing staff updated the General Conditions to address this recommendation in May 2014. The General Conditions now provide, at paragraph 6(1) (3):

> Change Pricing. In the absence of applicable unit prices or other agreement, the changed work will be priced in accordance with the following provisions:
>
> i. In no case shall the sum of the individual markups applied to a General Contractor's Modification exceed fifteen percent (15%), regardless of the number of Subcontractor tiers involved in performing the Work.

ii. The total combined mark-up for a Subcontractor and his lower-tier Subcontractor shall not exceed ten percent (10%). Costs of tax and insurance shall not be marked up.

iii. For work perform by a subcontractor, the subcontractor will receive 10% markup for direct costs. The General Contractor shall receive a five percent (5%) of the subcontractor's direct costs for processing.

iv. For self-performed work by the General Contractor, the markup shall equal fifteen percent (15%) of the direct cost as defined herein.

v. Bonding may be increased a maximum of one percent (1%) provided the Contractor demonstrates to the District a requirement to increase bonding.

vi. If the net value of a change results in a credit from the Contractor or subcontractor, the credit shall be the actual net cost, plus five percent (5%) for overhead and profit. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase or decrease, if any, with respect to the change.

RECOMMENDATION 11 (p. 48)

For formal selection processes using a Request for Proposal procedure, the district should consider using a ranking methodology that scores firms in order of preference as opposed to pure point totals from individual rater's point totals. In addition, provide guidelines on how to score specific categories to ensure greater consistency in scoring individual categories.

STAFF RESPONSE: Concur with Comment

Purchasing staff modified the Division 48 RFP template (section 4.2.5) to incorporate a ranking methodology in May 2014. The ranking methodology in the Division 48 RFP template is identical to that in the CMGC RFP template:

4.2.5 Final Scoring and Ranking of Proposals

The highest-ranked proposal will be determined as follows:

a) Each evaluator will assign a number to each proposal based on

the total score he or she awarded each proposal (as described in 4.2.1 through 4.2.4).

b) The proposal to which the evaluator awarded most points will receive an Evaluator Final Score of 1. The proposal to which the evaluator awarded the second most points will receive an Evaluator Final Score of 2, and so forth. The proposal the evaluator scored lowest (through the process described in 4.2.1 through 4.2.4) would receive the highest Evaluator Final Score.

c) The District will then sum the Evaluator Final Scores for each proposal and rank the proposals. The proposal with the lowest total final score (the sum of all Evaluator Final Scores) will be ranked highest. The proposal with the second lowest final score will be ranked second highest, and so on. The proposal with the highest Final Score will be ranked last.

Purchasing staff will consider further modification to the Division 48 RFP template to provide more guidance on how to score specific categories.

RECOMMENDATION 12 (p. 48)

In addition to providing raters of proposals with guidelines on how to score specific categories of information, the district should also provide instructions on how raters should use reference information in their scoring of proposals. The changes should be incorporated into written Purchasing SOPs.

STAFF RESPONSE: Concur.

RECOMMENDATION 13 (p. 49)

To help control the cost of builders risk insurance, the District should consider increasing the share of deductible, per occurrence, that contractors must pay in the event of a builders risk insurance claim.

STAFF RESPONSE: Concur with Comment

The District's insurance exhibit (Exhibit B) for Large Construction contracts (i.e.,

construction contracts over $100,000) was revised in May 2014. The new language relating to builders risk insurance indicates that the contractor will be responsible for the first $10,000 of the deductible, per occurrence. This change reflects a $5,000 increase in the contractor's share of deductible.

RECOMMENDATION 14 (p. 52)

To ensure the next RFP for CM/GC services is complete, consistent, and clear, we recommend the following changes:

1. To ensure clear understanding of when substantial completion is required, establish a specific and consistent date in the RFP. Substantial completion is specified as Spring 2017 in one part of the RFP and March 2017 in another.
2. To ensure that the CM/GC fee is based on the estimated Cost of Work at the time of development of the Guaranteed Maximum Price, the fee definitions in the RFP and contract should be the same. Although the contract defined the fee as "based on the estimated Cost of Work at the time of the development of the GMP," the RFP defined the fee as based on the "% of completed construction work."
3. To provide clear directions to proposal raters, clarify how the preconstruction fee and the CM/GC fee will be used in the assessment of total fee and the rating of the proposed fees.

