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TABLE OF FUTURE STEPS

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1. Guiding Principles	Utilize Guiding Principles as a filter for all planning decisions	Guiding Principles P. II-3 to II-6
2. Inventory Community Assets	Guiding Principle A: Develop Partnerships	Methodology P. II-6
3. Educational Specification	Goal One: Effective Educational Environments	Goal One P. II-3 Modern Learning Environments P. III-1 to III-3
4. Physical Education Requirements	Goal One: Effective Educational Environments	Physical Education Requirements P. VI-5
5. School sites capable of expansion	Guiding Principle A: Develop Partnerships	Shared use and partnership P. V-9
6. Additional land acquisition	Guiding Principle A: Develop Partnerships	Site Acquisition Schedules and Programs P. V-11
7. Procurement process	Guiding Principle B: Embrace Sustainability	Methodology P. II-7
8. Community engagement process	Guiding Principle B: Embrace Sustainability Guiding Principle C: Demonstrate Fiscal Responsibility	Methodologies P. II-7
9. Student capacity model	Goal Three: PPS shall optimize utilization of all schools while taking the academic program needs of each school into account.	Student Capacity Models P. V-7
10. Track Metro Reserves decisions	Guiding Principle A: Develop Partnerships	Regulatory Context P. VI-3
11. Cost Benefit Analysis	Guiding Principle B: Embrace Sustainability	Methodology P. II-7
12. Include other voices	LRFP Advisory Committee	Next Steps P. II-4
13. Determine need for all school facilities	Goal Three: Optimize utilization	Goal Three P. II-5 School Utilization P. V4-V7

GLOSSARY OF TERMS

ADA	Americans with Disabilities Act: ADA is a Federal Regulation that precludes discrimination in the workplace against disabled persons. Within the law are requirements and guidance for access to public federal and state facilities that includes handicapped parking, building access, restroom accommodations and provisions for access to areas that may require the use of lifts, ramps or elevators to reach, etc.
BOMA	Building Owners and Managers Association
Bond	<p>General Obligation Bonds (GO Bonds). Municipal debt security issued by the District and is backed by the full faith and credit of PPS. They are used to finance capital expenditures and are supported by a voter approved property tax levy.</p> <p>The proceeds must be spent on “capital costs” that are described in PRS 328.205. The weighted average life of the capital costs financed with a general obligation bond issue must not exceed the weighted average life of the bonds that financed the assets; and, the use of the proceeds must be consistent with the ballot measure that the voters approved, authorizing the bonds.</p>
Capacity	Capacity is the number of students that may be housed in a facility at any given time based on objective criteria adopted by the School Board.

Capital Expenses	Capital expenses are defined very broadly as “costs of land and of other assets having a useful life of more than one year, including costs associated with acquisition, construction, improvement, remodeling, furnishing, equipping, maintenance or repair”.
Capital Asset Renewal	A strategy designed to extend the useful life of District facilities, ensure public capital investments are properly preserved, and reduce deferred maintenance costs. Portland Public Schools developed a Capital Asset Renewal Plan (CAR Plan) approved by the Board in FY 11-12. Updates to the Plan will take place in subsequent five year intervals, to provide for life-cycle renewal of major building components the District has invested in over the last several years including Rosa Parks and Forest Park as well as for any newly modernized or renovated buildings in the future. Major building components include, but are not limited to, items like roof replacements, athletic field replacements, boiler upgrades, and major mechanical, electrical and plumbing upgrades.
ELL	English Language Learners. The Portland Public Schools department responsible for the administration of the district’s ESL program.
ESL	English as a Second Language.
Educational Adequacy	(from PPS FMP) The degree to which a school’s facilities can adequately support the instructional mission and methods, is an essential yet often overlooked element in many districts’ attempts to prepare aging facilities for a 21st century educational paradigm.
Equity Policy	<p>Educational equity means raising the achievement of all students while (1) narrowing the gaps between the lowest and highest performing students and (2) eliminating the racial predictability and disproportionality of which student groups occupy the highest and lowest achievement categories.</p> <p>The part of the policy more relevant to the LRFP is: To achieve educational equity, PPS will provide additional and differentiated resources to support the success of all students, including students of color.</p>
FCI	The Facility Condition Index (FCI) is a standard tool used by architects, engineers, and facility planners to compare the condition of school facilities and determine whether it is more economical to fully modernize an existing school or to replace it. This is a nationally recognized standard that has been adopted by the National Association of College and University Business Officers (www.nacubo.org) and the Association of Higher Education Facilities Officers (www.appa.org). The index is computed as a ratio of the total

cost to remedy identified deficiencies to the current replacement value of the building.

GSF	Gross Square Feet (GSF). The International Building Code defines this term as being the floor area within the inside perimeter of the exterior walls of the building under consideration, exclusive of vent shafts and courts, without deduction for corridors, stairways, closets, the thickness of interior walls, columns or other features.
HVAC	Heating Ventilating and Air Conditioning (HVAC). The acronym is used to refer to mechanical equipment that provides treated indoor air for a facility.
Instructional Aids	Presence of necessary equipment within teaching spaces including teacher storage, student storage, writing and tack surfaces, sinks, demonstration tables, and fixed audio/video equipment.
LCCA	Life Cycle Cost Analysis.
LEED	Leadership in Energy and Environmental Design Green Building Rating Systems™, consists of a suite of rating systems for the design, construction and operation of high performance green buildings, homes and neighborhoods.
LRFP	Long Range Facility Plan
Land Use Review	City of Portland review of site or building alterations not allowed outright by the city's zoning code. A land use decision grants land use approval of the alterations often with conditions that mitigate the impact of the alterations. Land use reviews include conditional use review, design review, historic design review, etc.
Learning Environment	Degree to which learning areas are comfortable, well lit, odor free, controllable and quiet.
Local Option Levy	A local option levy is a voter approved property tax. Districts may use a local option levy for operating and capital expenditure.
MEP	Mechanical, electrical and plumbing (MEP).
Maintenance	Ordinary repair and maintenance to maintain a public improvement.
Major Maintenance	A planned activity of facilities renewal funded by the annual operating budget. Which leads to the notion that failure to perform needed repair, maintenance and renewal as part of a normal maintenance management program creates deferred maintenance.

Modular Buildings	Modular buildings are an affordable and flexible method for responding to fluctuations in school enrollment and increasing the efficient use of a school site. The modular buildings used by the District typically consist of two classrooms which accommodate approximately 25 students per classroom.
NSF	Net Square Feet is a term used in building codes to describe the actual occupied area of a floor, not including accessory unoccupied areas (stairs, elevator & HVAC shafts, mechanical rooms, etc.) or the thickness of walls.
Number of Classrooms	<p>The number of rooms in a school that are dedicated to the organized instruction of course content to groups of students (excluding library, gym and drop-in computer labs).</p> <p>Classroom space also included self-contained programs like Special Education spaces, music and art rooms.</p>
Operating Expenses	Operating expenditures are those expenses that typically pay for cleaning, maintenance of school buildings and grounds, minor repairs and utilities.
ORS	Oregon Revised Statutes
PPS	Portland Public Schools
Physical Characteristics	Primarily size and shape of individual teaching spaces.
Portable	See Relocatable Building
Priority	The result of a process to determine the importance of a given project compared to other projects.
Public Improvement	<p>ORS 279A "Public improvement" means a project for construction, reconstruction or major renovation on real property by or for a contracting agency. "Public improvement" does not include:</p> <ul style="list-style-type: none">- Projects for which no funds of a contracting agency are directly or indirectly used, except for participation that is incidental or related primarily to project design or inspection; or-Emergency work, minor alteration, ordinary repair or maintenance necessary to preserve a public improvement.

RUL	Remaining Useful Life (RUL) The remaining useful life of a system component or piece of equipment is an estimate of how many years of future service can still be anticipated based on how much of the original existing useful life (EUL) has occurred and a review of existing conditions. a component of systems lifecycle costing, RUL can be adjusted to account for actual field conditions and it can be longer or shorter than projections based on useful life compared to the installation year.
Relationship of Spaces	Proximity of instructional spaces to support areas like libraries, restrooms, student dining, and recreational areas.
Relocatable Building	A building or portion of a building made up of prefabricated units that may be disassembled and reassembled frequently, or a single unit of construction consisting of walls, roof, and floor that is movable as a unit either on wheels or by truck. Mobile, demountable, dividable, modular, and portable buildings are types of relocatable units.
Repair	Work to restore damaged or worn-out facilities (e.g., large-scale roof replacement after a wind storm) to normal operating condition.
Replacement	An exchange of one fixed asset for another (e.g., replacing a transformer that blows up and shuts down numerous buildings) that has the same capacity to perform the same function.
Replacement Value	Replacement value (the denominator in the FCI equation) is the cost to replace an existing structure with a new structure of the same size at the same location. Interior design and construction materials of the existing and proposed buildings may be different. Replacement value = GSF x Project Cost/GSF (to design, build, furnish and equip a new school).
School	An institution that provides preschool, elementary, and/or secondary instruction and may provide other education-related services to students; has one or more teachers; is located in one or more buildings; and has an assigned administrator.
School Facility	Includes any structure, building or facility used wholly or in part for educational purposes by a district or community provider, and facilities that physically support such structures, buildings and facilities, such as district wastewater treatment facilities, power generating facilities, steam generating facilities and other central service facilities, including central kitchens and maintenance shops.
School Utilization Rate	A school utilization rate gives facility planners, public officials, and the public a way to understand the extent to which buildings are used by comparing actual student enrollment to enrollment capacity of the

school. If a school has a capacity of 450, and 500 students are enrolled, the utilization rate is 111 percent. Formula 3 illustrates the calculation of the School Utilization Rate. Actual School Utilization Rate = (Student Enrollment / Student Capacity) x 100%.

PPS enrollment balancing process uses the term utilization to define the number of teachers in a school divided by the number of classrooms.

Site

The land and all improvements on the land, other than structures, such as grading, drainage, drives, parking areas, walks, plantings, play-courts, and play-fields.

Site Deficiencies

Deficiencies in school sites include both “natural” deficiencies and those resulting from problems with site design or condition. Examples of natural site deficiencies include inadequate size, the presence of wetlands or rocky terrain, radon or other naturally occurring chemical pollutants, and inability to perk. Site design deficiencies might include inadequate parking, no student drop-off area, a poor approach to the front entrance, no city sewer or water hookups, and lack of road access. Examples of site condition deficiencies would be fencing, retaining walls, sidewalks, or blacktop in poor condition.

Soft Costs

Soft cost models include items such as contractor and subcontractor overhead and profit, regional and local inflation adjustments, a premium for LEED environmental and energy design construction techniques, as well as other fees which are typically encountered during the construction process of renovating a facility.

Special Education (SPED)

The Education for All Handicapped Children Act passed by the federal government in 1975 established special education in public schools throughout the country. The law requires public schools to provide students with disabilities with a free and appropriate public education in the least restrictive environment with a preference for including special education students in general education classrooms.

Supervision and Security

Extent to which physical configurations help or hinder building operation and include both passive and physical security.

Support for Programs

Provision of special spaces or classrooms that support specific curriculum offerings such as music, sports, science, and technology programs.

Swing Space

Space available to the District that would allow a buildings occupants to be relocated during construction.

Technology	Presence of infrastructure, data distribution/storage, and equipment within classroom and laboratory settings. This will also include local area network cabling, video distribution systems, electrical outlets, and projection or video display screens.
Total Program Cost	Also known as Total Project Cost is the Construction Cost plus soft-costs.
Useful Life	Each component of the building is identified by the year the component was originally installed and/or replaced and evaluated for maintenance quality. With these descriptors, one can calculate the remaining life and its expected year of expiration.
Utilization	The ratio of student enrollment to student capacity in a school.

Long Range Facility Planning Advisory Committee Meeting

*December 13, 2011
5:00-8:30 p.m.
Wy'East Conference Room / BESC*

Welcome & Committee Charge

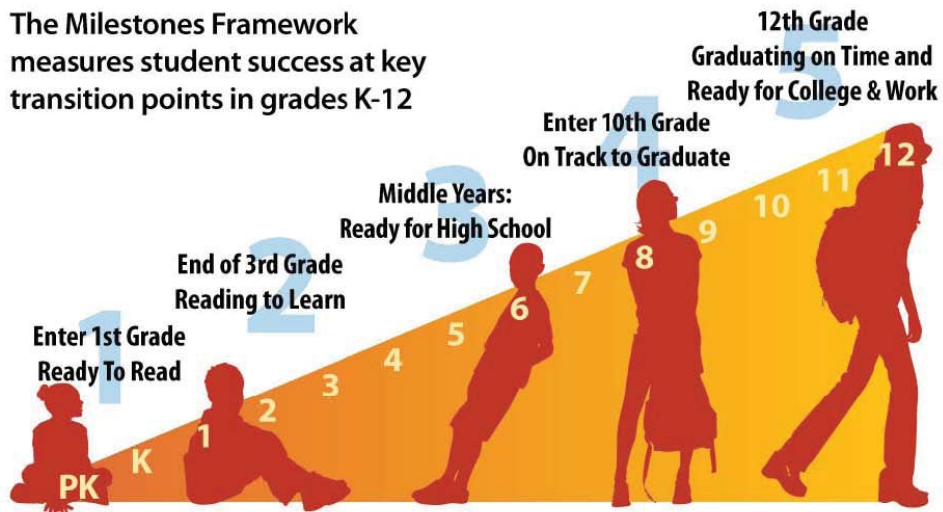
Portland Public Schools Goal Statement

*By the end of elementary, middle and high school,
every student by name
will meet or exceed academic standards
and will be fully prepared
to make productive life decisions.*

Milestones Framework



The Milestones Framework measures student success at key transition points in grades K-12



Focus is on a few critical measures

We Reviewed Examples from Other Urban Districts to Inform Metric Selection

Metric	Montgomery Cty	Boston	Seattle	Chicago	Portland
Ready to Read	% meeting K-2 Literacy benchmarks	% Reading by end of 1 st Grade	% Ready for K	% Enter 1 st ready to read	% Enter 1 st ready to read
3rd Grade Reading to Learn	% on 3 rd grade level	% of 3 rd grade meets/ exceeds	% of 3 rd grade meets & % exceeds	% of 3 rd grade meets/ exceeds	% of 3 rd grade exceeds
Ready for High School	% passing 8 th grade algebra	% meeting 7 th grade writing, % passing 8 th grade algebra	7 th graders ready for algebra	% 6 th & 8 th reading & math at benchmark	% meeting 7 th grade writing, 7 th grade attendance, % passing 8 th grade algebra
On Track to Graduate	% Passing high school assessments	% On track with credits at end of 10 th grade	% with 5 credits at the end of 9 th grade,	% On track credits in 9 th grade, meeting 11 th grade benchmarks	% with 6 credits with C or higher in core classes
Graduate College Ready	% taking & passing AP exams, 1100 on SAT	1650 on SAT	% taking AP exams, 4 & 5 year graduation rate, % enrolling in post secondary	% at 20 on ACT, graduation rate % enrolling in post secondary	% College Ready on 3 ACT tests, 4 yr graduation rate

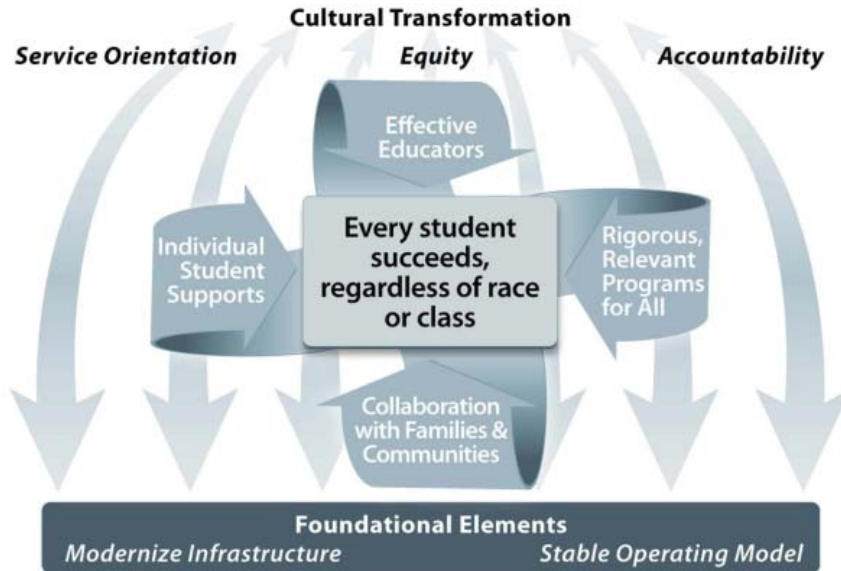
Specific Metrics Defined for Each Milestone

1. Enter 1st Grade Ready to Read	<ul style="list-style-type: none"> • % of students meeting 3 literacy assessment benchmarks in fall of 1st grade – letter names, letter sounds, phonemic awareness/phoneme segmentation
2. End of 3rd Grade Reading to Learn	<ul style="list-style-type: none"> • % of students meeting or exceeding standards in 3rd grade reading
3. Middle Years: Ready for High School	<ul style="list-style-type: none"> • % of 7th grade students with > 90% attendance • % of 7th grade students meeting or exceeding standards in writing • % of 8th graders taking & passing algebra
4. Enter 10th Grade On Track to Graduate	<ul style="list-style-type: none"> • % of students with 6 or more credits at a C or higher grade in the fall of 10th grade
5. Graduate On Time & Ready for College & Work	<ul style="list-style-type: none"> • On time: 12th grade graduation rate • Ready: % of students scoring at “college ready” level on 3 of 4 ACT tests

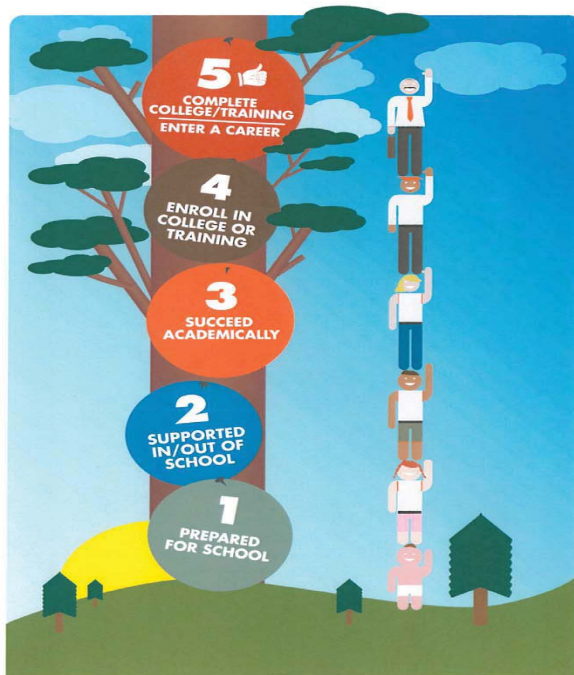
Summary: One Year Milestones Targets

Goal	2009-10 Actual	2010-11 Target	2010-11 Actual
3rd Grade Reading To Learn: % Exceeding Benchmarks (Final Data)			
Keep Up: All Students	46%	+5	+5 (51%)
Catch Up: Largest Gap	43 pts	Gap -5	-5 (38 pts)
<ul style="list-style-type: none"> • 2009-10: African American students 43% • 2010-11: Hispanic students 38% 			
7th Grade Writing: % Meeting Benchmarks (Final Data)			
Keep Up: All Students	52%	+5	+10 (62%)
Catch Up: Largest Gap African American students	33 pts	Gap -5	-4 (29 pts.)
Enter 10th grade on track: % with 6 credits, at least C in core subjects (Final Data)			
Keep Up: All Students	54%	+5	+5 (59%)
Catch Up: Largest gap African American Students	33 pts	-5	-5 (28%)

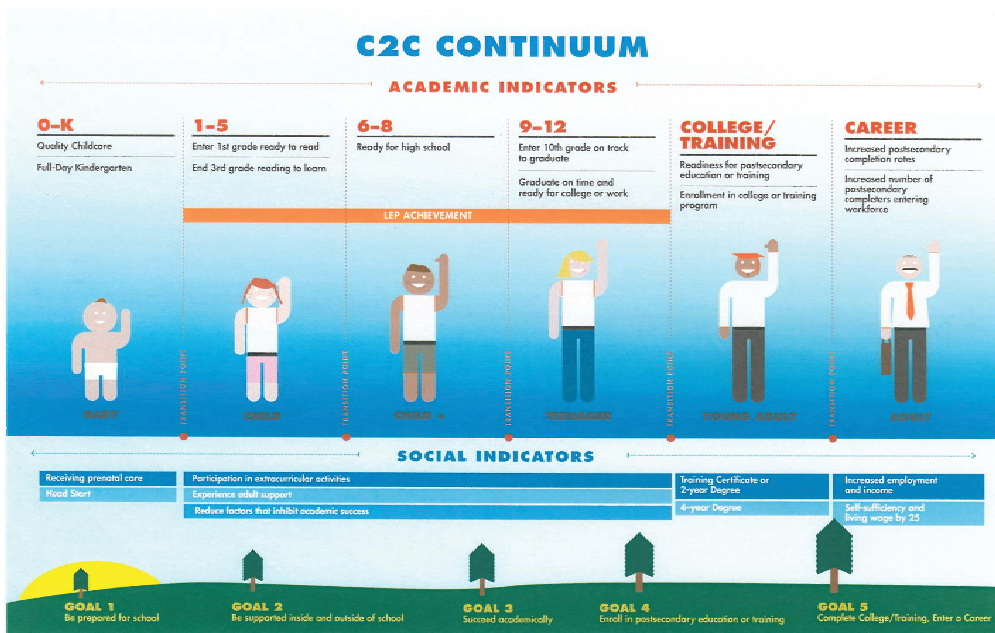
PPS Strategic Framework 2011-12 Priority Action Areas



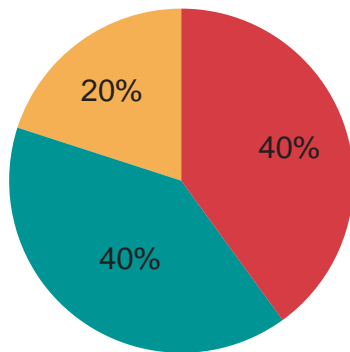
City of Portland: Cradle to Career



CRADLE TO CAREER GOALS



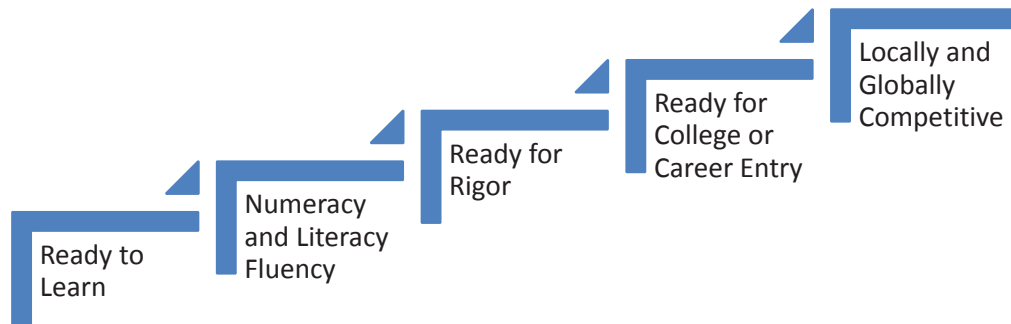
State of Oregon: 0 – 20 Initiative



The Destination

- 40 percent of adult Oregonians have earned a bachelor's degree or higher;
- 40 percent of adult Oregonians have earned an associate's degree or postsecondary credential as their highest level of educational attainment; and
- 20 percent of all adult Oregonians have earned at least a high school diploma, an extended or modified high school diploma, or the equivalent of a high school diploma as their highest level of educational attainment.

Outcomes



- Post bond listening sessions
- Vision Process
- Long Range Facilities Plan development: Advisory Group

ISSUE PAPER #1 ENROLLMENT FORECASTING

BACKGROUND

Every year, new students enter school, and other students leave. Planning for fluctuations in student enrollment is an important school district activity, as state general funds are allocated and teachers are assigned based on the number of students expected to arrive in September. Accurate student forecasts also drive long-term school facility decisions, such as opening, expanding or closing schools and moving academic programs.

For the past 12 years, PPS has received enrollment forecasts from the Portland State University Population Research Center (PRC). This brief will describe student population changes that have occurred over the last decade, PRC's enrollment forecasting process and accuracy rates during that time span, and district-wide forecasts for the next 10 years. A more in-depth analysis of school-by-school forecasts will be discussed in a follow up report on enrollment balancing.

RELEVANCE FOR FACILITIES PLAN

State law (Oregon Revised Statute (ORS)195.110) requires large school districts (K-12 enrollment of more than 2,500 students) develop long range facility plans. School facility plans must include "population projections by school age group." Local school districts also need to identify school facility needs based on population projections and the potential for future housing development based on land use designations by local jurisdictions (City of Portland in the case of PPS).

