



**Date:** July 13, 2020

**To:** Board of Education

**From:** Dan Jung, Chief Operating Officer

**Subject:** 2020 Bond Budget Summary

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Over the past several months staff have developed potential 2020 bond scopes of work and associated costs, ranging from relatively small facility improvements to full school modernizations. This document provides a summary of the 2020 bond cost budgeting efforts to date.

## OVERVIEW

All budgets are based upon the best available data. It's worth noting that data sources can vary in detail and specificity. Sources used for bond estimates include the recently completed Facilities Condition Assessment (these are "high-level" estimates based upon rapid visual inspections), completed project cost data (scope specific data but not project specific) and in the case of the high school modernizations, estimates from professional construction cost estimators, among other sources.

Cost estimates change over time as new information is learned and conditions change. To account for inevitable fluctuations various risk management strategies are used to contain costs and align scope with budgets. Examples we use include (i) utilizing project specific contingency budgets; (ii) including a robust program contingency budget; (iii) targeting a range of improvements for less defined scopes of work; and (iv) allowing flexibility in the bond language to modify scope and funding to address highest priorities as conditions change over time.

Staff has met with the Bond Accountability Committee (BAC) six times to review 2020 bond cost estimates, with the most recent meeting on June 30. Estimates in this update reflect input received from the BAC. Additionally the BAC will be provided the enclosed information to allow for any additional comments/recommendations to staff and the board.

The cost updating efforts over the past several weeks have not changed overall costs significantly. For example, in the table below Column A summarizes the 2020 bond option provided at the July 9 board work session (which primarily utilizes the estimating data from May 2020). Column B is the same option with the updated estimates. The total change is less than 1%.

	A	B	C (B-A)	
	7/9/2020 OPTION	7/9/2020 OPTION (UPDATED COSTS)	DELTA	
MODERNIZATIONS	620,000,000	619,000,000	-1,000,000	
EDUCATIONAL IMPROVEMENTS	179,044,000	170,844,000	-8,200,000	
PHYSICAL FACILITY IMPROVEMENTS	198,500,000	200,800,000	2,300,000	
CAPACITY	0	0	0	
CONTINGENCY & ADMINISTRATION	149,631,600	158,503,040	8,871,440	
TOTAL	1,147,175,600	1,149,147,040	1,971,440	0.17%
TOTAL - ROUNDED	1,150,000,000	1,150,000,000	0	0.00%

## MODERNIZATIONS

### CONCEPTUAL MASTER PLANS

In early 2020 staff completed Conceptual Master Plans (CMPs) for Cleveland HS, Jefferson HS and Madison HS. The goal of the CMP process was to provide a high-level scope of work for each project with an associated budget. After the November 2020 vote, all high schools that are included in the 2020 bond will complete the master planning process, which will include (i) additional community and stakeholder engagement; (ii) identifying the final modernization option; (iii) aligning the scope of the selected option with the district's High School Education Specifications; and (iv) finalizing the project budget.

The CMPs were informed by the district's High School Education Specifications, Design Guidelines and input from staff, stakeholders and the community. The construction cost estimates were provided by a professional construction cost estimator with additional design, permitting and other associated soft costs calculated based upon recent project data. Below is a summary table, including updated project budgets.

<b>Jefferson HS</b>	<b>Preferred Option A</b>	<b>Preferred Option C</b>	<b>1000 Students</b>	<b>New Construction</b>
Renovation / New Construction	Renovation	Renovation	Renovation	New Construction
Base Estimate	305,000,000 *	317,000,000	281,000,000	276,000,000
Base w/ Seismic Upgrade	311,000,000	323,000,000	286,000,000	281,000,000
<b>Cleveland HS</b>	<b>Preferred Option 1</b>	<b>Preferred Option 2</b>	<b>Preferred Option 3</b>	
Renovation / New Construction	Renovation	Renovation	New Construction	
Base Estimate	305,000,000	304,000,000 *	240,000,000	
Base w/ Seismic Upgrade	311,000,000	310,000,000	244,000,000	
<b>Wilson HS</b>	<b>Preferred Option E</b>	<b>Preferred Option G</b>	<b>Renovation</b>	
Renovation / New Construction	New Construction	New Construction	Renovation	
Base Estimate	252,000,000	251,000,000 *	251,000,000	
Base w/ Seismic Upgrade	256,000,000	255,000,000	256,000,000	

\* Staff Recommended Option

## JEFFERSON - NEW CONSTRUCTION OPTION

The CMPs are informed by the district's High School Educational Specifications which identify a student enrollment target of 1700 students. The CMP process for Jefferson reviewed several potential modernization options and identified 2 preferred options, both of which included a student enrollment capacity of 1700 and retained the original Jefferson High School building. Prior to completion of the CMP an additional 1000 student capacity option was requested and provided.

A fourth option was requested, after completion of the CMP, that included removing the original high school building and replacing it with new construction. This option is included in the updated cost information. Of note, the new construction option is not based on a specific layout, rather the costs are based upon an estimated building square footage and an assumed cost per square foot provided by a professional cost estimator.

## SEISMIC

All new modernization projects meet building code standards for seismic safety. Additionally PPS's current structural standard includes increasing the structural system of one common space within each building to Risk Category IV (immediate occupancy). The intent of this increased structural component (typically the gymnasium or cafeteria<sup>1</sup>) is to provide a potential structurally safe relief area if needed in the event of an emergency. Recent discussions have revolved around increasing PPS's standard to require all new construction buildings to meet the Risk Category IV structural standards. As requested, estimates to increase the structural system for new construction buildings to Risk Category IV are included in the modernization budgets as an independent line item.<sup>2</sup>

## ESCALATION

Staff have consulted with 3 professional cost estimators in recent weeks to update forecasted escalation rates based on the current market. Though some forecasts anticipate escalation rates to decrease in coming years, where others forecast an increase in rates, the overall trend appears to be a 3% - 5% increase over the next year, then dropping slightly in coming years.