STAFF RESPONSE: Concur

RECOMMENDATION 15 (p. 53)

Consider, in future contracts, or in the GMP amendment for existing contracts, providing more proscriptive guidelines for the CM/GC to be able to procure subcontracts by specific methods other than advertised competitive bid.

STAFF RESPONSE: Concur

RECOMMENDATION 16 (p. 53)

Redefine the contract to clarify what general conditions work will be paid lump sum

and what other general condition work will be reimbursed on an actual cost basis, subject to a maximum allowance within the negotiated GMP.

STAFF RESPONSE: Concur

RECOMMENDATION 17 (p. 54)

For current contracts in the GMP amendment, and for future contracts, clarify District intent for P/OH to be allowed to the CM/GC for additive changes to the GMP. Consider placing a maximum total percentage limit that can be charged for P/OH for all tiers of subcontractors.

STAFF RESPONSE: Concur

PLANNING AND DESIGN

RECOMMENDATION 18 (p. 59)

In order to improve the efficiency of the master planning and design efforts of future modernization and replacement projects, we recommend that the district consider the following actions:

1. Hold more timely and complete discussions with internal and external stakeholders on school design topics such as the number, type, and size, of classrooms; classroom utilization rates; career learning and technical education delivery, and core space needs. The completed high school specifications will provide a sound foundation for these discussions but complete educational specifications for middle and elementary schools should be final before initiating these discussions with lower grade levels (e.g., Faubion PK-8). Ensure that updates if any to the HS Ed Specs, including target capacity and core size occur well before the start of the master planning process for the remaining comprehensive high schools, which is scheduled to occur later during this eight year bond program.
2. Reconcile student and core planning capacities currently established by the

BOE with the different capacities contained in the Long Range Facility Plan and the Educational Specifications for comprehensive high schools. Ensure that all documents are consistent and compatible with one another before beginning the work at GHS and the master planning for the remaining comprehensive high schools.

STAFF RESPONSE: Concur

RECOMMENDATION 19 (p. 60)

In order to provide timely and complete guidance to project design teams, OSM and FAM should strive to complete PPS Design Standards and Guidance in time for inclusion in the design for Roosevelt and Franklin high school, Faubion PK-8, and summer Improvement Project 2015.

STAFF RESPONSE: Completed

PPS Design Guidelines were recently updated and are being posted on the PPS website. The ongoing design teams have participated in the guideline development. The Design Guidelines are expected to evolve over time.

PROJECT AND CONSTRUCTION MANAGEMENT

RECOMMENDATION 20 (p. 64)

To guide the delivery and management of bond program projects, we recommend that project plans and SOP's be developed and implemented by the end of calendar year 2014, if not sooner. Those SOP's necessary for the successful implementation of IP 2014 be completed and put into use immediately.

STAFF RESPONSE: Concur

RECOMMENDATION 21 (p. 66)

In order to increase the value of e-Builder as a common repository for all project documentation, OSM should establish requirements for filing and indexing all project documents and for encouraging the consistent use of e-Builder by project staff for document storage.

STAFF RESPONSE: Concur

RECOMMENDATION 22 (p. 66)

Depending on individual project team preferences, develop and implement streamlined steps for RFI processing where the PD/PM is copied rather than required to act on certain steps.

STAFF RESPONSE: Concur with Comment

As of the date of this response, this recommendation has been implemented.

RECOMMENDATION 23 (p. 69)

To ensure the district complies with contract language and board policy regarding change order approval, the new PCO procedure should be fully tested and found functional before IP 2014 change order work proceeds. OSM should ensure that project staff understand new requirements and comply with e-Builder protocols. OSM should also consider developing and implementing a back-up paper system in the event that the new PCO process does not ensure that changes are approved by the appropriately authorized staff, and lower level authority is "renewed" before change order work proceeds.

To more effectively and efficiently manage change order processing, we have made a separate recommendation (# 7) that PPS consider increasing change order authority for designated PPS staff, and adding a limited level of authority for the PC position.

Once the new system is implemented and fully working, in order to avoid potential confusion, PPS contract documents should be amended to reflect the terminology of the new system.