Enrollment forecasts are used, in part, to determine whether the district will need to add or modify facility space to meet school program or configuration needs. Student enrollment forecasts, combined with a methodology for determining student capacity in each school and a strategic plan

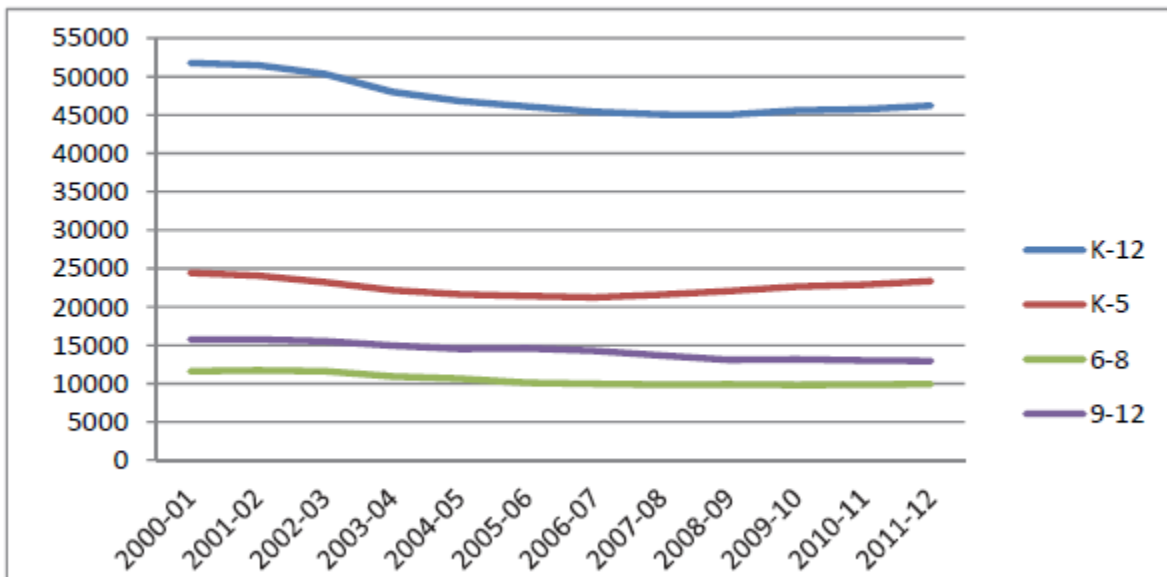
for increasing student achievement, provide a framework for facility needs. As such, student enrollment forecasts comprise an important component of the Facility Plan.

PPS ENROLLMENT HISTORY

Enrollment in Portland Public Schools peaked during the height of the baby boom in 1964, when 79,832 students attended schools in the district. As the attached graphic shows, student population since the 1960s has followed a generally downward trend. Although there have been waves of increases along the way, enrollment has been at or below 50,000 students since the late 1990s.

In Fall 2011, PPS enrolled 46,206 students in grades K-12, an increase of 465 students from Fall 2010, but a decrease of 5,575 students from Fall 2000. These counts include all students attending a neighborhood, focus, charter, alternative and special school within the PPS system. Between 2001 and 2008, PPS enrolled 6,477 fewer students, a decline of 13%. However, student population is now seeing a consistent, but small, upswing, with 1,182 students (2.6%) added since 2008.

**Figure 1:
PPS K-12 Enrollment 2000-2011**



Nested within those district-wide totals are enrollment figures by school and grade that are more prone to variability each year. For example, the number of students attending grades K-5 grew by 1,182 students between 2008 and 2011, which offset the decline of 167 students in grades 9-12 during those same years. Population changes by region were spread unevenly across the district, as well. Figure 2 below highlights enrollment changes by students' residence over the last decade.

**Figure 2:
Portland Public Schools Historic K-12 Enrollment¹
By High School Cluster of Residence**

HS Cluster ²	2000-01	2005-06	2010-11	'00 to '10 Change	
Cleveland	6,680	6,038	6,499	-181	-3%
Franklin	8,985	8,267	7,579	-1,406	-16%
Grant	7,283	6,172	6,267	-1,016	-14%
Lincoln	3,843	4,101	4,510	667	17%
Madison	9,234	7,842	7,494	-1,740	-19%
Roosevelt	9,390	7,656	7,580	-1,810	-19%
Wilson	5,310	4,993	4,798	-512	-10%
Jefferson ³	8,857	6,618	5,662	-3,195	-36%
Non-PPS Resident	1,056	1,053	1,014	-42	-4%
PPS Total	51,781	46,122	45,741	-6,040	-12%

1. Includes ungraded students; excludes enrollment in pre-kindergarten and programs that were transferred to MESD in 2003.

2. For all years, students are counted by 2011-12 cluster boundaries.

3. Jefferson Dual Assignment Zone residents are also included in the Grant, Madison, or Roosevelt attendance area totals.

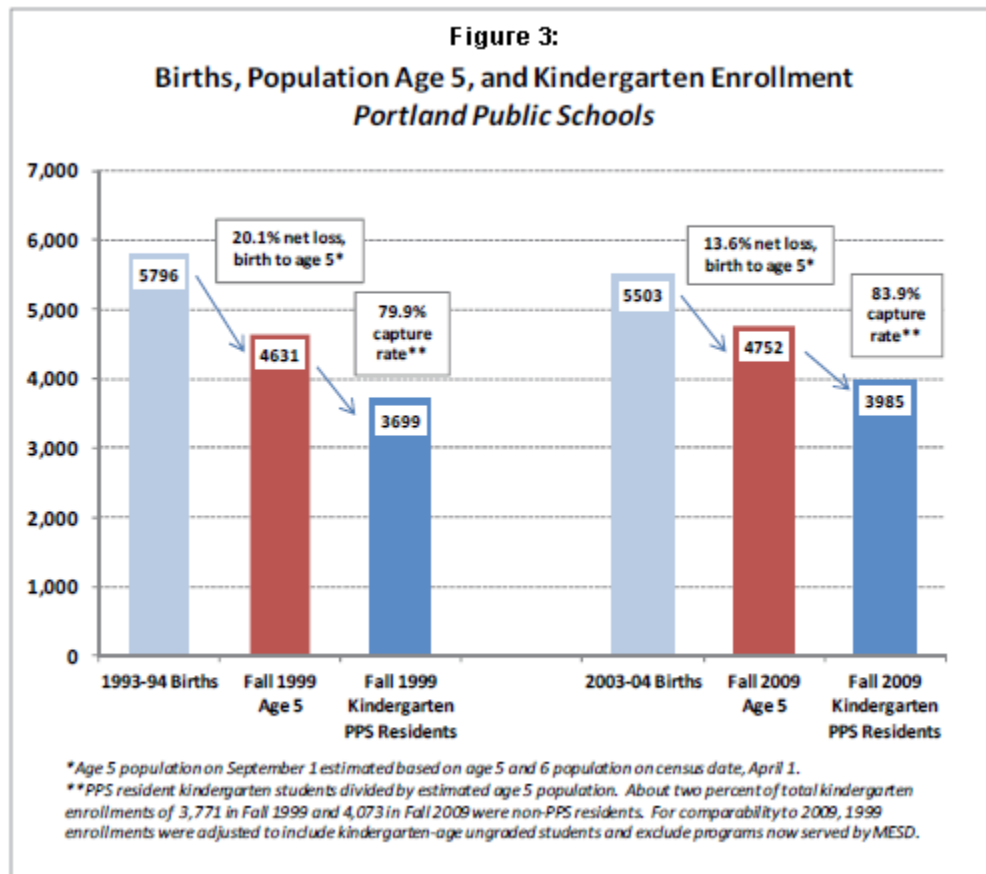
ELEMENTS OF ENROLLMENT FORECASTING

Historical enrollment is one of several elements used by PRC demographers to predict the number of students who will attend PPS schools in the future. Among the many forecasting building blocks, demographers consistently include census data, birth rates and new housing completions.

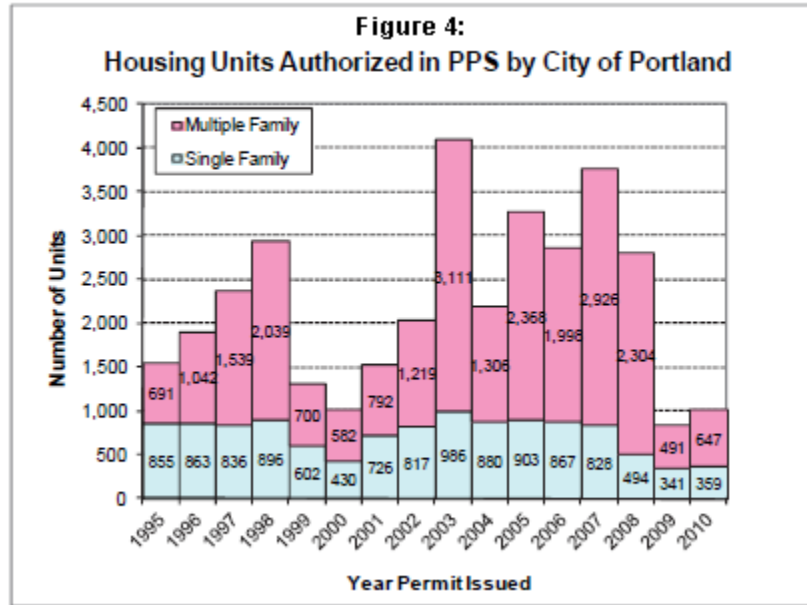
Census data is released every 10 years, and is a key for estimating school-aged populations, as well as the proportion of those students who will attend public schools. Census counts by single year of age as of April 2010 were released in August 2011. Between 2000 and 2010, the overall population in the PPS boundary rose by 8%, but the proportion of residents who were between the ages of 5 and 18 shrunk by 5.5%. This explains, in part, the loss of students over the decade, as more of Portland's population was made up of non-school-aged residents. (For purpose of this discussion, we are referring only to the portion of the city that is within the PPS boundary.)

Census data also reveals the portion of school-aged children who attend non-public schools. As private and home schools are not required to report where their enrolled students reside, this is the most accurate way to measure a school district's share, or "capture rate" of all children. During the past decade PPS's capture rate declined from 85.6% to 82.7% of school-aged children living in the district's boundary.

Another population element that is captured in census data is the ratio of births in the city to the number of kindergarten students who attend PPS schools 5 years later. Figure 3 below explains, in part, why kindergarten enrollment was higher in 2010 than at the start of the decade. While the overall number of births decreased during that timeframe, the number of children who were in Portland five years later was higher in 2009 than in 1999, and a larger portion of those students attended public school than in the past. Demographers then investigate why changes such as this occur, looking carefully at factors such as mothers-age at child’s birth and affordability of housing in the district relative to other areas in the region.



Demographers also pay close attention to housing starts and other municipal planning data when developing enrollment forecasts. Different housing types have been found over time to generate different numbers of school-aged students who attend public school, so knowing both the number and type of new units is necessary to estimate the impact on PPS enrollment. Data from the past decade show that housing permits were dominated by multi-family developments, with new approval rates for both single- and multi-family units declining dramatically after 2008.



The PRC works closely with local planning agencies to stay informed of housing trends, as well as other identified demographic changes. All those elements are considered during the annual update of enrollment forecasts. Population projections are developed under different models that assume higher and lower rates of families moving in or out of the PPS boundary. The most likely forecast over time has been the medium growth model, which becomes the basis for PPS enrollment forecasts.

FORECAST ACCURACY

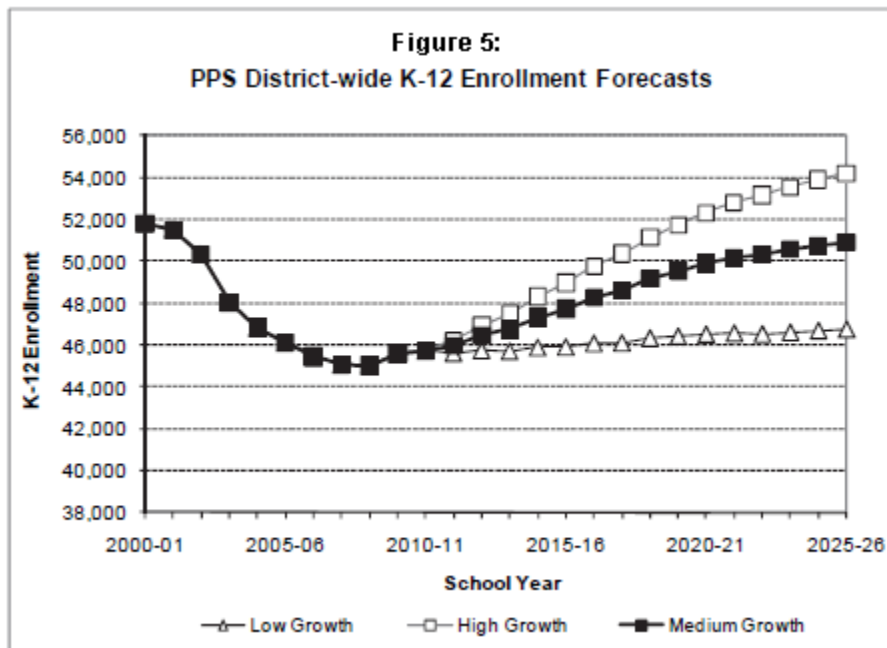
PRC updates student population forecasts annually, in order to incorporate new enrollment data, as well as newly released birth and housing data. PRC also measures forecast accuracy by comparing past projections to actual enrollments. District-wide enrollment in 2011-12 varied from the most recent medium-growth forecast by 227 students, or 0.5%. The actual enrollment of 46,206 matched more closely the high-growth forecast of 46,233, varying by only 27 students, or 0.1%.

Forecast accuracy rate decrease when the district-wide number is disaggregated by grade level and geographic region. Recent forecasts are typically more accurate than projections that were made several years earlier. This is particularly true early in a decade when fresh census data is available.

The current forecasts are based on 2010-11 school enrollment, and will be updated by PRC demographers in the coming months, to reflect the slightly higher than anticipated enrollment growth.

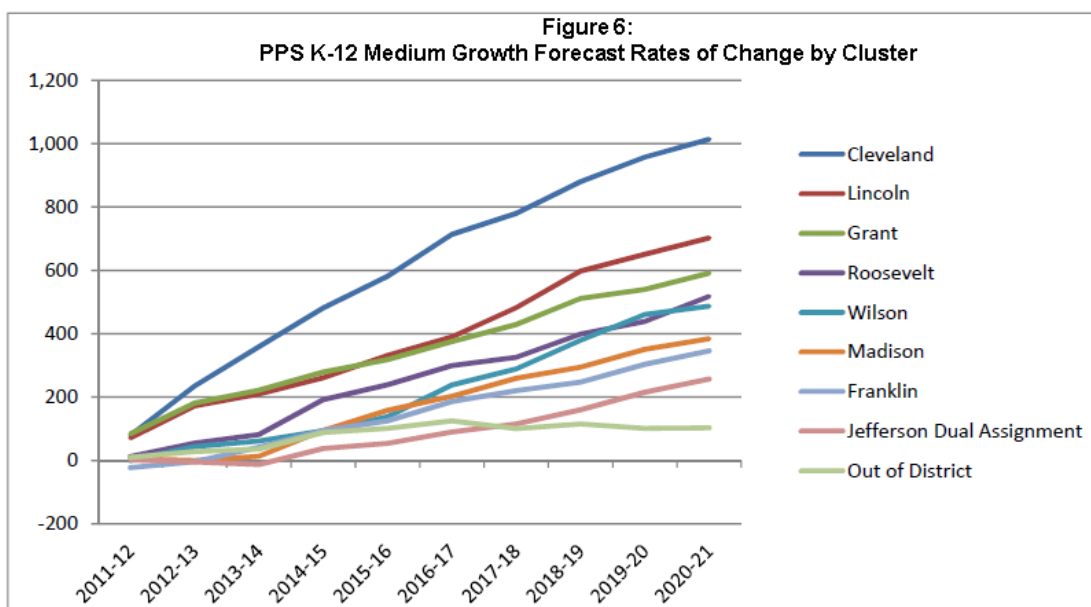
ENROLLMENT FORECASTS: 2011-2021

District-wide enrollment forecasts over the next 15 years are shown in the figure below. For the purpose of this analysis, we will focus on 10 year period through the 2020-21 school year.



All three forecast models point to additional students enrolling in PPS over this time span. The most likely growth scenario shows K-12 enrollment increasing to 49,885 students in the 2020-21 school year, adding 3,679 students more than the current enrollment. The high growth scenario predicts that 2020-21 enrollment would reach 52,323 students, adding more than 6,000 students to the district over the next ten years.

Under the medium growth scenario, additional students are distributed across every region of the district, with highest rates of change anticipated in the Cleveland and Lincoln clusters.



SUMMARY

PPS relies on enrollment forecasts to predict future program and facility needs for students. After a lengthy period of declining student populations, the district has seen three straight years of enrollment increase. PRC anticipates that those increases will continue into the next decade, based on evidence collected from historic enrollment, census, housing and other data sources. Long-range planning will be focused on providing 21st century learning spaces for a growing population of students through the coming years.

Further analysis of growth and change by region and school will be forthcoming, along with a description of the type of student assignment, program and facility changes that can be leveraged to balance enrollment across the district.

Source: Portland Public Schools Enrollment Forecasts 2011-12 to 2025-26, Portland State University Population Research Center, November 2011

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Judy Brennan, Enrollment Director, PPS, 503-916-3205, jbrennan@pps.net

Shawn Helm, Data and Policy Analysis Senior Manager, PPS, 503-916-3324, shelm@pps.net

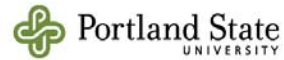
Charles Rynerson, Demographer, PSU PRC, 503-725-5157, rynerson@pdx.edu

Enrollment Trends and Forecasts

**Portland Public Schools
Long Range Facilities Advisory Committee
December 13, 2011**



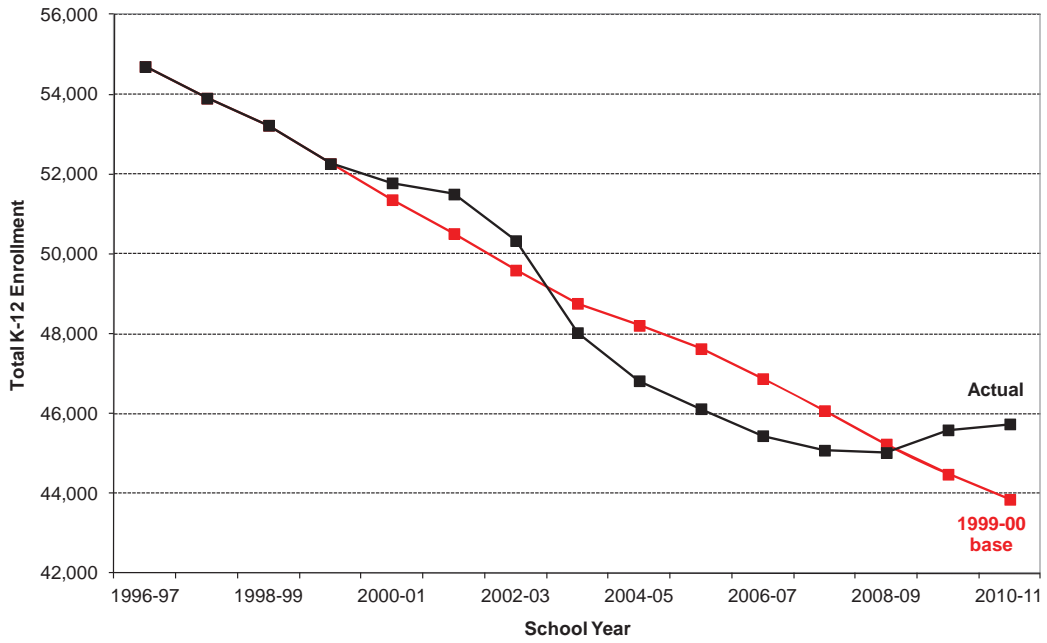
Charles Rynerson
Census State Data Center Coordinator
Population Research Center
College of Urban and Public Affairs



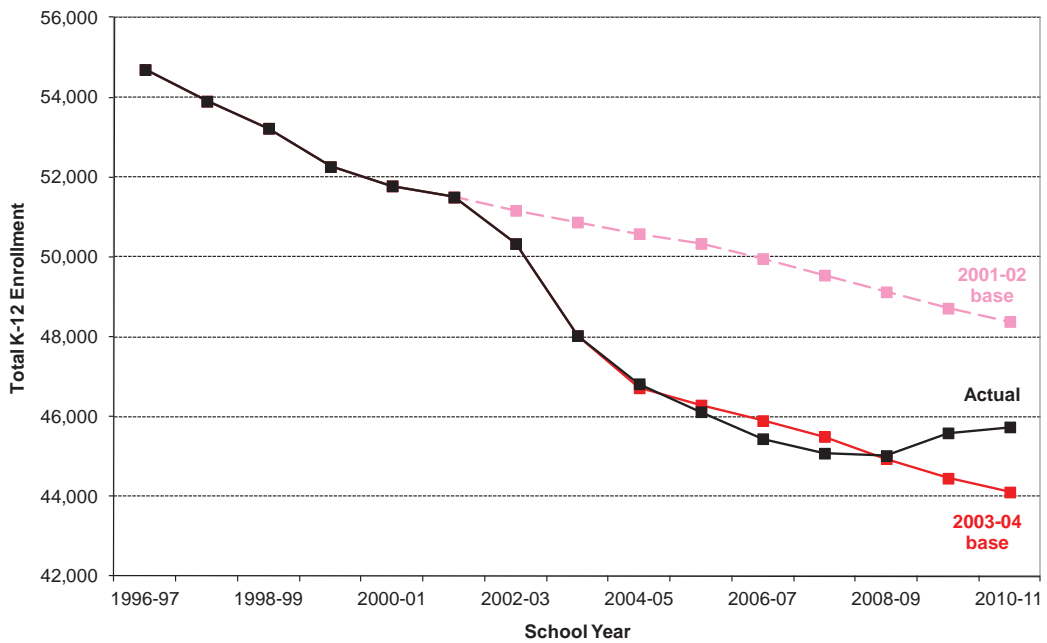
PSU Enrollment Forecasts for PPS

- 12 consecutive years
- Long range focus
- Low, Middle, High District-wide
- Attendance Areas
- Individual Schools

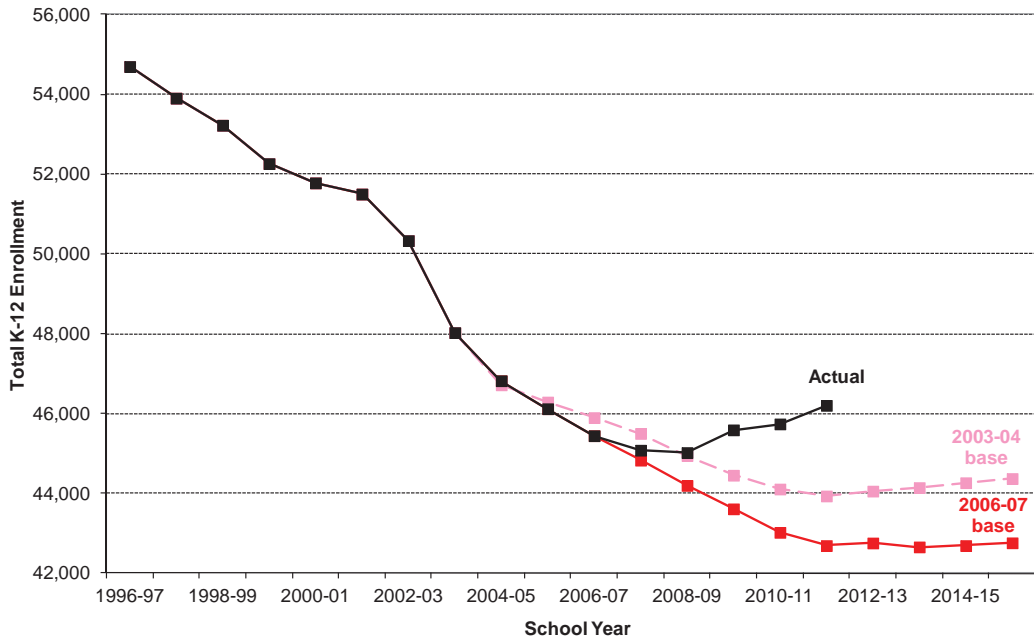
District-wide K-12 Forecast: 1999-2000 Base Year



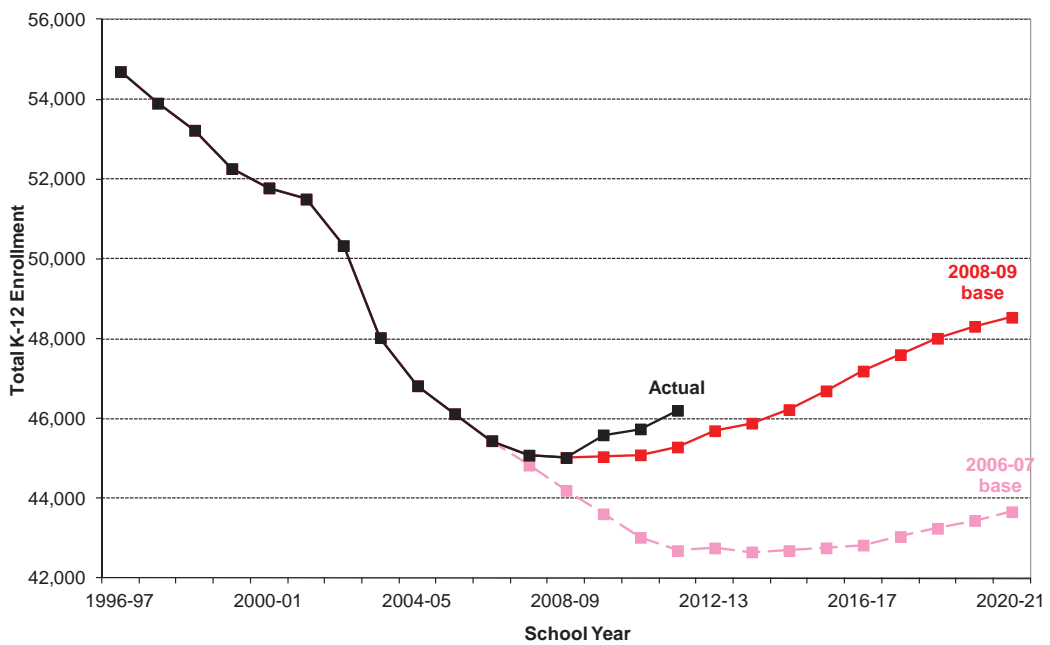
District-wide K-12 Forecast: 2003-04 Base Year



