

Portland Public Schools Bond Construction Program:

**PERFORMANCE AUDIT #3**

May 2016

Hirsh and Associates,

Bill Hirsh and Richard Tracy



## MEMORANDUM

**To:** Carole Smith, Superintendent;  
Jerry Vincent, Chief, School Modernization

**From:** Richard Tracy and Bill Hirsh

**Date:** May 2016

**Re: School Bond Construction Program - Performance Audit #3**

Attached is our 2016 performance audit report of the School Bond Construction Program for the Portland Public School district. This is the third of four annual audits and principally covers the period from April 2015 to March 2016.

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.



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# SUMMARY

The Portland Public School district is into the fourth year of 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. Additional resources have increased the projected improvement budget to approximately \$551 million. This report is the third annual performance audit of how well the district is managing and implementing the school building improvement bond program.

## **Program enters busiest period**

After several years of major planning and design efforts, the bond program over the past 12 months began its busiest building period to date. Construction started at the two major modernization projects at Franklin and Roosevelt high schools, and demolition was completed and work has begun on the new Faubion PK-8. Twenty-seven schools throughout the district received summer improvements such as seismic strengthening, access improvements, new roofs, and science classroom upgrades. Work was completed at Tubman and Marshall so that students from Faubion and Franklin respectively could begin classes at these interim spaces for the start of the 2015-2016 school year.

In addition, the bond program started and completed master planning for Grant high school and entered the schematic design phase in anticipation of construction beginning in the early summer of 2017. Master plans were started for three other high schools – Lincoln, Benson, and Madison – that will serve as the basis for further design and construction if a new bond is approved by voters.

Although original baseline schedules have not been met in several instances, the district is on revised schedules for planned occupancy dates for the major construction projects. While some

projects have exceeded original planned budgets, the program currently has addressed many of these increases by using contingencies and reserves. As of the final drafting of this report, the Franklin high school project is estimated to complete substantially over budget. The Grant high school project also has unresolved budget concerns. The district and Office of School Modernization (OSM) need to stay vigilant to control project scope and cost increases as remaining reserves and contingencies are drawn down.

### **High school modernization projects: progress and risks**

The three modernization projects at Franklin, Roosevelt, and Grant are the most costly and complex of the bond program projects. Representing over 57 percent of the total bond budget of \$551 million, these projects involve major renovation of existing historical structures. The district chose to employ an alternative procurement and contract methodology called Construction Manager/General Contractor (CM/GC) to construct these projects.

We focused much of our audit effort this year reviewing the status of these projects and their compliance with statutes, policies, and best practices for CM/GC projects. For the two projects under construction, FHS and RHS, the district is projecting that it will complete the projects on schedule. FHS will complete substantially over budget and OSM projects that RHS will complete within its adjusted budget. In most respects OSM and the CM/GC firms have worked collaboratively to develop designs and construction documents, prepare project budgets, and bid work to subcontractors. However, we did find deviations from district policies and weaknesses in controls that increase financial risk and may result in higher costs. Specifically,

- The GMP amendment to the Franklin CM/GC contract language modified the intent of the GMP by negating the guarantee that the CM/GC firm will provide a complete facility at an agreed upon maximum price
- A buyout reconciliation change order to the Franklin CM/GC contract language has increased the contractor contingency budget and allowed overhead without demonstrating that the scope of the project has increased
- For the Franklin and Roosevelt projects, OSM protocols for reviewing and approving potential changes were inadequate to ensure that work was



approved before starting and that appropriate level of management approved the changes

The Grant high school master planning process resulted in an innovative conceptual design that received significant public input and was approved by the Board of Education in December 2015. However, based on a conceptual estimate prepared by the architect for the master plan, the budget for the school does not include sufficient project contingency amounts. The budget based on the master plan estimate and documentation from OSM provides a project contingency of approximately 3.5 percent, significantly less than the 10 percent standard employed for Franklin and Roosevelt high schools at the start of design. An additional approximate \$7.5 million would be needed to maintain a 10 percent contingency. Action is needed by the completion of schematic design to adjust the estimated Grant high school budget through revisions to scope, adding resources, and/or revisions to the project estimate. At the time of final drafting of this report, OSM reports that intends to address this concern.

We believe that a variety of factors have contributed to the conditions discussed above including that lack of complete standard operating procedures and policies and failure to consistently use existing standard operating procedures and guidelines. We make a number of recommendations to help OSM address these concerns.

**Program management: foundation in place with improvements needed**

OSM has established a comprehensive foundation to manage and administer the bond program. The program reports regularly on schedule and budget status, monitors budget and budget changes, reviews and authorizes payment requests, and continually evaluates the costs of program management overhead. In addition, the program has developed and implemented an extensive infrastructure to ensure strong communication with the community on the status of the bond program and extensive public engagement in the development of project designs. With the Purchasing and Contracting department in the lead, OSM has largely complied with district and state policies to ensure the fair and competitive selection of consultants and contractors. Concerns with one selection process highlighted the need for, and resulted in, internal improvements in the RFP process.

Although the program has experienced significant turnover in upper level management this past year, the blended organizational staffing team has maintained momentum toward completing the program in accordance with plans. We note that the bond program could strengthen systems in several areas to improve management oversight, tighten compliance with policies, procedures, and best practice, and to increase the potential that equity goals will be achieved. Some of these improvements include:

- Development and use of Project Team Management Plans to guide the design and construction of individual projects and to provide the basis for more effective supervision and control
- Enhancements to the procedures for review and selection of consultants to ensure more informed selection of qualified firms
- Increased flexibility in CM/GC contracts to permit the selection of more MWESB subcontractors
- Beginning processes for selection of firms earlier to avoid risks to schedule and budget
- Fully complete audit recommendations in a timely manner

The bond program has taken action on many of the recommendations that we made in our 2014 and 2015 audit reports. Additional effort is underway to address the remaining recommendations. A summary of the status of these recommendations is contained in Appendix B. We make new recommendations in this report that are compiled and summarized in Recommendations section on page 73.

# 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. This is the third of four performance audits of the School Building Improvement Bond program and covers the period from April 2015 to March 2016. The 2014, 2015, and 2016 performance audits can be found on the PPS Bond Program website at [www.pps.k12.or.us/bond](http://www.pps.k12.or.us/bond). This audit evaluates the degree to which the program is achieving its goals and objectives and is following applicable laws, policies, and procedures. The overall purpose of the performance audits 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.

## **Overview of bond program resources, budgets, and schedules**

The following tables provide current information on the bond program resources, project budgets, and schedules as of March 2016. As shown in figure 1, the School Building Capital Improvement Bond program derives funds from a variety of sources. Total capital improvement program funds from all sources have grown, increasing from \$499,107,903 in March 2014 to \$550,538,965 in March 2016. While general obligation bonds comprise the vast majority of funding for the bond program, the program also receives support from various state grants, contributions, bond premium/debt savings, and from partnerships with other organizations.

**Figure 1 2012 Capital Improvement Bond Program resources from all sources**

	<b>2014</b>	<b>2015</b>	<b>2016</b>
General Obligation Bonds	\$482,000,000	\$482,310,324	\$482,310,318
Bond premium/debt savings	\$13,870,000	\$13,870,000	\$47,081,952
Concordia University	-	\$879,306	\$15,539,710
SRGP funds and PPS contribution (seismic upgrades)	\$1,500,000	\$1,495,172	\$2,917,458
SB1149 funds (energy efficiency and renewable energy)	\$801,810	\$801,810	\$1,606,015
Debt Repayment	\$931,509	\$568,948	\$783,880
Education specifications	\$300,000	\$300,000	\$300,000
Facilities and Maintenance capital funds	\$4,458	\$40,732	\$198,057
Great Fields	-	-	\$65,517
Energy Trust	-	-	\$28,580
Partnership funds	-	-	\$7,478
<b>TOTAL</b>	<b>\$499,107,903</b>	<b>\$500,266,411</b>	<b>\$550,538,965</b>

Source: OSM Operations Summary for March 2014 and March 2016

The School Building Improvement Bond program as of March 1, 2016 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
- Nine Summer Improvement Projects to replace roofs, correct seismic deficiencies and accessibility problems, and upgrade science classrooms
- Master planning for three high schools – Benson, Lincoln, Madison
- Two swing site improvements, and transportation upgrades to provide temporary facilities for the students at Franklin, Roosevelt, 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

The table below lists the 21 separate projects managed by the OSM and their original and current budgets, and the invoices approved for payment as of March 2016.

**Figure 2 School Building Improvement Bond program: Projects and budgets**

PROJECT	BUDGET (in millions)		Approved invoices
	Original budget	Current budget	
Franklin HS	\$81.6	\$106.6	\$21.3
Grant HS	\$88.3	\$111.9	\$0.7
Roosevelt HS	\$68.4	\$96.6	\$15.2
Faubion PK-8	\$27.0	\$48.9	\$4.1
9 Improvement Projects, 2013-19	\$67.7	\$72.5	\$53.5
3 HS Master plans	\$1.2	\$1.3	\$0.1
Swing sites and transportation	\$9.6	\$6.9	\$4.9
Educational Specifications	\$0.0	\$0.3	\$275
Debt repayment	\$45.0	\$45.0	\$45.0
2012 Bond Program *	\$93.1	\$60.5	\$13.7
<b>TOTAL</b>	<b>\$482.0</b>	<b>\$550.5</b>	<b>\$151.8</b>

Source: OSM Operations Summary March 2016

\* 2012 Bond Program project includes program management and administration, reserves, contingencies

Because two of the major HS construction projects and Faubion have just begun the construction phase, only \$152 million in invoices have been approved for payment, about 28 percent of the total bond program budget. Over the next two to three years, program spending will increase significantly as three major projects largely complete construction.

Figure 3 below shows the principal schedule points for the major construction projects of the bond program. Franklin and Roosevelt high school projects started construction on time and scheduled substantial completion dates have remained the same. Schedule status will be discussed in more detail in the Audit Results section of this report.

**Figure 3 Project schedules for major construction projects**

PROJECT	Complete Design Development Phase		Start construction		Substantial Completion
	Schedule	Actual	Schedule	Actual	
Franklin HS	Jul 2014	Oct 2014	Jun 2015	Jun 2015	Jul 2017
Grant HS	Sep 2016	Oct 2016	Jun 2017	-	Mar 2019
Roosevelt HS	Jul 2014	Jan 2015	Apr 2015	May 2015	Jun 2017
Faubion PK-8	Jun 2015	Mar 2015	Jun 2016	Dec 2015	May 2017
Marshall swing site	Feb 2014	Apr 2014	Apr 2014	Jan 2015*	Jan 2015
Improvement Projects	<i>various</i>				

Source: BAC January 2015, July 2015, and January 2016 Reports

\* Marshall roofing was re-scheduled at a later date.

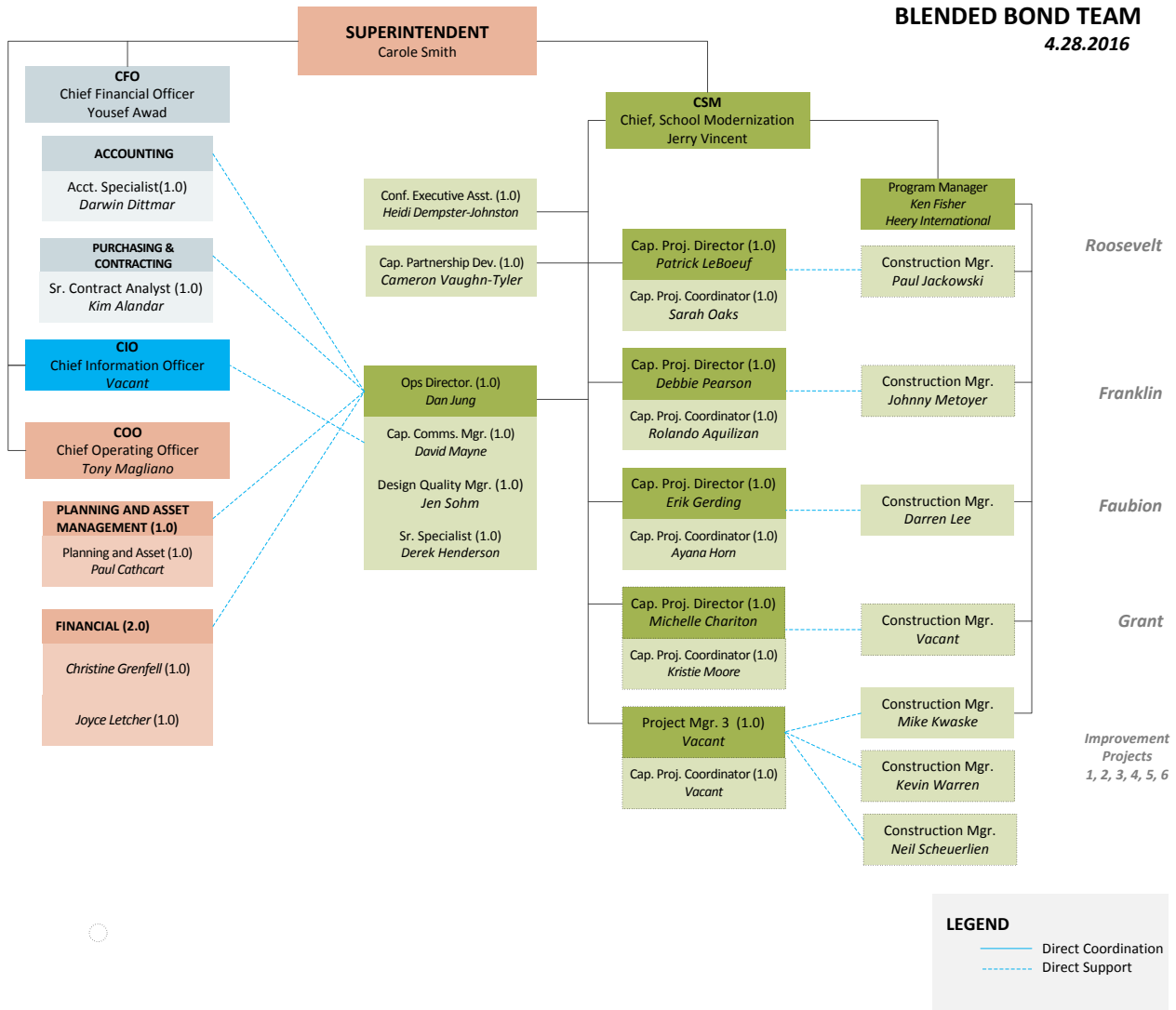
## Office of School Modernization

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, School Modernization (CSM). 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.

As shown below, OSM is composed of staff from OSM, FAM, and representatives from district Accounting and Finance, and Purchasing and Contracting. The most significant change to this organization the past year was the elimination of the OSM Senior Director (formerly Executive Director) position and the consolidation of the position's responsibilities with those of the Chief, School Modernization position.

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

**Figure 4 Organizational chart**





## Public accountability structures

The district continues to use several mechanisms to provide public accountability for the use of bond funds. In addition to annual financial and performance audits, the Balanced Scorecard performance report and the Bond Accountability Committee provides monthly and quarterly reporting respectively to the Board of Education and the public.

### BOND ACCOUNTABILITY COMMITTEE

The seven member community-based volunteer Bond Accountability Committee (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.

At the completion of this year's performance audit the BAC has had, since its inception, 14 quarterly meetings and issued 12 public reports on the status and progress of the bond program. All BAC meetings were announced publicly and were open to public participation.

### BALANCED SCORECARD REPORTING

The Balanced Scorecard performance measure and reporting tool used by OSM 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 summary of the four primary Balanced Scorecard perspectives and objectives is presented in the table below.