STAFF RESPONSE: Concur with comment

The new PCO procedure has been through a lengthy testing period and is expected to be fully tested and found functional before IP 2014 change order work proceeds. e-Builder was identified as the appropriate place to capture the PCO process confirming changes were being approved at the appropriate levels. The creation of a back-up paper-system would require a significant amount of work that OSM is not presently staffed for. Back-up paper copies of commitment reports, previous authorized changes reports, etc, with original signatures from multiple staff would be required which would be a significant time consuming processes that would inhibit rapid execution of change orders.

RECOMMENDATION 24 (p. 70)

To ensure the roles and responsibilities of the Project Managers/Directors, Coordinators, and Construction Managers are fully understood, the OSM should complete the Responsibility by Participant Matrix that identifies the specific expectations for each role including tasks, timelines, and report documentation. This recommendation should be implemented in conjunction with recommendation #3.

STAFF RESPONSE: Concur

COST AND BUDGET MANAGEMENT

RECOMMENDATION 25 (p. 74)

To improve efficiency and reduce duplicative efforts, the district should continue to explore opportunities to upgrade PeopleSoft and e-Builder to establish compatibility between the two systems.

STAFF RESPONSE: Completed

Integrating e-Builder and PeopleSoft may have a significant benefit to PPS as a whole (which is why it is being explored) but it may have only a marginal benefit to the to the Bond Program at a potentially significant effort. A cost/benefit analysis must be done to determine the feasibility of this recommendation. If deemed beneficial to the District, available funds would then be assessed to include what the correct source of these funds should be.

PUBLIC ENGAGEMENT AND COMMUNICATIONS

RECOMMENDATION 26 (p. 79)

CIPA with the assistance of OSM should update and revise the bond communication plan to address lessons learned in the first year of the program and to clearly identify which strategies will be employed and when they will be delivered throughout the entire year. In addition, CIPA and OSM should make clear to the community how input will be considered and how decisions will be influenced by public engagement.

STAFF RESPONSE: Concur

RECOMMENDATION 27 (p. 81)

In order to improve public engagement with the bond program and its projects, OSM and CIPA should:

1. Evaluate the impact to date of public engagement activities on stakeholder knowledge of the program, satisfaction with opportunities for input and feedback, and confidence in fiscal stewardship of the district.
2. Assess the effectiveness of staff roles to lead and support public engagement, in order to identify ways to improve coordination and delivery.

STAFF RESPONSE: Concur

APPENDIX A

State of Oregon Procurement Statute ORS 279 A, B, C, State and PPS Rules Explanation of CM/GC Alternative Contracting

Portland Public School's procurement of bond funded public contracts (including public improvement contracts) and bond-funded contracts for personal services are subject to the provisions of Oregon Revised Statutes, ORS 279 A, B, C.

ORS 279 A defines the classes of contracts and public agencies that must comply with ORS 279, establishes parameters for rule-making, and defines methods by which procurement may be shared by different public agencies.

ORS 279 B governs the procurement of contracts for goods and services, provided the contracts and services are not defined as personal services (which includes architecture, engineering, and related services) or public improvement contracts. The section also governs procurement of construction contracts for emergency work, minor alterations, ordinary repair, or maintenance necessary to preserve a public improvement. Although most construction contracts are procured under ORS 279 C, some minor construction contracts may be procured under ORS 279 B.

ORS 279 C governs the procurement of contracts for architecture/engineering (A/E) and related services, contracts for public improvements (defined as construction, major reconstruction, or major renovation on real property). ORS 279 C also defines public works contracts and State Prevailing Rate of Wage (PWR) requirements for public works contracts.

ORS 279 A requires all public agencies that do not adopt their own rules to use the State of Oregon Attorney General's Model Public Contracts Rules. For public agencies that do adopt their own rules, ORS 279 A requires that the public agencies review their rules every time there is a change to the AG's Model Public Contracts Rules to determine if the public agencies must modify their rules to ensure compliance with statutory changes.

ORS 279A authorizes public agencies, by resolution, rule, or other regulation to designate certain service contracts or classes of service contracts as personal services contracts. ORS 279A further authorizes public agencies to adopt rules for the procurement of contracts it has designated as personal services contracts.

Oregon Attorney General's Model Public Contracts Rules

The AG's Oregon Administrative Rules (OAR's) for procurement are located in chapter 137. They are organized to conform to the three major sections of ORS 279.

1. OAR 137, division 46 provides rules for the implementation of ORS 279A.
2. OAR 137, division 47 provides rules for the implementation of ORS 279B.
3. OAR 137, division 48 provides rules for the implementation of ORS 279C for the procurement of contracts for Architecture, Engineering, Land Surveying, and Related Services.
4. OAR 137, division 49 provides rules for the implementation of ORS 279C which provides rules for the procurement of contracts for Construction Services.