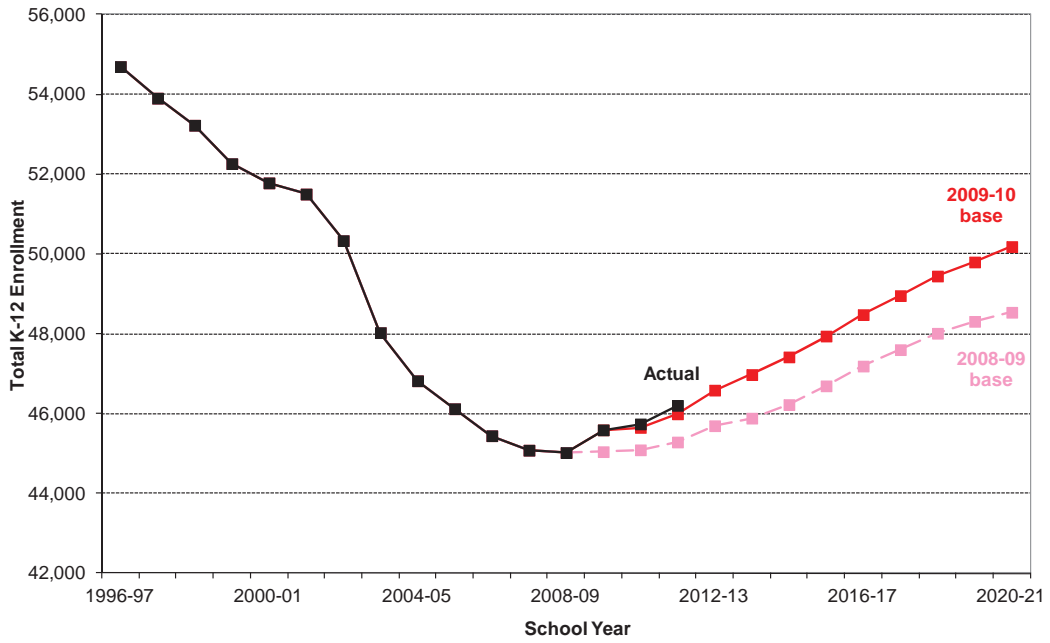
District-wide K-12 Forecast: 2006-07 Base Year



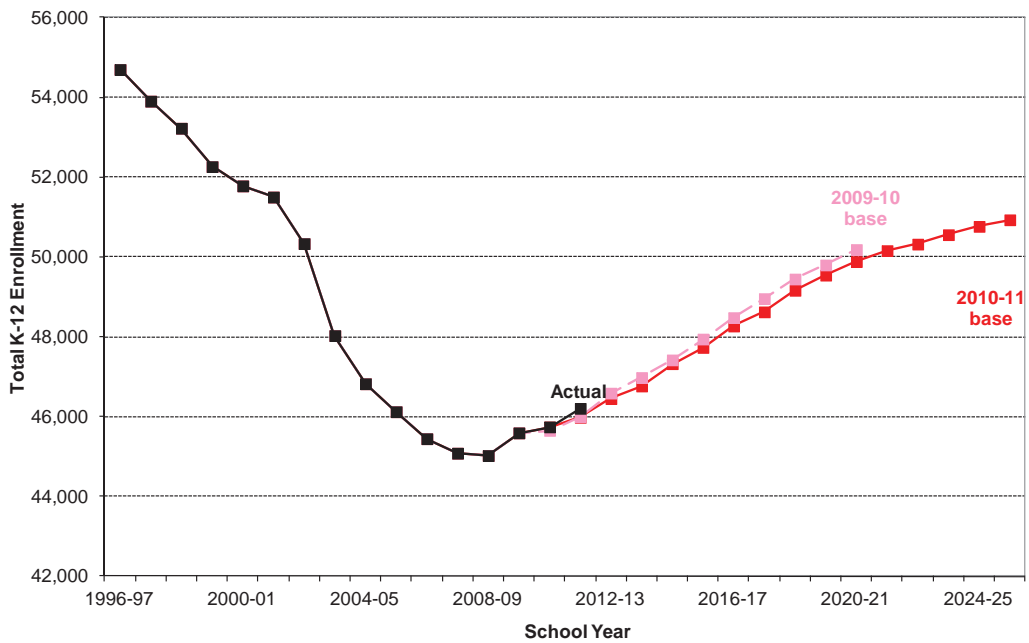
District-wide K-12 Forecast: 2008-09 Base Year



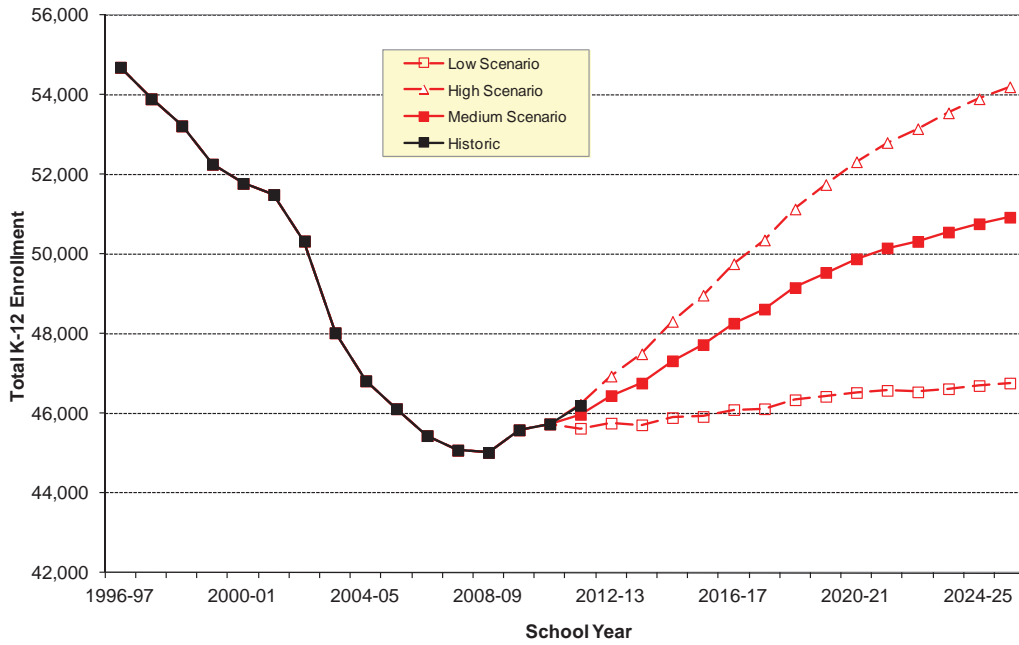
District-wide K-12 Forecast: 2009-10 Base Year



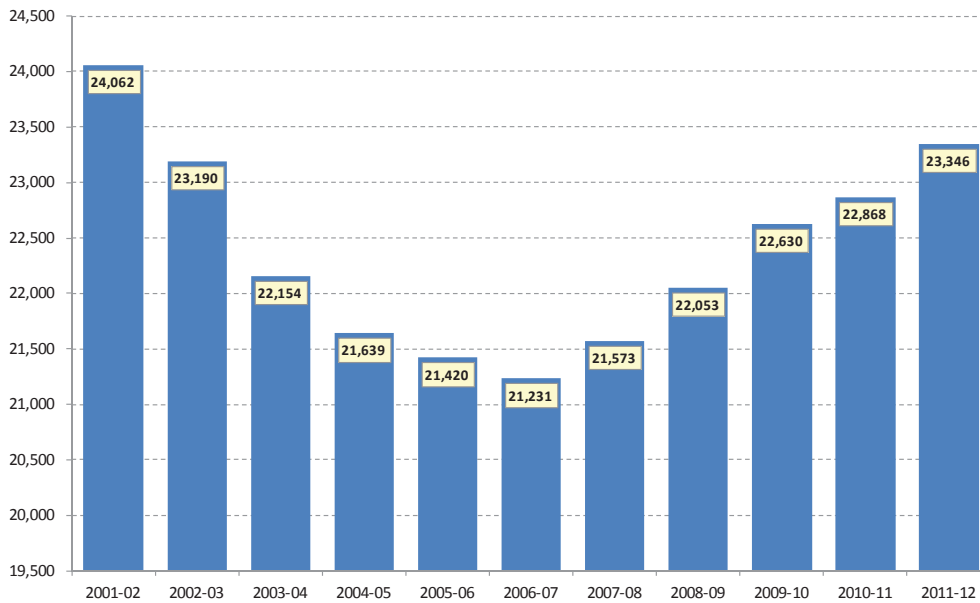
District-wide K-12 Forecast: 2010-11 Base Year

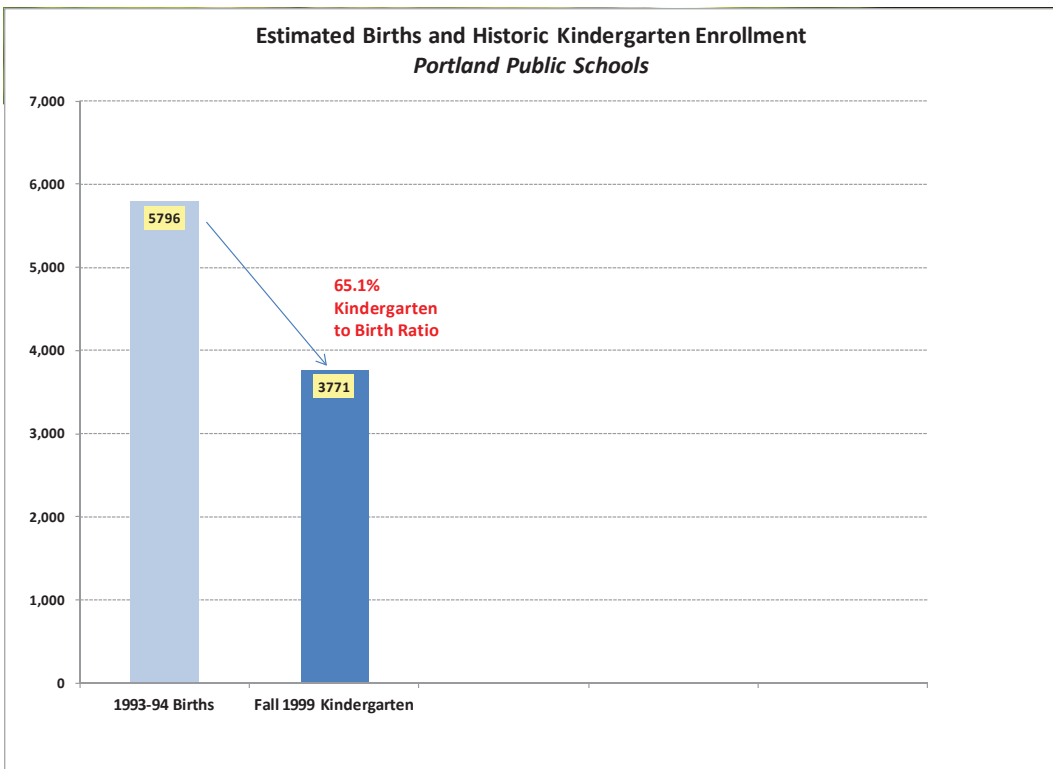
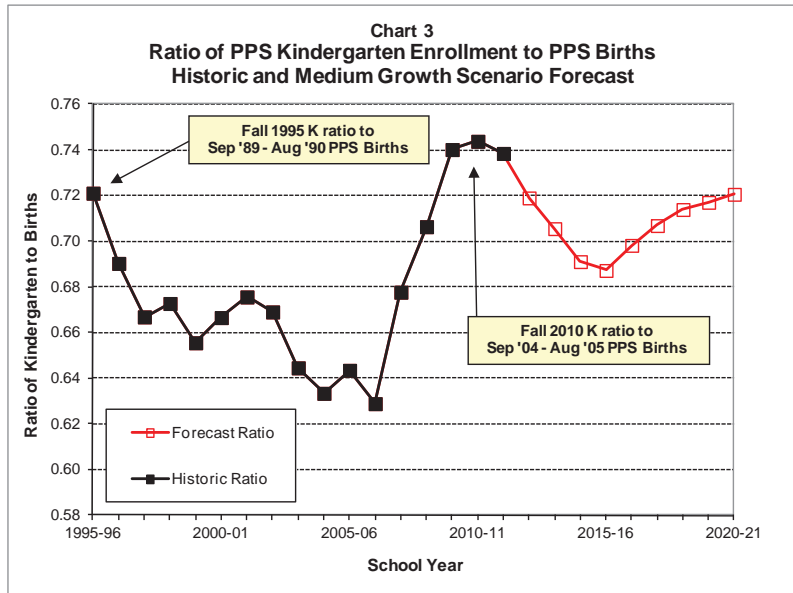


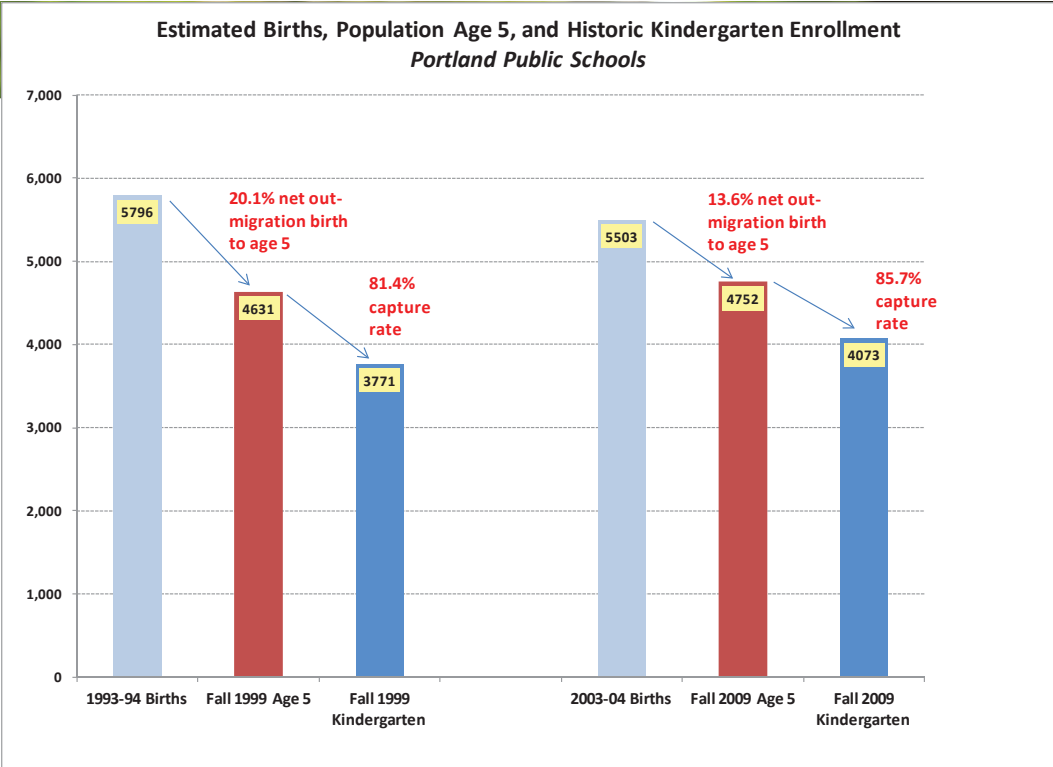
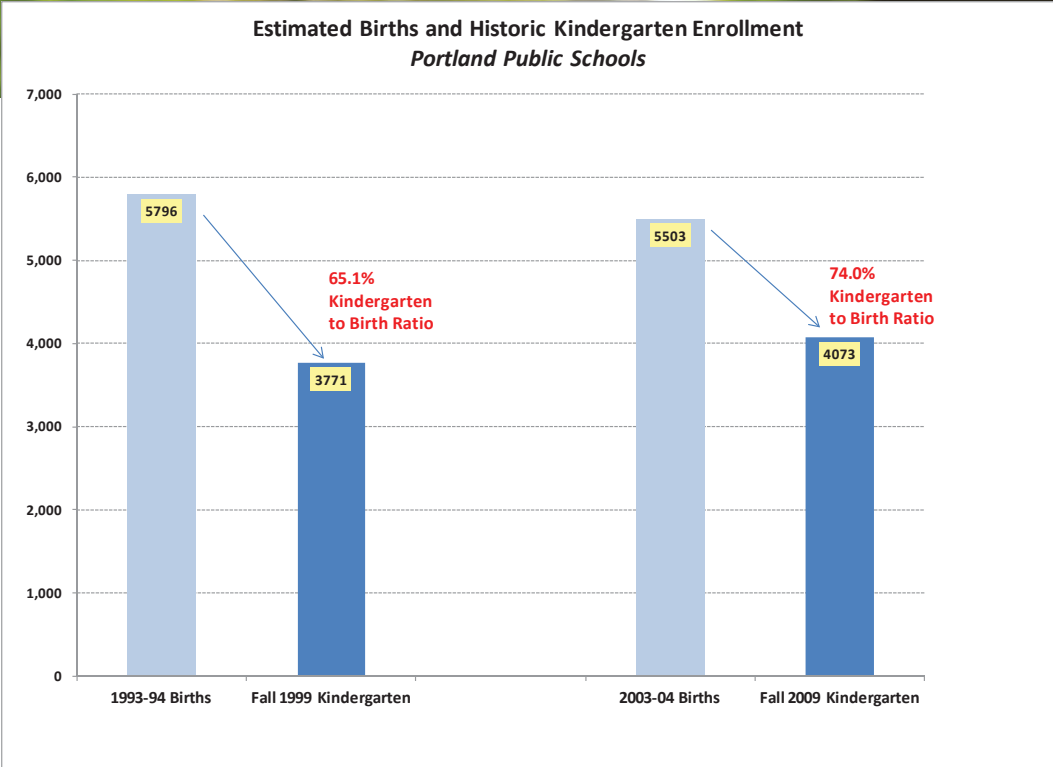
District-wide K-12 Forecast: 2010-11 Base Year Scenarios



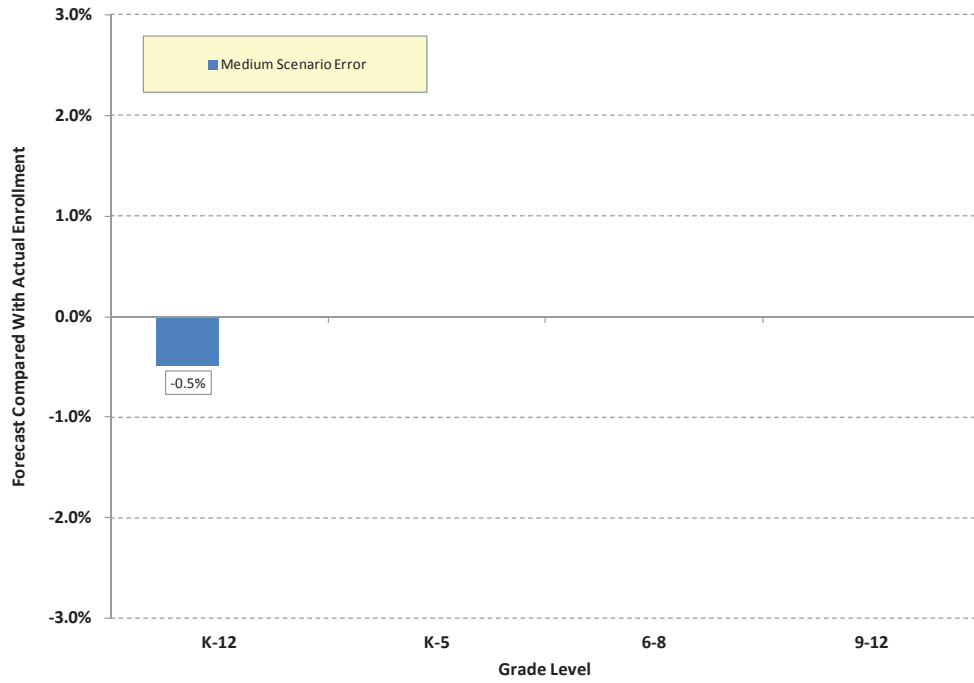
PPS Elementary (K-5th) Enrollment, 2001-02 to 2011-12



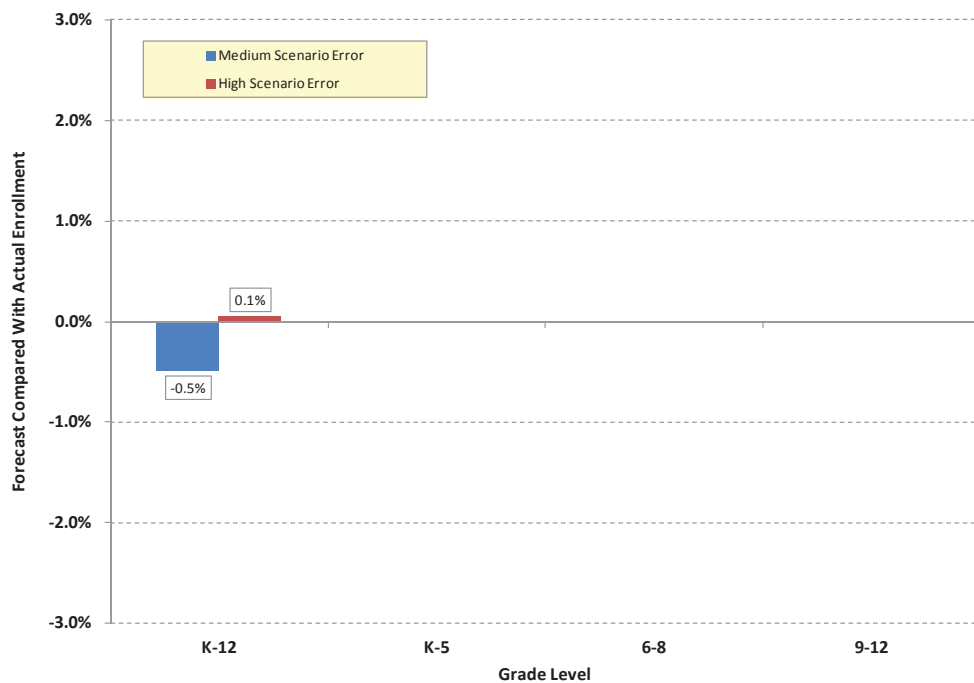




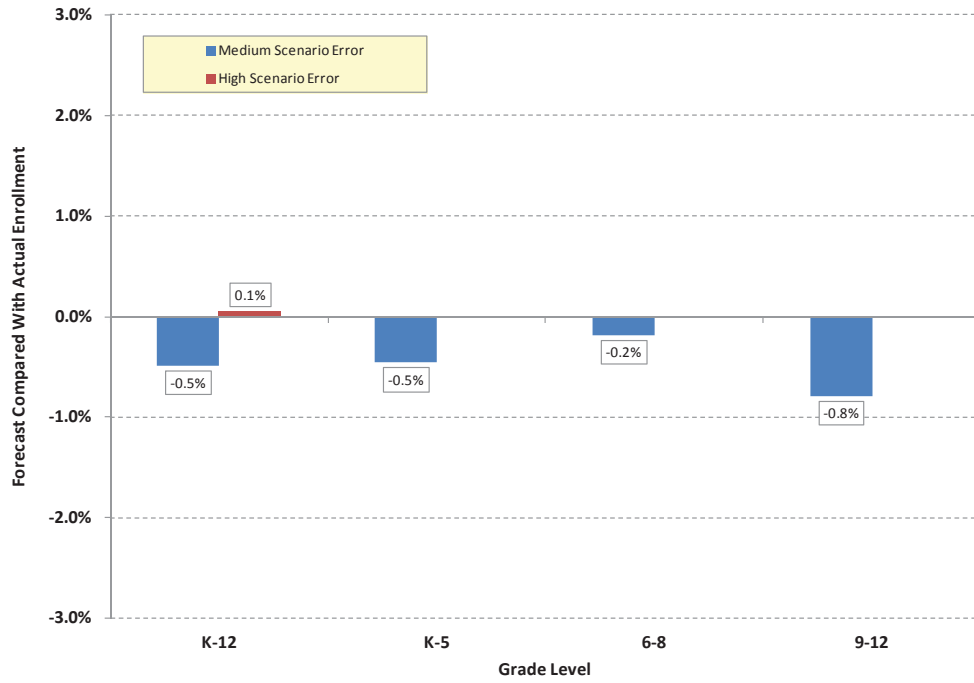
2011-12 PPS Enrollment: District-wide Forecast Error
Forecast Base Year 2010-11 (one year forecast)