**Figure 5 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

Source: OSM Balanced Scorecard Report and PMP

## 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, School Modernization
- Office of School Modernization, management and staff
- Purchasing, management and staff
- Program/Construction Management firm
- Community Involvement and Public Affairs staff
- Bond Accountability Committee chair
- Architect and CM/GC for FHS

In addition, we reviewed numerous documents including e-Builder documents on project cost management, procurement, project monitoring and reporting, and administration; internal OSM operations reports on program cost management, MWESB performance, student participation, financial reconciliation, and cash flows; OSM program management plan and standard operating procedures; PPS BOE agenda items and BOE meeting minutes, PPS rules and directives for purchasing and procurement, and state public contracting statutes. We tested purchasing and contracting documents for architectural design, construction, and CM/GC selection. We also utilized e-Builder to obtain information on contracts, invoicing review and approval, budget and cost reporting, project change orders and budget amendments, and public involvement.

This is the third of four annual audits and covers the period from April 2015 through March 2016. The primary focus of this year's audit was on the planning, procurement, and construction activities of three major projects: Roosevelt high school, Franklin high school, and Faubion PK-8 school. For these two high schools, we reviewed the CM/GC contracts, GMP provisions, pricing and buy-out, invoices, value engineering/scope reduction changes, project budgets and schedule status, general conditions, subcontracting, change order processing, and other construction management processes. We reviewed the master planning for Grant HS and the initiation of master planning for Lincoln, Benson, and Madison high schools. In addition, we continued to review and assess the adequacy of the bond program policies and procedures, compliance with purchasing and selection requirements, the design and construction of the summer improvement projects, and accomplishments in achieving objectives of the equity in public purchasing and contracting policy.

This audit was performed in accordance with a personal services contract awarded by the Portland Public Schools Board of Education (October 7, 2013). We planned and conducted fieldwork from July 2015 until March 2016. We conducted report writing and quality control in February, March, April and May 2016. 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 Schools has entered the busiest building period of the program to date. Construction was initiated at three large modernization and replacement projects and a variety of improvements were completed at twenty-seven schools in the summer of 2015. In addition, master planning was completed for one additional high school and started for three other high schools. Although there are some schedule and budget issues, the program is mostly on schedule and on budget.

Our audit also identified continuing opportunities to improve the program to ensure better compliance, to reduce risks, and to improve accomplishments of goals. For example, effort is needed to tighten CM/GC contract administration, to refine budget estimating for high school master plans, and to achieve aspirational goals for MWESB participation in contracts. In addition, due to the significant turnover in upper management, the program should implement stronger controls to ensure consistent and complete project oversight. OSM has also implemented most of the recommendations in prior audits but more action is needed to address partially or unimplemented items. The sections that follow provide detailed analysis of our audit findings for this year. We again offer additional recommendations for improvement. OSM and Purchasing and Contracting continue to be open and responsive to our audit work, and have already taken action on some of the issues and recommendations.

## High School modernization projects

Over the past year, the OSM initiated construction at Roosevelt and Franklin High Schools and completed master planning for Grant High School. In addition, the district initiated master planning for three additional high school modernization projects at Lincoln, Benson, and Madison high schools. This section provides our analysis of the progress and accomplishments of these six projects.

### 1. FRANKLIN HIGH SCHOOL

The district initiated demolition and construction of the Franklin HS modernization project in June 2015. The 287,000 square foot facility will be constructed over a period of 21.6 months and is scheduled to be substantially complete in March 2017. During the construction period, Franklin students and staff are at the interim facility at Marshall high school.

The FHS modernization project is being conducted using the CM/GC construction methodology. The project team consists of the architectural firm DOWA-IBI Group (DOWA) and the construction firm Skanska USA Building Inc. (Skanska) with owner oversight provided by OSM.

#### **Overall budget and schedule status**

The total current budget for the Franklin HS project is \$106.6 million. The Guaranteed Maximum Price was initially established at \$81.8 million. OSM currently forecasts that the project will complete on schedule. OSM project and program management staff report the project will be complete in time for students and teachers to use the new facility in September of 2017.

However, the April 2016 Project Status Update estimates the budget at completion to be \$108.9 million, approximately \$2.3 million over budget. Moreover, the Project Director further estimates in the update that the final project cost would be as much as \$112 million, substantially over the \$106.6 million project budget. As of April, the project is 35 percent complete and has

spent \$35 million of its total project budget. OSM management is currently working with the construction firm to develop a firm budget estimate for final construction cost.

We observed that OSM reporting of the Franklin high school budget status changed dramatically from \$4.6 million under budget in the January BAC report to \$2.3 million over budget in the April project status update. Based on conversations with the project director, we believe this occurred because a number of unapproved and potential change orders were not factored into the earlier forecast. A more complete and earlier recognition of potential costs to the project would provide greater transparency and useful information for decision makers. While OSM initiated a project status update requirement in e-Builder early in 2016, not all project directors have developed and posted current updates, nor have all updates that have been posted been complete.

Due to unforeseen site conditions, extensive hazardous material abatement, and extraordinary weather conditions, there have been a considerable number of approved and pending change requests. The CM/GC has requested a project completion date extension due to these change orders. OSM project management staff is working closely with the CM/GC on implementation of a remediation schedule.

Based on the experiences at the FHS project involving considerable amount of unforeseen hazardous material abatement which were not identified in the haz-mat survey, the district is planning on substantial destructive investigation during design by a CM/GC for GHS. The destructive investigation will potentially provide additional structural, mechanical, and hazardous material information for the design team.

**Recommendation 1**

In order to improve reporting of budget risks and/or the use of project contingences, OSM should ensure that all monthly project budget projections are updated on a timely basis and include rough order of magnitude (ROM) estimates of potential changes where scope and/or cost is not yet determined.

### **Guaranteed Maximum Price (GMP)**

A major effort over the past year was establishment of a Guaranteed Maximum Price amendment to the CM/GC contract. The project GMP was to be negotiated based on 100 percent completion of the design development documents (DD).

The initial GMP estimate provided by the CM/GC was \$109.75 million, \$28 million more than the \$81.75 million GMP budget established by OSM. OSM project management staff, the CM/GC, and the architect all expressed surprise at the magnitude of this difference because the project was ostensibly on-budget at the end of schematic design (SD) in July of 2014. The schematic design was completed approximately 5 months before the 100% design development drawings and an increase of \$28 million or 35 percent could not be explained by escalation alone, which was about 5 percent annually.

The CM/GC firm states that there were a number of causes for the significant growth in the construction estimate between SD and DD. The CM/GC states that the building size increased from 280,000 square feet at SD to 287,000 square feet at DD. According to an OSM document titled, "FHS Crosswalk: Comprehensive HS Area Program Analysis from Bond Development through Design Development," the building size was approximately 280,000 sf at the end of SD, and grew to 287,000 for the GMP set of drawings dated 10/9/2014. This constituted a 7,000 sf increase over the approved Ed Spec size. In addition, the FHS CM/GC claims they could not achieve a GMP within the district's budget at 100% DD drawings because the drawings and specifications were not completed to an industry level of 100% design development. Project management staff also state that the quality of the drawings and specifications at 100% DD were not as complete as OSM expected for this stage of design, which may have resulted from design schedule compaction related to delays in reviewing and approving additional scope and budget for the Ed Spec schematic design and additional scope and budget for the Additional Criteria. (The BOE Ed Spec Schematic Design and Additional Criteria increases are discussed in the 2015 audit). The architect and OSM project management state that the CM/GC firm could have been more actively involved in providing on-going review and comment on the development of the DD documents.



There were communication and documentation issues between team members related to other possible scope and budget increase causes. The architect and CM/GC both state that some of the systems required by the district were not affordable within the district budget. They both point, as an example, to the mechanical systems which ended up being completely redesigned twice during the design period. It is not clear from the documents we reviewed, how, if at all, these concerns were brought to the attention of OSM at the end of schematic design. It is beyond the scope of this audit to assess the detailed factors, other than increased building size and perceived uncertainty in the DD drawings which contributed to the substantial increase in estimated cost between SD and DD.

The difference between the CM/GC estimate and the OSM GMP budget caused the district to undertake substantial scope reduction, value engineering (v/e), and modification to proposed contractor contingencies to bring the project within budget. A five-page list of detailed scope reduction and v/e items is attached to the GMP document. Examples of scope reduction included elimination of the indoor running track and batting cage; reduction in size of the athletic building; reduction in amount of exterior brick that would be restored; deletion of the voice enhancement system and culinary equipment from the contractor's budget and transfer of these items to the owner's furniture, fixtures, and equipment budget; and elimination of wind turbines. Examples of value engineering changes included redesign of the mechanical system; changing plastic wainscot to abuse-resistant drywall; reduction in specification for roofing; electrical changes; and revision to shear walls. A GMP document for \$81.75M was executed in May of 2015.

### **Qualified GMP**

When OSM developed a contract amendment to establish the GMP, project management, the architect, and the CM/GC firm developed qualifying contract language that countered the intent and purpose of the guaranteed maximum price. The new contract language was approved by the OSM senior director and signed by the director of P&C.

A guaranteed maximum price was specifically required by the exemption order and findings approved by the BOE. Applicable PPS purchasing policy defines the GMP as:

“...the total maximum price provided to the district by the Contractor, and accepted by the District, that includes all reimbursable cost of and fees for completion of the Contract Work, as defined by the Public Improvement Contract, except for material changes in the scope of Work. It may also include particularly identified contingency amounts.”

The definition of GMP in the public improvement contract with the CM/GC firm is consistent with the definition in district policy, and with the industry practice meaning of the term. The contract language defines a project contingency that will be included within the GMP, and which is to be:

“... used to cover unanticipated costs and unforeseen conditions included within the scope of the project or any conditions that the parties reasonably should have anticipated might be encountered during the renovation of a site or of a building of a similar nature, condition, and age.... Notwithstanding the level of detail represented in the GMP Supporting Documents, the CM/GC shall represent and warrant, at the time it submits the GMP that the GMP includes the entire cost of all components and systems required for a complete, fully function facility consistent with the design intent of the District and Architect.”

In other words, the GMP is contractually required to be a guarantee of price to construct a complete and functioning facility based on incomplete drawings and specifications. Ideally the CM/GC works closely with the architect and owner during design development to ensure the project is designed within budget and there are no surprises. Contingency within the GMP, the expertise of the CM/GC, and collaboration with the district and architect are intended to guide the development of a complete design within the GMP budget.

However, the General Qualifications contained in the GMP amendment to the CM/GC contract agreed to by OSM and the CM/GC firm contains the following provision:

“If after final subcontractor buyout of the Final Bid Package the total project costs exceed the GMP amount of \$81,750,000, then the CM/GC and district will do one or a combination of both of the following: (1) the district will increase the GMP to an amount equal to the amount the buyout exceeds ... the GMP amount of \$81,750,000; or (2) the district, the CM/GC, and the architect will engage in further VE efforts to reduce the scope in an amount equal to the amount that they buyout exceeds the \$81,750,000

GMP Budget. This may or may not include review of Allowance or VE items and it may include review of other items that had not been part of the VE process previously.”

The General Qualifications includes a provision that, “The GMP does not include any design revisions which may be the result from plan review comments and permitting.”

These contract qualifications negate the implicit and explicit “guarantee” described in the original contract and district policy. It potentially puts the project at substantial risk for increase in time and cost, and/or decrease in scope. The project was scheduled to start based on the first site work bid package with subsequent bid packages occurring during construction. Redesigning or modifying the project once construction begins, if even possible, is potentially less efficient and more costly than if redesign occurs earlier in the process. Ideally project redesign or modifications should occur before the construction document phase of design has begun.

The value engineering deductions to get to the GMP agreement came with additional cost. The architect has been paid approximately \$300,000 for redesigning the project, and substantial requests for additional services for redesign are still pending.

#### **Recommendation 2**

1. In order to potentially reduce the risk of budget increase and schedule delay, OSM should ensure that future CM/GC contracts have provisions that require proactive participation of the CM/GC with the architect during DD and CD and cost estimate updates by the CM/GC on an on-going basis rather than just at the end of each stage of design. Modify the OSM SOP and develop PTMPs to define a higher degree of accountability for clearer communication, documentation, monitoring and controlling of scope and budget increases during design.
2. In order to reduce potential risk for schedule delay, reduced scope, and/or increased cost, the district should ensure that the GMPs for future CM/GC projects are negotiated and executed at the contractually proscribed point in design. No conditions should be placed on the GMP that would serve to negate or compromise its validity as a full guarantee of all costs, except those that are reasonably attributable to scope increase. Provide examples in the original contract documents of what types of items constitute scope increase and what types of items are expected to be included within the GMP.

## **GMP Buyout results**

After finalizing the GMP amount, the CM/GC firm obtains bids from subcontractors and vendors to build the facility. This process is called “buyout.” For the FHS project, because the final CD documents for FHS were not fully completed prior to the start of buyout, the buyout occurred in four consecutive bid packages for various elements of the work. Buyout of the four subcontractor/vendor packages occurred in the late spring of 2015 through the end of the summer of 2015. The audit team reviewed approximately 50 percent of the first two bid packages and found that the CM/GC and district complied with the contractual requirements for subcontractor bid award. The bid packages were publicly advertised and awards were made by the CM/GC firm to the responsible firms submitting the lowest prices best conforming to the bid specifications.

The need to redesign systems for the GMP value engineering contributed to construction documents (CD) drawings being sequentially developed, some of which didn’t go out to bid until the summer of 2015. The CM/GC estimates that by putting the mechanical package out to bid in the middle of the summer, the lowest bid was 20 percent over their budget because of an already overheated institutional construction market. Buyout exceeded the GMP by an estimated \$12 million, which triggered the “non-guarantee” clause that requires additional value engineering, scope reduction, and/or budget increase. District project management personnel worked closely with the CM/GC and architect to identify legitimate increases to scope for which the CM/GC would be entitled to an additive change order and areas where further value engineering could occur. The budget differential was resolved through a reconciliation process that involved about \$4.8M in additional value engineering and scope reduction, reduction in some CM/GC estimated costs, and an additive change order that increased the GMP by \$5,021,255. The change order also included an increase to the contingency within the GMP of \$1,053,131.

The \$1,053,131 increase to contingency within the GMP is non-compliant with district policy in that this increase is not directly related to a concomitant scope increase. District procurement policy states that, “The GMP must not be increased without a concomitant increase to the scope defined at the establishment of the GMP or most recent GMP amendment.” The situation is

exacerbated in that the \$1,053,131 contingency increase includes a 7 percent increase to the general conditions work, without justification to any work requiring extended general conditions.

**Recommendation 3**

To control costs and follow industry best practice, the district should ensure that all future change orders are consistent with the letter and intent of applicable law and policy. Specifically, additional contingency and increases in general conditions overhead (related to contingency increase) should not be added to the GMP unless directly related to a concomitant scope increase.

**Contract terms for general conditions and fringe benefit mark-up**

The original contract did not provide for any increase to general conditions work as a standard markup for increases to the GMP. This was consistent with industry practice.

However, when the GMP was established, the General Conditions were amended to provide the CM/GC with an additional 7 percent for all additive changes to the GMP as an increase to the lump sum amount for general conditions work.

OSM and P&C inform us that the original contract was developed from a state contract template. A current template provided to us by the state Department of Administrative Services (DAS) describes general conditions work to be negotiated as time and materials (T&M) with a not to exceed (NTE) limit. The state template further limits the increase due to the contract for changes to the GMP solely to the CM/GC's fee. Under a T&M/NTE limit format, the CM/GC will develop a general conditions budget with the assumption that change orders will happen both in and outside of the GMP. The CM/GC will manage its staff to the necessary scope within the NTE limit. If the contract time is extended, the general conditions NTE limit might need to be extended but only to the degree warranted by the additional supervisory and job site extension caused by the additional work. The addition of the 7 percent extended general conditions markup for all change requests will result in substantial additional payment to the CM/GC.

**Recommendation 4**

To reduce the risk of unnecessary cost for future CM/GC contracts where a lump sum general conditions amount is negotiated, the district should consider increases to general conditions work for additive changes to the GMP only when time is extended and only to the degree that such an increase is warranted.

**Protocols for reviewing and approving change orders**

The change order process for CM/GC contracts is more complex than that for design-bid-build contracts. Most changes occur within the established guaranteed maximum price (GMP) by using contingency amounts or allowances that are budgeted within the GMP. Changes that do not involve a change to the design intent at the time of execution of the GMP would typically occur within the GMP. Such changes would include design coordination issues, changes to the bid documents necessary to build a fully functioning facility, and subcontractor bids coming in above the GMP estimate.