PPS Purchasing Rules

PPS rules currently parallel the AG's rules, in content, wording, and numbering (insofar as the labels of division 46, 47, 48, and 49). PPS division 46 includes rules for the procurement of contracts for personal services, which is not included in the AG's rules.

Construction Manager/General Contractor (CM/GC)

ORS 279C.335 requires that, with a few exceptions, a public improvement contract over $100,000 be procured through competitive public bid, unless exempted as an alternative contracting methodology, under provisions of ORS 279C.335.

SB 254 of the 2013 Legislature created specific requirements for the procurement of a special class of alternative contracting methodology generally called Construction Manager/General Contractor (CM/GC). The provisions of SB 254 become effective on July 1, 2014. Along with the statutory provisions, all public agencies are required to use the AG's Model Public Contracts Rules for CM/GC procurement on or after July 1, 2014. Statutory provisions for CM/GC procurement in place prior to July 1, 2014 (i.e., those effecting the selection of the CM/GC firms for FHS and RHS) are similar, albeit somewhat less proscriptive than the new provisions.

What is CM/GC?

The CM/GC contracting method combines the traditional scopes of work of the construction manager and the general contractor into a single contract. During the early stages of the design phase, the owner selects a CM/GC firm using a competitive (RFP) selection process. Typically, selection criteria includes information pertaining to the firm's qualifications, experience, proposed project team, proposed project approach, the fee the firm will charge for preconstruction services, and the fee the firm will charge for CM/GC services during construction, as a percentage of the estimated construction cost at a set point in the design.

Industry terminology can be ambiguous. The term construction manager as it relates to CM/GC is a different function than the function performed by Heery personnel – construction managers – assigned to help oversee construction contracts.

By joining the project team during design, the CM/GC firm can collaborate with the design team on the development of the design and the preparation of the design documents. The interaction allows for improving constructability and for conducting value engineering reviews. (In general, value engineering is a process whereby alternative contraction methods or systems can be considered weighing value in terms of performance and cost). The CM/GC firm also provides

assistance with material selection, scheduling, estimating, and other related service during design. The CM/GC firm performs these services during the first part of the design process based on a preconstruction fee. These services are, in part, the function described as Construction Manager.

Once the design has progressed to an acceptable level, the CM/GC firm typically submits a guaranteed maximum price (GMP) for the project to the owner. In the case of FHS and RHS, the development of the GMP is anticipated to occur at about 80% completion of the design development documents. The GMP is the CM/GC's commitment to the maximum price for the Cost of the Work, the Contractor's fee, and any contingencies and allowances the CM/GC may carry. The price guarantee given by the CM/GC firm places the firm "at risk" and gives incentive to the firm to ensure a successful project for the owner. After agreement on a GMP is reached, and design is completed to a successful point, the CM/GC firm undertakes the construction of the facility. The construction piece is the General Contractor component of CM/GC. The CM role continues throughout the project as an adjunct to the GC role. Performance and payment bonds for the full value of the GMP are provided by the CM/GC to the owner. The CM/GC firm procures subcontracts through competitive selection processes (governed by the new statutory provisions and the contract between the owner and the CM/GC). Typically, the work is bid in multiple bid packages, and may be phased, so that initial work can be procured and started while additional design work is still proceeding on finish details for the building. General conditions work, along with minor "pick-up" work, is typically self-performed by the CM/GC firm. In some cases, the CM/GC firm may be allowed to self-perform portions of the trade work by competitively bidding for the work in competition with trade contractors.

The CM/GC process has the added benefit that the owner, architect, and CM/GC, tend to work as a collaborative and collegial team to produce the best product for the owner. The CM/GC process is repeatedly used by public agencies for large complex projects because it has been successful, typically resulting in project completion on time, under budget, at a high degree of quality. Project savings (meaning the difference between the GMP and actual eligible expenses) accrue entirely to the owner.