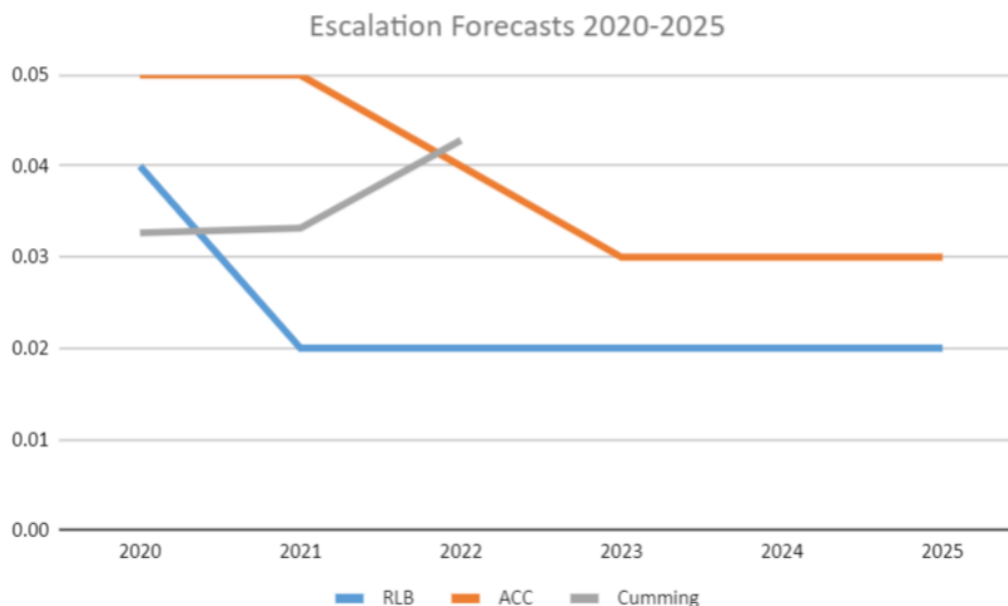
For the appropriate scopes of work within this bond package, staff has utilized an escalation model that anticipates 4% growth for the next two years, then reducing to 3% growth for remaining years of each individual scope of work. Escalation is typically estimated to the midpoint of construction to account for timing of bidding and purchasing of materials and

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<sup>1</sup> Current standards do not specify the space to allow projects to identify the space that is the most useful and has the least cost impact.

<sup>2</sup> Feedback from our professional cost estimator notes upgrading a building's structure from a Category III (Life Safety) to Category IV (Immediate Occupancy) will only add somewhere between 1-5% (often more toward the lower end of that range) to the total construction cost for a new build, depending on the building's size and geometry. Most CMP modernization options include a mixture of renovation and new construction, however the cost estimates do not separate renovation from new construction costs. For budgeting purposes, 2% has been added to the hard cost estimates for each option.

services, however exceptions do apply. Below is a table of the recent input received from the cost estimators.



#### 2017 PROJECTS (BENSON AND MGP)

Though sometimes referred to as “Benson and MPG” or simply “Benson” the cost to complete all of the 2017 Bond projects is the delta between the total 2017 Bond project budgets and the estimate at completion. Each quarter OSM reports on the overall bond program status and updates the estimate at completion. The last report in May identified a delta of approximately \$202 million. Below is a simplified cost breakdown.

2017 PROJECT	BUDGET	ESTIMATE AT COMPLETION	DELTA
BENSON/MPG	78,702,500	357,728,000	279,025,500
LINCOLN	242,500,000	242,500,000	0
KELLOGG	59,811,150	59,811,150	0
MADISON	201,502,499	201,502,499	0
ACTIVE H&S PROJECTS	119,823,626	119,152,065	-671,561
ADMIN & UNALLOCATED BUDGET	190,197,087	113,826,392	-76,370,695
	<b>892,536,862</b>	<b>1,094,520,106</b>	<b>201,983,244</b>

Included in the estimate at completion is anticipated interest earnings from invested bond proceeds. Early investment projections anticipated total interest revenue of \$34 million over the life of the bond program, however due in large part to the current health pandemic, interest rates have recently dropped dramatically, reducing the overall anticipated revenue to approximately \$21.3 million, a reduction of over \$12 million. Below is a summary of the updated interest projections.

	Original Projection	Updated Projection	Delta
Earned Interest (Through August 2018)	6,500,000	5,582,726	-917,274
Earned Interest (Forecasted) 2017 Issuance	13,500,000	12,528,877	-971,123
Earned Interest (Forecasted) Future Issuance	14,000,000	3,143,898	-10,856,102
<b>Total</b>	<b>34,000,000</b>	<b>21,255,502</b>	<b>-12,744,498</b>

	2017 Issuance	2020 Issuance
FY2018 Actual	4,356,960	-
FY2019 Actual	4,885,069	-
FY2020 Preliminary	3,775,321	777,063
FY2021 Projected	2,197,669	1,673,696
FY2022 Projected	1,769,591	649,204
FY2023 Projected	1,114,163	43,935
FY2024 Projected	12,831	-
	<u>18,111,603</u>	<u>3,143,898</u>
		<u>21,255,502</u>

Based on this information, staff recommends budgeting \$214,000,000 to complete the 2017 Bond projects.

#### CLEVELAND & WILSON - MASTER PLANNING & DESIGN

Included in the potential 2020 bond scope of work are funds to continue master planning and designing of Cleveland HS and Wilson HS. The intent of these funds is to complete the master planning phase (including finalizing the project modernization option and budget) and proceeding into the design phase in anticipation of a future bond that will include the remaining funds necessary to complete construction.

The Lincoln and Madison projects expended approximately 5% of their total project budgets when they began construction. Taking into account project uniqueness and still undetermined final master plans and schedules, staff recommends allocating approximately 7% of the current preferred option budget for Cleveland and Wilson, which averages to approximately \$20 million for each.

A few notes:

1. It is anticipated that if the cost for this scope comes in below \$20 million, the savings would be rolled into the project budgets to complete construction.
2. The Cleveland and Wilson modernization estimates have been updated to reflect current escalation estimate percentages and durations.
3. The timing of this master planning and design is dependent upon the timing of the future bond (which influences when construction will begin).

## CENTER FOR BLACK STUDENT EXCELLENCE

Included in the options for 2020 are funds to support and progress the concept of a Center for Black Student Excellence. It is important to note that this concept does not necessarily refer to a singular physical campus or facility, but rather envisions a broader definition referring to: a geographical community as well as an overall culturally-affirming approach and set of community-developed strategies, aligned towards promoting Black student excellence, from cradle to career. These funds represent a significant investment and step forward in further developing and realizing this vision of Black children, youth, and families thriving. The below table outlines the proposed scope and budget.