However, there is a substantial level of disagreement between the CM/GC and OSM about the definition and intent of the “fully functioning” facility clause, and as a result, how change order items should be characterized – whether within the agreed upon GMP or an increase to the GMP. This type of initial disagreement is common to many CM/GC projects and is described in the Public Contracting Guide to CM/GC construction.

OSM procedures from reviewing and approving CM/GC change requests are not consistent, complete, or timely. The district has used the designation termed “GMPCA” in their e-Builder project management software to account for and process the changes within the GMP. According to OSM program management staff, GMPCAs are processed using the same level of signature control as that for change requests to design-bid-build contracts. That is, changes of \$10,000 or less can be approved by the project director and those above \$10,000 must be approved at the board designated authorization level. However, this is not consistent with written OSM standard operating procedures which authorize the project director to approve

changes that are within the GMP up to \$100,000. OSM indicates that a revision to Standard Operating Procedures will be made in July to correct this problem.

Our review also indicates that some changes have been approved by OSM project managers as CCDs (construction change directives) without first determining whether the changes are within or outside the GMP. If a change is subsequently determined to be outside the GMP, the project director has exceeded his/her authority for changes above \$10,000 because such changes require approval by designated PPS officials at a higher level of signature authority than the project director. Moreover, construction change directives are not an identified and defined process within the e-Builder management software system and are not recorded as processes within the system. OSM informs us that they are in the process of implementing an e-B process for construction change directives.

Finally, we found that although some changes requested by the contractor are pending as vendor initiated change requests (CR-VI), the work in many cases has proceeded without negotiation on price, scope, or under proper authority. Some work proceeded before even entered into the e-Building system as a CR-VI or a GMPCA.

The Public Contracting Coalition Guide to CM/GC construction advises owners that under the CM/GC process it is likely that there will be disagreement about whether changes will be within or additional to the GMP. Because work must proceed to ensure schedules are met, an e-B process is needed to authorize the work to begin either within the GMP, outside the GMP, or to be determined in future negotiations. The lack of an adequate system to address these initially undesignated changes has allowed work to proceed without appropriate authorization.

**Recommendation 5**

In order to increase efficiency, reduce potential additional cost and risk of non-compliance with district policy and OSM protocols, OSM should do several things.

1. Provide a workable format in e-B for processing CM/CG contract changes in a timely fashion, regardless of whether or not there is initial agreement as to whether they are changes within or outside the GMP.
2. Ensure that change orders and draw-downs for CM/GC projects receive appropriate approvals and approval authority in accordance with established SOPs and e-Builder requirements. Ensure that the provisions within the SOP and in e-B are consistent with each other.

**Project management**

The project team consisting of OSM, the project director, the architect, and the CM/GC have worked diligently to accomplish project goals and intents. Although the de-facto non-guarantee of the GMP was triggered, the team has worked collaboratively together to find solutions. The project is roughly 50 percent historic renovation. The team has attempted to provide the least cost solutions to preserve key aesthetic interior features of the existing structures, while dealing with issues related to asbestos, structural, and consistency of finishes. Original plans have changed to adjust to unforeseen conditions. A number of disagreements regarding change orders, schedule, and contract interpretation remain to be resolved.

There have been four minor construction accidents, all involving apprentices. The CM/GC has implemented changes to prevent these types of accidents from happening in the future.

The project continues to have difficulty meeting aspirational goals for contracting with MWESB firms. As of January 2016, the project as a whole has paid a total of \$19.5 million to contractors and consultants of which \$0.9 million or 5 percent went to certified MWESB firms. As shown in the table below, \$872,424 went to Division 48 MWESB firms (architects, consultants) but only \$6,250 went to Division 49 MWESB firms (contractors and trades). Although OSM selected architects and contractors in part on their commitment to address



MWESB goals, the firms have not been successful in reaching the aspirational goals of 18 percent of payments to MWESB firms. In addition, the use of CM/GC alternative procurement approach was selected for modernization project in part based on the additional latitudes these firms have to encourage MWESB participation in subcontracts.

**Figure 6 Percent of FHS project payments to MWESB firms (consultants and contractors): March 2016**

TYPE OF CONTRACT/PURCHASE	Total invoices paid	Payments to MWESB firms	% to MWESB firms
Division 48 – A&E, survey & related services	\$6.3 m	\$872,424	14%
Division 49 – Public Improvements	\$13.2 m	\$6,250*	0%
<b>TOTAL 48 and 49 contracts</b>	<b>\$19.5 m</b>	<b>\$878,674</b>	<b>4%</b>

Source: OSM MWESB Invoice spreadsheet March 2016

\* Based on incomplete reporting

## 2. ROOSEVELT HIGH SCHOOL

The district initiated demolition and construction of the Roosevelt HS modernization project in April 2015. The 240,000 square foot facility will be constructed in three phases with final site improvements to be completed in November 2017. In contrast to the other modernization projects at Franklin and Grant high schools, and the Faubion project, students and teachers will remain at Roosevelt and will move between existing buildings, temporary classrooms, and the new facility as the different phases of construction are started and completed.

The project team consists of Bassetti Architects, the construction firm of Lease Crutcher and Lewis, and project direction and oversight by OSM.

### Overall budget and schedule status

The total budget for the project as of March 2016 is \$96.7 million. The Guaranteed Maximum Price (GMP) was established at \$69.3. The April Project Status Update forecasts the project to complete within budget with an estimated savings of \$2.6 million in unused project contingency. The CSM states that this projection may be subject to further (downward) adjustment as work begins on the restoration of the historic wing. As of April 2016, the project is 43 percent completed and has spent \$36 million of its total budget. OSM anticipates completing the three construction phases and phased move-in by students and teachers on the following schedule.

**Figure 7 Roosevelt High School construction phases**

	Phase One complete	Phase Two complete	Phase Three complete
Media Center/Library	Aug 4 2016		
Gym construction and classroom wing	Aug 10 2016		
Performing Arts and theatre and commons	Sep 1 2016		
Move-in	Aug 24 2016		
1921 building modernization		Aug 17 2017	
Move-in		Sep 5 2017	
Remove temporary facilities/buildings, final site-work			Nov 11 2017

Source: BAC January 2016 report and April 2016 Project Status Update

As the above phased construction is carried-out, students will remain on campus and move from temporary to permanent buildings as the phases are completed. This school year classes are being held in existing buildings and a “ten-plex” modular building. Two smaller modular structures will hold a social service office and a temporary weight room. PE classes will be held in a temporary heated tent structure. School assemblies will be held in the cafeteria. For the 2016-2017 school year, temporary facilities will remain and the new auditorium, gymnasium, media center, and commons cafeteria will open for student use. The existing 1921 buildings will be closed for renovation. Finally, in the fall of 2017, all modernized building will be open to students, temporary facilities will be removed, and old library and cafeteria wings will be demolished and removed. Final site work and landscaping will be completed in the winter of 2018.

Next year, we will spend additional time evaluating the procurement of furniture, fixtures, and equipment (f/f/e) for the Roosevelt project.

OSM continues to anticipate on-time completion of the project. However, Phase I is currently two weeks behind schedule. Saturday construction work has helped reduce days lost due to poor weather in January 2016 but, according to OSM project management staff, additional efforts will be needed to ensure on time completion of Phase I.

### **Guaranteed maximum price (GMP) and buy-out results**

A major effort this past year was to amend the initial contract with the CM/GC firm to reach a guaranteed maximum price (GMP) for the construction work. The project GMP was to be negotiated based on 100% completion of the design development documents. The initial cost estimate submitted to OSM by the CM/GC was \$80.7M. OSM and the CM/GC identified over \$11.4 million in reductions through value engineering adjustments, scope reduction, and negotiating lower contingency levels to arrive at a GMP budget of \$69.3 million. Some of the larger value engineering items included reduced steel requirements, an alternate roofing system, and a LED lighting system. The larger scope reductions included fewer and lesser quality storm windows and changing ground face and colored CMU block to standard concrete block. The CM/GC contract was amended on April 15, 2015, to establish the GMP total of \$69,312,721.

Following the establishment of the GMP amount, the CM/GC requested and received bids, in three bid packages, from sub-contractors to perform various elements of the constructions such as mechanical and plumbing, electrical, structural concrete, structural steel and metals, and drywall/insulation/sheathing. The buyout by the CM/GC of the subcontractor bids exceeded the amounts budgeted in the GMP by \$3,647,147. The CM/GC, with OSM concurrence, addressed most of this shortfall by using \$3.4 million in the GMP budget set aside for escalation and design contingency. The remaining amount of shortfall, \$237,000 was considered by OSM to represent a scope increase to the GMP. OSM authorized a change request for this amount from the project contingency.

### **Additional Changes**

Additional changes, both within the GMP and as an increase to the GMP, are anticipated based on conversations with the project director and the latest April project status update. The 2017 audit will spend more time evaluating the status of changes, use of contingency within the GMP and use of project contingency.

### **Additional CTE space contemplated**

On August 4, 2015, the Portland School Board passed a resolution to ask the OSM to evaluate the feasibility of reusing the existing Roosevelt auto shop for additional STEM and CTE work space using \$2 million in Roosevelt project funding. The subsequent evaluation submitted to the Board reported that \$2 million would be insufficient to address minimal requirements for design work, permitting, and repairs and improvements, currently estimated by OSM program management to cost \$4 million to \$5 million. In addition, the report identified other impacts of reusing the Auto Shop including creating inequities in funding and space with Franklin and Grant high projects modernization projects, various problems in school operation and management, site utility concerns, and challenging adverse impacts to the tennis courts which were to be located on the site of the auto shop. The report also detailed impacts on the overall Roosevelt budget and scheduled completion.

Just prior to the finalization of this report, the Board of Education authorized the use of up to \$5 million in program contingency to add 10,000 square feet of stand-alone career technical

education (CTE) and maker-space on the RHS campus. The use of reserves to fund this addition to the RHS project was not supported by the Bond Accountability Committee nor OSM because of budgetary risks. At the time the BOE made their decision, although OSM and the BAC talked in general terms about potential significant additional costs, the OSM updates did not yet report some of the quantifiable additional anticipated costs for the FHS and GHS budgets. (See the next section for discussion of the GHS budget.) The 2017 audit will discuss the additional maker/CTE space in greater detail.

### **Project management**

Our review of the ongoing management of the construction phase shows that the RHS project team members are collaboratively working together toward a goal of completing the project on schedule. A number of systems are in place to support ongoing communication and decision making including weekly project team meetings, daily site reports, and project newsletters and web-based communication. The project has experienced minimal safety concerns.

The project continues to have difficulty meeting aspirational goals for contracting with MWESB firms. As of January 2016, the project as whole has paid a total of \$17.9 million to contractors and consultants of which \$1.5 million or 8.2 percent went to certified MWESB firms. As shown in the table below, 14.3 percent of payments went to Division 48 firms (architects, consultants) but only 4.9 percent of the payments went to Division 49 firms (contractors and trades). Although OSM selected architects and contractors in part on their commitment to address MWESB goals, the firms have not been successful in reaching the aspirational goals of 18 percent of payments to MWESB firms. In addition, the use of CM/GC alternative procurement approach was selected for modernization project in part based on the additional latitudes these firms have to encourage MWESB participation in subcontracts.

**Figure 8 Percent of RHS project payments to MWESB firms (consultants and contractors): March 2016**

TYPE OF CONTRACT/PURCHASE	Total invoices paid	Payments to MWESB firms	% to MWESB firms
Division 48 – A&E, survey & related services	\$6.4 m	\$0.9 m	14.3%
Division 49 – Public Improvements	\$11.5 m	\$0.6 m	4.9%
TOTAL 48 and 49 contracts	\$17.9 m	\$1.5 m	8.2%

Source: OSM MWESB Invoice spreadsheet March 2016

We made a recommendation in our 2014 and 2015 audit reports to provide more flexibility in PPS contracts to permit CM/GC firms to procure subcontractors by methods other than competitive advertised bids. The same recommendation is repeated elsewhere in this Audit. However, according to the RHS project director, further improvement in achieving MWESB goals at Roosevelt high schools will be hard to achieve because most of the subcontractors and vendors have already been selected.

There are a number of systems issues which are addressed in the FHS section of this report, which are also valid, in whole, or part, for the RHS project. Rather than repeat them in full the findings and recommendations, we list the issues below, and refer the reader to the recommendations contained in Franklin high school section of this report.

- The 7 percent proscribed increase to fixed sum general conditions for all change approval requests was also added at the time of the GMP contract amendment to the RHS contract.
- Weaknesses in change order processing: Timeliness, appropriate authorization, lack of consistency between SOP written protocol and e-Builder systems.
- Clarity about which change items constitute a change to the GMP and which are additions to the GMP.

### 3. GRANT HIGH SCHOOL

As of March 2016, Grant HS has completed its Master Plan. The Board of Education approved the Master Plan in December 2015 and the exemption for a CM/GC alternative procurement process for construction services in January 2016. The Schematic Design process started in December and is scheduled for completion this May. Construction is anticipated to begin in the late spring of 2017 and is scheduled for completion in the summer of 2019.

As of February 2016, the total budget for the Grant high school modernization is \$111.9 million. Of this amount, approximately \$81.25 million has been designated for the maximum amount of the CM/GC contract value and \$12.3 million for project contingency. As discussed in the 2015 Audit, the project budget was increased by approximately \$18.5 million since the last audit report to address the Additional Criteria and actual escalation at 5 percent rather than the previously assumed rate of 2 percent.

The sections that follow evaluate selection of the architecture/engineering firm to lead the master planning effort and subsequent design and construction administration, the results of the master planning process, current construction budget and costs, and project and program management budget oversight systems.

#### **Selection of architecture/engineering firm for Grant HS modernization project**

On April 3, 2015, the district advertised an RFP for procurement of A/E services for master planning, design, and construction administration for the GHS renovation project.

Two events occurred during the selection process which subsequently caused P&C to make changes to P&C RFP selection procedures. First, the scoring and ranking of proposals by members of the selection committee for one firm were significantly divergent with each other. One proposal was ranked last or next to last, out of six firms, by all three program management staff but was ranked first by the two project management staff. Four firms, including the firm that received divergent scores, were invited to participate in an interview.

The second event occurred during the interview ranking process. One of the OSM program management staff made an adverse comment to the entire selection committee about one of the

proposers that P&C believed to represent bias and undue influence on others in the group, particularly because the management person making the statement had the highest level of authority in the group. P&C removed that person from the selection committee, voided that person's scores, and ranked the firms based on the scoring of the four remaining committee members.

A Notice of Intent to Award was issued by P&C to the highest ranking firm but a protest was submitted by the second ranked firm alleging the selection process did not meet the statutory requirements of integrity and lack of bias. The second ranked firm made a number of claims and requested that the selection process be redone with a new, unbiased selection committee. While disagreeing with some of the claims of the protest, the subsequent review by P&C found that the process had not met the standard of integrity and lack of bias as required by the statute. Consequently, as permitted by district rule and the RFP, the district terminated the selection process.

A new RFP for Grant HS design services was issued in July 2015 and was completed late August. The result of the second selection was that the original highest ranking firm was again the top-ranked firm.

This experience resulted in several changes to the RFP process. First, in order to minimize the chance for bias or inappropriate influence in future RFP selections, Purchasing and Contracting assumed greater control over the RFP processes. P&C developed a revised detailed list of responsibilities and requirements of selection committee members that each selection committee member is required to sign. These responsibilities and requirements include rating firms solely upon the materials submitted, not talking with other members of the committee about the process outside of the proscribed elements of the process, using a P&C template for assigning points, and rating proposals prior to group discussion.

In order to ensure a higher degree of public accountability and buy-in to the process, P&C staff established requirements that the selection committee should include one community member, where available and appropriate. Additional non-OSM members can be assigned to a selection committee including school and/or district instruction administrators. P&C must approve all selection committee members, including those from OSM.