Although CM/GC is an excellent process when used correctly for the right choice of project (large, complex, challenging budgets, time constrained) it is not the best choice for all projects. Although 80% of public improvement projects by dollar amount are procured by CM/GC, 80% of projects by number alone are procured by the traditional design-bid-build methodology. Smaller, straightforward projects generally do not warrant nor can they afford the preconstruction costs associated with the CM/GC methodology. There is no industry standard or statutory provision proscribing what size project warrants consideration of use of CM/GC. Rather, each project, or in some cases, class of similar projects, must be evaluated to assess whether CM/GC is an appropriate choice and whether the statutory findings can be adequately addressed.

CM/GC is a complex process to manage. In fact, the new statutory provisions require the public agency to consider whether it has adequate expertise available to effectively coordinate and manage the process. We note that several key managers and staff at OSM have had prior experience using the CM/GC process or its equivalent, GC/CM in Washington.

History of CM/GC in Oregon

CM/GC has been a successful procurement method used by the private sector construction industry for many years. CM/GC, as a public procurement process, has been used within the

State of Oregon since the mid 1980's. Oregon was one of the nation-wide leaders in this alternative contracting methodology. (See “A New Fast Track for Public Works,” Civil Engineering Magazine, February 1992). Washington State observing the success that Oregon was having with CM/GC, in particular for large and complex projects, implemented its own version of CM/GC (called GC/CM) in 1991.

Although only a handful of public improvement contracts in Oregon were procured by CM/GC through the 1980's, by circa 2005, according to a study performed by the Associated General Contractors of Oregon, approximately 80% of public improvement contracts, by dollar amount, were procured by the CM/GC methodology. For vertical construction projects (meaning buildings rather than roads), this generally applied to large and complex projects including, but not limited to: high schools, college buildings, major sports stadiums and arenas, corrections institutions, large institutional buildings, and the like. The CM/GC process has been used by multiple school districts around the state, including Beaverton, Hillsboro, Parkrose, Bend, Redmond, Eugene, Crook County, Silverton, Grants Pass, Riverdale, etc. It has been used by multiple agencies in the Portland area including Multnomah County, Clackamas County, Washington County, the State of Oregon, the City of Portland, and Tri Met.

In 2002 an ad-hoc group of industry professional from multiple public agencies, contractors, architects and project managers, called the Public Contracting Coalition (PCC), collaborated with the Associated General Contractors of Oregon and the Department of Construction Engineering Management at Oregon State University, to write the Oregon PCC Guide to CM/GC Construction, which remains an industry standard.

The PCC Guide states the following:

> Public agencies have traditionally employed the design-bid-build method of project delivery for the construction of public projects. While this contracting method has led to the successful procurement and delivery of many public improvements, public agencies have increasingly desired and chosen alternative contracting methods that provide opportunities for success which are not available through the traditional design-bid-build process. Alternative contracting methods are often chosen for projects that contain special characteristics or when project conditions make the design-bid-build contracting method less desirable. Circumstances upon which the decision to use an alternative contracting method are based, have typically included: limited project delivery time, unusual project technical complexity requiring specialized knowledge or skills, complicated project phasing, substantial work coordination issues, and limited project budget.
>
> ... Projects may be considered exempt form (the low bid requirement of the statute) ... if specified criteria are met. Consequently, in order to employ an alternative contracting method ... public agencies must justify its use by showing specified exemption criteria are met on the project.

