



## **Building the facilities bond budget**

***Independent construction experts, experienced school construction managers help PPS estimate school project costs***

**April 1, 2011** – Portland Public Schools' budget for proposed school upgrade projects transparently and fully accounts for all costs associated with each project and anticipates potential cost increases, so the school construction program can deliver on the projects promised.

Independent construction cost estimators and school construction managers experienced in other districts helped PPS leaders develop the budget for the school construction bond on the May 2011 ballot. As a result:

- Project cost estimates are in line with the experience in other school districts.
- The budget share for contingency and project management is prudent and appropriate based on independent construction estimators and construction managers' guidance.

With thorough and careful budgeting, the school construction program is designed to hit the mark: neither overestimating costs, nor underestimating likely expenses. Portland Public Schools' construction bond budget would allow the district to deliver every project promised, making strategic use of taxpayers' investment as PPS updates safety and learning environments in every school in the district.

### **Independent construction expertise shapes budget**

PPS school modernization staff underwent a thorough process to outline the costs of the proposed work.

- Reviewing recent construction bids from school projects in regional school districts (every other Portland metro school district has a construction bond levy in place, and Seattle is actively rebuilding its schools).
- Hiring two local independent cost estimators with extensive K-12 construction experience to produce detailed budgets for rebuilding four individual schools, based on individual costs typical to the type of project.
- Developing a conceptual budget for the entire bond program, again hiring a third-party construction management firm to broaden the input and validate assumptions.
- Conducting detailed review of the proposed budget with capital program managers in other school districts, including Seattle School District and districts in the north Willamette valley with active rebuilding campaigns.

The result is a \$548 million bond budget that will increase school safety; renovate and update school buildings, classrooms and grounds; retire existing school project debt and rebuild schools across Portland, where that is more cost effective.

### **PPS budget to rebuild schools starts with costs, experience of peer school districts**

The thorough and careful budgeting was especially important in estimating costs for the nine schools to be rebuilt in the bond. These nine schools – one elementary, four K-8 schools, a middle school and three high schools – all have building systems (roofs, heating, windows, plumbing and more) nearing the end of their useful lives. And none provides an up-to-date learning environment for today's students, unlike newer schools in the suburbs.

Some would be fully renovated – modernized but retaining the valued historic components of the older building. Others might preserve parts – but not all – of the older building, or add on to an updated older

structure with a compatible new expansion. And yet other school buildings might be razed, with entirely new construction built.

Community input will shape the master plans for each school site, and architectural design will follow. Those plans and specific conditions at each school will adjust the cost of the project – turning the conceptual budget into an actual project budget as the work goes to bid.

### **“Hard” construction costs are 80 percent of budget**

The baseline of the budget is an estimate of the construction costs: \$205 per square foot for full renovations and \$230 per square foot for new construction in elementary or K-8 schools; and \$210 for renovations or \$280 for new construction in high schools. Renovations are generally less costly, as they reuse parts of the existing building; upper grades are more expensive as they require more specialized equipment, furnishing and learning spaces.

The budget also anticipates the unexpected. It includes a 10 to 15 percent allowance for change orders due to design or unforeseen circumstances – particularly in older buildings dating back 80, 90 or 100 years where only destructive testing will reveal the past construction methods and how well they have held up.

Whether fully renovated or built anew, each school building would be completely overhauled, with:

- Earthquake, fire and life safety upgrades, and security systems including card-key access and video;
- Reconfiguration of classrooms and learning spaces, with updated technology for all students and teachers;
- Landscaping and site upgrades for PE, sports and play as well as safety;
- Modern building systems including replaced roofs, modern and efficient heating and ventilation, new plumbing, adequate electrical; and
- Equipment, storage, furniture and technology for updated classrooms.

(Learn what the scope of what the bond money would buy at each rebuilt school online at [www.pps.k12.or.us](http://www.pps.k12.or.us).)

### **All capital improvement costs covered by bond; preserves PPS budget for teachers**

Planning and design is the next largest share of each school project’s budget. Architectural and engineering services are the bulk of this category, which also includes line items for hazardous material planning (older schools have asbestos in insulation, floor tiles, fireproofing, etc.), program and construction management and legal counsel.

Notably, PPS includes the costs of district staff working on the bond program as part of the individual school project budgets. Less than 5 percent of the total, those costs include program administration and oversight, contracting, accounting, procurement, security checks for contractors and community outreach and partnership development. This increases the “soft” costs attributed to each project, but ensures that the construction bond program pays for itself. Some districts cover part of these costs through their General Fund operating dollars; PPS would preserve its general operating dollars to protect classroom teaching positions.

Three other elements complete the budget for rebuilt schools:

- **Compliance.** PPS is budgeting for system development charges and permits from the city, and for special testing and inspection.
- **Project contingency.** Unforeseeable events and conditions can abruptly change costs – whether regional or global economic and market shifts, or local regulatory and building standards. Beyond the construction change orders, this additional level of contingency protects the budget.

- **Escalation.** Costs of services and materials tend to rise with inflation. Over the course of the six-year bond program, PPS is budgeting for forecasted construction price escalation.

Altogether, the budgets set for PPS school projects is in the mid-range of recent projects of school districts in the region. Direct comparisons are tricky, as:

- **Each school district accounts for its costs differently.** Professional expertise at analyzing capital budgets is necessary to ensure appropriate comparisons.
- **The scope of work can vary from school to school, or even within a school.** Some projects combine a less expensive light remodel (perhaps new flooring, paint and lighting), major renovation in some areas and new construction for expanded space. True cost comparison requires understanding, with some provision the extent of the work; the age, condition and design type of the existing building; jurisdictional requirements; onsite and offsite improvement needs; and individual school program requirements.
- **Building codes and standards vary from one city to the next, and can change.** Seismic upgrades and accessibility standards are only two areas with recent and significant increases in code standards; over time these can have major impacts on costs.
- **Different markets have varied costs and change with the economy.** Costs depend on the state of the local economy when projects are put to bid. PPS expects to use local construction firms and contractors, and the construction bids will depend on how much other work is being conducted in the region, as well as more global economic factors that impact the cost of materials.

Overall, Seattle School District’s projects are most similar to Portland. Both are major urban districts rebuilding historic schools (often 70 or more years old) in tight city sites, usually with homes across narrow neighborhood streets. That is very different from building a new school on an expansive suburban plot, or renovating schools built in the 1960s or 1970s. The full modernization undertaken in Seattle schools also tends to be closest to the scope of work PPS projects for local schools, making the comparison more apt.

With all costs factored in, the proposed PPS school rebuilds are in line with the range of peer district projects.

Rebuilding schools: Total project cost, per square foot		
School District	PPS Budget	Regional school districts
Elementary and K-8 Schools	\$307 to \$340	\$228 to \$372
High Schools	\$322 to \$414	\$307 to \$427

More detail about the scope of work at rebuilt schools, cost estimates and budget by project are online, at [www.pps.k12.or.us](http://www.pps.k12.or.us). For further information, contact Matt Shelby, PPS Public Affairs, [mshelby@pps.k12.or.us](mailto:mshelby@pps.k12.or.us), (503) 916-3027. Portland Public Schools is an equal opportunity employer and educator.