Finally, based on a OSM recommendation P&C streamlined the RFP submittal requirements and interview process so that firms would not have to invest as much time and effort, and the overall selection has a higher degree of integrity. Proposals are limited to a maximum number of pages, interview questions are no longer provided prior to interview, and the same interview questions are to be asked of each firm. Reducing the cost of submitting proposals and preparing for interviews, in the long run, saves the owner from higher fees which incorporate the cost of preparing proposals and interviews.

The revised P&C RFP process addresses an immediate significant concern of lack of integrity and bias. However, there are continuing opportunities for P&C to improve the selection of qualified candidates by ensuring that all committee members fully understand the requested service so that they are able to better interpret the written proposals and oral presentations. While the new protocols permit committee members to talk with one another in a group context, this communication only occurs after each committee member has scored proposals. Community members or instruction personnel with limited knowledge of design and construction may not understand construction terms, standard industry practice, or the scope of work requested. Discussions with committee members on what to look for in proposals and how best to interpret the information prior to receiving and scoring the proposals would help committee members make more informed decisions on the qualifications and abilities of the proposers.

**Recommendation 6**

In order to increase the likelihood of selecting the most qualified firm to perform services, P&C and OSM should investigate ways to provide more complete information to help the selection committee evaluate and screen applicants prior to advertising and receiving proposals. While still maintaining integrity and lack of bias, this information could include specifics on what OSM/PPS is trying to accomplish in a particular project, how to read and interpret proposals, and how to assess interview responses. In addition, in order to reduce the risk for schedule compaction, architect/engineer selection should occur earlier to increase project schedule float and minimize the adverse time impact of potential delays including protests, program changes, and re-design.

### **Master Planning (MP) results**

OSM and Mahlum Architects held five Design Advisory Group (DAG) meetings and two design workshops in the fall of 2015 to develop the Master Plan for the Grant HS modernization. The DAG brought community and stakeholder perspectives into the design and development of Grant HS improvements. The Master Plan was submitted and approved by the Board of Education on December 15, 2015.

The Grant HS Master Plan provides for total building size of 294,000 gross square feet and was designed for a 1,700 student enrollment and a core facility sized for 1,700 students. Classroom spaces will accommodate a teacher workload of 150 students in accordance the Educational Specifications but in view of the potential need for a greater number of classrooms in the future, teacher office space were designed to classroom size (approximately 850 square feet) so that they could be potentially repurposed as classrooms in the future.

The 294,000 gross square foot size is 14,000 gross square foot larger than that proscribed by the Educational Specifications. The MP presentation posted on the district web site identifies compliance with and variation from the Educational Specifications. Specifically, the Master Plan adds the following additional spaces not included in the Educational Specifications: medically fragile program (2200 sq. ft.) choir classroom (2200 sq. ft.), AVID and virtual scholars (2200 sq. ft.), gender neutral facilities (630 sq. ft.), and reuse of existing theatre and balcony (7000 sq. ft.). District project and program management staff believe the larger size is affordable and within budget as a result of planning for more renovation (70%) and less new construction (30%). For example, the design includes a creative and cost efficient use of existing structural walls to back up on each side of newly developed spaces.

### **Master plan construction cost estimate**

The adjusted construction estimate for the Master Plan is approximately \$90 million. The estimated was developed by an independent estimating firm and provided by the master planning design firm. The \$90 million dollar conceptual estimate includes cost escalation to the second quarter of 2017 and a reduction for an alternative mechanical system. Because OSM's construction budget for the CM/GC contract for Grant HS is currently only \$81.2 million, the

Grant project director indicates that \$8.8 million in additional funding will be required from the project contingency. Obligating this amount will reduce the overall project contingency from \$12.3 million to \$3.5 million, approximately 3.1 percent of the overall project budget.

Reducing the project contingency to 3.1 percent of the project budget before establishing the GMP and transferring risk to the CM/GC firm is inconsistent with prior OSM practice and places the project budget at potential financial risk. OSM practice has been to maintain an owner's project contingency of at least 10 percent of the entire project budget until agreement upon the GMP at which point risk is theoretically reduced. Ten percent of project budget would be \$11.2M. Both the FHS and RHS projects maintained project contingencies of about 10 percent of project budget prior to agreement on a GMP.

At the time of the final drafting of this report, based on a nearly complete schematic design, and as revised by OSM, the architect estimates the project construction cost at approximately \$92 to \$93 million, depending on how markups are assessed. OSM informs us that they will be directing the architect to design the project to a total construction cost of approximately \$86 million. OSM further states that they will transfer approximately \$5 million from program reserves to the project budget.

OSM may have several options to bring a project back within an appropriate budget and various barriers to pursuing these options:

Validation of the estimate. The assumption contained in the master planning cost estimate could be revisited. Although review of the estimate could result in potential lower costs for individual items, it may also identify line items that are potentially insufficiently funded. For example, the estimate provides for escalation to the 2Q of 2017 which is the projected milestone for buyout of subcontractor packages. The second quarter of 2017 is one year earlier than that used by OSM in its own parametric estimating. OSM generally assumes escalation to the mid-point of construction which would be the 2Q of 2018.

Identification of less expensive options while delivering the same level of performance (value engineering).

Reduction of project scope/size. Scope reduction might require a change to the master plan developed through a community process and approved by the Board of Education.

Providing the project with additional budget from other sources.

**Recommendation 7**

In order to reduce potential financial risk for the GHS project, by the completion of schematic design, OSM should make value engineering reductions, scope reductions, increase the project budget, and/or take other appropriate measures so that the projected construction costs are within budget while maintaining an ample and appropriate project contingency.

**Project management protocols and compliance**

Several factors may have contributed to the master plan design cost estimate exceeding the planned project budget and reducing contingency levels to less than district and industry standards. Additional factors have contributed to OSM not “catching” the problem. Although general guidelines for contingency levels at different stages of project development are provided in the OSM Standard Operation Procedures (SOP) for non-GMP projects, for GMP projects the SOP defaults to agreement between the project director and executive director (now the CSM) to set minimum and optimal levels for project contingency. Appropriate review and communication by OSM program management may not have occurred. The July 2015 PMP requires the Executive Director (now CSM), the Operations Director, and the Program Manager to provide some level of project budget oversight. The level of oversight may not be sufficiently specific, and there may have been compliance issues in the GHS project budget not being appropriately vetted by OSM program management.

The OSM PMP has from the onset of the program also required every project to have a Project Team Management Plan (PTMP) to identify specific project goals and action steps in order to keep a project on budget, on schedule, to the desired scope, and to be a project-specific risk identification and prevention tool. The 2014 and 2015 audits both address that PTMPs have not been implemented for any project. Although the OSM program management staff stated that the PTMP would be implemented for GHS, a GHS PTMP has not been written. The 2015 audit

recommended, with which the district concurred, that in order to reduce risk key elements of the PTMP should be implemented prior to design rather than just prior to construction as identified in the SOP.

**Recommendation 8**

1. In order to minimize the chance that design cost will exceed budgeted funds for this and future projects, and to increase accuracy and transparency in reporting, OSM should modify the SOP to provide specific targets or ranges for project contingency at key stages of design for high school renovation projects in general and for GMP high school renovation projects in specific. The SOP should provide greater specificity on how the program will provide project budget oversight and the CSM should hold program management accountable for oversight compliance in fully reviewing and vetting project budgets on an on-going basis.
2. In order to minimize risk, OSM program management should ensure the development of comprehensive and detailed PTMP templates for renovation projects, new construction projects, and IP work. OSM program management should hold project management staff accountable for producing comprehensive and functional PTMPs, with core elements of the plan written and ideally implemented prior to beginning the master planning process, or at the latest, prior to the start of schematic design.
3. In order to increase the potential for success of corrective action as recommend above, or otherwise implemented by OSM, written lessons learned should be developed and updated regularly from information obtained from the FHS, RHS and GHS projects.

#### 4. MASTER PLANNING FOR THREE ADDITIONAL HIGH SCHOOLS

OSM has initiated Master Planning for three high schools – Benson, Lincoln, and Madison. While OSM initially planned to complete master planning for six high schools, the combination of the BOE deciding in November of 2014 to potentially consider three high schools for renovation as part of a possible 2016 bond measure and cost experience with FHS and RHS indicated that additional funding was needed for adequate master planning and public engagement, funding was transferred from the budgets of the three other schools (Wilson, Jefferson, and Cleveland). Master planning for the three high Benson, Lincoln, and Madison schools is scheduled to be complete by June, 2016.

Similar to efforts taken before the approval of the 2012 bond, OSM has developed a set of general assumptions to guide the master planning for the three high schools and to help estimate the size of a potential new bond. These assumptions are termed parametric planning parameters and include building size and cost per square foot, soft cost percentages for design and engineering, estimates for furniture and equipment, contingency levels, expected escalation, management costs, and reserves. OSM presented these planning parameters for Lincoln, Benson, and Madison to the BOE School Improvement Bond Committee in December 2015.

##### **Benson HS**

Master planning for Benson high school is underway. As of March 2016, three master planning committee meetings have been held and two public open houses are planned. As the district's major focus option school, the program needs to allow for considerably more CTE and specialized instructional space and costs than that which are provided for a comprehensive high school.

The budget for master planning for Benson HS has been increased to \$500,000, as recommended in the 2015 Audit. This represents an increase of \$176,666 over the amount reported in the 2015 Audit. The design contract with DOWA architects is approximately \$375,000; \$24,175 is set aside for land surveying; and \$25,193 is reserved for geotechnical engineering. The master planning project has a \$75,000 contingency.

The contact with DOWA requires the development of the master plan for a school of 391,000 square feet, the current building size, and non-escalated construction budget of \$114 million (building plus site). These numbers are consistent with the OSM parametric planning parameters for a future bond established by OSM.

### **Lincoln HS**

Master Planning for Lincoln high school is also underway. To date, four public Master Planning Committee meetings have been held and two public open houses are planned. Bora architect firm was selected to lead the master planning effort.

The budget for master planning for Lincoln HS is \$400,000, an increase from the budget reported in the 2015 Audit. The budget is composed of \$381,000 for design and architecture, \$17,000 for land surveying, and \$2,000 is reserved for small supplies. There is no separate project contingency and no funds have been reserved for geotechnical engineering.

The contact with Bora requires the development of the master plan for a 300,000 square foot school and a non-escalated construction budget of \$96 million (building plus site). This budget is inconsistent with the OSM program bond planning document that identifies a parametric total non-escalated construction cost of \$90.7M.

Prior to the selection of Bora, the district contracted with GBD architects for an initial assessment of the potential for mixed uses of the property such as street-front commercial development and shared parking with the relatively close athletic club and/or the soccer stadium. A Memo of Understanding between PPS and PSU is in place to explore the potential for PSU relocating its School of Education to the Lincoln campus, a partnership similar in principle to the partnership between Concordia University and PPS on the Faubion campus.

### **Madison HS**

Master Planning for the Madison high school is underway. Only one Master Planning Committee meeting has been held due a delay in appointing a new project director and the late start in selecting the architecture firm to guide the planning effort. Additional MPC meetings and public workshops are planned with a scheduled completion of June 2016.

The budget for master planning for Madison HS is \$400,000, an increase from the budget shown in the 2015 Audit of \$323,334. The current contract with Opsis architectural firm is for \$320,000. The project contingency is established at \$80,000 but other budget line items have not been established due to the delay in starting the planning.

The contract with Opsis requires the development of the master plan for a 300,000 square foot school with a non-escalated construction budget of \$96 million (building plus site). These amounts are consistent with the OSM parametric planning parameters for a future bond.

**Recommendation 9**

For increased efficiency and effectiveness, the SOP should be updated to provide greater clarity and specific guidelines for line item budgeting for master planning. Program level estimating for future projects should be completed prior to setting targets for master planning efforts.



## Other Major Projects

In addition to the high school modernization and master planning projects discussed in the previous section, OSM worked on other major projects this past year. These projects include the renovation of Faubion PK-8 school upgrading interim sites at Tubman school and Marshall high school, and the ongoing summer Improvement Projects. The sections that follow discuss the progress of these projects and their budget and schedule status.

### 5. FAUBION PK-8 SCHOOL

As reported in the 2015 Audit, the new Faubion PK-8 facility is an innovative public/private venture with Concordia University scheduled to open in September of 2107. Faubion students have been relocated to the Tubman Campus for the 2015-16 and 2016-17 school years.

The project is described by OSM as, “Construction of a new three-story, approximately 133,000 square foot Pre-Kindergarten through 8th grade school with Concordia University College of Education classrooms and offices, a health and wellness clinic, an early childhood center, as well as spaces for community service partner organizations. The school and associated vehicular access and play areas will be constructed on properties owned by Portland Public Schools. Work also includes a new outdoor plaza constructed on property retained by Concordia University, providing access from their campus to the south entry of the new school building. The project is seeking LEED version 4, Building Design and Construction: Schools Gold certification.” The work also includes demolition of the existing 62,500 square foot PK-8 school building and three existing houses currently used as university office space.

The 2015 Audit reported the total project budget as \$44.7 million which included an estimated \$15.5 million contribution from Concordia University to fund the CU portions of the project. The overall budget has increased to \$48,870,128 which includes up to \$15.5 million in cash from CU and gifted property and land. The \$4.2 million budget increase is the result of projections during design development for additional funding due to the continued escalation of estimated construction costs. The additional funding came from program contingency.

In order share in the construction and development of the project, the district and Concordia University intend to enter into a Project Construction Cost Sharing and Funding Agreement. The draft agreement delineates that CU will provide equity in the form of cash up to \$15.51 million and PPS will commit \$27.5 million. The parties have agreed that certain costs will be separately the direct responsibility of one party and other costs will be shared in the ratio of PPS 74 percent and CU 26 percent. The cost sharing percentages are based on the square footage of areas of the spaces solely attributable to either PPS or CU use. The agreement affirms that the contracts with the architect and general contractor are the responsibility of PPS. The agreement specifies that “PPS will approve all change orders using its reasonable discretion, provided that if any change order affects the CU premises or increases the CU contribution, CU shall approve said change order in its reasonable discretion within three business days of PPS providing a copy of the change order to CU.”

The project budget includes approximately \$1.1 in CU contingency which can be used to cover the CU portion of change orders. CU has arranged to obtain a loan guarantee from the Lutheran Church Extension Fund (LCEF) and PPS is authorized to drawdown funds from the LCEF. The agreement with CU appears to be financially responsible with both the contractual commitment from CU and the letter of authorization backing the commitment from the LCEF. CU has been a strong and committed partner. It is, however, beyond the scope of the performance auditors to comment on financial risk, if any, which might arise out of this agreement.

A separate operating agreement with CU for shared and individual responsibilities for the operation and maintenance of the new facility once the building is constructed is yet to be negotiated and executed.

Todd Construction was selected as the general contractor and the contract was executed by PPS on January 14, 2016. However, Todd began work prior to execution of the Cost Sharing Agreement with CU. Although there likely will be little risk involved because of the intent of both parties, the Cost Sharing agreement should have been negotiated and executed before the start of the contract with Todd. A change request has been approved by OSM to extend the

substantial completion date from May 26, 2017 to June 2, 2017, because of a delay in BOE approval of the award to Todd due to bad weather for the scheduled BOE meeting.

As of the drafting of this audit, there have been relatively few approved change requests (CRs) to the Todd contract.

Hazardous material destructive investigation for the former facility occurred under an initial contract of time and materials with a not to exceed limit of \$5,000. The work was directly procured with Professional Minority Group, Inc. (PMG). The abatement work was competitively bid and awarded to Keystone Contracting for an initial contract amount of \$284,900. The abatement work was completed by January of 2016.

The former facility has now been demolished under the contract with Todd. PPS acquired two single family houses from CU as part of the agreement with CU. OSM solicited quotes for the abatement of these two houses and awarded the contract to Keystone Contracting for \$30,500. This abatement work, too, has been completed, and the buildings removed. A CR was approved by OSM on March 8, 2016, for oil cleanup at the site of one of the demolished residential houses donated by CU for an amount not to exceed \$40,000.

## 6. INTERIM FACILITIES: TUBMAN AND MARSHALL

In order to provide an interim space for instruction during the construction of Faubion PK-8 school and Franklin high school, OSM upgraded and renovated portions of Tubman middle schools and the vacant Marshall high school. Both of these two projects are complete and currently housing students for this school year.