<b>Amount</b>	<b>Line Item</b>
<b>\$2 Million</b>	<b>Conceptual Design</b> In concert with Black elders, youth and families, design a Center for Black Student Excellence that: <ol style="list-style-type: none"> <li>1. Reflects the lived experiences and aspirations for Portland's Black children;</li> <li>2. Acknowledges Portland's (Public Schools) trouble history with institutional, cultural and systemic racism, and centers a community engagement process that leads to healing between PPS (as an institution) and Portland's Black community;</li> <li>3. Establishes a robust Center for Black Student Excellence as both a physical built environment and as a designated set of culturally responsive strategies, immediate and long term plans and culturally-specific partnerships to advance Black student achievement in line with "PPS reimagined;" and</li> <li>4. Is congruent with the Master Design Plan and Academic Programs of Jefferson High School.</li> </ol>
<b>\$14 Million</b>	<b>Master Design Plan</b> At minimum, the Master Design Plan should incorporate an interconnected early learning to eighth grade campus(es) congruent with the rebuild of Jefferson HS.
<b>\$2 Million</b>	<b>Community Engagement and Project Management</b> The Center for Black Student Excellence will require culturally specific strategies, outreach and engagement plans that center the lived experiences of our PPS Black families and students. This will require a dedicated team and resources to lead a meaningful process to realize the goals for the Center for Black Student Excellence.
<b>\$42 Million</b>	<b>Construction and Implementation (Phase I)</b> Based on the conceptual design and overall plan for the Center for Black Student Excellence, begin the phased implementation of: <ul style="list-style-type: none"> <li>• Interconnected Early Learning to Eight Grade Campus(es) that is/are congruent with the Jefferson HS Master Plan and concepts for a Center for Black Student Excellence.</li> <li>• Potential enhancements to schools in the Jefferson Cohort.</li> </ul>
<b>\$60 Million</b>	<b>Total Investment in Bond 2020 Renewal for Black Student Excellence</b>

## **EDUCATION & FACILITY IMPROVEMENTS - UPDATED 07 13 2020**

Beginning in March, staff have utilized the Educational & Facility Improvement Summary document to provide an overview of educational and facility improvement options and budgets. An updated Educational & Facility Improvement Summary is provided herein based on new information, refinement of scope and estimates, and recent feedback.

A few notes:

1. The curriculum scope of work has been updated to reflect full funding for the adoption of more comprehensive instructional resources and materials, across core subject areas (including language arts, math, science, the arts and social emotional learning) as well as resources to support more innovative PPS vision-oriented courses of study (e.g. climate justice, ethnic studies, middle school redesign, experiential education and portfolios, computer science).
2. All estimates (where appropriate) include the updated escalation rates.
3. The most notable decrease in cost is for the SPED Classrooms scope of work. As the estimating assumptions were re-reviewed, staff found some costs (such as overhead and administration) were being accounted for in multiple scopes and have updated the estimates.
4. The most notable increase in cost (with the exception of curriculum) is for the ADA scope of work. As staff re-reviewed the accessibility costs per square foot we realized we were using a lower per square foot estimate than appropriate based on recent work completed (particularly for the elevator work). These numbers have been updated. Please note: the scope of the work has not been reduced, only the estimated cost to complete the work has been reduced.
5. If one or more high schools are included in the 2020 bond, the scope of work for those schools will be reviewed and, if appropriate, removed. The most notable example of this is the ADA improvements for Cleveland, Jefferson and Wilson. Included in the ADA scope is approximately \$8.8 million for improvements at the three high schools, these funds would be removed if one or more schools are included in the 2020 bond. Staff are judicious and mindful of improvements to buildings that are scheduled for full modernization.

## **CAPACITY & ENROLLMENT**

2020 Bond scenarios have included various potential scopes of work to support student capacity and enrollment. To date no specific capital improvements have been identified as required to meet capacity or enrollment needs, however the district is currently undertaking a multi-year enrollment review process that may result in capital needs.

At this time staff is not recommending a specific amount for capacity or enrollment needs, however staff recommends the 2020 bond include a robust program contingency and flexible

bond language that will allow program contingency funds to be allocated to capacity and enrollment needs if/when necessary.

## ADMINISTRATION AND CONTINGENCY

### ADMINISTRATION

Since 2012 bond administration costs have generally run in the 5% - 6% range. The table below provides an overview of the 2017 Bond program's current administration estimate.

<u>2017</u>		
Management	52,339,534	4.8%
Bond Issuance	5,000,000	0.5%
Corporate Activities Tax	4,400,000	0.4%
Owner Controlled Insurance Program	5,000,000	0.5%
TOTAL	66,739,534	6.1%

Several variables influence administration costs including the type of work managed (technology and curriculum requires less resources; health and safety improvements require more), duration of work, etc. OSM recently approximated a staffing model based upon the \$1.1 billion bond option and estimated total administration cost within the 5% - 6% range. Staff recommends budgeting 6% for program administration. Consistent with previous practice, any bond administration savings will be allocated to bond funded projects.

### PROGRAM CONTINGENCY

Program contingency is a risk management tool used to buffer against unanticipated costs. Program contingency is available to cover costs including:

- Estimating errors
- Discretionary scope additions
- Higher than anticipated escalation costs
- Building code or zoning code changes
- Emergency facility needs
- Pandemic related cost impacts
- Additional staff and resources for community engagement
- Or any other unanticipated cost whether it be discretionary or nondiscretionary

It is worth noting that both the 2012 and 2017 bond experienced significant scope increases after passage of the bond. For example, after the 2012 bond vote the high school student capacity target increased from 1500 students to 1700 students, increasing the base high school size from 220,000 square feet to 280,000 square feet during the design of the Roosevelt and Franklin projects.



Anticipating unanticipated costs is by definition challenging, however a few sample scenarios that could require additional resources based upon the recent potential 2020 bond options include:

- Educational Improvements - though we have detailed many of the highest priority educational capital needs, PPS has many other areas that require attention as well including performing and visual arts, athletics, physical education, all user restrooms, CTE, etc. It's conceivable one or more of these categories of work may become a priority in coming years and require capital improvements.
- Facility improvements - recent estimates put the district's deferred maintenance needs at over \$2 billion, with many failing or near failing systems. It's reasonable to assume some additional categories of work may need capital support in coming years including (but not limited to) electrical systems, plumbing systems, playground equipment, exterior closure systems, fire sprinklers, etc.
- Capacity & Enrollment - as noted above the district is undertaking a multi-year enrollment review. Capital improvements to support enrollment needs are a possibility.
- Center for Black Student Excellence - the scope of the Center for Black Student Excellence effort is undefined, and though significant funds are being discussed to support this, additional funding may become necessary as the plans develop.