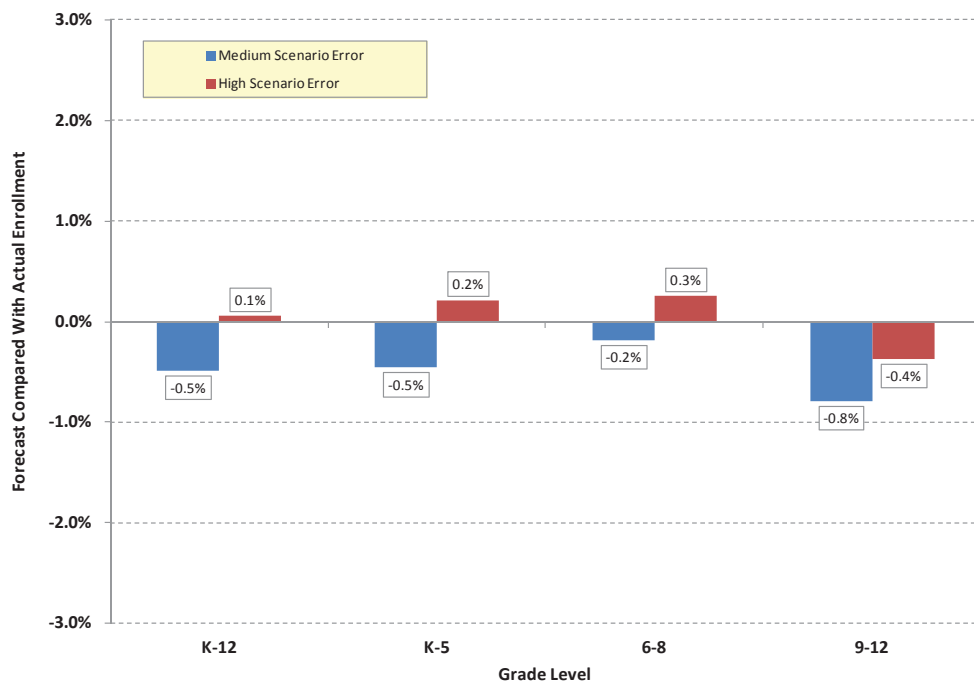
2011-12 PPS Enrollment: District-wide Forecast Error
Forecast Base Year 2010-11 (one year forecast)



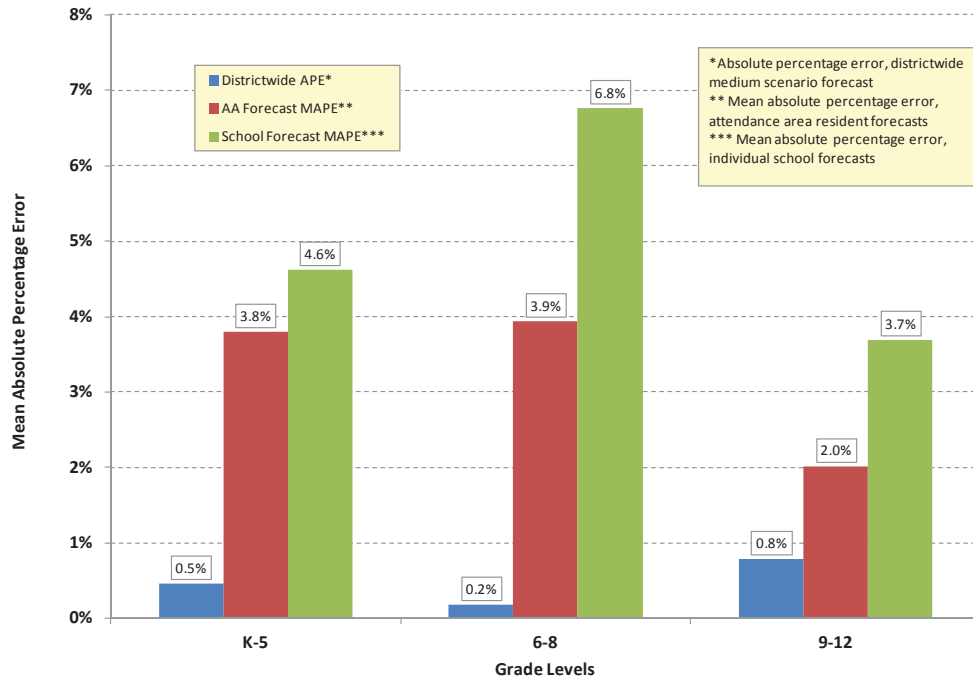
2011-12 PPS Enrollment: District-wide Forecast Error
Forecast Base Year 2010-11 (one year forecast)



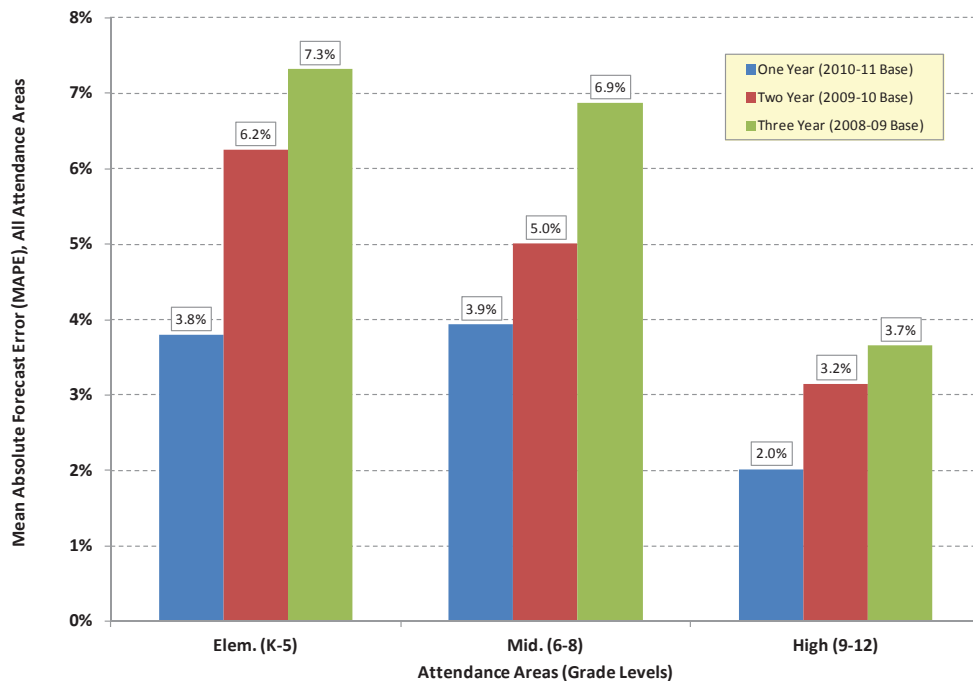
2011-12 PPS Enrollment: District-wide Forecast Error
Forecast Base Year 2010-11 (one year forecast)



**2011-12 PPS Enrollment: District, Attendance Areas, and Schools Forecast Errors
One Year Forecasts (2010-11 Base Year)**



**2011-12 PPS Enrollment: Residents by Attendance Area Forecast Errors
One, Two, and Three Year Forecasts**





Critical Drivers of Enrollment Trends

- Incoming kindergarten
- Migration and mobility
- Grade 9: High school choice (public/private)
- Grade 12: 5th year and continuation
- Capture Rates



Complicating Factors

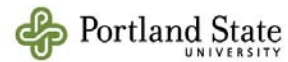
- New housing (volume, affordability, design)
- Perceptions of school quality
- Inter-district transfers
- Charter schools

Enrollment Trends and Forecasts

**Portland Public Schools
Long Range Facilities Advisory Committee
December 13, 2011**



Charles Rynerson
Census State Data Center Coordinator
Population Research Center
College of Urban and Public Affairs





MEETING NO. 1 DISCUSSION SUMMARY

MEETING DATE: December 13, 2011 **TIME:** 5:30 PM
LOCATION: PPS District Office

ATTENDEES: Committee: Scott Bailey, Tim Carman, Larry Dashiell, Lakeitha Elliott, Stuart Emmons, Shane Endicott, Louis Fontenot, Bob Glascock, Nancy Hamilton, Bill Hart, Jeff Hammond, Angela Jarvis Holland, Brett Horner, Sally Kimsey, Angela Kirkman, John Mohlis, Matt Newstrom, Scott Overton, Willy Paul, Bobbie Regan, Ted Reid, Rudy Rudolf, Trudy Sargent, CJ Silvester, Kevin Spellman, Dick Spies, Jason Thompson, Michael Verbout, Kate Willis

PPS: Bob Alexander, Judy Brennan, Ken Brock, Paul Cathcart, Melissa Goff, Karl Logan, Tony Magliano, Marlys Mock, Jim Owens, Rhys Scholes, David Wynde,

Mahlum: Diane Shiner, Gerald [Butch] Reifert, LeRoy Landers, Rene Berndt

Public: Chris Brown, Bob Clark, Beverly Davis, Pamela Fitzsimmons, Lindsey O'Brien, Scott Rose, Otto Schell

COPY TO: Jide Akanbi, Andrew Colas, Teresa Guerrero, Henry Li, Abbie Rankin, Gwen Sullivan,

The following represents the facilitator's understanding of discussions held and decisions reached in the meeting. Anyone with amendments to these minutes should notify the author within five (5) days of the minutes date in order to amend as appropriate.

The Advisory Committee began with a welcome and introduction by PPS Superintendent Carole Smith and Chief Operating Officer C. J. Sylvester. Carole Smith presented an overview of key milestones, reviewed how the Long Range Facility Plan fits into the Strategic Framework and discussed the listening sessions she conducted following the last bond. C.J. Sylvester reviewed past Long Range Facility Plans conducted by the District. Each committee member then introduced themselves.

The topic for the first meeting was the Enrollment Forecast. A presentation was given on enrollment forecasting by Charles Rynerson of Portland State University's Population Research Center and PPS's Judy Brennan, Director of Enrollment and Transfer.

Links to presentations given at the meeting can be found on PPS website <http://www.pps.k12.or.us/departments/facilities/6760.htm>

A summary of the Advisory Committee's discussion follows below.

ITEM DISCUSSION

- 1.1 Numbers captured are not in question; understand the logic behind the projections.
- 1.2 Are we forecasting where the impacts are for growth and where might we need to add capacity?
- 1.3 Have we talked about what the potential capture rate is for students if in the future the District attracted more students? What might that look like?

- 1.4 The committee would like a better sense of what keeps students in the PPS and what might attract students to the school district (survey community, listening circles with students, teachers and parents regarding what are the assets)
- 1.5 Charles—in some neighborhoods there is low attendance at the local school and other neighborhoods there is over-enrollment. These circumstances change over time. It is difficult to predict where individual school may be attractive to parents. (The committee thinks we should be planning for this)
- 1.6 Judy—capture rates have dropped over the last ten year (see full report)
- 1.7 The committee would like to see the impact of school closers over time. This could help the group understand how these types of changes effect neighborhoods.
- 1.8 How do home school and on-line schools affect the enrollment numbers. Is this part of the demographics? (Judy--ESD tracts these, it is usually a very steady number).
- 1.9 The committee expressed the need for flexibility to be built in to the plan to accommodate when enrollment numbers go up or down.
- 1.10 The committee would like to understand the drivers between district sites? What makes people move and why? Sometimes the worst facilities from an infrastructure standpoint are the most vibrant.
- 1.11 What is the value of the school to the specific neighborhood? How can the community be better exposed in to the school buildings?
- 1.12 What are the economic drivers and how are they impacting enrollment?
- 1.13 Charles—a higher percentage of students are staying in the district, the reasons for this may vary (enjoying the neighborhood? less mobile? Can't sell their home? Can't afford a new home?) Families are aging in place more.
- 1.14 The committee wants to be sure we are not assuming too much. Why did the District lose 20% between 1990 and 2008? What are the drivers (where are students flowing in or out and why? What are the facts around this?
- 1.15 Look at adjacent school districts. Can we get more data over the next few months?
- 1.16 If PPS is growing x%, how does this compare to other adjacent districts, is there a correlation?
- 1.17 Charles—last few years PPS has been growing more than the rest of the state.
- 1.18 Chart projecting by high school—6000 more students in the high schools. How do we absorb this and how can we change where that occurs? Can we have a regular review of school boundaries? Such as a review every five years, and this is part of the understanding of the district?
- 1.19 District transfers—how will this affect enrollment with students currently out of district transferring to PPS
- 1.20 Judy—Districts can opt in or not. Lots of strings in the new law. PPS is consulting with nearby districts to gauge what the pros and cons are of the new law. The district may take a holding position. Currently PPS gains approximately 800 students from transfers in (rather than out) to the district.
- 1.21 Are projections at the High School level in danger of undershooting the projections due to the educational initiatives the district is undertaking? This does seem to be happening at the high school senior level. This is happening in other districts in the state?
- 1.22 Concern was expressed about the use of Kindergarten data as a predictor.

- 1.23 Charles—PSU uses both kindergarten and first grade as predictor. Using first grade figures alone would yield a slightly higher projection.
- 1.24 PPS has seen a 17% increase in Lincoln HS in the last few years. This is mostly due to the Forest Heights development. Are there other predicted developments that will impact capacity? There is capacity for more development in the Lincoln cluster. This is a city development question. What is the plan for the North Pearle District? Will the units developed support family housing? The ratio of number of units to children is difficult to predict without feedback from developers and the City of Portland.
- 1.25 Is there a requirement at the City level to help direct understand where housing will occur? CJ (Carol?)--This is happening more and more now (less so historically) The City is working with the district with regard to where capacity is needed.
- 1.26 CJ—PPS has staff involved with the City to discuss the development issues together.
- 1.27 How does PPS envision this committee will participate in the outreach efforts? There needs to be an effective methodology. Rhys is working on this. It will be a little different for each committee member. PPS is also doing other outreach activities. The District will give the support needed and committee members will have input with how outreach should best occur.
- 1.28 There is a student on the facilities committee (not present tonight)
- 1.29 Is there anyone not here that should be here? Senior citizen? BOMA?
- 1.30 What is the forecast for us? High vs low. What is the probability of hitting the high? Charles--Median is most likely. Last few years enrollment has been above the median. Forecasts are done every year. Since 2008 enrollment projections have been fairly accurate. Volatile time in the last decade.
- 1.31 Forecast will make its way into the facility plan. What are the risks of under planning vs. over planning? (Charles—high spend too much?, low not enough space?)
- 1.32 Capture rate—do we have data that tells us why we don't capture those that we would like to retain? Data doesn't say why, but does say what--16% of children in district are enrolled in private school. 2% are being home schooled.
- 1.33 Growth—where is this going to happen? Which neighborhood or school? Charles--Most growth in Cleveland, Lincoln and Grant (due to elementary growth in those areas). Infill potential affects Lincoln.
- 1.34 Metro is doing a forecast for 2025 for small areas. PSU will look at this and factor it in as appropriate.
- 1.35 North and St. Johns, demographics are changing rapidly. More young professionals seem to be in the community. How will this change the demand? Older homes turning in some neighborhoods. Charles—educational attainment has increased in Portland, there is a greater percentage of the population with bachelors degrees. Trend in older mothers and home ownership.
- 1.36 Page 6 in the white paper, figure 6 is labeled by cluster, not by the school.
- 1.37 Full report has year-by-year and grade group enrollment.
- 1.38 Higher education attainment—is this taken into account with the forecast? Charles—helps us to understand what has happened and why in the previous forecasts. This is built in to the forecast.
- 1.39 Kindergarten capture rate seemed to correlate with the economic downturn. What's up with the forecast going down and then going back up? Charles—enrollment is based on population. He looks at this closely every year.

- 1.40 How does PPS compare with Seattle, San Francisco, Minneapolis? Charles—He looks at Seattle and San Francisco. PPS is similar to both these cities in terms of: having a rebound in elementary enrollment, both lost enrollment and then began gaining, similar size and mix of enrollment, similar cost of living.
- 1.41 Forecast to 2025, Empty nesters will be moving (to greener pastures). What will the neighborhoods be like then, will it yield more students? Charles—high share of young families in newer housing tend to have families with elementary kids. Turnover occurs in housing that is over 20 years old. One in 3 or 32% in 4 county area households had one or more students under age 18.
- 1.42 Core of city is growing, this tends to translate into fewer students per household.
- 1.43 Group suggestions for future meetings:
 Like the small group work
 Like food
 Difficult to hear—amplification systems might be helpful
 Larger font size should be used for issue paper.
 Physical disability expert present, for some meeting to discuss special requirements such as Assistive technology and Universal design
 Who is not here—Latino, English language learners, Russian, Eastern European
 Other subject member experts as required at other meeting to educate the committee.

BIKE RACK

The bike rack includes comments or questions that occurred at the meeting that were unrelated to the specific meeting topic. These questions will be addressed in future meetings or in the PPS staff response log on the PPS website. (Response Log to be posted on the website by January 3, 2012)

- 1.44 What assets attract Students and Parents to PPS? (1.4)
- 1.45 Built-in Flexibility for facilities to accommodate population change (1.9)
- 1.46 What is the value of the school to the community outside of educational use? What is the value to the City? (1.11)
- 1.47 What is the committee's role regarding outreach? (1.27)
- 1.48 Will there be student representation on the committee? (1.28)
- 1.49 Who else might join the committee? (1.29)
- 1.50 Magellan report—to what extent are principals, parents and staff knowledgeable or in agreement with this report
- 1.51 Community use of school building and space allocation.

ISSUE PAPER #2 FACILITIES CONDITION OVERVIEW

INTRODUCTION

Portland Public Schools (PPS) currently manages 8.37 million square feet of facilities on 693 acres housing a variety of programs. Combined, these facilities support a total enrollment of approximately 47,288 students (2011-12). The District's inventory includes nine high schools, 10 middle schools, 28 K-5 schools, 30 K-8 schools and eight selective focus/community based programs schools (<http://www.pps.k12.or.us/schools/index.htm>).¹ The inventory also includes five administrative sites, 11 facilities used by other PPS Focus School/Special Education. Nine buildings are currently closed, four of which are being actively marketed, three are swing sites (see page 2) and two of which are leased to other entities outside PPS. All but two schools were built prior to 1975. The average age of PPS buildings is over 65 years.

Due to (1) declining enrollment beginning in the late-1960s as a result of families relocating to the suburbs, (2) a State funding model that shifted funding to a per student basis in 1990, and (3) voter-approved caps on the assessed value of real property for taxing purposes in 1997, operating funds to maintain District schools have dramatically declined.

Decades of deferred maintenance and lack of stable capital funding for school facilities has created a sizeable maintenance backlog. Implementing facility improvements to support educational programming needs, including unique requirements for Special Education, science labs and computer labs, has also suffered from lack of funding.

Funding these improvements will likely be a multi-decade program due to the extent of the need.

¹ For purposes of this report, these are the numbers of individual sites, not schools which may include multiple schools on the same site.

RELEVANCE FOR FACILITIES PLAN

State law (ORS195.110) requires large school districts with K-12 enrollment of more than 2,500 students to develop long range facility plans. School facility plans must include a “description of physical improvements needed in existing schools to meet the minimum standards of a large school district”. <http://www.leg.state.or.us/07reg/measures/sb0300.dir/sb0336.1ha.html>

Facilities condition assessments are a way to describe the physical improvements needed in schools and are an important component of the Long Range Facility Plan. Assessments help staff identify which building systems will need repair or replacement, and when (life-cycle cost). Assessments also help the District to identify at what point repairs to facilities would outweigh the cost of replacing the entire facility. This assessment information begins to frame the District’s initial, highest-priority 10-year capital investment need.

PPS INVENTORY

The District houses a variety of programs as described in Table 1 below

Facility Type		Count	Sq Ft
Elementary	ES	28	1,652,553
PreK/K through 8th Grade Schools	K-8	30	2,065,602
Middle School	MS	10	1,028,731
High School	HS	9	2,446,472
Other Programs	Other	11	353,305
Administrative	Admin	5	704,440
Closed Facilities	Closed	7	381,057
Facilities Leased to Others	Leased	2	73,490
Total		102	8,705,650

Table 1: Facility Count and Square Footage

- Active Schools – Active school sites house the District’s school programs including early education programs, K-5s, K-8s, middle schools, high schools and special focus programs.
- Leased Sites – Leased sites are previously-closed school buildings the District leases to generate long-term revenue. These sites are usually leased by tenants for consecutive years. The Kenton and Edwards sites are examples. The District generated \$ 1.5 million in lease revenue that contributed to the General Fund in FY 2010-2011.
- Administrative – Several buildings across the District are used for administrative purposes including the Blanchard Education Service Center (BESC), Rice and Marshall sites.
- Closed – The PPS building inventory also includes vacant school sites. Some of these schools may be potential “swing” sites to house students while repair or renovation work is being performed at active school sites or used for interim administrative purposes.

Facilities Age

Two permanent campuses (Rosa Parks and Forest Park) have been constructed in the last 15 years. As described in Chart A, eighty percent of the district inventory was built prior to 1960, with 24 buildings constructed prior to 1920 and 66 buildings constructed prior to 1930.

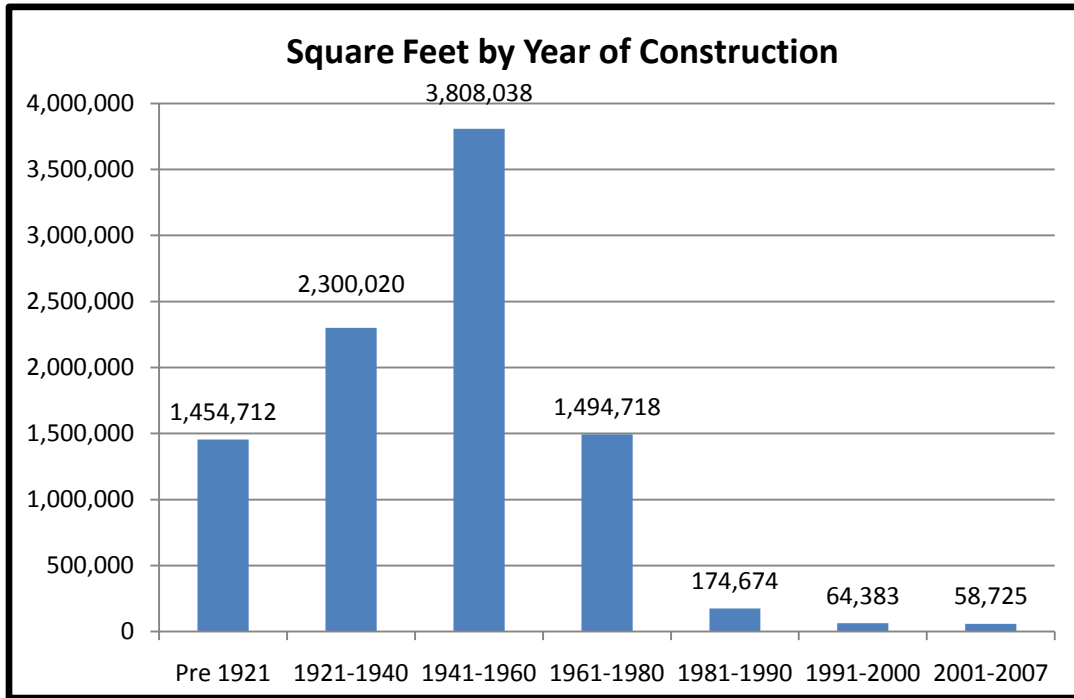


Chart A: Building Age

BUILDING ASSESSMENTS

Facilities assessments function as a central component of capital improvement plans. The District’s existing facility assessments provide a framework to establish, compare and prioritize facility needs. Facility assessments help facilities staff determine the relative condition of schools throughout the District. Assessments typically include the overall condition of a building and include details such as an evaluation of health and life-safety features, level and amount of accessibility (ADA), sustainability features, available technology, historical significance and the ability of a district to accommodate a variety of instructional programs. Charts B and C on the following page summarize the District’s \$1.6 billion in building deficiencies broken down by system and category.