### **Tubman Swing Site**

The Tubman campus was remodeled during the summer of 2015 to accept students from Faubion PK-8 and to provide instruction during the 2015-2016 and 2016-2017 school years.

The project budget for the primary construction contract at Tubman was \$809,500. Improvements included better accessibility, HVAC improvements, fire sprinkler upgrades, and interior finishes, flooring, casework, and program adjustments for PK-8 users. The contract was awarded to the low bidder, 2KG, for \$507,000. The work was substantially complete by the end of August, 2015. The contract term has been extended several times to address additional minor necessary work items. The most recent term extension occurred in January 2016. The contract now will end on February 29, 2016. The contract was increased by a total of \$150,524 to \$657,524.

State law requires PPS to provide for transportation (bussing) for elementary students living more than 1 mile from their school secondary students living more than 1.5 miles from their school, or for students who do not have a safe walking route to school. OSM has arranged with PPS transportation to provide bussing for the Faubion students to Tubman. The additional cost of this bussing is to be paid for by the bond and \$770,000 is budgeted in the Tubman project for this purpose.

### **Marshall Swing Site**

As reported in previous audits, while the Franklin high school renovation projection is under construction, Marshall HS is the interim swing space for the FHS program for school years 2015-2016 and 2016-2017. It will also be the used as the interim swing space for the Grant high

school program for school years 2017-2018 and 2018-2019. Total budget for the project was established at \$4,609,080.

Most of the work necessary to prepare Marshall for the FHS program was done in 2014 and was addressed in our 2015 audit report. The majority of the work was done by Skanska Construction Company under an early work agreement to the Franklin high school CM/GC contract. The original contract for the Marshall high school improvement was for \$2,088,321 but the contract was subsequently amended on several occasions. Renovation work with regard to the FHS program at Marshall is now substantially complete. Project costs included project construction (\$2,658,531), architecture and engineering fees (\$350,652), moving expenses (\$556,437), and f/f/e (\$368,000). As of March 2016, the project is forecasted to be \$132,055 under budget.

The FHS program at Marshall is being operated with interim teacher office spaces similar to the program that is planned for the renovated FHS when it is open in the fall of 2017.

PPS operates under a waiver from the state which permits FHS students to use public transportation and meets the state requirement to provide transportation for secondary students that live more than 1.5 miles from school or that have an unsafe walking route. PPS has coordinated routes to Marshall with Tri-Met. All special education students currently receiving PPS transportation prior to the transition will continue to receive that PPS transportation. Yellow bus service for special education students did not change simply due to a change in school location. Special education students eligible for bussing will still be eligible for bussing unless the IEP team makes a service change.

## 7. SUMMER IMPROVEMENT PROJECTS

The management of the Summer Improvement work in 2015 was separated into three projects: eight schools received roofing and/or seismic rehab (IP-2015), 18 schools received science and in some cases ADA improvements (IP 2015-Science), and one school, added late in design to the IP-2015, had its own project designation (IP 2015-Maplewood). Construction of all the summer Improvement Projects 2015 was substantially complete in late August of 2015, in time for school opening in the fall. As shown in the table below, the nine schools of IP 2015 and IP 2015-Maplewood received improvements such as roof replacements, seismic upgrades, ADA accessibility improvements, and science classroom improvements. Eighteen other schools received science classroom updates, ADA improvements, or both. Elevators at Ainsworth and Woodlawn schools will be completed by spring and summer of 2016, respectively.

**Figure 9 2015 Summer Improvement Projects: Major projects**

	Roof and seismic	Science classrooms	Seismic rehab	ADA accessibility
AINSWORTH K-5	✓			✓*
BUCKMAN K-5	✓			✓
CREATIVE SCIENC/CLARK K-8	✓	✓		
HAYHURST K-5	✓	✓		
LLEWELLYN K-5			✓	
MAPLEWOOD K-5	✓	✓		
SABIN PREK-8	✓	✓		✓
STEPHENSON K-8	✓			
WOODLAWN PK-8	✓			✓*

Source: OSM BAC Meeting report January 2016

\* Includes elevator

IP 2015-Science work was done at Astor, da Vinci, George, Gray, Irvington, Lee, Markham, Meek, Peninsula, Skyline, West Sylvan, Bridger, Harrison Park, Holladay Center, Lent, Mt. Tabor, Richmond, and Roseway Heights.

The total budget for IP 2015, IP 2015-Maplewood, and IP 2015-Science was increased from the initial IP 2015 budget of \$13.5 million to \$17.2 million, a 26 percent increase. As of March 1, 2016, the projects are near final close-out and are expected to be under the revised budget of \$17.7 million by approximately \$500,000. As shown below, the primary factor in the increase over the original budget was the addition of the Maplewood K-5 roof to the IP 2015 schedule and higher contractor bids than anticipated. Total construction bids exceeded fully escalated design and construction budgets by \$1.5 million (12%).

**Figure 10 Comparison of IP 2015 Design and Construction budgets to contractor bids**

BID PACKAGE	Design and construction budget	Contractor bids	% change
PAYNE CONSTRUCTION (Ainsworth, Woodlawn, and science sites)	\$3.4 m	\$4.3 m	26%
BALDWIN CONSTRUCTION (Hayhurst and Stephenson)	\$2.3 m	\$1.9 m	<17%>
2KG CONSTRUCTION (Maplewood roof)	\$ .9	\$1.4 m	56%
CORP CONSTRUCTION (Buckman, Sabin, Creative Science and Llewellyn)	\$4.7 m	\$5.3 m	13%
2KG CONSTRUCTION (Boise-Eliot/Humboldt and Chief Joseph)	\$1.1 m	\$1.5 m	36%
SKYWARD CONSTRUCTION (Science sites)	\$ .9 m	\$ .5 m	<44%>
<b>TOTAL</b>	<b>\$13.3</b>	<b>\$14.9</b>	<b>12%</b>

Source: OSM IP Project documents

The summer improvement projects in 2013, 2014, and 2015, as a whole, have all exceeded their original budgets. OSM Project management staff stated that at approximately the design development phase of design for IP 2015, the designs were within budget and the projects were carrying design contingencies built into their internal cost estimates. However, much of the work bid over budget. In each year, OSM transferred funding from CSM (formerly COO) contingency to address overages. As shown below, total IP budgets for these three years have

increased from original budgets of \$36.6 million to final forecasted expenditures of \$47.0 million, a 28 percent increase.

While construction cost escalation was one cause of increases during this time period, not all of the overage is attributable to escalation. An independent cost estimating firm, RLB, estimates institutional construction escalation in the Portland area at about 5 percent per year for the past two years. The majority of the work for IP 2014 bid over budget and to a degree that cannot be accounted for purely by escalation.

Our discussions with OSM management indicate that a number of other factors likely influenced the increase in final costs from the original budgets. For example, the initial budgets for these projects may have been inadequate to address the costs of roofs, ADA, and seismic improvements. Because of the more specific nature of work within classrooms, it was possible to fairly accurately estimate science upgrades. The inadequacy of existing as-built drawings and the existence of unforeseen conditions for roofs, asbestos, and framing made final designs and costs more variable and difficult to accurately estimate.

In addition, requesting bids in mid to late spring, prior to summer construction, also contributed to higher bids than planned because of reduced competition. Several of the projects had only two bidders. IP 2015-Maplewood was not part of the original IP 2015 scope of work and was added late in the development process at the request of FAM. Even with an accelerated design, the project bid later than the other IP projects and received only one bid. OSM project management staff state that there was insufficient time to rebid the project and complete the work in the summer of 2015.

OSM program management stated that the short summer construction timeframe of 65 days and PPS requirements related to MWESB bidding compliance and monitoring, work force apprentices, OCIP requirements, and reporting, may have also contributed to reduced competition and higher bids.



**Figure 11 Summer Improvement Project budget increases – IP 2013 to IP 2015**

	Original budgets	Final forecasted expenditures	% change
IP 2013	\$9.5 m	\$12.0 m	26%
IP 2014	\$13.6 m	\$17.8 m	31%
IP 2015, IP 2015 Maplewood, and IP 2015 Science	\$13.5 m	\$17.2 m	27%
<b>TOTAL</b>	<b>\$36.6 m</b>	<b>\$47. m</b>	<b>28%</b>

Source: OSM Operations Summary reports

For one project, the classroom cabinets installed over the summer were not acceptable, and the work had to be redone during the school year. According to district project management staff, the cabinet subcontractor had subcontracted the installation of the new cabinets to another subcontractor that used inadequately trained (daily) workers for the installation. As in prior years, some change order work items occurred prior to fully executed change authorization.

OSM has learned a number of lessons from these experiences and have taken efforts to advertise construction bids earlier in the spring to encourage more competition. In addition, OSM has initiated more investigative demolition work to identify potential problems, which should lead to more informed design decisions and estimates, and reduce unforeseen conditions during construction. A construction firm was hired on an as needed time and materials basis to open up roofing spaces so that OSM and the architect can view roof substructures.

Advertising invitations to bid earlier in the year may result in more competition and lower bids.

**Recommendation 10**

In order to control IP summer project budget increases, OSM should assess the factors that have contributed to a pattern of projects bidding over budget and continue to explore ways to develop designs that bid within budget. In addition to conducting more investigation demolition work to make informed construction design decision, OSM should start design earlier and issue invitations to bid earlier. In order to ensure a higher level of quality construction, OSM should consider adding in the bid specification, minimum qualifications requirements for designated systems.

## 2012 Bond Program Administration

Our review of the 2012 Bond Program Administration this year includes an assessment of program staffing and costs, compliance with district and state procurement policies, progress in meeting equity in public purchasing and contracting goals, and public engagement and communication improvements. We also evaluate the degree to which OSM has implemented recommendations from our prior audit reports. The following sections discuss the results of our review of the Bond Program’s management and administration for the period from April 2015 to March 2016

### 8. PROGRAM MANAGEMENT AND STAFFING

To manage and administer the bond program, OSM has a separate “project” called the 2012 Bond Program project. This project accounts for all OSM staff, materials and services, and other activities to administer the bond program. The program also accounts for various reserves and contingencies for the bond program. The table below summarizes the current eight-year 2012 Bond Program project budget as of March 2016. As shown, the total budget to manage the bond program is \$39.0 million. The budget is composed of \$18.1 million in staffing costs (e.g. salaries, benefits, overtime, and professional development) and \$20.9 million in materials and services (e.g. consulting, intergovernmental agreements, office supplies, travel, and insurance). As of March 2016, approximately 3½ years into the eight-year program, OSM has spent about \$13.9 million or 37 percent of the budget. The spending levels to date are generally on track in terms of the percent of time remaining in the eight-year program.

According the most recent OSM Operations Summary, there is approximately \$21.4 million in unobligated funds at the program and district level - \$8 million in the BOE reserve, \$9.2 million in CSM contingency, \$2.2 million in bond premium, and a \$5 million set aside for Roosevelt high school CTE space. OSM program management staff also indicates there are other unfunded liabilities that may need additional budget from these sources including defunded IP work, escalation on future IP work, additional budget needs for scope for IP 2016 and later IP work, the FHS budget that is projecting being substantially over budget, and the GHS budget

may be increased by approximately \$5 million. The Roosevelt project is projected as completing within budget; it is, however, over a year from completion with remaining unknowns. Work has not yet begun on the renovation of the historic wing, which involves potentially the biggest risk for the project.

**Staffing costs**

The current staffing level for the Bond program is 22 positions. It is currently composed of 19 positions that are funded from bond funds and 3 positions that are funded by the general fund of the district. Positions that are currently funded by the general fund include the Chief of School Modernization, the Executive Assistant to the Chief, and the Partnership and Development Manager. At the program management level, positions funded by the bond include the operations manager, design quality manager, and the communications manager. There are four project directors and four project coordinators for the major modernization and replacement projects, and one project manager and one coordinator for the summer IP projects. One project director position and one project coordinator position are vacant. Other bond-funded staff includes personnel assigned from PPS departments including Facilities and Asset Management, Finance, Purchasing and Contracting, and Community and Public Engagement.

**Figure 12 OSM 2012 Bond Program management costs:  
Eight-year bond program**

	Current budget	Estimate at completion	Spending to date	% of total
DISTRICT ADMINISTRATION (salary, benefits, overhead, professional development)	\$18.1 m	\$17.8 m	\$6.0 m	33%
MATERIALS AND SERVICES (consulting, materials, services, Insurance, supplies)	\$20.9 m	\$21.1 m	\$7.9 m	38%
<b>TOTAL</b>	<b>\$39.0 m</b>	<b>\$38.9 m</b>	<b>\$13.9 m</b>	<b>36%</b>

Source: OSM Operations Summary March 2016

## **Management turnover**

The Bond Program experienced significant turnover in upper level management positions in 2015. The Executive Director of OSM left the district in August of 2015 and the Chief, School Modernization left the district in November of 2015. A new executive was hired in November of 2015 and he assumed the duties of both positions as the new Chief, School Modernization. The new Chief has 7 positions that report directly.

The Project Director for the major modernization project at Roosevelt high school left the district in November, 2015. The director was replaced internally by the previous project manager of the summer IP projects, creating a vacancy for IP project manager, which at the current time has not been filled. The Heery program manager has been assisting the district with managing IP 2016.

We believe that the replacement of two upper level executives and two project director/manager positions less than half way through the 2102 Bond program adds risks to the overall program. Notwithstanding the qualifications and abilities of their replacements, the turnover of key positions increases the chance of inconsistent oversight, delayed decision making, and changed policy direction. Additional attention from upper management and more reliance on written policies and procedures to guide the organization is critical during periods of management turnover. The GHS project budget concerns, described in the GHS section of this audit report, may reflect the need for greater oversight and more reliance on written policies and procedures.

### **Recommendation 11**

To reduce the risks to the program from the turnover in critical management positions, the district and OSM should ensure that the program is subject to greater oversight by district program management and that performance and performance reporting requirements are diligently maintained during the transition period. In addition, OSM management should ensure that the OSM Project Management Plan and Standard Operating Procedures are complete and updated on a regular basis, and that program staff are trained in, and required to use established policy and procedures, including the Standard Operating Procedures.

## **Experience with CM/GC alternative procurement**

Our review of the current staffing for the major modernization projects indicates that all but one OSM staff person lacks expertise and prior substantial experience with CM/GC.

State statutes recognize that CM/GC is a complex delivery system requiring prior experience and expertise. In considering an exemption from competitive bid to authorize the use of CM/GC, applicable state statute requires public agencies to consider,

“Whether the contracting agency ... has, or has retained under contract, and will use contracting agency ... personnel, consultants and legal counsel that have necessary expertise and substantial experience in alternative contracting methods to assist in developing the alternative contracting method that the contracting agency or state agency will use to award the public improvement contract and to help negotiate, administer and enforce the terms of the public improvement contract.”

The exemption resolution passed by the Board of Education for Grant high school included language that finds that department staff, design team consultants, and legal staff have the necessary expertise with CM/GC to develop and utilize the proposed alternative contracting method. While program and project management staff had substantial experience and expertise with CM/GC in the first year of the bond program, current department staff assigned to the GHS project and assigned for program level oversight do not have substantial experience in CM/GC contracting and procurement.

CM/GC is now used by many states and each state uniquely fashions its own rules, requirements, and practices. For example, Washington State uses GC/CM with a different set of proscribed statutory procedures. For this reason, it is not only prior CM/GC experience that is important but prior CM/GC experience in Oregon. There is a comprehensive discussion of CM/GC in the appendix to the 2014 Audit.

### **Recommendation 12**

OSM should re-evaluate the effectiveness of using the CM/GC alternative procurement methodology with current OSM staffing, and consider other procurement methodologies (i.e. design-bid-build) as well as CM/GC for future modernization projects.

## Materials and services spending

In addition to staffing costs, the Bond Program supports the overall program in variety of ways including program management and construction management consulting, insurance premium costs, expenses for issuing the next bonds, audit services, and computer software. The major categories of Bond Program materials and supplies are as follows.