Staff recommends budgeting no less than 10% for program contingency.

A couple of notes:

- 1) All program contingency funds are ultimately allocated to and spent on capital projects.
- 2) Staff does not recommend forecasting bond premium or interest earnings in the bond budget. Though proceeds can be significant, they are also highly dependent upon the market and largely out of PPS's ability to influence.

## **EXHIBITS**

- a. Educational & Facility Improvements Summary - Updated 07 13 2020
- b. High School Modernization Cost Summary
- c. Bond Options Comparison

# EDUCATIONAL & FACILITY IMPROVEMENT SUMMARY

**UPDATE: 07 13 2020**

Staff has identified technology, curriculum and special education classrooms as priority scopes of work within the Educational Improvements category. Roofs, mechanical systems, security, seismic, and ADA were identified as priority scope of work within the Physical Facility Improvements category of work. Though both categories of work have many other essential needs, these scopes regularly rose to the top during discussions on need, priority and impact. Below are summaries of each.

## EDUCATIONAL IMPROVEMENTS

### TECHNOLOGY

Having a resilient and functioning technology infrastructure is an essential core for providing an effective school experience for our students, teachers, and staff. The technology infrastructure is critical in all aspects of the operations and functions throughout the district. The technology and network infrastructure provides the basis from which many of our most critical systems function. Starting with the Student Information System (SIS), our phone system which is our most critical element of communication, all electronic communication, access to our financial and human resources system (ERP), security access controls for our automated door locks, security cameras, paging systems, all require an up to date and well maintained infrastructure. Our classrooms and instructional materials are also dependent upon the same infrastructure to provide attendance, curriculum, communications (email, phone, and video conferencing), access to the Internet, electronic courses, learning management systems (LMS), instructional applications and a myriad of other resources. Without a healthy and well maintained core infrastructure all of those resources are at risk of failing at critical times.

Cyber security is also a component of a healthy core infrastructure. Technology changes rapidly and the advances in technology bring those same advances to the bad actors on the Internet. Aging and out of date infrastructure provides open opportunities to exploit the holes presented to be able to run malware, ransomware, and other acts of cyber crimes that put our student data, staff data, and critical resources at risk.

The infrastructure at PPS has been ignored and unattended to for many years and is so out of date that we are at risk of failing systems and leaving us vulnerable to cyber attacks. In order to provide the best educational opportunities, and in order to provide equitable access to all of the rich resources technology can make available, PPS needs a large investment to erase the technical debt that has accrued over the past 2 decades. The first, and best, of the three options presented below builds a plan to reverse the years of neglect and will bring our infrastructure up to an operational standard that will be reliable, resilient, secure, and more easily maintained. This investment will also provide the devices necessary for students to access all the abundant resources available in a fully realized digitally enabled school district. Additionally, it will lay the needed foundation from which we can build a cyber security

program to help defend against the myriad of bad actors and malicious attacks which are increasing rapidly across the country specifically targeting school districts.

### **Budget Options**

**A. \$128,200,000** - This option has been refined to align with a shorter Bond request timeline of 2-4 years. It does include all of the critical updates needed in the core infrastructure as well as classroom modernization, and device purchasing required to position us to transition to a fully realized Digital District with one-to-one programs in all of our schools. The significant adjustments in this Bond proposal are the removal of any equipment or device refresh options that would be delayed to be included in the next Bond ask from the community. Also, while we have included funds for the preparation for replacing our ERP solution, the actual replacement and transition funding are also being moved to the next Bond request.

Technology Projects	
Infrastructure and Security	\$39,600,000
Device Replacement	\$34,100,000
Classroom Modernization	\$26,600,000
ERP Replacement Planning	\$12,600,000
Implementation Services	\$15,300,000
	<b>\$128,200,000</b>

### **CURRICULUM**

Portland Public Schools is committed to providing all students equitable access to a comprehensive, rigorous, equitable, and inclusive education. A core component of a comprehensive education includes students and teachers engaging with well-organized, high-quality resources that can be adapted to the needs of each class. A growing and compelling research base suggests that high-quality Tier I instructional materials can yield improvements in student learning outcomes equal to or greater than many interventions that are often more costly. A high-quality core curriculum can give educators within a school and across a school system a comprehensive and common foundation to organize the work they're undertaking at the classroom level and collaborate to develop together.

We must also reimagine learning for our students and build learning environments that are rich in digital and print materials to deepen engagement, expand access to information and content, and cultivate creativity. A digital rich environment provides extensive opportunities for more personalized learning options, anytime, anywhere while supporting students in attaining deep concepts and developing 21st-century skills. It allows educators flexibility to design and differentiate learning experiences based on their students' needs and strengths.

Portland Public Schools has not been able to prioritize the adoption of comprehensive print and digital instructional materials in the last ten years; as a result, students and teachers have been using outdated instructional resources that have impacted teaching and learning. The funds requested would support the purchasing of curriculum in core content areas such as language arts, mathematics, science,

social-emotional learning, social sciences, English as a second language, and the visual and performing arts. This investment would not only bring instructional resources current, but would also allow the district to get back on the state's materials adoption cycle and comply with ODE's Standards for Public Elementary and Secondary Schools. For the first time in decades, PPS would have a comprehensive offering of high-quality instructional resources for students across grades and nearly all subject areas.

### **Budget Option**

**\$53,444,000** - Full funding would allow for the adoption of comprehensive and current instructional materials, across core subject areas, including language arts, math, science, the arts and social emotional learning. This would lead to a) students working with high-quality, standards-based instructional materials, and, b) would allow for a return to the Oregon textbook adoption cycle.

In addition, funding at this amount would allow for the introduction and expansion of the ethnic studies instructional program, across K - 12, over the next 3 years. With an emphasis on black and Native studies, the funding would allow PPS to reflect its Vision and Theory of Action. Funding would allow for a more comprehensive implementation of the Climate Justice Initiative across K - 12.