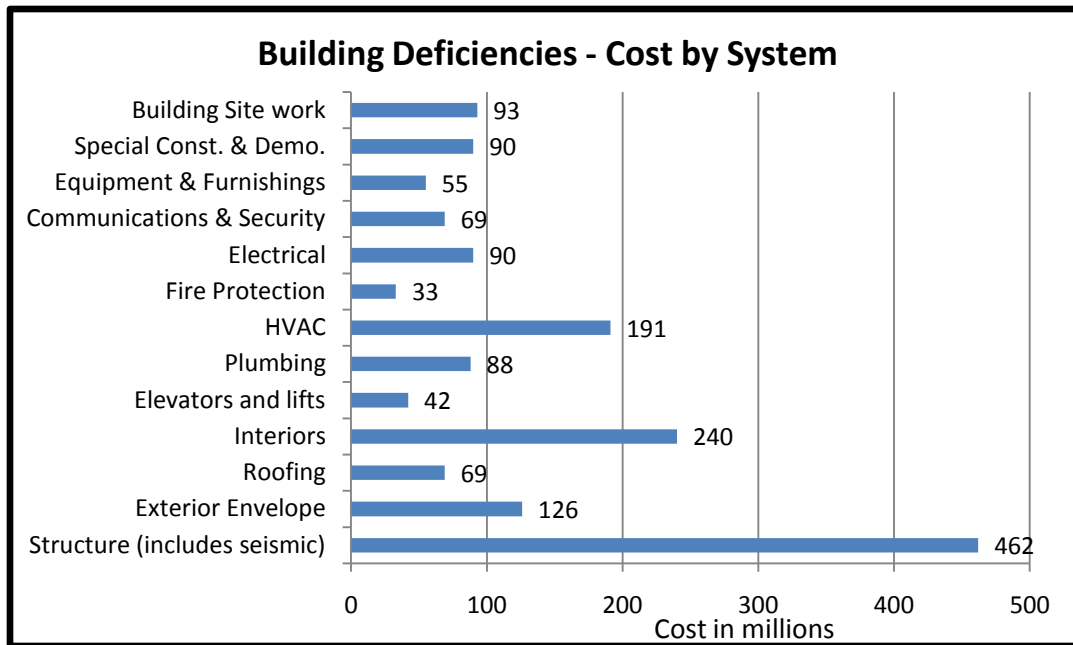


Chart B: Condition Assessment – Cost by System in 2011 dollars

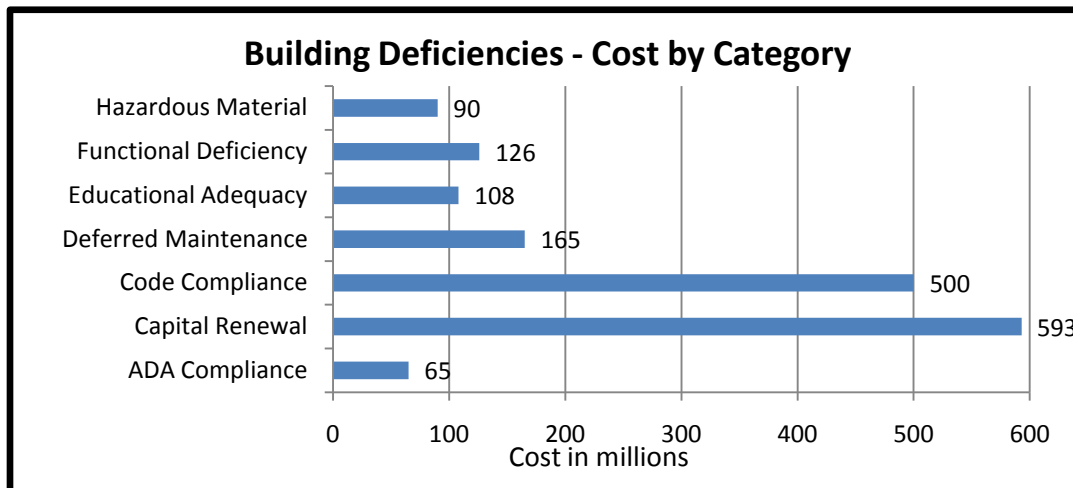


Chart C: Condition Assessment – Cost by Category in 2011 dollars

Facilities Assessment

PPS completed a comprehensive assessment of its facilities in June 2008 to establish a baseline of facility conditions throughout the District’s building inventory. This assessment, prepared by Magellan Consulting, consisted of an educational adequacy assessment, a building condition assessment, and a review of all site and building systems including a life-cycle capital renewal forecast.

PPS will update these assessments on a four-year rotation using trained staff with technical expertise to update the building conditions database.

<http://www.pps.k12.or.us/departments/schoolmodernization/1046.htm>

Subsequent to the Magellan assessment PPS conducted additional assessments to further enhance our understanding of the overall condition of PPS facilities:

Seismic Assessment

The District hired KPFF to complete a seismic safety assessment in 2010 to update existing data and compare physical conditions against current American Society of Civil Engineers methodology (ASCE 31/41).

The seismic assessment examined 12 school campuses within the PPS facilities inventory as a representative sample of building construction types throughout the district. KPFF evaluated these buildings to identify seismic deficiencies and to develop preliminary rehabilitation options for each building. KPFF then developed construction cost estimates for these options on a per square foot basis. These cost estimates provided options for completing a stand-alone seismic retrofit or a retrofit as part of a larger renovation. The per square foot costs were applied to similar campuses based on construction type to determine order of magnitude costs per square foot for the entire inventory of PPS school facilities.

The 1995 Facilities Capital Bond Program funded \$47 million in seismic upgrades to approximately 53 schools and as part of re-roofing projects at 15 additional schools. PPS determined which schools were most in need of the work by using engineering evaluations of school buildings to quantify the risk. This work focused on upgrading those buildings most at risk of collapse to promote safe exiting. In 2009, PPS further completed partial seismic upgrades at nine schools as part of re-roofing projects.

Typically, stand-alone seismic retrofits cost twice as much as doing the work in conjunction with a larger renovation.

<http://www.pps.k12.or.us/departments/schoolmodernization/4813.htm>

Accessibility Assessment

An accessibility assessment of PPS facilities was conducted in 2009 by Ankrom Moisan Architects. The assessment identified accessibility deficiencies within PPS facilities and cost estimates to correct the deficiencies to the requirements of the Americans with Disabilities Act (ADA).

The assessment identified priorities for accessibility upgrades. Examples include providing ADA van parking, accessible routes to building entrances and removing barriers to increase accessibility. Other upgrades include providing elevators, lifts and ramps to inaccessible floors. The assessment estimated the total cost for accessibility upgrades to all District buildings at \$45.3 million.

\$10.7 million in ADA upgrades were completed during the 1995 Facilities Capital Bond Program. Improvements included upgrading building entries, removing interior access barriers, modifying restrooms, providing sensory impairment signage, and providing new or upgraded elevators at 15 schools, including nine of the 10 high schools and chair lifts at three schools. As noted, additional upgrades are needed to meet current ADA requirements.

<http://www.pps.k12.or.us/departments/schoolmodernization/2053.htm>

Historic Assessment

PPS hired ENTRIX in 2009 to conduct a historic building assessment of District facilities. ENTRIX conducted research and a field study of District buildings constructed prior to 1979 and compared those buildings to identify their character-defining features, assess their comparative levels of historical integrity and evaluate their eligibility for the National Register of Historic Places (NRHP). Of the 98 properties surveyed, three are currently listed in the National Register as contributing resources to NRHP Historic Districts (HD); Abernethy (Ladd’s Addition HD), Couch/MLC (Alphabet HD) and Irvington (Irvington HD). Three schools (Benson, Duniway, and Woodstock) are currently listed as Portland Landmarks and three schools are considered contributing resources to City of Portland Conservation Districts (Kenton, Woodlawn, and Jefferson).

<http://www.pps.k12.or.us/departments/schoolmodernization/1627.htm>

Roof Assessment

In 2007, PPS completed an in-house roof assessment of all District roofs identifying and prioritizing \$70 million in needed roof replacement and an additional \$5 million in roof-related seismic upgrades in 2007 dollars.

Since 2007 the District has twice contracted with Professional Roof Consultants (PRC) who provided additional detail on replacement and repair costs for 43 high-priority roofs.

In 2009, PPS spent nearly \$14 million dollars and installed new roofs on nine school buildings. These projects included thin film solar installation and roof-related seismic upgrades.

FACILITY CONDITION INDEX (FCI)

A Facilities Condition Index (FCI) is a widely-used indicator that provides a relative scale of the overall condition of a given facility or group of facilities within an inventory. The index is derived by dividing the total repair cost by the total replacement cost for the existing school facility.

$$\frac{\text{Total Repair Cost}}{\text{Total Replacement cost}} = \text{Facility Condition Index}$$

The educational facility assessment industry developed a scale of how to interpret FCI scores:

FCI	Overall Condition	Recommended Action
Less than 10%	Good	Repair
11 to 35%	Fair	Renovate
36 to 50%	Marginal	Renovate
51 to 65%	Poor	Renovate, Fully Modernize, or Replace
Greater than 65%	Very Poor	Replace or Fully Modernize

In 2010, PPS revised the FCI for each school campus to incorporate the costs associated with the 2009/10 seismic, accessibility and roofing assessments as well as adjusting construction costs for inflation.

FCI is only one criterion decision-makers use to prioritize capital projects. In 2008, the Board of Education adopted Resolution 3986 that identifies criteria for determining the order in which a long-term school rebuilding and renovation program should proceed to meet the objective of creating 21st century learning environments. The Board of Education went beyond a “worst first” approach in prioritizing the work that includes a broader range of factors to be considered when determining where work is to be performed. The full resolution is online at:

http://www.pps.k12.or.us/files/schoolmodernization/RESOLUTION_3986.pdf

CAPITAL RENEWAL

In addition to the costs identified above for known Building Deficiencies, there is \$176,810,000 in life-cycle renewal projects needed over the next 10 years (replacing building systems at the end of their useful life) as shown in Table 2. The District’s current operating budget for capital renewal is \$3 million per year for this purpose.

Facility Type	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Elementary	4.19	5.25	0.54	3.97	1.72	7.10	1.00	6.50	1.20	1.39	32.86
K-8	5.48	6.70	0.42	4.85	0.96	5.33	0.90	7.64	0.78	1.27	34.33
Middle School	4.28	4.08	0.62	3.99	1.80	5.75	0.35	6.22	0.36	0.93	28.38
High School	4.90	11.36	0.10	5.93	1.24	9.03	0.74	11.03	0.63	1.95	46.91
Other Programs	0.33	0.53	0.03	0.71	0.15	1.06	0.01	1.72	0.09	0.50	5.13
Total Schools	19.18	27.92	1.71	19.45	5.87	28.27	3.00	33.11	3.06	6.04	147.61
Admin	1.50	1.43	1.04	1.56	4.86	2.43	0.10	4.86	0.02	1.61	19.41
Leased	0.39	0.37		0.72	0.08	0.40	0.04	0.80	0.06	0.09	2.95
Closed	0.56	0.73	0.09	0.98	0.20	2.51	0.12	1.21	0.01	0.43	6.84
Total Other	2.45	2.53	1.13	3.26	5.14	5.34	0.26	6.87	0.09	2.13	29.20
District Total	21.63	30.45	2.84	22.71	11.01	33.61	3.26	39.98	3.15	8.17	176.81

Table 2: Capital Renewal Requirements -- Cost in millions (2011 dollars)

In recent years PPS leadership and staff have worked to set a new and more sustainable course for maintaining the District's facilities. Key decisions to stabilize the impact of cuts over the last 20 years include:

- Setting aside revenue from the sale of surplus property for District capital needs, rather than using those funds to cover on-going operational costs.
- Holding the maintenance and operations budget stable, even as further cuts were implemented across other central departments.
- Implementing energy and water conservation pilot program at Wilson, Cleveland, George and Beaumont.
- Allocating Recovery Zone Bond funding to execute needed energy and water upgrades in all District buildings.
- Establishing a \$25.7 million fund by the Board of Education to finance specific capital costs associated with needed real and personal property improvements across district facilities (to be retired by future voter-approved bond proceeds) including:
 - Construct modular classrooms: 28 classrooms at 13 school sites
 - Construct nine roof replacements, including seismic structural reinforcement and solar photo-voltaic cells
 - Complete fire alarm system upgrades at Benson HS, Franklin HS and Harriet Tubman Leadership Academy

Appendix A: Board of Education Resolution #3986, October, 2008: Criteria to Determine the Order of Rebuilding and Renovation of PPS School Buildings to Create 21st Century Schools

1. Balance by Grade Level – Work needs to be performed across all levels of schools (high school, middle school, K-8, elementary)
2. City Development Plans/Projects - As the City of Portland implements policies to encourage family-friendly development around school sites and “20 minute walkable neighborhoods” PPS will work with the City to plan strategically for future growth. This City/PPS cooperative planning is expected to provide opportunities to retain existing families as well as attract new families to PPS, and may be a factor in placing a school higher on the list (for example, if a major family housing development or increased housing density is proposed for an area).
3. Enrollment – Enrollment is the number of students assigned to a building. Schools can be over enrolled, under enrolled or at a manageable capacity. In order to “right size” the school, PPS can apply several tools: analyzing transfer patterns and making adjustments, evaluating boundary changes to balance enrollment between adjacent schools, and increasing the physical capacity of the school. The choice of how to address the issue of enrollment may impact the order in which facilities work proceeds.
4. Enrollment Enhancement Opportunity - A new or fully modernized school may be used as an opportunity to attract students back to a neighborhood with a low “capture rate” .
5. Environmental Considerations – There may be specific environmental considerations that affect the order in which work is undertaken among all of our schools. For example, further testing might reveal water intrusion of an unacceptable and irreparable level at a school.
6. Facility Condition Index – The facility condition index (FCI) is an industry standard for comparing building condition. The FCIs developed by Magellan included the actual physical condition of buildings and, in addition, included the costs needed to bring each school up to the educational specification levels set by a broad-based team of PPS instructional leaders. FCI does not include the costs needed to create 21st century schools, only the costs needed to provide upgrades within the current facility structure.
7. Fulfilling a Commitment – Honoring the commitments about facility improvements that the school district has made in the past may be considered in determining the order of work.

8. Geographic Distribution – School renovation work should be distributed across the city to assure that there is equity in school improvements.
9. Historic Structure Deterioration – A few PPS schools have been formally designated as historic structures. An increase in the rate of deterioration might need a quick response that moves a facility ahead in the schedule.
10. Large Impact – The renovation or addition of a facility that is anticipated to have a large impact on another school, an entire community or a major part of the city, in addition to meeting other criteria, may be a determining factor in placing a school higher on the list.
11. Partnership Opportunities – Partnerships can be financial, technical, joint use and/or joint development and can take quite a while to nurture. The opportunity for a partnership that has been developed and funded may mean that a particular facility needs renovation or construction ahead of schedule or that a delay is warranted while the partnership is formalized. Equity of access to quality partnerships will be a key consideration.
12. Program Requirements – A new school district program imperative might require a major facility renovation in order to offer that academic program in a quality way. These can be handled under either short-term work or long-term work, depending on the amount of renovation required. For example, deciding to offer pre-K in every school has implications on building size. Again, equity of access to programs and support for programs will be a key consideration.
13. Safety and Security – Assuring that all schools within the Portland system are “warm, safe and dry” is always a priority. But various safety and security considerations might impact the school district’s renovation order because of the volume or nature of concerns at a particular site that could only be addressed with major rebuilding or renovation.
14. Temporary Space - Most school rebuilding and renovation work will require students to be temporarily relocated while work is being done on their school. For those schools, PPS will need to balance the work being performed at any one time across the city in order to have temporary space (with limited travel time for students) available to support the work being performed.
15. Unite a Divided Campus – Several PPS schools have significant portions of their school enrollment in buildings that are not close to each other.



THE BUILDINGS WE LEARN IN

*An Overview of PPS Facilities
and Condition Assessment*

AGENDA



- Introduction
- Key terms
- The Assessments
- History
- Good News

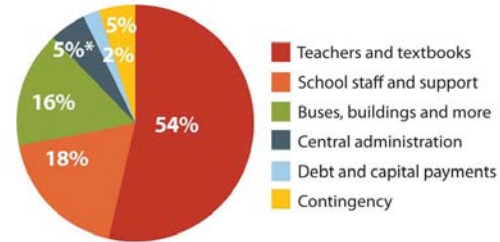


INTRODUCTION



- Property, Physical Plant, and Equipment is the largest single asset category in many organizations...yet...many organizations choose to direct scarce operating funds to other business needs.

2011-12 General Fund Budget (\$467 million)



*Note: The transfer of the Risk Management budget from a self-insurance fund to the general fund accounts for a 1% increase from 2010-11 in central administration spending.

- In Portland Public Schools, this means keeping teachers in the classroom educating our most important asset...our STUDENTS.

INTRODUCTION

Why buildings need to be maintained...



Buildings can...and will fail when not properly taken care of.

DILAPIDATION

How buildings fall into disrepair...



- Water in its various states is the primary cause of dilapidation.
 - Rain, snow, groundwater, moisture, humidity...etc.
- Wear and tear of users.
- Obsolescence
 - Fire and building code changes.
 - Changes in technology.
 - Energy efficient options.
 - Changes in the techniques of teaching and learning demand changes in school facilities.



KEY TERMS

Creating a framework for asset management...



- **Asset Management** - a strategy for preventing assets from falling into dilapidation and obsolescence.
 - Preservation
 - Preventive maintenance
 - Corrective maintenance/repairs
 - Capital renewal
 - Deferred maintenance
 - Renovation



Impact on Student Achievement

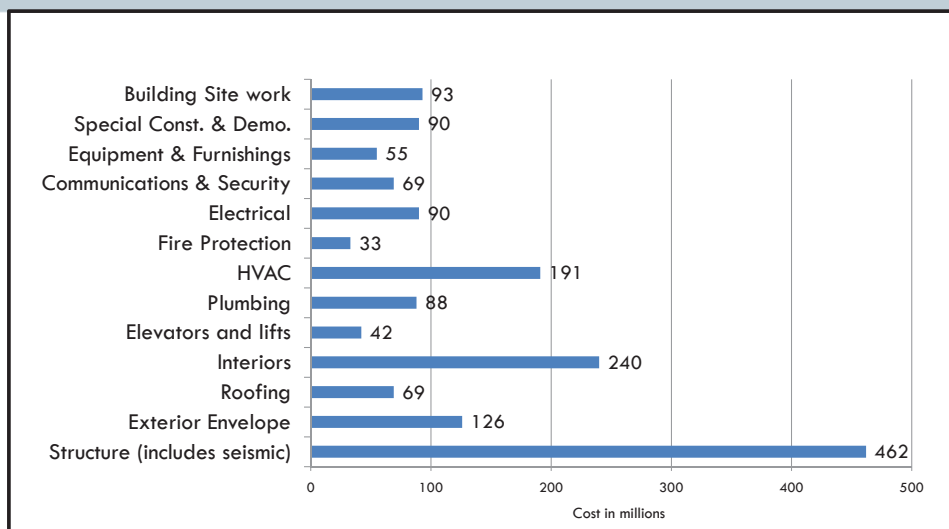


- Building condition is directly related to student achievement and behavior.



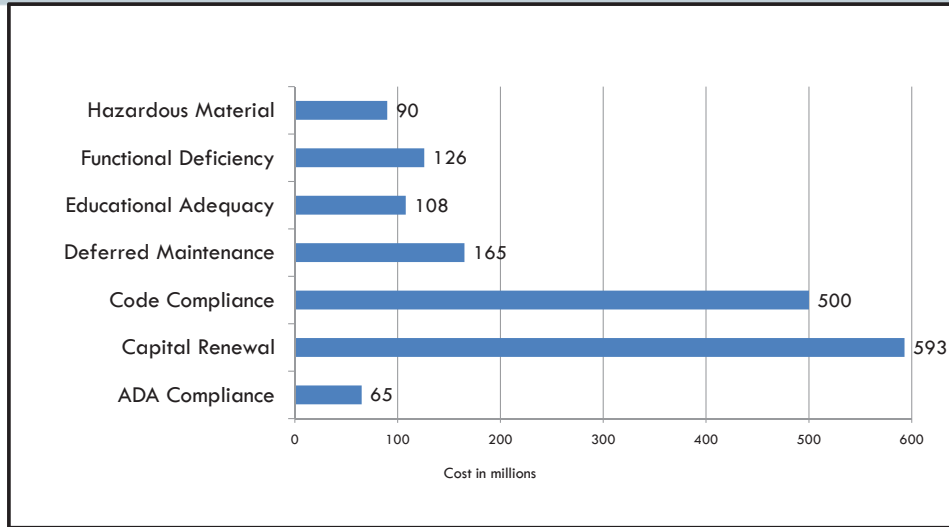
THE ASSESSMENT

Building Deficiencies - Cost by System



THE ASSESSMENT

Building Deficiencies - Cost by Category



THE ASSESSMENT

Capital Renewal – Next 10 Years



Facility Type	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Elementary	4.19	5.25	0.54	3.97	1.72	7.10	1.00	6.50	1.20	1.39	32.86
K-8	5.48	6.70	0.42	4.85	0.96	5.33	0.90	7.64	0.78	1.27	34.33
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Leased	0.39	0.37		0.72	0.08	0.40	0.04	0.80	0.06	0.09	2.95
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Total Other	2.45	2.53	1.13	3.26	5.14	5.34	0.26	6.87	0.09	2.13	29.20
District Total	21.63	30.45	2.84	22.71	11.01	33.61	3.26	39.98	3.15	8.17	176.81

CONTINUING THE ASSESSMENT

Accessibility – Americans with Disabilities Act (ADA)



- 30 multi-level schools lack elevators including 18 K-8 and middle schools
- Auditoriums, cafeterias, gyms, computer labs, and libraries are not accessible at many of these schools including immersion and other special programs
- When possible, PPS addresses accessibility concerns on a case by case basis



CONTINUING THE ASSESSMENT

Seismic



- Most of the District's facilities were built before seismic code existed
- Some combination of the following upgrades are needed for **all** schools except the two newest schools (Forest Park and Rosa Parks)
 - Structural strengthening aimed at prevention of building collapse
 - Nonstructural strengthening of unreinforced masonry walls and roof parapets, chimney removal or bracing and anchoring suspended ceilings



CONTINUING THE ASSESSMENT

Roofing



- PPS has six million square feet of roofs - the equivalent of 134 football fields
- Replacing about 720,000 square feet of roofs per year for a five year period would eliminate the deferred re-roofing backlog
- If the deferred maintenance backlog was eliminated, PPS would need to replace about 240,000 square feet of roofs every year to keep up on required roof work

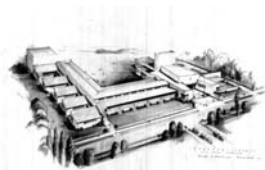


CONTINUING THE ASSESSMENT

Historic



- Entrix surveyed 98 properties for the 2009 Historic Building Assessment and determined that 51% or 50 schools are historic and eligible for listing on the National Register of Historic Places (NRHP).
- Just over half of PPS's pre-1979 schools are either highly or moderately historically significant.
- The District owns a showcase of architecture that provides a rich narrative of educational development in the city from 1908 to present.



CAPITAL SPENDING

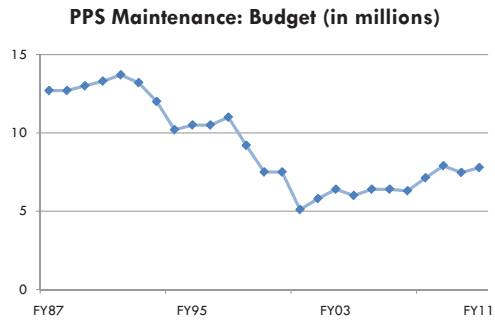
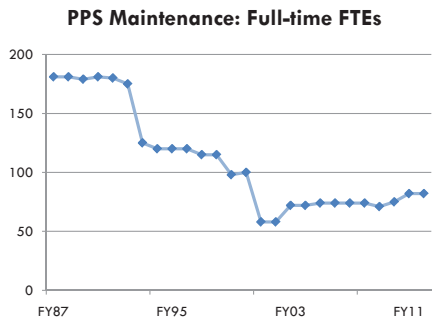


	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09	FY09-10	FY10-11	FY11-12	Total
1995 Bond	22	12.6	6.6	2.3	0					43.5
FAM General Fund	0.9	1.4	2.8	3	3	5.1	2	3.9	6.5	28.6
OSM General Fund						2.5	13.1	3.4	7.6	26.6
Other*	0.4	0.7	0.9	0.8	0.1	0.4	0.5	5.2	6	15
Total	23.3	14.7	10.3	6.1	3.1	8	15.6	12.5	20.1	113.7

FAM: Facilities & Asset Management; OSM: Office of School Modernization

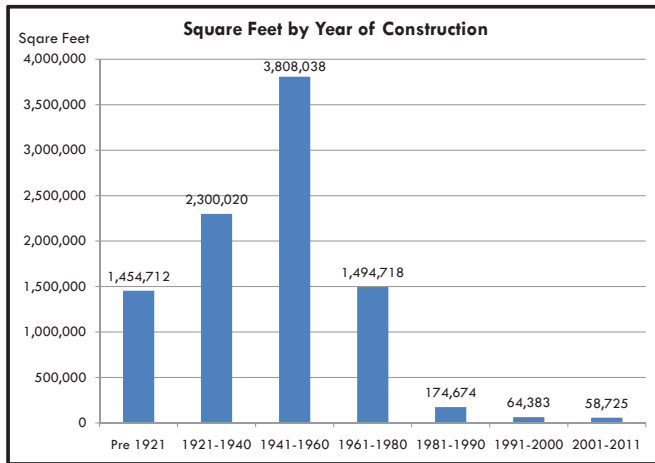
* State Energy Funds, Federal/State/Private Grants, other District Funds

MAINTENANCE HISTORY

BUILDING AGE

How does building age impact maintenance?



Elementary:	65
K-8:	67
Middle School:	52
High School:	66
Selective / Focus:	52
Admin:	43
Closed:	58
Leased:	59

GOOD NEWS STORIES

The Capital Asset Renewal (CAR) Plan



- The District has established a sustainable funding strategy to pay for the life cycle replacement of major building systems for any newly modernized or renovated buildings in the future (major building systems include things like roofs, athletic fields, boiler upgrades, and major mechanical, electrical and plumbing or electrical upgrades).
- The goal of this strategy is to extend the useful life of District facilities, ensure public capital investments are properly preserved, and minimize deferred maintenance costs. This Capital Renewal Plan will be funded through:
 - Construction Excise Tax (CET) Revenues.
 - Subsequent to debt retirement estimated to begin in FY 2021/22, redirection of the Recovery Zone Bond utility savings.
 - Lease revenues and surplus property sales. At a minimum, lease revenue shall be base-lined at the FY 2011/12 present day value to hold the General Fund stable.
 - Revenue generated from renting/leasing District athletic fields. Revenue generated from renting/leasing athletic fields will be tracked through the Civic Use of Buildings office.
 - Interest earned on the CAR Fund and CET.