**Figure 13 Major categories of Bond Program materials and supplies**

LINE ITEM	Original budget	Current budget	Spent to date 3/1/16	% remaining
External Program Management (PM/CM)	\$4.2 m	7.4 m	\$3.1 m	55%
PBOT IGA	\$5.0 m	\$5.0 m	0	100%
Owner controlled Insurance Program (OCIP)	\$2.5 m	\$2.5 m	\$2.3 m	8%
Bond issuance costs	\$2.6 m	\$2.6 m	\$1.4 m	46%
Audit services	\$1.2 m	\$1.2 m	\$359,466	66%
Computer software	\$700,00	\$700,000	\$208,145	71%
Local meetings – Non-instructional staff development	\$365,000	\$365,000	\$7,903	100%
Traffic engineering services	\$300,000	\$300,000	\$99,965	66%
External Project management	\$150,000	\$150,000	\$142,00	5%

Source: OSM Operations Summary, March 2016

In order to monitor and control overhead expenses, OSM calculates each month the percent of the total program budget that is budgeted for and spent on management and overhead. The table below shows the percent of overhead by sub categories of overhead: payroll, payroll plus program consulting, and total management overhead. As shown, budgeted Bond Program overhead ranges from 3.3 percent to 7.1 percent depending on what amounts are included in overhead. Actual overhead spending to date is running about 8.6 percent of actual total program spending but when certain costs for Owner Controlled Insurance Program, Portland Bureau of Transportation right of way improvements, and issuance costs are removed, actual overhead spending

drops to 6.3 percent. OSM staff state that their goal is for overhead administration to range from 5 percent to 6 percent of the total program budget.

**Figure 14 OSM Bond Program overhead budget, actual, and percent of total bond program spending**

BOND PROGRAM	Current budget	% of total budget	Expended to date	% of total spending
Staffing costs	\$18.1 m	3.3%	\$6.0 m	3.7%
TOTAL management overhead including all materials and services	\$39.0 m	7.1%	\$13.9 m	8.6%
TOTAL management without OCIP, PBOT, and Bond Issuance costs*	\$29.0 m	5.3%	\$10.2 m	6.3%

Source: OSM Operations Summary, March 2016

\* Owner Controlled Insurance Program, Portland Bureau of Transportation aggregate right of way costs, budgeted Bond Issuance Costs

OSM has reduced budgeted overhead attributable to the bond in several areas in the past year. The largest reduction of over \$1 million came from changing the funding source of four positions from bond resources to the district general fund and the delay in filling one of these positions. This changed the overhead cost projection from \$1 million over budget in the November 2015 bond forecast to \$176,000 under budget in the March 2016 forecast. Other changes in the budgeted overhead items were reallocations between line items and had no net effect on the total budgeted amount.

To find additional reductions in program management and administration costs, OSM can explore other opportunities for “belt-tightening.” Likely areas are those where current spending is much lower than what one would expect at this stage of the program such as computer software and local meetings/non-instructional staff meeting line items. While overall staffing budgets comprise almost half of the bond overhead, it is difficult to identify additional positions to reduce as the program enters its busiest period of construction. Nevertheless, it is also conceivable that the same level of staffing funded by this bond may not be necessary in the future as the 2012 bond program nears completion. OSM projects anticipates reducing staffing significantly in June 2018 as major modernization projects at Franklin and Roosevelt high

schools and Faubion school are completed. Should another bond pass before this bond completes, funding for other positions at OSM could appropriately be funded by the future bond as those positions would then support the new bond's projects.



## 9. PROCUREMENT AND CONTRACTING

Formal procurements in the district are managed and administered by the Purchasing & Contracting Department (P&C). These formal procurements include Invitation to Bid (ITB) for design-bid-build (d-b-b) public improvement contracts; Request for Proposal (RFP) for CM/GC public improvement contracts; and RFP for consultant contracts for architecture, engineering, and categories of contracts called related services. P&C also takes the lead on preparing proposed exemptions and findings for alternative contracting. We reviewed a sample of formal procurements this last year including the ITB for public improvement contracts for IP 2015, selection of architects for IP 2016, selection of design firms for high school master plans, and preparation for the Grant HS CM/GC alternative procurement. We also reviewed the updates to the district procurement policies.

### **BOE procurement policies**

The 2014 and 2015 audits both address the statutory requirement that effective, July 1, 2014, the district must use the AG Model Rules for the procurement of CM/GC contracts. Although as of drafting of this audit no CM/GC contract has been procured since July 1, 2014, the district's current purchasing rules are non-compliant with statute regarding the required AG Model Rules use for CM/GC procurement.

In December 2015 the district advertised a notice of a public hearing to receive comment on a proposed CM/GC exemption for the GHS project. The draft CM/GC exemption language included a requirement that the procurement would occur using the district rules. The audit team recommended to the district that the language of the draft exemption be changed to state that, as required by statute, the procurement would comply with the AG Model Rules. The district made the recommended change.

P&C staff state that the district is in the final stages of approval of a comprehensive revision to the district procurement policy which will address the statutory requirement for use of the AG Model Rules in CM/GC procurement. During 2015, the BOE implemented a new policy for the award of contracts. Previously, the BOE had simply awarded (most) contracts over \$150,000. Under new BOE policy, the BOE reviews (most) contracts over \$150,000 prior to award.

Other changes are anticipated for district procurement policy which will affect OSM. The draft revision to district procurement policy includes a provision that no work may proceed prior to an appropriately executed contract or contract amendment. As stated in this and prior audits, OSM has allowed some work to proceed prior to executed contract or contract amendments. Another new provision of the district policy will limit the dollar amount contracts that can be administratively changed to 25 percent of the original contract, with several construction-related exceptions, or by approval of the BOE. Current board policy authorizes the district to administratively amend contracts to any dollar amount. OSM has approved non-construction contract amendments exceeding 25 percent of the original contract without Board approval.

### **Procurement of ten-plex modular classrooms**

The original planning for phasing at RHS involved the use of four modular classrooms from Faubion to assist with interim space at RHS. Based on recent increased enrollment, the district determined that an additional ten modular classrooms would be needed for interim space during construction.

The district used a permissive interstate cooperative procurement agreement to procure the ten-plex classroom modular complex. The state statute that defines and governs cooperative procurement is attached as Appendix A.

The procurement includes the providing and installation of the (ten) portables. Typically the procurement of modulares that includes installation on site is considered a public improvement. State statute prohibits the district from using a permissive cooperative contract for the procurement of public improvements.

The district received written opinion from legal counsel that the procurement is not for a public improvement in that the district's intent is not to use the modulares at RHS on a permanent basis. The reasoning provided in the opinion is that the facility being constructed must be permanent in order for it to be a public improvement. Public improvement is defined by the statute as, "a project for construction, reconstruction or major renovation on real property by or for a contracting agency."

The opinion cautions the district that permanent use at a site of the modulars would create a situation where the original procurement would be non-compliant with statute.

Had the district begun the procurement process earlier, it potentially could have procured the modular through its own RFP or ITB, at a comparable price. In doing so, the future use of the modular would not be limited.

### **CM/GC procurement**

The release of the CM/GC RFP for the Grant High School project was significantly late. Originally scheduled to be released on November 6, 2015, the RFP was advertised on March 3, 2016, 123 days behind the baseline schedule. Without additional delays the CM/GC will be selected and the contract negotiated and executed with the CM/GC firm by the start of design development. OSM program management states that the delay was attributable in part to efforts made to modify contract solicitation language to increase MWESB participation. Ideally, such modifications should have occurred such that the scheduled release of the RFP would not be delayed.

As recommended by the Oregon Public Contracting Guide to CM/GC, ideally, the CM/GC firm should be selected to begin work during schematic design. (The Guide indicates that CM/GC selection may even occur even earlier). During this period the CM/GC firm can provide guidance with regard to building systems, constructability, scheduling, and cost estimates. These services would be of particular value given that the architect's cost estimate for the Master Plan for Grant high school is approximately \$7.5M over the district's budget (see the GHS modernization section of this report).

The delay in selecting a CM/GC may result in foregoing opportunities to involve the CM/GC in important decisions that take place in the schematic design phase. Active input by the CM/GC firm on design plans and specifications can help the district reduce construction costs and avoid redesign fees by the architect.

**Recommendation 13**

In order to reduce costs and improve efficiency, OSM and P&C should procure the services of future CM/GC firm by the beginning or mid-point of schematic design. Earlier services can result in the development of more efficient plans and specifications that are within budget, which in turn could save the district additional construction cost and/or redesign fees by the architect.

**Faubion PK-8**

The contract for the construction of the new Faubion PK-8 school was procured using an exemption from public bidding using a “Two-Step” procurement process. First, the district advertised and solicited statements of qualifications from construction firms. The proposals were reviewed and ranked by the district and the four firms that proposed were found to be eligible to bid on the project. In the second step, three of the four firms submitted competitive bids. A contract was awarded to the firm, Todd Construction, submitting the lowest responsive bid.

The low bid of \$37,226,000, which includes the selection of four additive alternates, was approximately \$1.9 million over the district’s budget. There were sufficient funds within the Faubion project contingency and other line items to cover the overage and allow the project to proceed. The project currently has a project contingency of \$2.76 million, 7.4 percent of the construction contract amount. This level of contingency at the start of construction is within the standard industry range by public owners for new construction.

Abatement and demolition work for the former Faubion PK-8 was separately competitively bid. The work was completed before the demolition of the existing school.

**High school master plans**

P&C, with the active participation of OSM, has conducted selection processes, using new RFP internal guidelines and procedures, for the procurement of design firms for the master planning

for Benson HS, Lincoln HS, and Madison HS. All the procurement processes have been reviewed, and found to comply with applicable statutes, policies, and industry practice.

Dull Olsen Weekes (DOWA)-IBI Group has been selected for producing Ed Specs for a Focus Option HS, and for the master planning for Benson HS. DOWA is the architect currently working on the FHS project. The selection process began in June of 2015, and was put on pause for the redesign of the P&C procurement process. (See the GHS section of the this Audit. The pause was indirectly related to the GHS A/E procurement issues). The original start of work of the contract, as anticipated in the RFP was August 10, 2015. The contract was executed by PPS on November 16, 2015.

The 2014 Audit recommended that the district fully update Ed Specs prior to starting master planning on future projects of the 2012 bond (this would include the Benson MP). The baseline schedule developed by OSM allowed for sufficient time to develop a focus option high school specific Ed Spec for Benson, prior to starting master planning. The three month pause in the procurement of the architect caused the Ed Spec process to overlap with the master planning process.

Bora was selected for the master planning for the Lincoln HS project. Bora is the architect currently working on the Faubion project. The RFP was advertised in September of 2015. The contract was executed on November 25, 2015.

OPSIS has been selected for the master planning for the Madison HS project. OPSIS has done a number of projects for the district including the development of the district-wide Design Guidelines. The RFP was advertised in November of 2015, anticipating a contract to be signed by December 30, 2015. The contract was executed on January 29, 2016.

Should another bond be passed at some future point, and funding for the renovation of these high schools is included in the bond, the design firms for these projects would need to be selected by additional RFP processes.

**Recommendation 14**

In order to reduce the financial and schedule risks associated with incomplete Ed Specs prior to master planning, begin the process of procurement of firms to develop Ed Specs revisions and master plans with sufficient additional time or float to accommodate for delays and, protests. This is a repeat recommendation from the 2015 Audit, and the Marcia Latta report (see next section) also recommends that Ed Specs preceded master planning and design.

## 10. PUBLIC ENGAGEMENT AND COMMUNICTATION

In the summer of 2015, the district conducted an extensive study to evaluate the quality and breadth of stakeholder engagement in the design of bond modernization projects, particularly at Franklin and Roosevelt high schools and Faubion PK-8.<sup>1</sup> The report concluded that the community has a tremendous sense of ownership over local schools and a greater demand for shared decision-making in community processes than other districts in the state. The report found that the district needed to carefully balance the expectations of community members who feel ownership over local schools with construction requirements, budgets, and equity among schools. The report made six recommendations:

- 1) The district should define its educational vision and continually share information about its educational priorities. The Ed Spec process, or any process to define educational standards, should be completed before building design processes begin.
- 2) The district must be clear in explaining the role to participants and reiterate the role throughout the process. They must be consistent in conducting the processes and enforcing rules in the charter.
- 3) The district must clearly define the type of input they are seeking and from which stakeholder groups. If the DAG input is weighted equally with staff input and input from public design forums, the district must tell DAG members they are not the only source of design recommendations.
- 4) The district must define and provide opportunities for input to non-member participants and ways to reach diverse audiences.
- 5) The district must be clear and bond funding, budgets, and construction requirements for each project and the educational plans the projects will support.
- 6) The district should respond to input by offering feedback or explanations for how recommendations were incorporated or not included.

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<sup>1</sup> *Assessment of Community Engagement*, October 2015, Marcia Latta, Communications Consultant

Our review indicates that some of these recommendations have been acted upon and others are still under consideration by the district. Some of the specific actions that have been taken in response include:

- A new charter for the Design Advisory Group for master planning at Grant high school was developed. The revised DAG contains more clarity on the roles and responsibilities of the DAG and how input from the DAG is used in the master planning effort.
- New Master Planning Committee (MPC) Charters for Benson, Lincoln, and Madison high school master plans were developed and time was added to the processes to respond to identified needs in the Latta report. Additional outreach efforts were added to the processes.
- Additional efforts are planned to ensure the OSM staff and design consultants provide consistent information to the DAGs and MPCs and to clearly explain their role in the master planning process and foster awareness about how construction project are phased.
- Appointing community members to co-chair master planning committees to increase engagement and commitment.

Based on our discussions with OSM staff and the BAC chairman, the master planning for Grant high school was successful in achieving desirable public engagement. Seven Design Advisory Group meetings were held and participation by the community was extensive. In addition, Master Planning Committees were formed for Benson, Lincoln, and Madison. Lincoln has held four meetings with two more planned, Benson has held three meetings with three more planned, and Madison held two meetings with four more planned.



11. EQUITY IN PUBIC PURCHASING AND CONTRACTING

OSM’s performance in achieving the objectives of the school district’s Equity in Purchasing and Contracting policy continues to be mixed. Full MWESB aspirational goals were not met in the past year. The district achieved 8.4 percent MWESB participation toward the 18 percent aspirational goal. Apprenticeship participation was higher than last year and student participation continues to increases.

**Business equity**

OSM continues to have results less than its aspirational goal for the business equity objective of the equity policy. As of January 2016, the percent of bond invoice payments made to MWESB owned consultants and contractors averaged about 8.4 percent, less than the aspirational goal of 18 percent established by the district’s Administrative Directive. As shown in the table below, approximately \$94.1 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 \$68.3 million of which \$2.9 million was paid to MWESB firms (4.2%). Consultants (Division 48) submitted invoices totaling \$25.8 million of which \$5.0 million was paid to MWESB firms (19%).

**Figure 15 Percent of bond program payments to MWESB firms (consultants and contractors): March 2016**

TYPE OF CONTRACT/PURCHASE	Total invoices paid	Payments to MWESB firms	% to MWESB firms
Division 48 – A&E, survey & related services	\$25.8 m	\$5.0 m	19%
Division 49 – Public Improvements	\$68.3 m	\$2.9 m	4.2%
TOTAL 48 and 49 contracts	\$94.1 m	\$7.9 m	8.4%

Source: OSM MWESB Invoice spreadsheet March 2016

OSM continues to make efforts to increase minority participation in OSM bond projects.

Some of the actions are as follows:

- Held a small business open house to encourage small, emerging, and small business to bid on OSM projects
- More use of informal or negotiated procurement when possible and permitted; OSM found that awards to MWESB contractors are higher when OSM staff has more discretion in procurement
- Holding periodic meetings with two CM/GC contractors to discuss what efforts have been completed to engage MWESB subcontractors and the effectiveness of those efforts
- Encouraging joint proposals with larger established firms and smaller MWESB firms

One of the factors for utilizing the CM/GC alternative procurement process was the flexibility it provided to the prime CM/GC firm to select subcontractors and vendors without having to follow public contracting invitation to bid (ITB) practices. Under alternative procurement subcontractor and vendor procurement is subject to the terms of the contract between the district and the CM/GC. Both the OSM staff and the BAC expressed optimism that once the CM/GC contracts for the high school modernization projects were underway, the district would see improvement in the percent of payments made to MWESB firms. However, the experience to date with the two firms has not reflected this optimism. Both firms are significantly below the district aspirational goal of 18 percent. In addition, the prospects for substantially improving as the construction program continues over the next year are not good because the firms have largely bid-out the contracts to subcontractors.