An important priority the bond would support is the Middle School Redesign. A key aspect of the district's vision is the design and implementation of more authentic, real-world learning experiences for our students across PK - 12. The Middle School Redesign initiative focuses on such experiences, including project-based learning, work-based learning, and problem-based learning opportunities. This requires more authentic measures for assessing student learning. Students will have the opportunity to perform real-world tasks with a high cognitive demand that demonstrates clear application of relevant knowledge and skills. These experiences reflect authentic, real-world situations. The portfolios would support such learning and assessment.

The Middle School Redesign will include piloting the MSR model, representing the effort to celebrate adolescence as consequential and full of promise—the transition between childhood and adulthood and the developmental stage when the search for identity is an individual's paramount endeavor. Though this signature trait of adolescence can manifest as rebellion and cause a clash with societal and school expectations and norms, it's also each student's chance to chart a course toward a fulfilling life and career. This is the age at which students begin to tackle abstraction, grapple with complexity, and envision infinite alternatives and solutions—ones that as adults we had never imagined. Funding the MSR efforts would allow us to, both tap into and nourish this wellspring of energy, optimism, and creativity, while supporting youth through any personal and academic challenges they encounter.

Collectively, the ask represents a concerted effort to provide more integrated instruction that acknowledges students as partners in their learning. It allows us to move from adult advocacy to student agency. To achieve this, we need to set a solid foundation, temporary yet solid scaffolds, and opportunities for students to engage in leading their own learning. Doing so, in a more integrated manner, where disciplines leverage each other, and enhances the relevance of each, can lead to

higher-impact learning. The funding would provide the necessary resources to engage in more intentional teaching and learning experiences in both the virtual and in-person learning space.

### **SPECIAL EDUCATION**

The educational suitability assessment completed as part of the FCA identified many District facilities as poor or unsatisfactory to deliver special education (SPED) programming. Many of the SPED instructional spaces receiving this designation scored low due to inadequate storage, poor acoustics, and suboptimal location within the building.

Planning & Real Estate staff began meeting with the SPED leadership in August 2019 to outline capital investments that could improve SPED spaces. Through subsequent questionnaires and interviews SPED leadership identified flexible, portable furniture and equipment as high priority investments for SPED classrooms. Examples include mobile storage units, soft seating, and portable room partitions. This approach offers a balance of flexible, adaptive classroom configurations with visual and acoustic mitigation to support distraction-free, small group instruction.

#### **Budget Options**

**A. \$13,400,000** - Provides the resources to equip or update the current focus option classrooms in the District with furniture and fixed equipment aligned with PPS standards and identified by SPED leadership as high priority investments for classroom improvements. The District currently supports 82 focus option SPED classrooms; many of these classrooms are overcrowded so some allowance for expansion is accounted for here. Beyond furniture and equipment aligned with PPS standards, this option includes an allowance for classroom modifications. These modifications include acoustic baffling, replacement of fluorescent lights with dimmable LEDs, and built-in casework, to name three important examples. Combined, the addition of District standard furniture and equipment with classroom modifications will support both the instructional requirements of special education staff and the sensory-needs of our students.

**B. \$8,100,000** - This option would include the same set of improvements outlined in the above option (A) but would affect fewer classrooms. The amount proposed is the mid-point between option A and option C, outlined below.

**C. \$2,500,000**- This lowest amount would cover the purchase and installation of furniture *only*. The option would offer some ability for SPED staff to create small, structured instructional spaces within classrooms but would be limited in its ability to provide a distraction-free learning environment. Perhaps most importantly, this option would offer the least ability to create sensory support spaces within classrooms, potentially exacerbating incidents of emotional dysregulation.

### **ADDITIONAL SCOPES OF WORK**

In addition to the above priorities, PPS has many educational improvement needs including physical education (PE), athletics, visual and performing arts (VAPA), among others.

The educational suitability assessment identified visual and VAPA and PE as programs underserved by our facilities. In both cases, facility constraints around available space for existing programs were observed. Regarding PE, there are currently nine schools in the District without dedicated gyms (i.e. PE takes place in dual-purpose spaces such as cafeteria-gyms). To be sure, these dual-purpose spaces present significant challenges to fulfilling the number of PE minutes required by state law (HB 3141). Outdoor covered play structures offer a viable option to extend the space available for physical education. Across the District's K-5s, K8s, and MSs, 46 currently *need* covered play structures. District staff are working to develop a prototype to expedite the design and permitting process for these structures.

Regarding visual and performing arts, the educational suitability assessment identified 18 schools with VAPA programming without dedicated visual or performing arts spaces. In such cases, arts programming migrates between general-use classrooms, often without vital facility supports such as sinks, storage, and tackable wall surfaces.

Athletics is another area that could benefit from significant capital investment. Many of PPS's sites lack the facilities to provide robust athletic programming and events. PPS athletics will be a part of the forthcoming capital planning efforts that will identify overall needs and priorities. Some athletic capital needs have already been identified, including Grant Bowl, West Sylvan fields, turf fields at various high schools, etc.

## **PHYSICAL FACILITY IMPROVEMENTS**

### **ROOF**

Maintaining roofing systems is essential to creating spaces conducive to learning and avoid serious facility conditions such as:

- Structural deterioration: Continual exposure to water exposes wood in roofs to mold and rot. This can weaken the framing considerably and cause a roof collapse which is a serious threat to your personal safety and the structural integrity of your home.
- Interior damage: Like water, the problem can trickle downward causing damage to the rest of your building, including ceilings, flooring, electrical systems, furniture and equipment.
- Health problems: Wet and damp conditions promote mold growth and create unhealthy conditions.
- General inconvenience: Smaller issues are easier to fix than large ones. A badly damaged roof takes days to repair which is a major inconvenience, not to mention the impact it can have on your energy bills and overall comfort.

The FCA identified approximately 150 deficiencies in categories 1-4 at over 60 sites. Roofing components that need to be repaired or replaced can range from relatively small scopes such as broken access hatches, to large concerns including deteriorated roofing membranes and regular water leaks. Anticipating the performance of any individual roofing is an inexact science, however staff estimates

approximately 30 sites will require a full or majority roof replacement in the next 5-10 years with about 25 of those needing replacement within the next 3-4 years.