GOOD NEWS STORIES

Office of Emergency Management- Seismic Rehabilitation Grant



- Alameda School has conditionally been awarded a State of Oregon Office of Emergency Management (OEM) Seismic Rehabilitation Grant Program (SRGP) for seismic retrofit.
- Award of a formal contract agreement is conditional and subject to the definitive sale of government bonds in spring of 2012 specifically for the SRGP.



GOOD NEWS STORIES

Energy Usage



Federal Stimulus Grants- State Energy Program

- PPS received an American Recovery and Reinvestment (stimulus) grant in 2010 through the Oregon Department of Energy (ODOE) for nearly \$379,000 to retrofit the remaining T12 fluorescent lighting in the District. These projects were completed in June 2010.
- The entire retrofit project in all 17 buildings is expected to save 708,593 kWh of energy and \$63,774 in energy costs per year. The electricity use for the lighting that was replaced was reduced from between 37 percent to 74 percent depending upon the building.

GOOD NEWS STORIES

Energy Usage



Cool Schools (Senate Bill 1149)

- The district continues to use and maximize the benefits of its SB1149 funds. Current projects include:
 - LED exterior lighting
 - High efficiency water heaters
 - Lighting occupancy sensors
 - Steam trap replacement and repair
 - Building control upgrades
 - Full building energy assessment at six schools
 - Replacement of metal halide and mercury vapor lighting

GOOD NEWS STORIES

Energy Usage



Recovery Zone Bond (RZB)

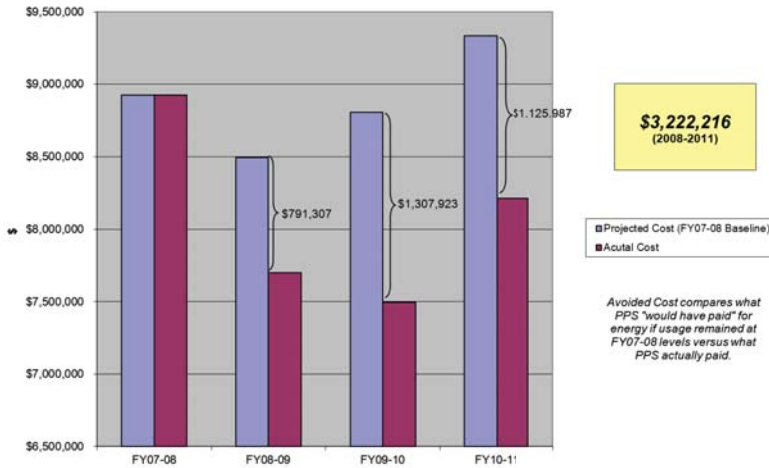
- In May 2010, Portland Public Schools received an \$11 million dollar Recovery Zone Bond to reduce the District's energy and water consumption potentially saving the District more than \$1,200,000 in energy savings annually.
- The District will repay the Recovery Zone Bond with the savings realized by completion of these projects.
- The RZB projects include:
 - Replace steam control valves and traps to save energy and improve thermal comfort and operation at 41 schools.
 - Replace toilets with new dual flush units at 83 schools.
 - Replace walk-in coolers at 2 schools, food warmers at 63 schools, reach-in refrigerators and freezers at 23 schools, and ovens at 15 schools with new Energy Star rated equipment.
 - Install automatic urinal controls at 72 schools.

GOOD NEWS STORIES

Energy Usage



Portland Public Schools: Avoided Energy Cost



Since FY2007-08 PPS has avoided over **\$3.2 million dollars** in total energy costs due to behavior modification and energy projects.

QUESTIONS? COMMENTS?



Tony Magliano 503-916-3403

Bob Alexander 503-916-3256



MEETING NO. 2 DISCUSSION SUMMARY

MEETING DATE: January 10, 2012 **TIME:** 5:30 PM

LOCATION: PPS Jefferson High School

ATTENDEES: Committee: Scott Bailey, Tim Carman, Andrew Colas, Larry Dashiell, Lakeitha Elliott, Stuart Emmons, Shane Endicott, Louis Fontenot, Bob Glascock, Nancy Hamilton, Jeff Hammond, Bill Hart, Brett Horner, Sally Kimsey, Angela Kirkman, John Mohlis, Matt Newstrom, Scott Overton, Lydia Poole, Abbie Rankin, Bobbie Regan, Ted Reid, Rudy Rudolf, CJ Sylvester, Kevin Spellman, Dick Spies, Patrick Stupfel, Gwen Sullivan, Jason Thompson, Kevin Truong, Michael Verbout, Kate Willis, Edward Wolf

PPS: Bob Alexander, Nancy Bond, Judy Brennan, Paul Cathcart, Tripp Goodall, Melissa Goff, Jeff Hammond, Karl Logan, Tony Magliano, Marlys Mock, Jim Owens, Sharon Raymore, Rhys Scholes, Carole Smith

Translators: Hashim Fai, Olga Filinova, Ngan Ha, Ariel Lavander, Ai-my Wong

Mahlum: Diane Shiner, Gerald [Butch] Reifert, Rene Berndt

Public: Ric Battaglia, Bob Clark, Charmaine Coleman, Pamela Fitzsimmons, Betsy Hammond, Eric Lanciault, Scott Mutchie, Glen Pak, Steve Pinger, Dave Porter, Justin Stranzel,

COPY TO: Jide Akanbi, Ken Brock, Teresa Guerrero, Angela Jarvis Holland, LeRoy Landers, Willy Paul, Trudy Sargent, David Wynde

The following represents the facilitator's understanding of discussions held and decisions reached in the meeting. Anyone with amendments to these minutes should notify the author within five (5) days of the minutes date in order to amend as appropriate.

INTRODUCTION TO JEFFERSON AND MIDDLE COLLEGE FOR ADVANCED STUDIES

Jefferson is the oldest operating High School at PPS. Students opened the presentation with a description of Jefferson and the sustainability aspects of the school and how things could improve. Ventilation is inadequate in the school. More operable windows would help. Middle College for Advanced Learning is geared towards the future needs of education. The older building does not support the education that wants to occur in the building. There is a good computer to student ratio, but there continues to be a challenge to accommodate the capacity and band width required for technology. There are opportunities for students to study at PCC, which provides a more ideal environment for learning. The building should match & support the innovative learning that is occurring at the school.

There are on-going challenges working with the existing building. The configuration of the building makes observation difficult however they appreciate the history and feel of the environment. The challenge is how to maintain the character of the building and meet the needs of future learning.

OVERVIEW OF PREVIOUS MEETING

LRFP provides the overall strategy for the district planning. It is based on a body of foundational information regarding function, enrollment and condition. These foundational elements will feed into the overall strategies and criteria used to develop the Long Range Plan

THE BUILDINGS WE LEARN IN. PRESENTED BY TONY MAGLIANO

Links to presentations given at the meeting can be found on PPS website
<http://www.pps.k12.or.us/departments/facilities/6760.htm>

A summary of the Advisory Committee's discussion follows below. These notes reflect individual committee member's comments during the meeting and have not been confirmed for accuracy.

ITEM DISCUSSION**SMALL GROUP REPORTING**

- 2.1 First Group—Educational adequacy/functional deficiency as the top priority 50%. Didn't like ADA/Code, think accessibility should be the goal. This should be at 30%. Historic & neighborhood value should be added as a category and given 40%. Hazardous was given 10% because it was felt that hazardous materials are well contained now. They should be removed only as a part of other work.
- 2.2 Second Group—Lumped categories around basic concepts. Warm, safe and dry should be a priority and received 30%. Educational adequacy (configuration of space, comfort, technology, CTE support, ADA, Mandate) was the next most important category. Deferred Maintenance ranked third and capital renewal was a fourth priority. Percentage only given for the first priority.
- 2.3 Third Group—Listed priorities without percentages. 1. Safe (seismic) 2. Educational adequacy 3. Capital renewal 4. Functional deficiency 5. ADA compliance 6. Deferred maintenance 7. Hazardous material (ranked so low because it is contained) but must ultimately be addressed 7. Code compliance will be required once everything else is done. Consideration—Are there flexible spaces within the district inventory that can be leased to business or other groups to generate revenue.
- 2.4 Fourth Group—Safety first (Our kids come home at the end of the day is most important) 2. Deferred maintenance 3. Educational adequacy (ability to serve meet the program needs) 5. Accessibility next. 5. Everything else lumped together. Need to address all of categories whenever work is done.
- 2.5 Fifth Group—60% of pie should be capital renewal (roofs, seismic, ADA and hazardous materials). 20% to educational adequacy (basic classroom and building structures) 20% to deferred maintenance.
- 2.6 Sixth Group—50% to capital renewal (functional, hazardous, educational adequacy, code compliance and ADA).
- 2.7 Seventh Group—Capital renewal at 33%, Seismic 27%, deferred maintenance 19%, educational adequacy 11% and code compliance at 8%. Missing 2% for contingency.

PUBLIC COMMENT

- 2.8 Bob Clark—Issue paper comments. There is no author or department stated. Appendix A. Item #1 is to balance by grade level. He wanted to point out that the last bond measure had the bulk of the work occurring at the high school and only 1/3 of the students attend high school.
- 2.9 There was one written public comment:
 "I hope we can change out remaining oil fired boilers with natural gas furnace heating systems. I know people are worried about "fracking" natural gas technology and it's environmental water impact(s). But fracking is relatively new and can be adjusted to reduce its potential water supply hazard.

More important changing out the oil boilers with natural gas heating systems has a payback of only 6-7 years versus solar systems with subsidized payback of 9-10 years or more and without subsidies, solar generation has a payback greater than its equipment life of 25 years or so.

Natural gas has the lowest CO2 impact of the fossil fuels, oil and coal.

Don't budget for a lot of solar but keep the budget lean by going to natural gas systems."

THEME SUMMARY FROM SMALL GROUP

- 2.10 The importance of adding an Historic Character and importance to neighborhood as a category to the mix for prioritization
- 2.11 Safety was identified as the most important priority by a number of groups. The definition/detail of this will need to be defined. Is it warm, safe and dry?
- 2.12 Educational adequacy and universal access were other important themes.
- 2.13 Capital renewal program was a priority.
- 2.14 Allocation for contingency may also be something that should be considered.

LARGE GROUP DISCUSSION

- 2.15 Reflection on the small group discussion. The group talked about the priority of safety, but closely after that was educational adequacy. If the school does not meet educational needs you would not want to spend money on a place that does not meet its basic functional mission.
- 2.16 Vancouver School District. Their approach has been to look at the schools that are doing the best and investing the money there.
- 2.17 Love the exercise. Provided a better understanding of the different considerations. Capital renewal versus capital investment needed clarification. Had time to look at the demographics and compared to the general PPS metro area. There are fewer kids and many more young adults. Seattle and San Francisco have a similar demographic. The question is how the district will look in 30 years. What will this mean for the district? Will there be more kids once the baby boomers are gone and the demographic of the city changes.

Tony response—Capital renewal is replacing systems. Renovation is modernization. Deferred maintenance is repair.
- 2.18 Disappointment that the tour did not go to the learning environment and some of the areas of pride in the building. There is a long history of Jefferson as the center of the community. One doesn't get the same sense of community in a new school outside of a neighborhood. Jefferson has a real sense of community and pride expressed.
- 2.19 Tour—TV studio had a lot of energy in the room. Looked like dynamic learning was happening there. In many respects it represented a great learning environment, but could be improved. Illustration of great learning happening in an old building.
- 2.20 Tour—wanted to see a classroom. Reminded that the green wall is what 21st century learning looks like. Exercise—revealed how difficult it is to prioritize all the necessary work that has to occur. Illustrates that the public would have an equally diverse set of answers to this question.
- 2.21 The tour illustrated how difficult it would be for a person with impaired mobility to navigate the facility. There were many steps and convoluted paths to get to different areas of the building.

- 2.22 The tour resulted in a feeling of sadness, because Portland can do better with its facilities. The long-term goal of this process is to come up with a LRFP, but hope that there will be an opportunity for “out of the box” thinking. Example-shared campuses. Would like to look more at the campus than at individual facilities. Want the group to think about some of things that the district hasn’t been able to look at. Others may have ideas of what we should look like.
- 2.23 Weighing the need to provide great education with the risk of a potential seismic event. There is the possibility of very large incident in Portland. This historically has happened every 400-500 years. The last large event was 300 years (?) ago. Even though the district made seismic improvements in 1995, there are still only two schools that will survive a large incident. Even in these two schools, it only means that it is safe to get students out of the buildings. The building may not be able to be re-used.
- 2.24 Multiple choice test and all the answers were wrong. This is a large school district, how will we ever get caught up? Out of the box thinking will be needed if we will ever make progress.
- 2.25 Admire the things that are done in Vancouver, but don’t want to prioritize high achieving schools. Concur with the idea of out of the box thinking. Infrastructure is extremely important. Want to know what a 21st century school should look like, but believe that this also can occur in an historic building.
- 2.26 The comparison Tony made in his presentation with the Seattle School District caught attention. There is a substantially different financing system in Washington for school funding. For instance, if we could have schools that could survive a significant earthquake, these could be community assets during a seismic event. We should think more broadly about our schools.
- 2.27 White paper—there are seven closed facility. Should we have leased or sold these facilities? Could this money be used to help to fix other schools?
- 2.28 What is the difference in costs for a building that can withstand an earthquake versus one that just provides safe egress out of the building? Should some schools be built to a higher standard so that they can be a safe refuge for the community after a significant seismic event?
Does PPS have earthquake insurance? CJ—a little bit.
- 2.29 ADA—would like to reference this more as universal design. What led to the local community being so un-informed about the schools in PPS? What can we do to improve this and create a different future for the district?
- 2.30 As we look forward, we have to look at partnerships, shared ownership, and other ways to finance projects (other than bonds). Do we have the will to bring the community together to create great facilities (otherwise we just create great plans)?
- 2.31 The schools’ first and foremost should meet the educational needs and then serve as centers of community serving multiple generations. Our schools could also meet the needs of other public agencies.
- 2.32 Generate revenue and think outside the box—all issues could be resolved with more money. Test a model or conduct a trial program. Can we allow advertising to help pay for some things at the district?
- 2.33 Clarification—Board resolution, there is a section on cooperating with the city on planning approach. Today we have been talking about the money required to restore schools to the current condition. At what point do we get to the 21st Century School?

- 2.34 Comment on getting more funds in the schools—there may be opportunities to develop the site and provide for mixed use. Are there things that could add value to the schools? We should look through this lens as well.
- 2.35 Intrigued by multiple uses of the buildings, particularly to enhance the community feel of the facility. Like the idea of shared campuses and adjacency to parks. Capitalize on synergistic relationships.
- 2.36 We should think about Career Technical Education, technology and the future of education. In the future it is predicted that as much as 50% of high schools classes will be taught in part via on-line learning. We need to open our minds to high school looking more like college education (on-line learning plus teaching assistant?) This is coming. Flexible spaces need to be provided to accommodate this in the future.
- 2.37 If we begin to imagine IT classrooms that connect to other areas, learning can be done in existing assets (parks, arts museum, and downtown— leveraging what is in the city and around them). Can we leverage students learning in their own homes? May be a better use of the dollars than dealing with existing issues.
- 2.38 Experiential, cross-disciplinary real world learning. How do we tap into this and partnerships in the community? Forget fixing this building; learn somewhere that is educationally adequate. Challenge is to balance this against the sense of place. A challenge and an opportunity.

SURPRISES AND WAYS TO IMPROVE THE PROCESS

- 2.39 Surprises at the building—Studio is no longer being used as the studio, still has dance. Studio not used as the TV piece. Men behind the camera used the studio for many years.
- 2.40 Kids are still using the studio. Recording videos here. There was a photo studio at the school, now this isn't used, but it is still a skill that students may want to learn.
- 2.41 Impressed with the creative re-purposing of the school and inspired by the ability of the building to still accommodate learning.
- 2.42 When built, Jefferson was the world's largest high school. Surprised about this and the chart showing the phases of construction for the district.
- 2.43 Would have been nice to have had the glossary prior to the white paper.
- 2.44 Appreciate the sound system provided at this meeting.
- 2.45 The tour was very helpful, drove home the importance of air and light in schools.
- 2.46 Would have liked to see more data about the hazardous material condition and more information about building condition.
- 2.47 Would like a classroom to be part of future tours.
- 2.48 Appreciate the dialog at the meeting.
- 2.49 Like the links to other information on the web site for committee members to access more information. Would like to see information provided that categorizes by the clusters, i.e. link the information to the geography.
- 2.50 If we look at partnerships and potential revenue sources, would like have data that shows building by building what empty space is there.
- 2.51 Would benefit from a bit more information regarding on what the committee will be doing. What will the committees' role be?
- 2.52 White paper—because we are a district of over 2500 students...what is the meaning of "minimum district standards". Is it left up to us to establish this? Would like to see

- examples of Long Range Facilities Plans from other districts and how they addressed this question.
- 2.53 How will facilitators help to get the information back to the committee in a timely manner?
 - 2.54 Are there non-negotiable items that the committee should not address?
 - 2.55 There was a request for each committee member to provide a brief personal biography to Bob Alexander for inclusion on the web site.
 - 2.56 Invitation to Sustainability event being held with author Peter Senge on January 23rd. It will be recorded and streamed and will be rebroadcast on channel 28.
 - 2.57 PPS should send information electronically to the committee regarding the future learning sessions offered.

BIKE RACK

The bike rack includes comments or questions that occurred at the meeting that were unrelated to the specific meeting topic. These questions will be addressed in future meetings or in the PPS staff response log on the PPS website.

- 2.58 What is the difference in costs for a building that can withstand an earthquake verses one that just provides safe egress out of the building? Should some schools be built to a higher standard so that they can be a safe refuge for the community after a significant seismic event? (2.27)
- 2.59 Would have liked to see more data about the hazardous material condition and more information about building condition. (2.46)
- 2.60 Would like to see information provided that categorizes by the clusters, i.e. link the information to the geography. (2.49)
- 2.61 If we look at partnerships and potential revenue sources, would like have data that shows building by building what empty space is there. (2.50)
- 2.62 Would benefit from a bit more information regarding on what the committee will be doing. What will the committee's role be? (2.51)
- 2.63 White paper—because we are a district of 2500 students...what is the meaning of "minimum district standards". Is it left up to us to establish this? Would like to see examples of Long Range Facilities Plans from other districts and how they addressed this question. (2.52)
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- 2.65 Are there non-negotiable items that the committee should not address? (2.54)

ISSUE PAPER #3 21ST CENTURY SCHOOLS

BACKGROUND

There have been enormous strides in our understanding of how the brain functions and how children and adults learn. We now know that individuals learn in a variety of ways, requiring information to be provided in a variety of formats¹. This new knowledge has given rise to new approaches towards more effective teaching and learning: such as project-based learning, student-managed learning, small group work, independent research and presentation. While the realities of our modern world continue to change and evolve, our nation's school buildings are largely still configured and designed as they were 80 years ago (designed as factories for learning—with repetitive classrooms, sized for 30 students in a double-loaded corridor configuration). This paper explores how the 21st century School might address a new paradigm, which puts the student at the center of learning.

21st Century Learners are citizens of the world. They are connected through media and technology to a greater network of information than was ever previously contemplated or realized. They need to learn to sift through vast quantities of information and evaluate it, not memorize it. These learners must be more creative and innovative. They must work in a more collaborative way. As global citizens, they need to understand and relate to different cultures and be multi-lingual. They will live in a rapidly changing world, which requires them to be flexible to meet the needs of the future. They must be more self-directed and prepared to be life-long learners.

PPS and its Vision

“We must have high expectations for all of our students to gain the skills to contribute in a changing world. This requires an unrelenting focus on student learning and a shared belief among all of our staff in each student’s potential to succeed. Our students require this of us, and the future health of our community and our economy depends on it.”

— Superintendent Carole Smith

Strategic Framework

Portland Public Schools has developed a strategic framework for 2011-12 to focus its work with students in the areas most essential to their success. **At the heart of this framework is one goal: every student succeeds, regardless of race or class.**

To achieve this goal, the framework focuses work in four essential areas:

- **Effective educators**
We must ensure that all educators are equipped to help our diverse students succeed. That means hiring culturally and racially diverse teachers, aides and administrators and supporting them with mentoring, peer collaboration, skill development and leadership opportunities, while matching their skills to the needs of students in the schools they serve.
- **Equitable access to rigorous, relevant programs**
Every student — no matter the grade level, race, income or address — should have access to a consistently rigorous education with rich learning opportunities. We must set and hold clear and high standards for all, with varied ways for students to show what they have learned. Our teaching methods must be flexible, engaging and culturally relevant to help all students achieve.
- **Supports for individual student needs**
We must use a range of teaching strategies in response to a range of learning styles. We must check students’ progress regularly and then help students accelerate their learning or catch up if they are behind. And we must wrap support around our students starting with strong early childhood education.
- **Collaboration with families and community**
We must place family and community inside the circle of how our schools serve students, forming essential community and family partnerships that support the whole child.

Cultural Transformational Elements

In order for our academic initiatives to be successful, there is a need to transform the culture of PPS. These elements should be embodied by every school, department and employee: *equity, service orientation, and accountability.*

- **Equity in all decisions and interactions**
The District shall provide every student with equitable access to high-quality and culturally relevant instruction, curriculum, support, facilities and other educational resources, even when this means differentiating resources to accomplish this goal.
- **Create a service driven organization**
A healthy work environment and clear expectations contribute to employee satisfaction, which will motivate staff to provide excellent service to schools and community.
- **Individual and Team Accountability**
A culture of accountability for student progress is built through clear expectations, shared leadership, ongoing monitoring of progress, structures that promote dialog and action in support of continuous improvement. It requires making success visible, and swift decisions around required change when results and not demonstrated.

Foundational Elements

In order for our academic initiatives to be successful, we need to build foundational, supportive systems, structures and tools across the district. The two priorities below represent an ongoing area of focus, which needs to align with and connect to the academic strategies laid out above.

- **Build a Stable Operating Model**
Stable and dedicated PK-12 educational funding and an organization adaptive to changing environments will provide a strong foundation for student success.
- **Modernize our Infrastructure for Learning**
Develop a safe, healthy, modern infrastructure for learning at every school which contributes to student and staff success.

RELEVANCE FOR FACILITIES PLAN

What defines a model school? If such a paradigm exists, design would number among the key factors. Striving for realistic solutions to existing problems such as dated facilities, overcrowding, rising costs and stringent budgets, many public and private institutions are embracing proactive, holistic reforms that integrate innovative teaching methods such as hands-on learning and collaborative project-based work with more effective learning environments that are flexible, adaptable and technology-rich. Increasingly, insightful teams of administrators, educators and parents are collaborating with architects to re-imagine the schoolhouse. The goal: to create buildings that will engage students (with just-in-time learning), welcome the community (by being a 24/7 resource) and adapt to the inevitable shifts in population and pedagogy (by utilizing community resources). Good buildings do matter. This commitment to an idea, and to architecture as a means to achieve it, signifies a valuable investment in the future of our children².

In order to meet the nation's needs for the twenty-first century, the U.S. Department of Education offers the following guidelines:

The design of learning environments should:

- :: Enhance teaching and learning and accommodate the needs of all learners
- :: Allow them to serve as centers of the community
- :: Result from a planning | design process involving all stakeholders
- :: Provide for health, safety, and security
- :: Make effective use of all adaptable resources
- :: Allow for flexibility and adaptability to changing needs

Current, dated facilities do not support these aspirations. Many schools do not reflect the cultural norms of the community. Facilities are generally designed in a "one-size-fits-all" manner. While many schools across the nation are located in historic neighborhoods, they are not always open for community use. (PPS-Over 600 groups are currently using the Civic Use of Building (CUB) and in the first six months of FY 2011-12, 607 groups reserved PPS's facilities with over 75,000 individual bookings for school rooms or athletic facilities.) Many school facilities have not been upgraded since their construction and have poor heating and ventilation systems, do not meet current earthquake safety guidelines and in some cases still contain hazardous materials. Older building configurations were designed to support one teacher with a group of 30 students. There is limited flexibility for team-teaching or convening a variety of student-group sizes and typically no space outside the classroom for private conversations to facilitate more interpersonal instruction/tutoring.

ELEMENTS OF THE 21ST CENTURY SCHOOL

Multiple Use Spaces

The traditional "cells and bells" educational model organizes "cell"-like classrooms along both sides of a corridor. Knowledge transfer is interrupted by the sound of a "bell" which indicates to students that it is time to move to a new classroom or start a new session³.

This educational "Ford"-Model was based on the following assumptions of the 20th century post-industrial society:

1. Learning is a linear knowledge transfer from teacher to student, which happens inside a classroom and standardized testing measures the capability of each student to retain knowledge.
2. Students with the highest test scores and IQs will gain access to careers with the highest compensation potential, which will lead to a fulfilled life.
3. A pre-determined number of students will all learn the same thing at the same time from the same person in the same way in the same place for several hours a day.
4. Students from predominantly white, affluent neighborhoods have priority in advanced course work.

5. Any exception to the “norm” was not accommodated (e.g. Students with disabilities or who speak a home language other than English were unlikely to succeed educationally.)
6. Students adapt to the teachers instruction style.