We made a recommendation in our 2014 audit report and again in our 2015 audit report, with which the district concurred, to help the CM/GC firms have more flexibility in contracting by allowing the firms to select subcontractors by methods other than competitive bid (e.g., quoting up to proscribed dollar limits) without having to request prior approval by the district. Such flexibility would permit the firms to limit the field of those submitting quotes to specific criteria (e.g., MWESB certification). Despite our two recommendations, OSM and P&C have not

adjusted the CM/GC contract language to address our recommendations and may have missed opportunities to increase MWESB participation in the CM/GC work.

**Recommendation 15**

Ensure the CM/GC contract for GHS, and future CM/GC contracts have provisions that comply with audit recommendation #15 of the 2014 performance audit report, and repeated as recommendation #26 of the 2015 audit report. Specifically, to provide more flexibility in the selection of subcontractors, PPS CM/GC contracts should proscribe dollar limits up to which the CM/GC firms may procure subcontractors by competitive quotes, without the prior approval of the district.

**Student participation**

OSM made significant progress in 2014 in addressing the student participation objective of the Equity in Purchasing and Contracting policy, meeting all their goals in three categories of activities. As shown in the figure below, for all eligible active contracts in 2015, 3,240 students participated in group activities such as job fairs, 734 students participated in short-term activities such as mock interviews, and 122 students participated in long-term activities such as internships. Overall, OSM reports that over 4,096 individual students were served in some way.

**Figure 16 Student participation in bond activities in 2015**

TYPE OF ACTIVITY	# of participants	GOAL
<b>Group activities –</b> career fairs, guest speakers	3,240	>500 students
<b>Short-term activities –</b> job shadows, mock interviews	734	>50 students
<b>Long-term activities –</b> internships, project learning	122	>10 students

Source: OSM spreadsheet on 2015 student participation activities

## Workforce equity

OSM made progress in 2015 toward addressing the workforce equity objective of the equity policy. In accordance with the contract language, nine prime contractors working on OSM projects participated in the Workforce Training and Hiring Program administered by the City of Portland. Six prime contractors met apprenticeship goals on all of the projects they worked on, two received warning letters to improve apprenticeship hiring, and one was fined by PPS for consistently failing to meet apprenticeship goals.

**Figure 17 OSM contractors participating in Workforce Training & Hiring Program: Percent of labor hours performed by registered apprentices, minorities, and women**

CONTRACTOR	% of apprenticeship hours	% of minority Hours	% of female hours
Lease Crutcher Lewis	22%	27%	7%
Skansa	23%	44%	6%
Payne (three projects)	28%	29%	2%
P&C	31%	25%	2%
Baldwin (two projects)	16%	5%	0%
2KG (four projects)	23%	20%	-
Corp (two projects)	17%	49%	2%
Skyward	26%	43%	-
Point Monitor	39%	16%	-

Source: OSM spreadsheet of contractor apprenticeship hours

## 12. PRIOR AUDIT RECOMMENDATIONS

The OSM January 2016 BAC Report provides a tabulation of OSM progress with completing recommendations of the 2014 and 2015 Audits (Appendix B).

PPS concurred with 25.5 of the 27 recommendations of the 2014 Audit. Some of the recommendations had multiple elements. One recommendation for which the district non-concurred in part, has been completed in full. OSM reports that all but one of the recommendations of the 2014 Audit, with which PPS concurred, have been completed. Recommendation #5, to update Purchasing Rules, has not yet occurred, although it is in the process of being considered by the BOE.

The 2015 Audit had 26 recommendations, some with multiple elements. OSM concurred with 25 of these recommendation, and reports that 77 percent of these recommendations are complete.

Review of the recommendations, and discussion with OSM program management staff and the program manager, indicate that seven of the items marked as complete, for both audits, are not done or still have some degree of further work remaining.

### **2014 Audit:**

#### RECOMMENDATION 15.

More proscriptive guidelines for CM/GC to procure subcontracts. This recommendation was repeated (#26) in the 2015 Audit. It is not complete; hence the recommendation is repeated again in this Audit.

### **2015 Audit:**

#### RECOMMENDATION 5.

Written policies and procedures in the GMP, pertaining to GMP spending. Revised SOP protocols do not adequately address all CM/GC changes, and proscribe a dollar limit for authorization which is not in synch with e-B controls. The incomplete protocols are addressed in the FHS section of the 2016 Audit.

RECOMMENDATION 9.

Implementing the critical elements of the PTMP at the beginning of a project. As stated in the 2016 Audit, no PTMPs have been implemented. This is addressed further in the GHS, RHS, and FHS sections of the 2016 Audit.

RECOMMENDATION 11.

Uniform systems for document filing in e-B. Documents are not filed with a systematic methodology between projects.

RECOMMENDATION 12.

Clarity in SOP between DBB and CM/GC requirements. Requires further work.

RECOMMENDATION 22.

Correction and clarification of issues pertaining to proscribed markups for personnel in existing CM/GC contracts. There were two recommendations. Neither has been implemented.

RECOMMENDATION 26.

Provide for contractual specificity for CM/GC contractor to competitively procure contracts by quote up to dollar amounts. Not added to either existing CM/GC contract and not present in the GHS CM/GC sample contract issued with the RFP for CM/GC services.

# RECOMMENDATIONS

## **RECOMMENDATION 1** (p. 17)

In order to improve reporting of budget risks and/or the use of project contingences , OSM should ensure that all monthly project budget projections are updated on a timely basis and include rough order of magnitude (ROM) estimates of potential changes where scope and/or cost is not yet determined.

## **RECOMMENDATION 2** (p. 21)

1. In order to potentially reduce the risk of budget increase and schedule delay, OSM should ensure that future CM/GC contracts have provisions that require proactive participation of the CM/GC with the architect during DD and CD and cost estimate updates by the CM/GC on an on-going basis rather than just at the end of each stage of design. Modify the OSM SOP and develop PTMPs to define a higher degree of accountability for clearer communication, documentation, monitoring and controlling of scope and budget increases during design.
2. In order to reduce potential risk for schedule delay, reduced scope, and/or increased cost, the district should ensure that the GMPs for future CM/GC projects are negotiated and executed at the contractually proscribed point in design. No conditions should be placed on the GMP that would serve to negate or compromise its validity as a full guarantee of all costs, except those that are reasonably attributable to scope increase. Provide examples in the original contract documents of what types of items constitute scope increase and what types of items are expected to be included within the GMP.

## **RECOMMENDATION 3** (p. 23)

To control costs and follow industry best practice, the district should ensure that all future GMP amendments are consistent with the letter and intent of applicable law and policy. Specifically, additional contingency and increases in general conditions overhead (related to contingency increase) should not be added to GMP amendments unless directly related to a concomitant scope increase.

**RECOMMENDATION 4** (p. 24)

To reduce the risk of unnecessary cost for future CM/GC contracts where a lump sum general conditions amount is negotiated, the district should consider increases to general conditions work for additive changes to the GMP only when time is extended and only to the degree that such an increase is warranted.

**RECOMMENDATION 5** (p. 26)

In order to increase efficiency, reduce potential additional cost and risk of non-compliance with district policy and OSM protocols, OSM should do several things.

1. Provide a workable format in e-B for processing CM/CG contract changes in a timely fashion, regardless of whether or not there is initial agreement as to whether they are changes within or outside the GMP.
2. Ensure that change orders and draw-downs for CM/GC projects receive appropriate approvals and approval authority in accordance with established SOPs and eBuilder requirements. Ensure that the provisions within the SOP and in eBuilder are consistent with each other.

**RECOMMENDATION 6** (p. 35)

In order to increase the likelihood of selecting the most qualified firm to perform services, P&C and OSM should investigate ways to provide more complete information to help the selection committee evaluate and screen applicants prior to advertising and receiving proposals. While still maintaining integrity and lack of bias, this information could include specifics on what OSM/PPS is trying to accomplish in a particular project, how to read and interpret proposals, and how to assess interview responses. In addition, in order to reduce the risk for schedule compaction, architect/engineer selection should occur earlier to increase project schedule float and minimize the adverse time impact of potential delays including protests, program changes, and re-design.

**RECOMMENDATION 7** (p. 38)

In order to reduce potential financial risk for the GHS project, OSM should make by the completion of schematic design value engineering reductions, scope reductions, increase the project budget, and/or take other appropriate measures so that the projected construction costs are within budget while maintaining an ample and appropriate project contingency.



**RECOMMENDATION 8** (p. 39)

1. In order to minimize the chance that design cost will exceed budgeted funds for this and future projects, and to increase accuracy and transparency in reporting, OSM should modify the SOPs to provide specific targets or ranges for project contingency at key stages of design for high school renovation projects in general and for GMP high school renovation projects in specific. The SOP should provide greater specificity on how the program will provide project budget oversight and the CSM should hold program management accountable for oversight compliance in fully reviewing and vetting project budgets on an on-going basis.
2. In order to minimize risk, OSM program management should ensure the development of comprehensive and detailed PTMP templates for renovation projects, new construction projects, and IP work. OSM program management should hold project management staff accountable for producing comprehensive and functional PTMPs, with core elements of the plan written and ideally implemented prior to beginning the master planning process, or at the latest, prior to the start of schematic design.
3. In order to increase the potential for success of corrective action as recommend above, or otherwise implemented by OSM, written lessons learned should be developed and updated regularly from information obtained from the FHS, RHS and GHS projects.

**RECOMMENDATION 9** (p. 42)

For greatest efficiency and effectiveness, the SOP should be updated to provide greater clarity and specific guidelines for line item budgeting for master planning. Program level estimating for future projects should be completed prior to setting targets for master planning efforts.

**RECOMMENDATION 10** (p. 51)

In order to control IP summer project budget increases, OSM should assess the factors that have contributed to a pattern of projects bidding over budget and continue to explore ways to develop designs that bid within budget. In addition to conducting more investigation demolition work to make informed construction design decision, OSM should start design earlier and issue invitations to bid earlier. In order to ensure a higher level of quality construction, OSM should consider adding in the bid specification, minimum qualifications requirements for designated systems.

**RECOMMENDATION 11** (p. 54)

To reduce the risks to the program from the turnover in critical management positions, the district and OSM should ensure that the program is subject to greater oversight by district program management and that performance and performance reporting requirements are diligently maintained during the transition period. In addition, OSM management should ensure that the OSM Project Management Plan and Standard Operating Procedures are complete and updated on a regular basis, and that program staff are trained in, and required to use established policy and procedures, including the Standard Operating Procedures.

**RECOMMENDATION 12** (p. 55)

OSM should re-evaluate the effectiveness of using the CM/GC alternative procurement methodology with current OSM staffing, and consider other procurement methodologies (i.e. design-bid-build) as well as CM/GC for future modernization projects.

**RECOMMENDATION 13** (p. 62)

In order to reduce costs and improve efficiency, OSM and P&C should procure the services of future CM/GC firm by the beginning or mid-point of schematic design. Earlier services can result in the development of more efficient plans and specifications that are within budget, which in turn could save the district additional construction cost and/or redesign fees by the architect.

**RECOMMENDATION 14** (p. 64)

In order to reduce the financial and schedule risks associated with incomplete Ed Specs prior to master planning, begin the process of procurement of firms to develop Ed Specs revisions and master plans with sufficient additional time or float to accommodate for delays and protests. This is a repeat recommendation from the 2015 Audit, and the Marcia Latta report (see next section) also recommends that Ed Specs preceded master planning and design.

**RECOMMENDATION 15** (p. 69)

Ensure the CM/GC contract for GHS, and future CM/GC contracts have provisions that comply with audit recommendation #15 of the 2014 performance audit report, and repeated as recommendation #26 of the 2015 audit report. Specifically, to provide more flexibility in the selection of subcontractors, PPS CM/GC contracts should proscribe dollar limits up to which the CM/GC firms may procure subcontractors by competitive quotes, with the prior approval of the district.

# MANAGEMENT RESPONSE





June 28, 2016

Hirsh and Associates  
PO Box 5575  
Eugene, Oregon 97405

Dear Mr. Hirsh & Mr. Tracy:

Thank you for your continued reviews of Portland Public Schools' 2012 School Improvement Bond Program. We continue to look for opportunities to improve work processes and recognize that we are accountable and responsible to produce quality work while complying with all procurement and OSM policies and procedures

I have reviewed the draft version of Performance Audit #3 with particular interest regarding your extensive comments related to the use of Construction Manager/General Contractor as a delivery method. Your experienced recommendations will assist us in the continuing management of our eight year program.

Based on our review of the draft version of Performance Audit #3 dated May 2016 we have developed responses to each of your 15 recommendations which have been subdivided into 24 responses. Eighteen of the 24 recommendation are already completed. The remaining six recommendations have a goal of implementation by December 31, 2016. Each response contains one of the following statements:

- Concur - Goal is to implement recommendation by December 31, 2016
- Concur with Comment - Goal is to implement recommendation by December 31, 2016 with qualifying comments
- Nonconcur - Recommendation may not be implemented with comments to explain
- Completed – Recommendation has been implemented

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

#	Abbreviated Recommendation	Response	Status
1	OSM should ensure that all monthly project budget projections are updated on a timely basis and include	Concur with comment	Working

#	Abbreviated Recommendation	Response	Status
	rough order of magnitude (ROM) estimates of potential changes.		
2a	OSM should ensure that future CM/GC contracts have provisions that require proactive participation of the CM/GC with the architect during DD and CD and cost estimate updates by the CM/GC on an on-going basis.	Nonconcur	Completed
2b	Ensure that the GMPs for future CM/GC projects are negotiated and executed at the contractually proscribed point in design. No conditions should be placed on the GMP that would serve to negate or compromise its validity as a full guarantee of all costs, except those that are reasonably attributable to scope increase.	Concur with comment	Working
3	Ensure that all future GMP amendments are consistent with the letter and intent of applicable law and policy.	Completed	Completed
4	Consider increases to general conditions work for additive changes to the GMP only when time is extended.	Nonconcur	Completed
5a	Provide a workable format in e-B for processing CM/CG contract changes in a timely fashion, regardless of whether or not there is initial agreement as to whether they are changes within or outside the GMP.	Completed	Completed
5b	Ensure that change orders and draw-downs for CM/GC projects receive appropriate approvals and approval authority in accordance with established SOPs and eBuilder requirements. Ensure that the provisions within the SOP and in eBuilder are consistent with each other.	Completed	Completed
6	P&C and OSM should investigate ways to provide more complete information to help the selection committee evaluate and screen applicants	Completed	Completed
7	OSM should make by the completion of schematic design value engineering reductions, scope reductions, increase the project budget, and/or take other appropriate measures so that the projected construction costs are within budget while maintaining an ample and appropriate project contingency.	Completed	Completed
8a	OSM should modify the SOPs to provide specific targets or ranges for project contingency at key stages of design	Nonconcur	Completed



#	Abbreviated Recommendation	Response	Status
	for high school renovation projects in general and for GMP high school renovation projects in specific.		
8b	The SOP should provide greater specificity on how the program will provide project budget oversight and the CSM should hold program management accountable for oversight compliance in fully reviewing and vetting project budgets on an on-going basis.	Nonconcur	Completed
8c	OSM program management should ensure the development of comprehensive and detailed PTMP templates for renovation projects, new construction projects, and IP work.	Concur with comment	Working
8d	OSM program management should hold project management staff accountable for producing comprehensive and functional PTMPs.	Concur with comment	Working
8e	Written lessons learned should be developed and updated regularly from information obtained from the FHS, RHS and GHS projects.	Completed	Completed
9	SOP should be updated to provide greater clarity and specific guidelines for line item budgeting for master planning.	Nonconcur	Completed
10a	OSM should assess the factors that have contributed to a pattern of IP projects bidding over budget and continue to explore ways to develop designs that bid within budget.	Completed	Completed
10b	OSM should start design of IP projects earlier and issue invitations to bid earlier.	Completed	Completed
10c	OSM should consider adding in the bid specification, minimum qualifications requirements for designated systems.	Concur	Working
11a	OSM should ensure that the program is subject to greater oversight by district program management and that performance and performance reporting requirements are diligently maintained during the transition period.	Completed	Completed
11b	OSM management should ensure that the OSM Project Management Plan and Standard Operating Procedures	Concur with comment	Working

#	Abbreviated Recommendation	Response	Status
	are complete and updated on a regular basis, and that program staff are trained in, and required to use established policy and procedures, including the Standard Operating Procedures.		
12	OSM should re-evaluate the effectiveness of using the CM/GC alternative procurement methodology with current OSM staffing, and consider other procurement methodologies (i.e. design-bid-build) as well as CM/GC for future modernization projects.	Completed	Completed
13	OSM and P&C should procure the services of future CM/GC firm by the beginning or mid-point of schematic design.	Completed	Completed
14	Begin the process of procurement of firms to develop Ed Specs revisions and master plans with sufficient additional time or float to accommodate for delays and, protests.	Completed	Completed
15	To provide more flexibility in the selection of subcontractors, PPS CM/GC contracts should proscribe dollar limits up to which the CM/GC firms may procure subcontractors by competitive quotes, with the prior approval of the district.	Completed	Completed

Attached is our specific response to each of your recommendations. Please contact me or Jerry Vincent 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, Superintendent  
Portland Public Schools

Attachment



**RECOMMENDATION 1 (p. 17)**

In order to improve reporting of budget risks and/or the use of project contingences, OSM should ensure that all monthly project budget projections are updated on a timely basis and include rough order of magnitude (ROM) estimates of potential changes where scope and/or cost is not yet determined.