### **Budget Options**

**A. \$65,700,000** - Based on the current information available this amount is Staff's best estimation of the budget needed to respond to critical roofing needs over the course of the bond (approximately 12 roofs). Some roofs are likely to perform better than currently anticipated while others worse. Additional budget could be made available from Program Contingency to address additional roof needs that may arise during the course of the bond program. This option provides for approximately 4 roofs per summer.

**B. \$49,300,000** - An alternative option is to budget the amount to address the sites estimated to require full or major roof replacement over the course of the bond (approximately 9 roofs). This option provides for approximately 3 roofs per summer.

### **Notes:**

- Staff anticipate being able to replace 3-4 roofs per summer. This is also approximately the number of roofs per year to keep up with the life cycle of roofs.
- Roof replacements often include ancillary scope of work including roof level seismic improvements, additional building insulation, replacing outdated rooftop equipment, etc.
- Consistent with current practice, staff will convene regularly to review current roofing conditions and reprioritize/sequence roofing work based upon facility need.

### **MECHANICAL**

Mechanical system impacts to teaching and learning spaces range from simple discomfort (both hot and cold) to poor indoor air quality, costly emergency repairs and even school closures due to lack of heat. Along with roofs, mechanical deficiencies are PPS's largest facility need with dozens of schools having major mechanical system components in currently critical condition. Temperature issues are the most common complaints from school staff with over 6,000 mechanical system work orders submitted last year alone.

The FCA identified approximately 1,800 deficiencies in categories 1-3 at over 80 sites, with the majority of the deficiencies noted in category 1 (Currently Critical) or 2 (Potentially Critical). Additionally the FCA identifies over 50 sites that have repair/replacement costs exceeding \$1 million.<sup>1</sup>

Mechanical systems have many complex, dependent components making it challenging to predict a system's performance, identify the root cause of failure, design needed fixes and estimate the total cost. Detailed assessment by professional mechanical engineering firms is necessary to determine how to resolve a failing or poor performing system. However, based upon the FCA data, it's reasonable to assume many of the systems that have estimated costs exceeding \$1 million in categories 1 and 2, will

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<sup>1</sup> The FCA estimates hard costs only. This estimate excludes projects costs including design, permitting, escalation, management, and contingency.

require full or majority system replacements in the coming years. Additionally, it is reasonable to assume many other systems will require significant capital expenditure to maintain performance.

Staff estimates full mechanical system replacements average approximately \$10 million (depending on type of system, size of school, hazardous materials present, condition of ductwork, etc.). The FCA data points to large portions of systems in the majority of the schools needing significant repair or full/majority system replacement. Considering contractor availability, staff capacity, impacts to schools with these and other major capital projects, staff estimates approximately as many as 5 large mechanical system projects could be completed annually, plus additional smaller projects.

### **Budget Options**

**A. \$75,000,0000** - Staff recommends budgeting to complete 5 large mechanical projects each year at an average cost of \$5 million per project (assuming some projects will require full system replacement, while others will require only targeted improvements). This amount would address approximately 15 of PPS highest priority sites. Additional smaller projects would also be completed over the course of the bond. Additional budget could be made available from Program Contingency to address additional HVAC needs that may arise during the course of the bond program.

**B. \$45,000,0000** - An alternative option is to estimate completing 3 large mechanical projects per year. This amount would address approximately 9 of PPS highest priority sites.

### **Notes:**

- Staff anticipate being able to complete as many as 5 mechanical systems per year. Work would largely take place over summer with some work also taking place during the Fall (before the heating season begins).
- Staff will convene regularly to review current mechanical system performance and reprioritize/sequence work based upon highest need.

### **SECURITY**

PPS staff, students, parents and community members regularly emphasize the need for improved security systems throughout the district. The 2017 bond Secure Schools project is currently installing electronic access controls systems, updated public address system speakers, and other improvements at all schools in the district, but additional improvements will be of significant value.

Staff estimates \$25,900,000 will support adding locking hardware to all classroom doors throughout the district, along with additional security cameras and updated intrusion alarm systems.

### **Budget Options**

**A. \$3,800,000** - Staff estimates this amount will allow for the District to upgrade all classroom door locks to the current district standard that allows for a door to be secured from the inside of a classroom. Currently the majority of classrooms throughout district require use of a key or of a sub-standard lock to secure a classroom door.



**B. \$19,800,000** - Staff estimates this amount will allow for additional surveillance systems. The estimate is based on \$1.56/Sq.Ft. plus contingency and lifecycle support costs. The majority of non-modernized schools are limited to one surveillance camera. A single camera is not adequate in monitoring, deterring or preventing unwanted activity.

**C. \$2,300,000** - Staff estimates this amount will allow for the upgrade and/or replacement of intrusion systems in all non-modernized buildings. The existing intrusion systems are antiquated. Systems do not allow remote programming and cannot be integrated with other building security systems (access control/surveillance).

## **SEISMIC**

Although all new and modernized facilities meet seismic code requirements, and a number of PPS sites have received incremental seismic improvements in recent years via with roof replacement projects or other targeted improvements, few of PPS current buildings meet current seismic code.

Seismic deficiencies were not a scope within the FCA, however reviewing previous cost estimates places the total cost to bring all PPS sites up to current code at over \$1 billion. In addition to being costly, seismic retrofits are also very invasive, and time consuming; often larger scale projects cannot be completed over a single summer.

In reviewing options for seismic retrofits, Staff reviewed smaller schools that are both on the City of Portland URM database, and are likely to receive a full roof replacement in the near future (roof replacements include seismic improvements and offer an opportune time to complete simultaneous seismic retrofits). Staff identified 9 schools that are on the City of Portland URM database and are likely to be included in a full roof replacement as a part of this bond effort.

## **Budget Options**

**A. \$17,200,000** - Staff estimates this amount could retrofit up to 3 smaller schools that are on the City of Portland URM database and are likely to be included in a full roof replacement as part of this bond effort.

### **Notes:**

- Staff preliminary identified schools that comprise the above options. Further review and development of scope would take place before confirming sites.
- PPS has received multiple Seismic Rehabilitation Grant Program (SRGP) grants in the last 8 years. These grants offer significant funds toward completing seismic improvements, but do not offer enough to complete full retrofits. Allocating funds for seismic improvement will allow Staff to continue to pursue this (and other) matching fund sources.