In the future, it is anticipated the most valuable US export will be creativity and innovation⁴ and these attributes will ensure access to careers with the highest compensation potential and continued employment in a global marketplace. The physical implication of this trend is the need to support self-directed learning with an emphasis on educating the whole child (helping students use both the left and right sides of the brain).⁵

In addition to the changing economic landscape, new brain-based research resulted in the awareness that learning is not linear but holistic; it is not uni-dimensional but multi-faceted⁶. The new learning paradigm must allow different students, of varying ages, to learn different things from different people in different places in different ways and at different times.

Learning Everywhere

Learning can take place anywhere. Spaces that support multiple uses are places that provide space for a wide range of learning styles. Additionally, they are spaces that can take a variety of forms depending on the school's social and cultural context, students' ages and abilities, educational philosophies, curriculum and pedagogies. Multi-purpose learning spaces must be flexible. They should be able to serve a variety of learning communities within the school as well as the community surrounding the school.

Flexible—Contemporary learning requires larger spaces and enables the combining of small student groups. Learning spaces that can be divided into smaller, more intimate sizes using shelving, lounges, furniture, screens etc. are what is desired for more collaborative work. They need to be spaces for large group meetings and spaces for multiple uses including creative, verbal, experimental and collaborative activities.

Connected—These types of learning spaces provide both indoor and outdoor connections. They can include glass walls or large windows to connect students to nature while also providing a connection to the school network and Internet through wireless technology.

Collaborative--For a learning space to be collaborative, it needs to have areas that support small group work without creating disruption of other class activity. These collaborative spaces are often located outside the traditional classroom, not situated in highly trafficked areas and placed within a teacher's line of sight to facilitate supervision. Circular desks, flexible furniture and interactive equipment further support collaborative and project-centered learning. In science classrooms, lab benches installed at the back or around the periphery of classrooms, rather than in a separate room is a common trend.

Multi-sensory—The provision of large areas for work displays and changing visual stimulus as well as providing access to graphic and multi-sensory digital resources on notebooks or tablets or through connection to a network or the internet are all key components in contemporary and multi-purpose learning spaces. Allowing creation and playback of student created sound files including podcasts and providing space for kinesthetic activities are all different ways that a learning space can serve many purposes.

Study spaces—What makes a great study space? Natural light, comfortable furniture and a good view are not required, but studies have indicated that they make this type of space more effective for student achievement. In addition, study spaces should be quiet, can be enclosed or separated from distractions and have ample access to electric outlets and the Internet.

Multi-purpose spaces—Spaces are sometimes used for more than one purpose. A solution that was popular in past learning space designs was to make a space multi-use by installing movable wall partitions between small rooms. A dynamic classroom environment can make excellent use of moveable furniture, but clearly the movable wall is primarily used for semi-permanently turning two small rooms into one larger one or vice versa. Another solution for multi-purpose space is to provide break-out spaces which can be used for small-group pull-out work or can function for community use during after-school hours.

Shared Spaces—Providing space where teachers can drink coffee or eat lunch together in shared break rooms can have big implications. Putting functional spaces like copy rooms and mailrooms next to kitchens and break rooms makes great sense. While space is precious, some of the most fruitful interactions between people happen by chance and certain spaces do a great job of bringing people together. Adding a whiteboard, bulletin board, coffee table and some periodicals to your break room will enhance interaction. Whiteboards in public spaces form focal points for conversation and chance meetings. Adding small community kitchen facilities adjacent to the student commons helps support community use.

Design Patterns

“The Language of School Design” by Prakash Nair and Randall Fielding identifies 18 learning modalities that should be supported in a 21st Century School:

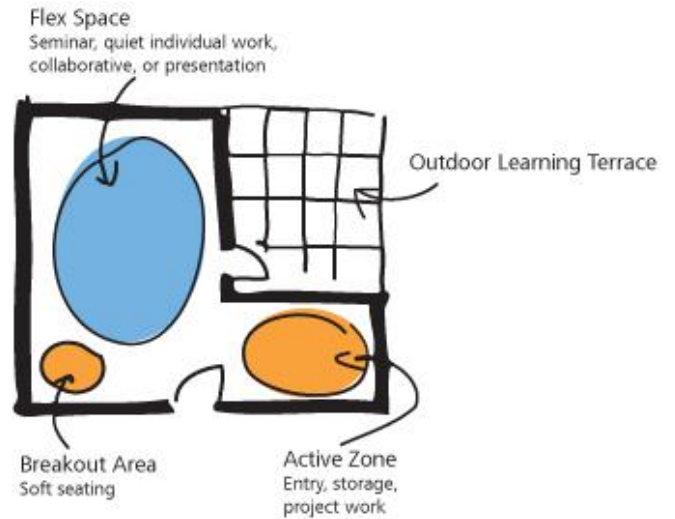
1. Independent study
2. Peer tutoring
3. Team collaborative work in small and mid-size groups (2-6 students)
4. One-on-one learning with a teacher
5. Lecture format with the teacher or outside expert at center stage
6. Project-based learning
7. Technology-based learning with mobile computers
8. Distance learning
9. Research via the Internet with wireless networking
10. Student presentations
11. Performance and music-based learning
12. Seminar style instruction
13. Community service learning
14. Naturalist learning
15. Social / emotional learning
16. Art-based learning
17. Storytelling (floor seating)
18. Learning by building

In order to address each modality, Prakash Nair and Randall Fielding developed a catalog of 25 Patterns that represent a fairly complete range of design principles. This checklist allows participants in the planning process to talk the same language. The patterns encompass the whole range of the human experience. In order to be holistic, they address the senses as well the physical aspects.

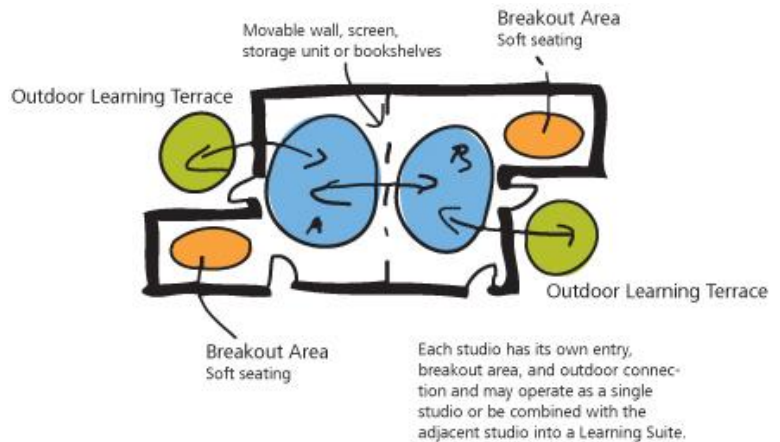
WELCOMING ENTRY makes us aware of the complex psychological and practical aspects of this zone that can directly influence if the school will be accepted as a resource by the community, allows students to form a bond through gathering spaces inside and outside as well as communicate with each other through access to student display areas, reduces the stress level through ease of orientation and safety through clear sightlines. Learning important social skills happens right when you enter and sets the tone for the day.

CLASSROOMS, LEARNING STUDIOS, ADVISORIES AND SMALL LEARNING COMMUNITIES describes aspects of:

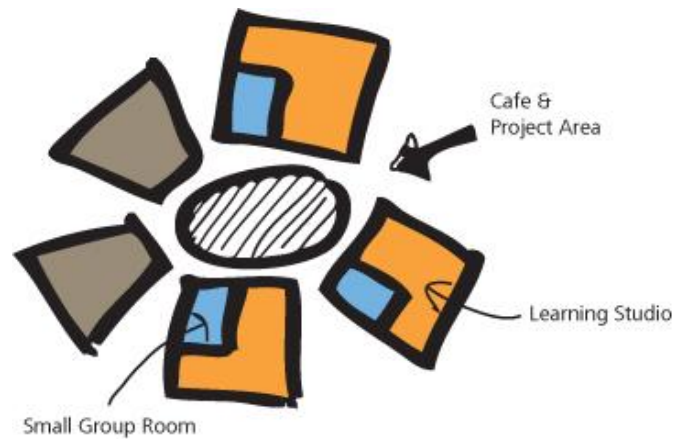
The learning studio is basically an L-shaped classroom zoned for multiple activities. The project area allows students to engage in model building and experimentation which exceed traditional time limits.



The learning suite combines two learning studios into a suite. Now large scale activities involving both studios can be accommodated as well as small scale activities, increasing the opportunities for resource sharing and interaction. Outdoor Learning spaces expand the range of activities further.



The learning community, can be used to break down the scale of a large school by creating wings within one building that contain studios and suites with associated indoor/outdoor break-out spaces as well as science labs, teacher work rooms and a central multi-purpose social space for project work and other large scale activities.



Other patterns include the WATERING HOLE SPACE where students can develop their soft skills (e.g. interpersonal, communication skills) through social discourse and collaborative learning. Soft skills are at the top of the list of qualifications for almost any profession today. On the other hand, a

CAVE SPACE allows students to retreat from the group for individual study and reflection. The caves should be located throughout the school.

These examples illustrate the complexity of demands a 21st Century School must address in order to create well rounded citizens who maintain a competitive edge in the century of CREATIVITY⁷. While some of these qualities can be accomplished in existing structures with minimum effort, others require a fundamental re-thinking and re-weaving of the educational fabric of today's schools. And the needs for elementary students may be different than the needs of secondary students.

Partnerships

Declining enrollment, aging facilities and lack of land for new schools have created new opportunities to rethink the American schoolhouse. In many places nationally, the 21st century school is smaller and located in town rather than on the outskirts. It may be an addition to an older building or even an adaptation of another type of building altogether. It leverages connections with other community resources, such as public libraries or nearby colleges or universities, and connects students to the globe through distance learning and online resources. It facilitates rich and meaningful learning experience for students beyond the classroom and creates the environment in which they can thrive academically and socially.

In a time of diminishing resources, partnerships can be a great way to augment school programs and provide educational continuity before and after school. A growing number of projects are also financed creatively through partnerships with public and private organizations.

PPS has a number of partnerships on a district-wide and local school level with public and private partners including Multnomah County, Portland Parks & Recreation and Portland State University as well as Nike, Intel, OMSI, Concordia University, Office Depot, Washington Mutual, Pixel Works and many other private partners.

Aligning services and programs

Rosa Parks School and Community Campus at New Columbia is a partnership between Portland Public Schools, the Housing Authority of Portland, Portland Parks and Recreation, and the Boys and Girls Club of Portland. Only the second new school built by Portland Public Schools in the last 30 years, Rosa Parks provided an opportunity for significant resource leveraging through partnerships and the opportunity to envision one option for early 21st century learning.

By aligning all of the partners' services and programs, using design to support learning, focusing on the whole child, and pursuing sustainable design strategies (including earning LEED Gold designation).⁸

Creating new learning opportunities

The Antonia Crater Elementary School and Chehalem Senior Center is another successful local example of community and school partnerships. In 1995, Antonia Crater, a teacher in Newberg, Oregon, donated land from her family farm to create an intergenerational facility. The school district gladly accepted this generous donation, and the local parks and recreation services provided federal block grant dollars to help build the facility. The result was a new senior citizen center built adjacent to the new school that was named after Ms. Crater.

Senior citizens walk directly into the school cafeteria for their meals and hold exercise classes in the school gym. Fourth grade students help serve the lunch to the seniors each weekday and several classes have adopted "senior buddies." The campus is also shared with the Chehalem Middle School and the Darnell Wright Softball Complex. The parks and recreation service maintains the senior center and has a working agreement to use the school's athletic fields during the summer⁹

Sharing facilities and leveraging resources

Building a new school is an opportunity to further expand alliances with community service providers, such as libraries and recreational facilities, and perhaps even make a new home together on a single campus. In Federal Way, Washington, the Truman Learning Center campus illustrates an example with similar features to the Rosa Parks center. A small high school serves 200 students in a single building. Athletic facilities for the campus are provided by an on-site Boys and Girls club|teen center through a land lease with the school district. A Head Start facility, also on the campus, provides childcare for children of students and faculty as well as early childhood learning. A public library is

located approximately one block from the campus and is utilized by the Truman students. The site enjoys an adjacency to a public park which provides recreational sports fields for the school and community. Completed in 2006, recent campus developments include a community garden, maintained by students and community volunteers, which in the last year alone produced 4000 pounds of fresh produce for local food banks.

Adapt and Re-use Existing Facilities

Another way to do more with less is to reuse what is already there. In recent years there has been a growing trend toward additions to and renovations of existing school buildings, as well as adaptations of other building types into schools. Nationally the percentage of children who live within a mile of school and who walk or bike to school has declined by nearly 25% in the last thirty years. While 71% of adult Americans say they walked or rode a bike to school when they were a child, today less than two in ten (17%) school-age children walk. Barely 21% of children today live within one mile of their school¹⁰. More than 40 percent of students at PPS Safe Routes partner schools walk or bicycle to school. That is significantly higher than the national average of 11 percent active trips to school (National Household Travel Survey 2009). It is also a local increase, up from 31 percent when the program began collecting data in the fall of 2006.

Adaptive reuse of existing buildings is one way to keep schools in established neighborhoods. Many older schools, particularly in cities, are located in well-established neighborhoods and, with creative adaptation; they can support the needs of the 21st century student quite well. These buildings many times utilize high quality materials, intricate detailing and grand scale that are difficult to afford in today's construction budgets. There are also many buildings that have qualities that can create great schools; warehouses, office buildings, and even shopping malls have all been creatively transformed into schools.

In Seattle, eight of twelve high schools have been modernized over the last six years. These buildings dated from early to mid-twentieth century, and all were located in established urban neighborhoods. Renovations included comprehensive code compliance as well as addressing technological and pedagogical needs of twenty-first century learners.

Grover Cleveland High School was built in 1927. Given the opportunity to renovate this Seattle landmark, the school district also desired to accommodate four independent, theme-based academies on-site as well as a Science Technology Engineering and Math (STEM) program on the campus. The four separate communities provide the ability to break-down the large scale of the campus and create self-contained learning communities. Completed in 2010, this revitalized campus serves approximately 1000 students, while preserving a cherished Seattle icon.

Nathan Hale High School was constructed in 1962. The school was essentially a closed concrete box, full of long, windowless corridors that isolated students in disconnected, mazelike paths. When given the opportunity to rehabilitate the existing structure, central student social spaces were created and the school was opened up to address way finding and improve circulation. Student commons spaces were organized around two existing interior courtyards that were completely isolated from use and view. Interior windows connect learners and staff to one another, creating collaboration spaces, conference areas and computer stations throughout all areas of the school.

The library, athletic facilities and performing arts center are located to connect to the surrounding neighborhood and encourage community use. This school was recently featured in *Architectural Record*¹¹.

Expanding the boundaries

The 2010 Department of Education National Education Technology Plan suggests that schools have to change to provide students the time and space to use technology in rigorous ways that support learning. Technology in schools is no longer only about computer literacy but instead must be used to help students gain 21st century literacy and skills such as collaboration, visual literacy¹², storytelling and creativity that will allow them to thrive in the future. The school learning environment can be designed to facilitate opportunities for students to practice these skills.

The School Without Walls is a small, urban, public high school in the heart of George Washington University, Washington, DC, that offers an innovative early college curriculum and has created a student-centered campus, blurring the boundaries between high school and post-secondary education. This model is similar to PPS Jefferson HS and the Middle College for Advanced Studies.

The non-institutional character and day lit interior of the historic 19th century Ulysses S. Grant School building are echoed in the 21st century addition. By creating a collegiate ambiance, providing technology-rich learning environments, encouraging formal and informal interaction, and fostering a subtle sense of security, The School Without Walls' facilities encourage a strong learning community and enable a seamless transition to college¹³.

The School Without Walls attempts to provide a strict learning environment. The George Washington University Partnership is one manner in which School Without Walls expands the curriculum of its students. Additionally, the school uses science labs at the University of the District of Columbia, has a standing partnership with the Fried, Frank, Harris, Shriver & Jacobson law firm, and an informal journalism internship program with the George Washington University student newspaper, the GW Hatchet. The school has in the past conducted classes at the United States Capitol, the Corcoran Gallery of Art, the National Aquarium, the National Zoo, the Botanical Gardens and other academic resources available in the city. In doing so, it offers opportunities not common to most of the nation's high schools but models the use of community assets in support of student enrichment.

In the book *Rethinking Education in the Age of Technology* by Allan Collins and Richard Halverson, the authors lay out the development of schooling in this country, explaining how enthusiasts and skeptics argue how technology can help or not help learning and their vision on how we should be rethinking education in a technological world. They believe that "the skeptics are correct in that there are deep incompatibilities between technology and schooling, but the enthusiasts are correct in that education must change to stay relevant in the wake of the Knowledge Revolution."

The concept of “community of practice” was coined by Jean Lave and Etienne Wenger while studying apprenticeship as a learning model. People usually think of apprenticeship as a relationship between a student and a master, but studies of apprenticeship reveal a more complex set of social relationships through which learning takes place mostly with journeymen and more advanced apprentices. The term community of practice refers to the community that acts as a living curriculum for the apprentice. The practice of a community is dynamic and involves learning on the part of everyone. The perspective of communities of practice affects educational practices along three dimensions:

Internally: How to organize educational experiences that ground school learning in practice through participation in communities around subject matters?

Externally: How to connect the experience of students to actual practice through peripheral forms of participation in broader communities beyond the walls of the school?

Over the lifetime of students: How to serve the lifelong learning needs of students by organizing communities of practice focused on topics of continuing interest to students beyond the initial schooling period?

From this perspective, the school is not the privileged locus of learning. It is not a self-contained, closed world in which students acquire knowledge to be applied outside, but part of a broader learning system. The class is not the primary learning event. It is life itself that is the main learning event. Schools, classrooms and training sessions still have a role to play in this vision, but they have to be in connection with the learning that happens in the world.

School as we know it will not disappear any time soon; however, new systems are beginning to emerge. The beginnings of a new educational system can be seen in the explosive growth of home schooling, workplace learning, distance education, adult education, learning centers, special education, educational television and videos, computer based learning software, technical certifications and internet cafes.

The need for lifelong learning will require us to move away from the highly structured schooling institutions toward a model where the learner acts as consumer of a wide variety of learning experiences. Learners will need to develop the skills to judge the quality of learning venues and the kinds of social networks that provide guidance and advice. What emerges could be a system that is much more tailored to the individual, where instruction is not age based, and students have the ability to travel through the system at their own pace in a more customized way.

Advances in information technology will continue to make it possible to connect students to knowledge sources around the world. More and more schools are also finding new ways to connect to resources in the neighborhood. Whether it's a Skype call to another country or drama classes at the local theater, the boundaries of school are expanding.

From a learning standpoint, the most successful schools provide an environment where virtual connections to the world can be social, collaborative and meaningful, and connections to the neighborhood are real, empowering and relevant.

DESIGN TRENDS

Environmental Responsibility

For teachers and students to perform at their best, the building must perform well. It must create a comfortable environment, free of irritants, while also minimizing energy and resource use. The very best sustainable school buildings go beyond sustainability in terms of energy use and employ the building as a teacher of environmental stewardship and a laboratory for learning about natural processes. The school environment is important! There is increasing national concern about the buildings and spaces where students learn, and how these might affect both health and achievement.

Air Quality—Nationally many post WWII buildings were low cost construction and used hazardous materials in the construction process--formaldehyde-soaked carpeting, mercury-treated drywall, asbestos, sealed windows and noisy ventilation. These buildings are still in use today. Children are more physiologically vulnerable to toxins in the environment. Their organs are still developing; their metabolic rates are higher than adults, thereby taking in more air per pound of body weight than adults. Children are lower to the ground. Metals such as lead and mercury, and gases such as radon settle close to the floor. Children breathe this air, play on the floor, and rarely wash their hands.

Asthma is the most common chronic disorder in childhood, currently affecting an estimated 6.2 million children under the age of 18¹⁴. American school children missed 12 million days of school in 2000 due to asthma¹⁵.

Acoustics—Many classrooms feature a speech intelligibility rating of 75% or less. That means listeners with normal hearing can understand only 75% of words read from a list¹⁶. The ability to focus on speech does not mature until ages 13-15. To correctly interpret spoken words, children need to hear consonant sounds clearly¹⁷.

Day Light—Studies have shown that students with limited classroom day light were outperformed by those with the most natural light by 20% in math and 26% on reading tests¹⁸.

The impact of buildings on the environment is clear. Buildings represent:

- 65.2% of total U.S. electricity consumption
- Greater than 36% of total U.S. primary energy use
- 30% of total U.S. greenhouse gas emissions
- 136 million tons of construction and demolition waste in the U.S. (approx. 2.8 lbs/person/day)
- 12% of potable water use in the U.S.
- 40% (3 billion tons annually) of raw materials use globally

There is a trend to make buildings more sustainable. One measure of sustainability is Leadership in Energy and Environmental Design (LEED). The goals of LEED are to promote design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment

and occupants in five broad areas: sustainable site planning, safeguarding water and water efficiency, energy efficiency and renewable energy, conservation of materials and resources, indoor environmental quality. Other metrics include the natural step and the living building challenge.

School as a teaching tool—there is increasing use of the school to illustrate the impacts of buildings on the environment. The materials used, the energy consumed and connection to the outdoors all provide rich learning opportunities for student learning. Composting and recycling also play an important role in student life at many schools.

Learning for All

Early Learning—There is increasing recognition that the first few years of a child’s life are a particularly sensitive period in the process of development, laying a foundation in childhood and beyond for cognitive functioning; behavioral, social, and self-regulatory capacities; and physical health. Yet many children face various stressors during these years that can impair their healthy development. There is a corresponding trend to offer programs in schools such as Head Start, Pre-Kindergarten and Full Day Kindergarten programs to help mitigate the factors that place children at risk of poor outcomes. Such programs may provide support for the parents, the children or the family as a whole. These supports may be in the form of learning activities or other structured experiences that affect a child directly or that have indirect effects through training parents or otherwise enhancing the care giving environment¹⁹. The implication for school facilities is the need for more space to accommodate an expanded population. Early Learning space will also require the practical aspects of being more self-contained for: learning, napping, eating, toileting and playing.

Universal Design—There are over six million students with disabilities being educated in America. The vast majority have moderate impairments that are often not visible or easily diagnosed. Disabled children include those with learning difficulties, speech difficulties, physical, cognitive, sensory and emotional difficulties. These disabilities make it hard or impossible for students to utilize many areas of schools including playgrounds.

Universal Design is a trend in school design which originates from the belief that the broad range of human ability is ordinary, not special. Universal Design accommodates people with disabilities, older people, children and others who are non-average. It operates on the premise that many people can benefit from larger text, enhanced acoustics and pathways that are not difficult to travel. Universal Design addresses both the physical environment and the curriculum, incorporating three principles of flexibility: multiple methods of presentation, multiple options for participation and multiple means of expression. This provides a wider range of options for students to choose from—meaning that the curriculum adapts to the student rather than the other way around²⁰.

English Language Learners (ELL)—there has been a dramatic rise in the number of people in the United States who have limited English proficiency. Between the years 1990-2010 the percentage grew by 80%. This kind of growth has incredible implications for public schools, where most limited English language proficiency children will end up. National trends indicate:

- :: More immigrant families are moving to small-town or rural communities that haven't received many immigrants for at least a century.

- :: The federal No Child Left Behind Act has brought increased testing for English-language learners. The federal law has tightened exemptions for ELLs from taking state tests. States are required by law to create new English-language-proficiency tests for ELLs.
- :: Team teaching between English-as-a-second-language teachers and mainstream teachers is becoming more common²¹.

ELL facility implications are again providing more space to accommodate break-out programs. ELL classrooms require more storage for multi-lingual materials, the ability for small group interaction and individual testing.

Charter Schools— Charter school laws return much of the control of schools to their local constituencies by granting the schools greater fiscal and educational autonomy in exchange for greater accountability. The theory behind charter schools is that, by giving them freedom to innovate and holding them accountable for results, the schools will develop educational models that are responsive to their communities and increase student achievement. At a systemic level, the state and federal governments expect that charter schools essentially become laboratories for the development and testing of educational reforms that can inform improvement in traditional schools (U.S. Department of Education, 2004). The first state charter school law was passed by Minnesota in 1991 and the first charter school opened there in 1992. In 1995 the federal government began support of charter schools with the passage of the Public Charter Schools Program (U.S. Department of Education Office of the Under Secretary, 2004).

There are now 2,996 charter schools in 38 states and the District of Columbia with a total enrollment of nearly 800,000 students²².

Charter School facilities may require a separate identity, with identifiable entries and their own security system. They may need more flexibility to accommodate unique program needs.

[Custom Tailored: Trends in Charter School Educational Programs](#)
[Jon Christensen, Lydia Rainey](#)

Physical Education—In recent years, leading government health organizations have issued multiple reports outlining how a lack of exercise combined with poor eating habits are having devastating effects on the nation's children. One of the most alarming developments, according to organizations such as the Centers for Disease Control and Prevention (CDC) and the U.S. Secretary of Health and Human Services, is the doubling of childhood obesity in the past 30 years—a trend they expect only to get worse as more schools eliminate gym classes and recess. Current trends in PE are to stress life-long physical activities such as bicycling, running and swimming—because students are more likely to carry these activities into their adult lives.

PE—2009 ORS 329.496 requires a minimum number of minutes per week of physical education for students in kindergarten through grade 8. The law will take effect in the 2017-2018 school year.