**STAFF RESPONSE: Concur with Comment**

Although the Project Directors are not always timely with their Monthly Project Reports the reports now contain a ROM of potential changes to scope and/or costs in the form of the Estimated Final Project Cost.

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**RECOMMENDATION 2a (p. 21)**

In order to potentially reduce the risk of budget increase and schedule delay, OSM should ensure that future CM/GC contracts have provisions that require proactive participation of the CM/GC with the architect during DD and CD and cost estimate updates by the CM/GC on an on-going basis rather than just at the end of each stage of design. Modify the OSM SOP and develop PTMPs to define a higher degree of accountability for clearer communication, documentation, monitoring and controlling of scope and budget increases during design.

**STAFF RESPONSE: Nonconcur**

This is a compliance issue not a procedural issue which must be addressed differently than what has been recommended. OSM will focus on ensuring compliance with the implementation of Project Team Management Plans and then complying with what is written and approved.

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**RECOMMENDATION 2b ( p. 21)**

In order to reduce potential risk for schedule delay, reduced scope, and/or increased cost, the district should ensure that the GMPs for future CM/GC projects are negotiated and executed at the contractually proscribed point in design. No conditions should be placed on the GMP that would serve to negate or compromise its validity as a full guarantee of all costs, except those that are reasonably attributable to scope increase. Provide examples in the original contract documents of what types of items constitute scope increase and what types of items are expected to be included within the GMP.

**STAFF RESPONSE: Concur with comment**

This recommendation will be implemented for the Grant High School GMP.

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**RECOMMENDATION 3 (p. 23)**

To control costs and follow industry best practice, the district should ensure that all future change orders are consistent with the letter and intent of applicable law and policy. Specifically, additional contingency and increases in general conditions overhead (related to contingency increase) should not be added to the GMP unless directly related to a concomitant scope increase.

**STAFF RESPONSE: Completed**

This is considered a compliance issue by OSM who will ensure that all future change orders are consistent with the letter and intent of applicable law and policy.

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**RECOMMENDATION 4 (p. 24)**

To reduce the risk of unnecessary cost for future CM/GC contracts where a lump sum general conditions amount is negotiated, the district should consider increases to general conditions work for additive changes to the GMP only when time is extended and only to the degree that such an increase is warranted.

**STAFF RESPONSE: Nonconcur**

This recommendation is inconsistent with the recent contract language interpretation from the District Counsel.

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**RECOMMENDATION 5a (p. 26)**

Provide a workable format in e-B for processing CM/CG contract changes in a timely fashion, regardless of whether or not there is initial agreement as to whether they are changes within or outside the GMP.

**STAFF RESPONSE: Completed**

e-Builder has been set up with multiple ways for changes to be processed in a timely fashion. The noted issues that resulted in this recommendation is not process but compliance. OSM will continue its process of training and correcting compliance issues where needed to further reduce processing time for changes.

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**RECOMMENDATION 5b (p. 26)**

Ensure that change orders and draw-downs for CM/GC projects receive appropriate approvals and approval authority in accordance with established SOPs and e-Builder requirements. Ensure that the provisions within the SOP and in e-B are consistent with each other.

**STAFF RESPONSE: Completed**

Page 22 of 69 of the annual draft revision of the Standard Operating Procedures has been amended to read as shown below where it previously showed \$100,000 instead of \$10,000:

- ii) This contingency has a broad scope application and is used at the discretion of the Project Director with the Executive Director of OSM receiving eBuilder notifications of any GMPCA that is greater than or equal to \$10,000.
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**RECOMMENDATION 6 (p. 35)**



In order to increase the likelihood of selecting the most qualified firm to perform services, P&C and OSM should investigate ways to provide more complete information to help the selection committee evaluate and screen applicants prior to advertising and receiving proposals. While still maintaining integrity and lack of bias, this information could include specifics on what OSM/PPS is trying to accomplish in a particular project, how to read and interpret proposals, and how to assess interview responses. In addition, in order to reduce the risk for schedule compaction, architect/engineer selection should occur earlier to increase project schedule float and minimize the adverse time impact of potential delays including protests, program changes, and re-design.

**STAFF RESPONSE: Completed**

P&C agrees that it is important for evaluation committee members to fully understand the requested services and to be able to discuss what OSM/PPS is trying to accomplish and how to read and interpret the more technical elements of proposals. The Audit Report incorrectly states that the new RFP protocols allow committee members to communicate only after each committee member has scored proposals. That has never been the case. Such discussion is encouraged and facilitated by P&C staff at the mandatory evaluation kick-off meeting, before proposals are distributed to each evaluator. Further, evaluators are instructed that any questions that arise during the evaluation process should be sent to the P&C staff member in charge of the solicitation, and if necessary P&C will set up and facilitate an evaluation committee discussion to address the question(s). Evaluators are prohibited from discussing proposals or scoring amongst each other outside of the presence of a P&C staff member, however, in order to avoid the possibility or appearance of influence, pressure, or bias.

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**RECOMMENDATION 7 (p. 38)**

In order to reduce potential financial risk for the GHS project, by the completion of schematic design, OSM should make value engineering reductions, scope reductions, increase the project budget, and/or take other appropriate measures so that the projected construction costs are within budget while maintaining an ample and appropriate project contingency.

**STAFF RESPONSE: Completed**

For the GHS project, at 100% SDs OSM has directed scope reductions and has increased the project budget to ensure that projected construction costs are within budget while maintaining an ample and appropriate project contingency. After review of the Master Planning estimate it was always the intent to do a more

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**RECOMMENDATION 8a (p. 39)**

In order to minimize the chance that design cost will exceed budgeted funds for this and future projects, and to increase accuracy and transparency in reporting, OSM should modify the SOP to provide specific targets or ranges for project contingency at key stages of design for high school renovation projects in general and for GMP high school renovation projects in specific.

**STAFF RESPONSE: Nonconcur**

Section 2.g - Contingency Management of the Project Standard Operating Procedures addresses the use of contingency and contains a graphic that depicts, in general terms, how the various contingencies should be drawn down to best utilize available funding to meet the District's project

needs. The information in this section and the color coded graph are for guidance and OSM does not agree that more specific targets or ranges need to be included in the SOP.

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**RECOMMENDATION 8b** (p. 39)

The SOP should provide greater specificity on how the program will provide project budget oversight and the CSM should hold program management accountable for oversight compliance in fully reviewing and vetting project budgets on an on-going basis.

**STAFF RESPONSE: Nonconcur**

Currently the PMP duties and responsibilities for the OSM Operations Manager include a multitude of project budget oversight items. On a weekly basis the Operations Manager, Program Manager, and Chief of School Modernization review the Weekly OPS Reports which include a Cost Summary for each project, a Commitment Summary, Recent budget changes, Recent Expenses, and the Outstanding Processes for each project in the program. Each Project Director meets with the Program Team monthly to review the Monthly Project Report which includes budget, schedule, procurement, design, permits, safety, EPPC, and any other concerns the PD may have.

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**RECOMMENDATION 8c** (p. 39)

In order to minimize risk, OSM program management should ensure the development of comprehensive and detailed PTMP templates for renovation projects, new construction projects, and IP work.

**STAFF RESPONSE: Concur with Comment**

OSM will review the current PTMP project template and determine how to use it to create specific templates for renovation projects, new construction projects, and IP work.

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**RECOMMENDATION 8d** (p. 39)

OSM program management should hold project management staff accountable for producing comprehensive and functional PTMPs, with core elements of the plan written and ideally implemented prior to beginning the master planning process, or at the latest, prior to the start of schematic design.

**STAFF RESPONSE: Concur with comment**

As the PMP contains the guidance and identifies the PD as responsible for the Project Team Management Plans, this is a compliance issue to which OSM will add greater emphasis.

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**RECOMMENDATION 8e** (p. 39)

In order to increase the potential for success of corrective action as recommend above, or otherwise implemented by OSM, written lessons learned should be developed and updated regularly from information obtained from the FHS, RHS and GHS projects.



**STAFF RESPONSE: Completed**

The Project Status Update process in e-Builder that is used to gather the Monthly Project Report information from the Project Directors has been modified to include written lessons learned to be submitted by each Project Director on a monthly basis. The new Close-Out Process created in e-Builder has also added a Lessons Learned section to capture all lessons learned from each project.

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**RECOMMENDATION 9 (p. 42)**

For increased efficiency and effectiveness, the SOP should be updated to provide greater clarity and specific guidelines for line item budgeting for master planning. Program level estimating for future projects should be completed prior to setting targets for master planning efforts.

**STAFF RESPONSE: Nonconcur**

Master planning, as it has been done for Madison, Lincoln, and Benson, is not expected to be accomplished in future bonds. If this was to be a reoccurring effort then some general guidance would be provided in the PMP but as master planning must take the school and the community into consideration, the program guidance would have to be kept very general in nature. Budgets for any future specified master planning would have to take into account the previous amounts spent on this process and the latest version of the Educational Specifications, making it again, difficult to specify a well-defined process in the PMP.

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**RECOMMENDATION 10a (p. 51)**

In order to control IP summer project budget increases, OSM should assess the factors that have contributed to a pattern of projects bidding over budget and continue to explore ways to develop designs that bid within budget.

**STAFF RESPONSE: Completed**

OSM has already assessed the reoccurring pattern of projects bidding over budget and has determined that the ROMs used to develop the budgets are generally 21% under the market value as proven by the bids. OSM will adjust any future project budgets accordingly.

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**RECOMMENDATION 10b (p. 51)**

In addition to conducting more investigation demolition work to make informed construction design decision, OSM should start design earlier and issue invitations to bid earlier.

**STAFF RESPONSE: Completed**

Based on lessons learned, OSM has already incorporated more investigative demolition into the IP17 design scope. To better coordinate this effort, for the IP17 design contract OSM has included a complete HAZMAT survey, site survey to include the existing roof conditions, destructive testing, 30 day electrical load studies, and other items to facilitate a more comprehensive design. OSM has always strived to start design as early as is feasible. IP work

requires to have construction contract notice to proceeds issued no later than the 1<sup>st</sup> of May to allow time for submittals and enrollment in OCIP.

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**RECOMMENDATION 10c** (p. 51)

In order to ensure a higher level of quality construction, OSM should consider adding in the bid specification, minimum qualifications requirements for designated systems.

**STAFF RESPONSE: Concur**

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**RECOMMENDATION 11a** (p. 54)

To reduce the risks to the program from the turnover in critical management positions, the district and OSM should ensure that the program is subject to greater oversight by district program management and that performance and performance reporting requirements are diligently maintained during the transition period.

**STAFF RESPONSE: Completed**

The transition period is complete. The program was subjected to greater oversight by district program management and the performance and performance reporting requirements were diligently maintained during the transition period.

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**RECOMMENDATION 11b** (p. 54)

OSM management should ensure that the OSM Project Management Plan and Standard Operating Procedures are complete and updated on a regular basis, and that program staff are trained in, and required to use established policy and procedures, including the Standard Operating Procedures.

**STAFF RESPONSE: Concur with Comment**

As specified in the PMP, the document (and all the appendices) are updated on an annual basis. Staff will be trained on the revisions and retrained on areas that require it.

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**RECOMMENDATION 12** (p. 55)

OSM should re-evaluate the effectiveness of using the CM/GC alternative procurement methodology with current OSM staffing, and consider other procurement methodologies (i.e. design-bid-build) as well as CM/GC for future modernization projects.

**STAFF RESPONSE: Completed**

With two ongoing CM/GC project and one Two-Step Design-Bid-Build project ongoing, the effectiveness of alternate procurement is constantly being discussed at the program level. With initial master planning completed for the Benson, Lincoln, and Madison campuses, potential delivery methods are already being discussed in the context of our ongoing construction.



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**RECOMMENDATION 13** (p. 62)

In order to reduce costs and improve efficiency, OSM and P&C should procure the services of future CM/GC firm by the beginning or mid-point of schematic design. Earlier services can result in the development of more efficient plans and specifications that are within budget, which in turn could save the district additional construction cost and/or redesign fees by the architect.

**STAFF RESPONSE: Completed**

It has been our practice to place a CM/GC firm under contract for preconstruction services near the end of schematic design when there is a greater level of design to warrant participation. Although OSM does agree that earlier CM/GC services may result in the development of more efficient plans and specifications that are within budget, which in turn could save the district additional construction cost and/or redesign fees by the architect, we have reviewed our recent experiences in depth and will again reassess this if CM/GC is selected as a delivery method. There are also budget considerations to be reviewed.

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**RECOMMENDATION 14** (p. 64)

In order to reduce the financial and schedule risks associated with incomplete Ed Specs prior to master planning, begin the process of procurement of firms to develop Ed Specs revisions and master plans with sufficient additional time or float to accommodate for delays and, protests. This is a repeat recommendation from the 2015 Audit, and the Marcia Latta report (see next section) also recommends that Ed Specs preceded master planning and design.

**STAFF RESPONSE: Completed**

OSM concurs with this recommendation and with the completion of the Focused Option Educational Specification, the District will have all these in order before any further master planning begins.

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**RECOMMENDATION 15** (p. 74)

Ensure the CM/GC contract for GHS, and future CM/GC contracts have provisions that comply with audit recommendation #15 of the 2014 performance audit report, and repeated as recommendation #26 of the 2015 audit report. Specifically, to provide more flexibility in the selection of subcontractors, PPS CM/GC contracts should proscribe dollar limits up to which the CM/GC firms may procure subcontractors by competitive quotes, without the prior approval of the district.

**STAFF RESPONSE: Completed**

P&C's CM/GC contract template mirrored the Attorney General's Model Rule language regarding selection of subcontractors. Those Model Rules provide constraints around subcontractor

selection, requiring that absent written justification the selection must be competitive and publicly advertised. Both the Model Rules and the CM/GC contract template stated that such process may include a “low-bid competitive method, a low-quote competitive method for contracts in a specified dollar range agreeable to the District, or a method whereby both price and qualifications of the subcontractors are evaluated in a competitive environment.” PPS 49-0690(5)(k). Prior to negotiation and signing of the Grant HS Modernization CM/GC contract, P&C further clarified the CM/GC contract language to specify that the publicly advertised, low-quote competitive method may be used for subcontracts less than \$100k dollars, consistent with the District’s own purchasing thresholds.