APPENDIX B

SCHOOL BUILDING BOND CONSRUCTION PROGRAM
PROGRAM/PROJECT COST SUMMARY
MARCH 1, 2014

Project Name	Original Budget	Approved Budget Changes	Current Budget	Estimate At Completion	Forecasted Over/(Under)	Actuals Approved	*% forecasted under budget*
Franklin HS Modernization	81,585,655	9,577,503	91,163,158	82,046,842	(9,116,316)	629,290	*10.0%*
Grant HS Modernization	88,336,829	(9,229,053)	79,107,776	67,241,610	(11,866,166)	0	*15.0%*
Roosevelt HS Modernization	68,418,695	13,824,059	82,242,754	74,026,637	(8,216,117)	412,879	*10.0%*
Faubion Replacement	27,035,537	(389,657)	26,645,880	24,956,370	(1,689,510)	818,758	*6.3%*
Improvement Project 2013	9,467,471	3,595,366	13,062,837	11,930,613	(1,132,224)	11,930,613	*8.7%*
Improvement Project 2014	13,620,121	2,528,649	*15,737,734*	13,861,057	(1,876,677)	891,854	*11.9%*
Improvement Project 2015	13,521,066	(604,060)	13,328,042	11,328,836	(1,999,206)	0	*15.0%*
Improvement Project 2016	15,274,437	(8,092,470)	7,181,967	6,104,672	(1,077,295)	0	*15.0%*
Improvement Project 2017	6,796,707	6,430,625	13,227,332	11,243,232	(1,984,100)	0	*15.0%*
Improvement Project 2018	9,062,119	(1,379,167)	7,682,952	6,530,509	(1,152,443)	0	*15.0%*
Master Planning - Benson HS	191,667	(30,000)	161,667	161,667	0	0	*0.0%*
Master Planning - Cleveland HS	191,667	(30,000)	161,667	161,667	0	0	*0.0%*
Master Planning - Jefferson HS	191,667	(30,000)	161,667	161,667	0	0	*0.0%*
Master Planning - Lincoln HS	191,667	(30,000)	161,667	161,667	0	0	*0.0%*
Master Planning - Madison HS	191,667	(30,000)	161,667	161,667	0	0	*0.0%*
Master Planning - Wilson HS	191,667	(30,000)	161,667	161,667	0	0	*0.0%*
Swing Sites & Transportation	9,550,000	(3,120,000)	6,430,000	6,430,000	0	0	*0.0%*
Marshall Swing Site - Bond 2012	0	2,500,000	2,500,000	3,567,550	1,067,550	14,167	*-42.7%*
Educational Specification	0	300,000	300,000	253,320	(46,680)	223,850	*15.6%*
Debt Repayment	45,000,000	0	45,000,000	45,000,000	0	45,000,000	*0.0%*
2012 Bond Program	93,181,361	1,346,102	94,527,463	69,596,854	(24,930,609)	3,372,586	*26.4%*
	482,000,000	**17,107,896**	**499,107,896**	**435,088,104**	**(64,019,793)**	**63,293,996**	***12.8%***

Source: OSM e-Builder

APPENDIX C

EXECUTIVE SUMMARY
PPS FACILITIES VISION STATEMENT

Portland Public Schools seeks to be the best urban school district in this country. In the 21st century, learning takes place everywhere, all the time, and buildings play a critical supporting role in ensuring all of our students emerge as lifelong learners ready for the world that awaits them. We seek to create learning environments that nurture, inspire and challenge all students, regardless of race or class. We aspire to provide safe, healthy, joyful, beautiful, sustainable and accessible school environments that foster productive relationships year-round for all children, families, staff and their communities. We promote public confidence through strategic engagement and investments that support student achievement and reduce operating costs.

This statement articulates Portland Public Schools vision for the role school buildings have in our community. The vision and key themes presented in this document summarize a series of targeted community-based activities conducted to ensure that as PPS moves forward with its significant school building modernization effort, the work ultimately reflects the values and priorities of the PPS communities and constituencies it serves, and to ensure that all PPS students leaving their K-12 experience, regardless of race or class, will be ready for the 21st Century world that awaits them.

The various community involvement efforts beginning in 2007 and running up to the successful passage of the Capital Bond in the Fall of 2012, served to engage a diverse cross-section of the community and to identify goals and priorities that have been consistent over time. Taken together, they provided a broad and rich foundation for launching a community-wide Facilities Visioning Process intended to identify the key themes, ideas and characteristics all PPS Facilities should have as they are modernized, remodeled or replaced in support of educational goals. The Facilities Visioning Process also provided an opportunity to reinforce significant School District educational goals including improvement of overall district academic performance while eliminating the predictability of disciplinary referrals and academic performance based on race -- which means we must close the achievement/opportunity gap.

Improving overall district academic performance while closing the achievement gap is pivotal to all students being fully prepared to contribute, collaborate and compete in our increasingly diverse community, country and global economies.

Therefore, as PPS begins to modernize, remodel and/or replace its schools its Facilities Vision must align with the educational priorities of the district. As articulated throughout this document, the community conversations' key themes and characteristics emerged repeatedly on how modernizing schools can help accomplish these tasks and fulfill the Facilities Vision. These themes begin on page 14 and articulate desired outcomes in the areas of teaching and learning, learning environments, school and community, and wrap around and facilities support. School facilities in Portland Public Schools will provide the opportunity and inspiration to passionately pursue learning at any age; honor and exhibit the achievements of all students; and provide users of all needs, abilities, and backgrounds with vibrant, comfortable, healthy learning environments that bring the world of resources to the classroom.