## **ADA**

Few schools within the PPS portfolio are fully accessible per ADA requirements and the current estimate to bring all sites up to current code exceeds \$100,000,000. There are currently 28 multi-level schools without elevators. PPS is in the process of updating its ADA Transition Plan and is currently engaging

community feedback. The ADA Transition Plan update process has looked at various options for phasing of improvements.

### **Budget Options**

**A. \$33,800,000** - Staff estimates this amount would allow the District to remove barriers at the main level District-wide. Main-level accessibility would include portions of the site necessary to reach the main entrance from the bus or drop-off area, the main entrance, and access to essential programming. Here, 'essential programming' includes an individual's classroom(s), the cafeteria, library, and gym, in addition to one or more accessible restrooms.

This approach may require administrators to schedule programming around individuals with disabilities in multi-level buildings without elevators. In addition to instructional programming, sensitivity to the placement of school-clubs and other extracurricular activities must be observed.

The advantage of this framework would be its economy and relative speed to implement District-wide. By omitting elevators - far and away, the most costly accessibility improvement - the District's accessibility budget could reach many more schools.

**B. \$22,400,000** - Staff estimates this amount would allow the District to remove barriers at two K-5s, one MS, and one HS, per cluster. This option would provide greater support for students experiencing disability by reducing transportation needs, potentially allowing these students to remain at their neighborhood school. Please note this option identified the most affordable path to accessibility; issues around transportation, geography, or other building deficiencies were not considered. The advantage with this option, of course, is that it allows two choices at the K-5 level, reducing the transportation onus on the most vulnerable of our student population.

Of the amount identified, \$8.8M would address barriers at Jefferson, Cleveland, and Wilson (with Jefferson taking the bulk of the cost). If the District moves forward with the Modernization of Jefferson and the design of Cleveland and Wilson, staff recommend reallocating the \$8.8M to other accessibility improvements as recommended by the forthcoming ADA Transition Plan.

**C. \$17,000,000** - Staff estimates this amount would allow the District to make fully accessible one K-5, one MS, and one HS, per cluster. Providing at a minimum of one fully accessible school configuration in each cluster. Please note this option identified the most affordable path to accessibility; issues around transportation, geography, or other building deficiencies were not considered.

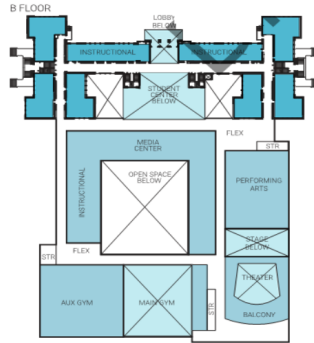
As with Option B above, of the amount identified, \$8.8M would address barriers at Jefferson, Cleveland, and Wilson (with Jefferson taking the bulk of the cost). If the District moves forward with the Modernization of Jefferson and the design of Cleveland and Wilson, staff recommend reallocating the \$8.8M to other accessibility improvements as recommended by the forthcoming ADA Transition Plan.

### **ADDITIONAL SCOPES OF WORK**

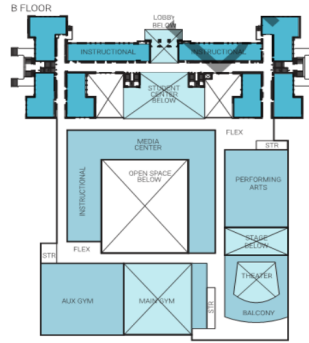
PPS has many other critical physical facility needs including plumbing systems, electrical systems, asbestos remediation, energy improvements, flooring replacement, play structure repair, foundation work, etc. Staff acknowledges the need for physical facility improvements exceeds the funding capacity of a single general obligation bond, however it will be important to allocate some funds to address the highest needs amongst these and other scopes, and allow for flexibility to respond to critical needs as they arise.

# Jefferson High School

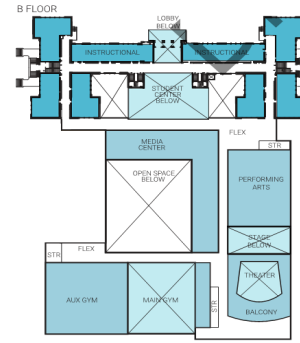
## Conceptual Master Plan Options



**APPROACH A**



**APPROACH C**



**1,000 STUDENTS**

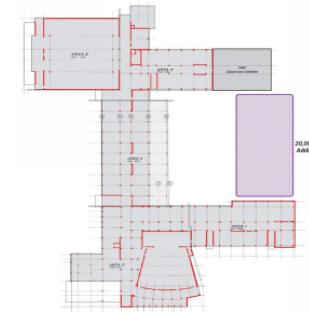
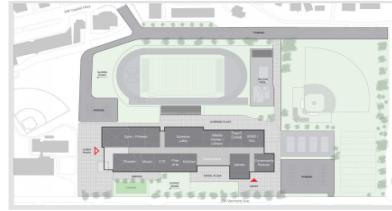
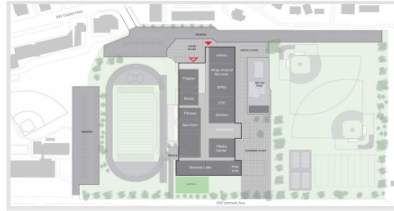


**NEW CONSTRUCTION**

HARD COST		183,142,890		190,736,572		169,184,309		171,943,094
EST CONTINGENCY	0.00%	0	0.00%	0	0.00%	0	0.00%	0
SOFT COST	14%	25,640,005	14%	26,703,120	14%	23,685,803	14%	24,072,033
FFE	27.00	9,029,070	27.00	9,029,070	27.00	8,084,178	27.00	8,372,538
CONTINGENCY	15%	32,671,795	15%	33,970,314	15%	30,143,144	15%	30,658,150
SWING		INCL		INCL		INCL		INCL
ESCALATION	2yr @ 4%, rem @ 3%	54,442,727	2yr @ 4%, rem @ 3%	56,606,519	2yr @ 4%, rem @ 3%	50,229,103	2yr @ 4%, rem @ 3%	40,730,502
OTHER		-		-		-		-
TOTAL		304,926,487		317,045,595		281,326,537		275,776,317
TOTAL - ROUNDED		305,000,000		317,000,000		281,000,000		276,000,000
SEISMIC ADD		6,000,000		6,000,000		5,000,000		5,000,000
TOTAL W/ SEISMIC		311,000,000		323,000,000		286,000,000		281,000,000

# Wilson High School

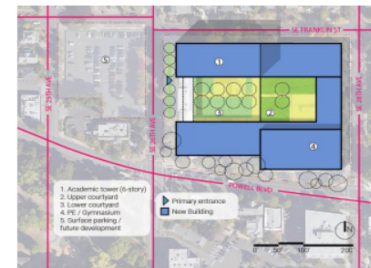
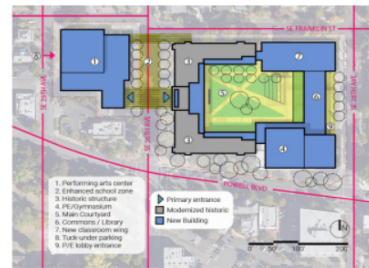
## Conceptual Master Plan Options



	OPTION E		OPTION G		RENOVATION		RECOMMENDATION
HARD COST		155,763,805		155,164,101		145,915,774	
EST CONTINGENCY	0.00%	0	0.00%	0	0.00%	0	
SOFT COST	14%	21,806,933	14%	21,722,974	14%	20,428,208	
FFE	27.00	7,749,000	27.00	7,722,000	27.00	7,560,000	
CONTINGENCY	10%	18,531,974	10%	18,460,908	15%	26,085,597	
SWING		INCL		INCL		INCL	
ESCALATION	2yr @ 4%, rem @ 3%	48,029,621	2yr @ 4%, rem @ 3%	47,845,437	2yr @ 4%, rem @ 3%	50,771,522	
OTHER		-		-		-	
TOTAL		251,881,332		250,915,420		250,761,102	
TOTAL - ROUNDED		252,000,000		251,000,000		251,000,000	
SEISMIC ADD		4,000,000		4,000,000		5,000,000	
TOTAL W/ SEISMIC		256,000,000		255,000,000		256,000,000	256,000,000

# Cleveland High School

## Conceptual Master Plan Options



	OPTION 1		OPTION 2		OPTION 3		RECOMMENDATION
HARD COST		180,733,198		179,835,691		148,395,056	
EST CONTINGENCY	0.00%	0	0.00%	0	0.00%	0	
SOFT COST	14%	25,302,648	14%	25,176,997	14%	20,775,308	
FFE	27.00	8,816,202	27.00	8,583,030	27.00	7,689,546	
CONTINGENCY	15%	32,227,807	15%	32,039,358	10%	17,685,991	
SWING		INCL		INCL		INCL	
ESCALATION	2yr @4%, rem @3%	58,214,629	2yr @4%, rem @3%	57,874,224	2yr @4%, rem @3%	45,837,073	
OTHER		-		-		-	
TOTAL		305,294,484		303,509,299		240,382,974	
TOTAL - ROUNDED		305,000,000		304,000,000		240,000,000	
SEISMIC ADD		6,000,000		6,000,000		4,000,000	
TOTAL W/ SEISMIC		311,000,000		310,000,000		244,000,000	310,000,000

# BOND OPTIONS COMPARISON

07 13 2020

	A	B	C	D	E
			(B-A)		(D-B)
	JULY 9 OPTION	JULY 9 OPTION (WITH UPDATED ESTIMATES)	DELTA	JULY 14 OPTION	DELTA
<b>MODERNIZATIONS</b>					
2017 BOND BALANCE	138,000,000	152,000,000	14,000,000	152,000,000	0
MPG BUILDING	62,000,000	62,000,000	0	62,000,000	0
JEFFERSON	320,000,000	305,000,000	-15,000,000	305,000,000	0
CENTER FOR BLACK STUDENT EXCELLENCE	60,000,000	60,000,000	0	60,000,000	0
CLEVELAND - PLANNING & DESIGN	20,000,000	20,000,000	0	20,000,000	0
WILSON - PLANNING & DESIGN	20,000,000	20,000,000	0	20,000,000	0
<b>SUBTOTAL</b>	<b>620,000,000</b>	<b>619,000,000</b>	<b>-1,000,000</b>	<b>619,000,000</b>	<b>0</b>
<b>EDUCATIONAL IMPROVEMENTS</b>					
<b>TECHNOLOGY</b>	<b>127,500,000</b>	<b>128,200,000</b>	<b>700,000</b>	<b>128,200,000</b>	<b>0</b>
<b>CURRICULUM</b>	<b>29,244,000</b>	<b>29,244,000</b>	<b>0</b>	<b>53,444,000</b>	<b>24,200,000</b>
SPED CLASSROOMS	22,300,000	13,400,000	-8,900,000	13,400,000	0
OTHER	0	0	0	0	0
<b>SUBTOTAL</b>	<b>179,044,000</b>	<b>170,844,000</b>	<b>-8,200,000</b>	<b>195,044,000</b>	<b>24,200,000</b>
<b>PHYSICAL FACILITY IMPROVEMENTS</b>					
ROOF	71,000,000	65,700,000	-5,300,000	65,700,000	0
MECHANICAL	75,000,000	75,000,000	0	75,000,000	0
SECURITY	26,500,000	25,900,000	-600,000	25,900,000	0
SEISMIC	15,000,000	17,200,000	2,200,000	17,200,000	0
ADA	11,000,000	17,000,000	6,000,000	17,000,000	0
OTHER	0	0	0	0	0
<b>SUBTOTAL</b>	<b>198,500,000</b>	<b>200,800,000</b>	<b>2,300,000</b>	<b>200,800,000</b>	<b>0</b>
<b>CAPACITY</b>					
OTHER	0	0	0	0	0
<b>SUBTOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CONTINGENCY &amp; ADMINISTRATION</b>					
ADMINISTRATION	49,877,200	59,438,640	9,561,440	60,890,640	1,452,000
PROGRAM CONTINGENCY	99,754,400	99,064,400	-690,000	101,484,400	2,420,000
<b>SUBTOTAL</b>	<b>149,631,600</b>	<b>158,503,040</b>	<b>8,871,440</b>	<b>162,375,040</b>	<b>3,872,000</b>
<b>TOTAL</b>	<b>1,147,175,600</b>	<b>1,149,147,040</b>	<b>1,971,440</b>	<b>1,177,219,040</b>	<b>28,072,000</b>
<b>TOTAL - ROUNDED</b>	<b>1,150,000,000</b>	<b>1,150,000,000</b>	<b>0</b>	<b>1,180,000,000</b>	<b>30,000,000</b>