Oregon Schools today typically provide fewer minutes per week than those stipulated by the new law. This will mean an increase in the amount of PE instruction time, perhaps yielding the need for more or different physical activity spaces.

http://www.pta.org/topic_decline_of_physical_activity.asp

<http://www.ode.state.or.us/teachlearn/subjects/pe/house-bill-3141data-report-1-30final.pdf>

<https://www.oregonlaws.org/ors/329.496>

SUMMARY

This paper is intended to give a flavor of how educational delivery and facility design are evolving. There are both challenges and opportunities ahead. With the PPS Long Range Facility Plan we have the opportunity to enhance how teaching and learning takes place; rethink how the environment can support learning; and create more dynamic, flexible and inspiring spaces that are also more connected to the neighborhood and other resources.

¹ Howard Gardner. *Frames of Mind* (LJ 10/1/83).

² *Schools of the 21st Century*, [Architecture Record](#); January 2012

³ Randall Fielding & Prakash Nair. *The Language of School Design: Design Patterns for the 21st Century School* (2005). 18-19

⁴ Sir Ken Robinson. *All our Futures: Creativity, Culture, and Education*. 1998 Report for the UK Government

⁵ Daniel Pinic. *A Whole New Mind* (2006)

⁶ Randall Fielding & Prakash Nair. *The Language of School Design: Design Patterns for the 21st Century School* (2005).

⁷ Randall Fielding & Prakash Nair. *The Language of School Design: Design Patterns for the 21st Century School* (2005). 19

⁸ *Learning By Design*, [American School Board Journal](#); Fall 2011

⁹ *Catching the Wave: Building Schools with Senior Citizens in Mind* [National Clearing House for Educational Facilities](#); October 2002

¹⁰ Beldon Russonello & Stewart Research and Communications, *Americans' Attitudes Toward Walking and Creating Better Walking Communities*

¹¹ *Schools of the 21st Century: the Latest Thinking and Best Ideas on the Planning and Design of K-12 Buildings*, [Architectural Record Online](#) January 2012

¹² The term "visual literacy" is credited to John Debes, co-founder of the [International Visual Literacy Association](#).^[1] In 1969 Debes offered a tentative definition of the concept: "Visual literacy refers to a group of vision-competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences."^[2] A white paper drawn up in January 2004, defines visual literacy as "understanding how people perceive objects, interpret what they see, and what they learn from them."^[3] However, because multiple disciplines such as [visual literacy in education](#), [art history](#) and [criticism, rhetoric, semiotics, philosophy, information design](#), and [graphic design](#) make use of the term visual literacy, arriving at a common definition of visual literacy has been contested since its first appearance in professional publications.

Since technological advances continue to develop at an unprecedented rate, educators are increasingly promoting the learning of visual literacy's as indispensable to life in the [information age](#). Similar to [linguistic literacy](#) (meaning making derived from written or oral human language) commonly taught in schools, most educators would agree that literacy in the 21st Century has a wider scope. Educators are recognizing the importance of helping students develop visual literacy's in order to survive and communicate in a highly complex world

¹³ *Learning By Design* [American School Board Journal](#); Fall 2011

¹⁴ Capital E, *Greening America's Schools: Costs and Benefits*, in [The Third Teacher](#) (2009).

¹⁵ American Federation of Teachers, *Building Minds, Minding Buildings: Turning Crumbling Schools into Environments for Learning*, in [The Third Teacher](#) (2010).

¹⁶ KI Education, *American School & University: Creating Positive, High Performance Learning Environments*, in [The Third Teacher](#) (2010).

¹⁷ OWP/P Architects, VS Furniture & Bruce Mau Design. [The Third Teacher](#), (2009)

¹⁸ National Clearinghouse for Educational Facilities, *Do School Facilities Affect Academic Outcomes?* in [The Third Teacher](#).

¹⁹ *Labor and Population: Proven Benefits of Early Childhood Interventions* [RAND Research Brief](#). (2005)

²⁰ OWP/P Architects, VS Furniture & Bruce Mau Design. [The Third Teacher](#), (2009)

²¹ [Education Week](#) January 12, 2012

²² Rothman, R. *Telling Tales Out of Charter School*. Boston: Harvard Graduate School of Education. (2004).

ADVISORY COMMITTEE MEETING 3
LONG RANGE FACILITY PLAN
Rosa Parks Elementary School
31 January 2012

Elements of the 21st Century School

AGENDA:

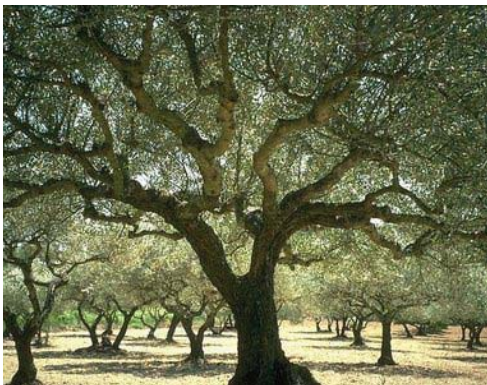
Background
Elements of the 21st Century School
Case Studies

mahlum

background

In 385 Plato met under a tree...
and there was order.

1600 years later some crazy Austrians discovered L.A....
and there was chaos



vastly different from the european model of learning through apprenticeship, public schooling in america called for a more generalized curriculum aimed at educating citizens for a democratic society



© 2011 MAHLUM



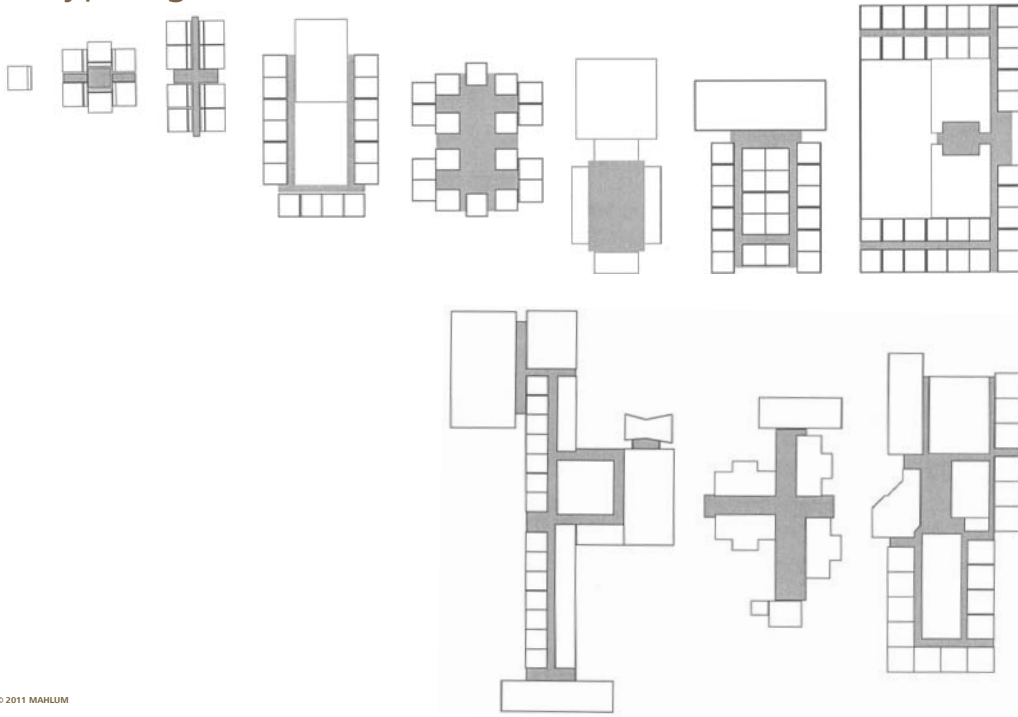
evolution of pedagogy

- 1780's – one room schoolhouse: multi-age, community based
- 1800's – lancaster model: fixed seats, large classrooms, rote memorization
- 1850's – the quincy plan: 'graded' classes, 31'x26' for 55 students
- 1910's – the gary plan: 'work-study-play' specialized spaces
- 1940's – crow island: utilizing form, space and order to enhance learning
- 1950's – boomers: under population pressure, crow island plan was 'cloned'
- 1960's – open plan: "...freedom for self-directed education..."
- 1970's – energy crisis eliminates windows, renovation abounds
- 1980/90's – 'schools within schools', 'neighborhoods' & 'houses'

21st century and beyond

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typologies



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main objective:
provide separation from work and family
provide shelter and basic comfort

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evolution from the one-room to multi-room layout:

“The Lancaster Model” resulted in the unification of the separate reading and writing schools, includes history, grammar, composition.



evolution from multi-room to grade school in 1848:

boston’s quincy grammar school is the first fully graded public school building in the us. grades were separated by floor with the auditorium on top and admin in the basement.

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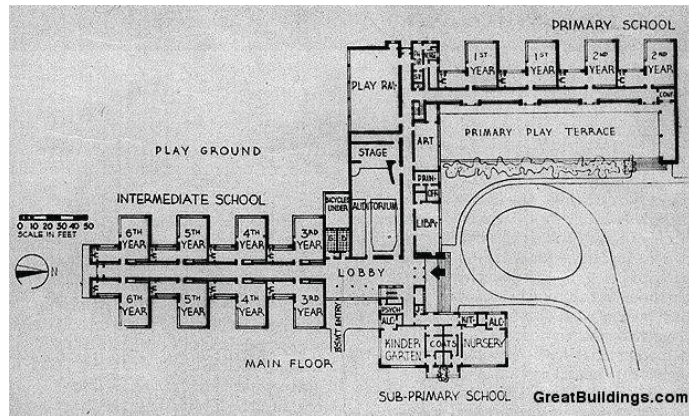
THE BASIS OF THE GARY PLAN OF TEACHING.
 The Principles Suggested for Educators to Consider—What the Enthusiasts Claim for It and What They Do Not.

BY ROBERT C. MERRILL.

The essence of the Gary Plan of Teaching is that it is a new plan for the education of the young. It is a plan that is based on the principle that the child is a human being who has his own life and his own way of living. It is a plan that is based on the principle that the child is a human being who has his own life and his own way of living. It is a plan that is based on the principle that the child is a human being who has his own life and his own way of living.

1912, the “Gary Plan” envisions a “work-study-play” school:

Reformist push for new educational approach based on learning through creative participation. specialized classrooms accommodate science, art, vocational training, gymnasiums, workshops playground and an auditorium.



Crow Island – 1940’s, first time architecture was recognized as partner in the educational process:

superintendent c.w. washburne meets with l. perkins and e. saarinen to replace the formal rigid organization of the victorian box and classroom cells with a residential scale schoolhouse in which classrooms are designed to support each educational program, zoned by age group with four classroom wings surrounding a common activity core.

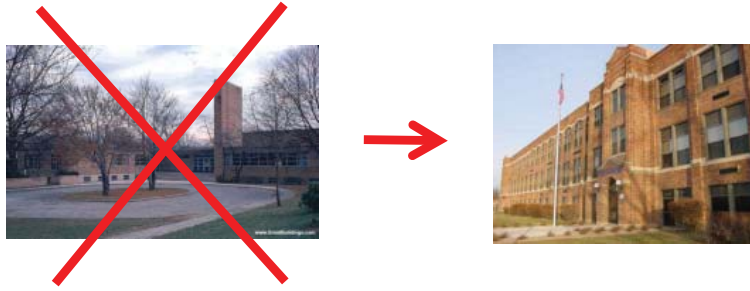




Each classroom is a self-contained unit; an L-shaped space with its own workroom, outdoor study/play courtyard, restrooms, sink and drinking fountain. These learning environments foster creative curricula and warm communities by design..

WWII intervenes





funds that had been dedicated to new school construction were diverted to finance the war
WWII prohibited educators and architects from building on the lessons learned from crow.

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1950's and 60's marks the highest level of school construction in history

architects are scrambling to meet the urgent demand focus on economy and efficiency
rather than matching program and plan. many schoolhouses reverted to plans used a
half century earlier. where crow was used is was modeled in form, not in spirit.





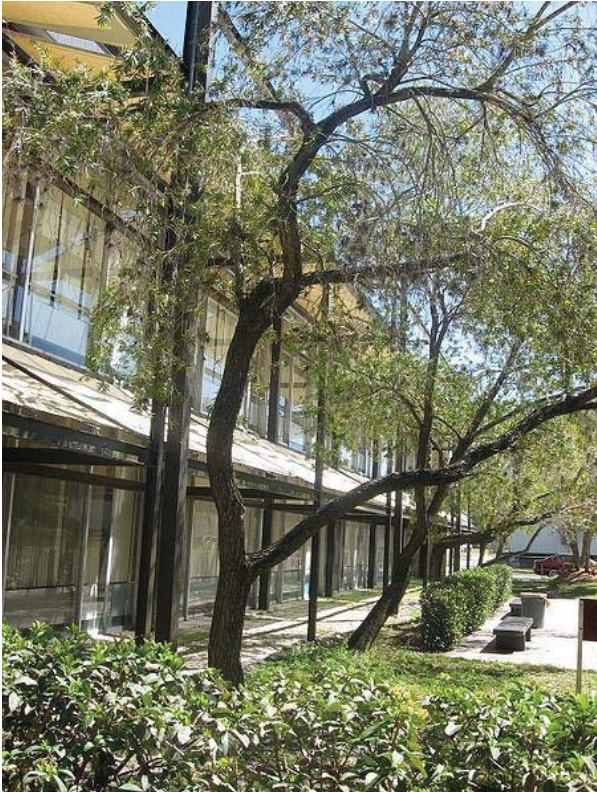
low tech function / high tech look

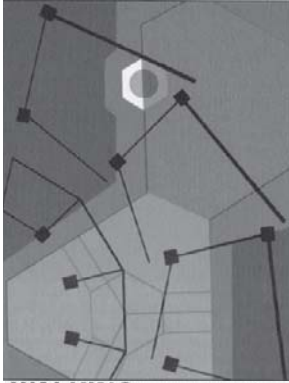


1957 riverview high school, florida (paul rudolph)

solutions integrated natural daylight, minimized direct sun and maximized ventilation. covered walkway ensured students were always protected from the sun and rain. generous corridors open at both ends to ensure a constant cross breeze. internal high-level windows in the classrooms ran the length of these corridors narrow slots in floors open to below along each side. Hot air was naturally drawn out of the classrooms and corridors, rising up and out clerestory windows in the hallway

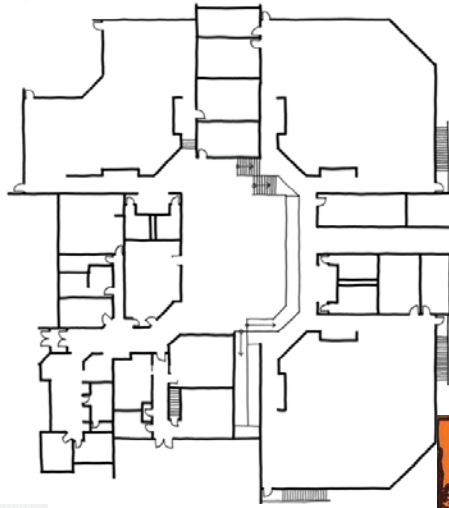
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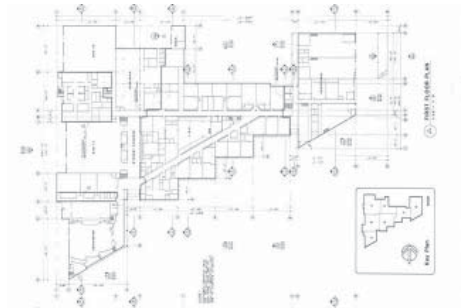
WALKING THE OPEN PLAN ROAD

The open plan school concept is a physical expression of today's academic dedication to the individual student. It is a giant step forward in the crusade to better equip children for life in our increasingly complex, individualized world. One person summed up the ultimate goal of education when he said, "The task of a teacher is to help the student get along without him."



1960 the open plan was imported from England:

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1970's and 80's mark more stagnation:

security concerns and the energy crisis still prevent architects to become the partner in the educational process = mega schools with cell lined corridors Become the norm.

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clusters & small group academies

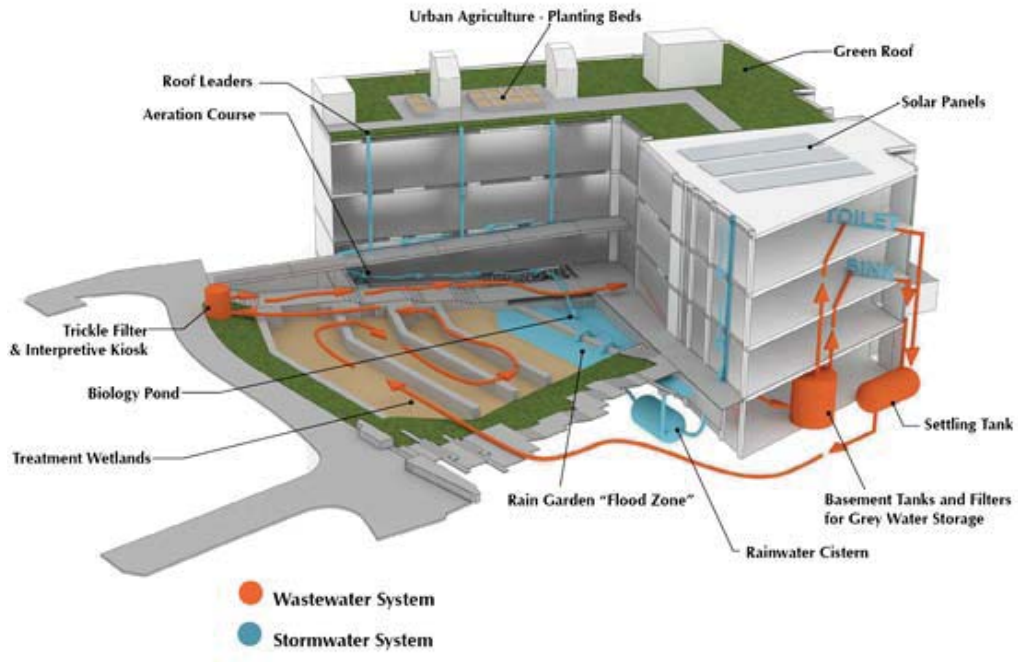




sidwell friends middle school, dc (kieran timberlake associates)

per w. knox, aia, there are three dimensions to a green school:
healthy school – non toxic
high performance – conserves energy, water and money
building is a teaching tool – promotes stewardship of the world

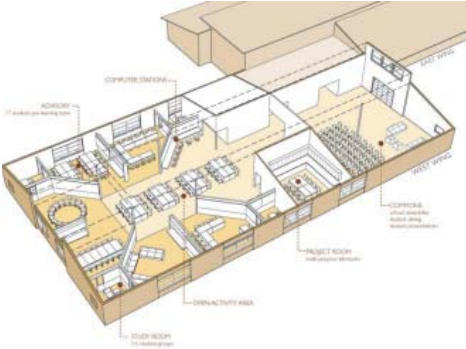
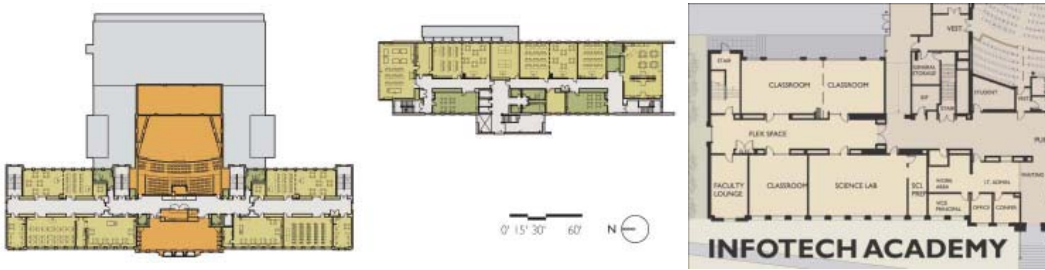
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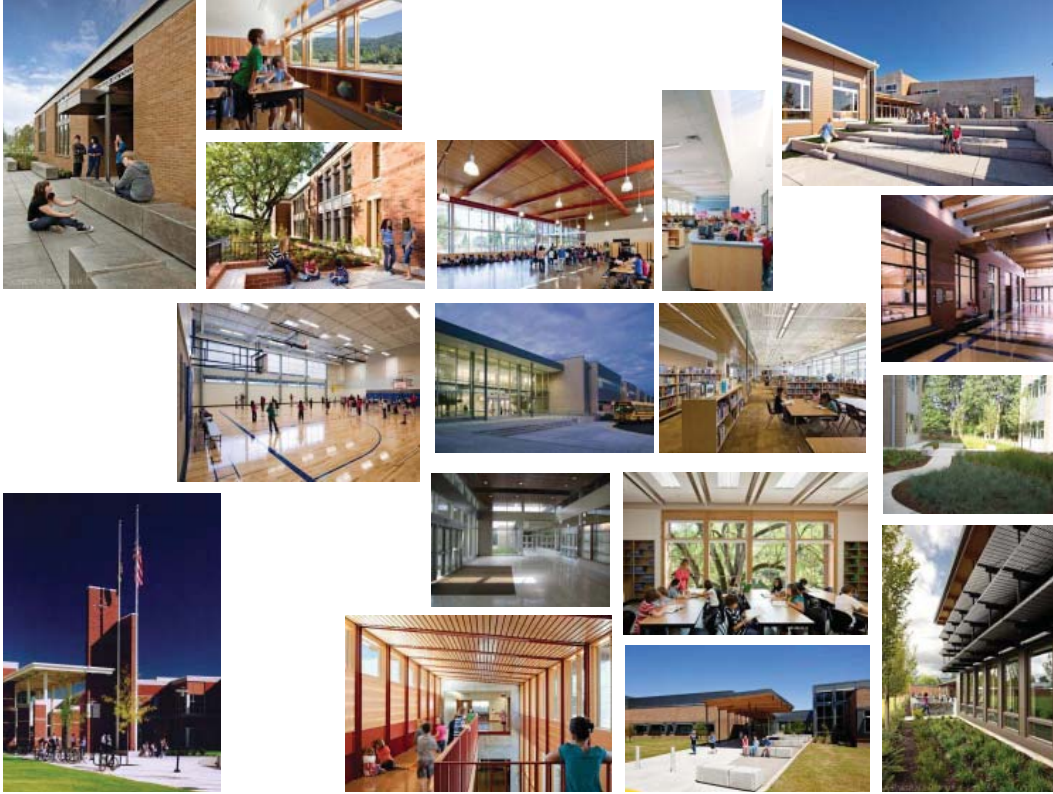
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project based career tech education / science tech STEM student driven interest



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Portland Public Schools Framework

Portland Public Schools has developed a strategic framework for 2011-12 to focus its work with students in the areas most essential to their success. **At the heart of this framework is one goal: every student succeeds, regardless of race or class.**

- :: **Effective Educators**
- :: **Equitable Access to rigorous, relevant programs**
- :: **Supports for individual student needs**
- :: **Collaboration with families and communities**

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US Department of Education Guidelines

- Enhance teaching and learning and accommodate the needs of all learners**
- Allow them to serve as centers of the community**
- Result from a planning | design process involving all stakeholders**
- Provide for health, safety, and security**
- Make effective use of all adaptable resources**
- Allow for flexibility and adaptability to changing needs**

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Elements of the 21st Century School



Elements of the 21st Century School

- :: Multiple Use Spaces
- :: Learning Everywhere
- :: Design Patterns
- :: Partnerships
*Aligning services & programs
Creating new learning
opportunities*
- :: Sharing Facilities and
Leveraging Resources
- :: Adapt and Re-use Existing
Facilities
- :: Expanding the Boundaries
- :: Design Trends

Multiple Use Spaces

long-term adaptability



long-term adaptability



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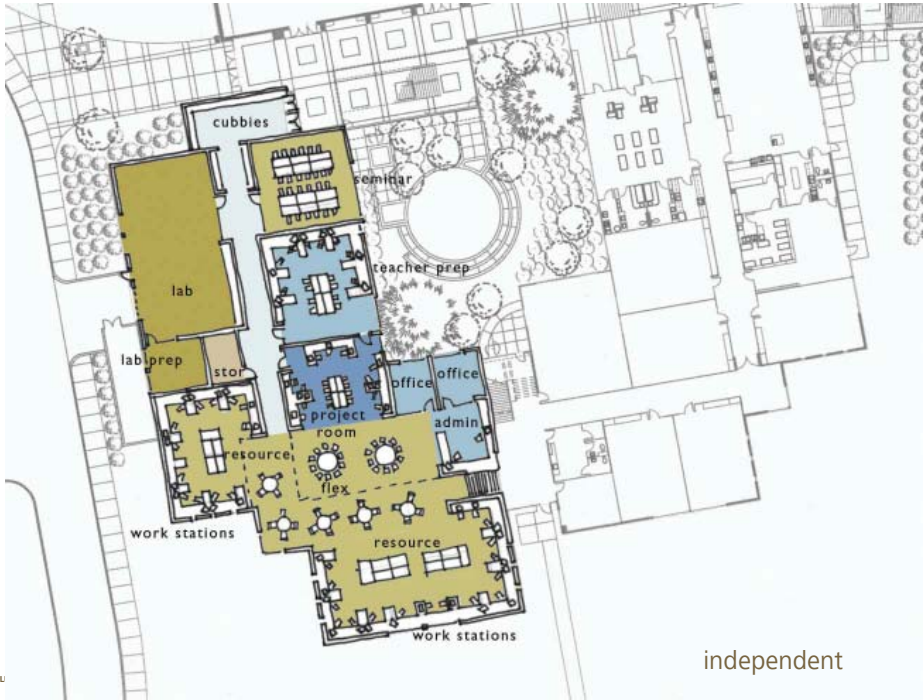
long-term adaptability



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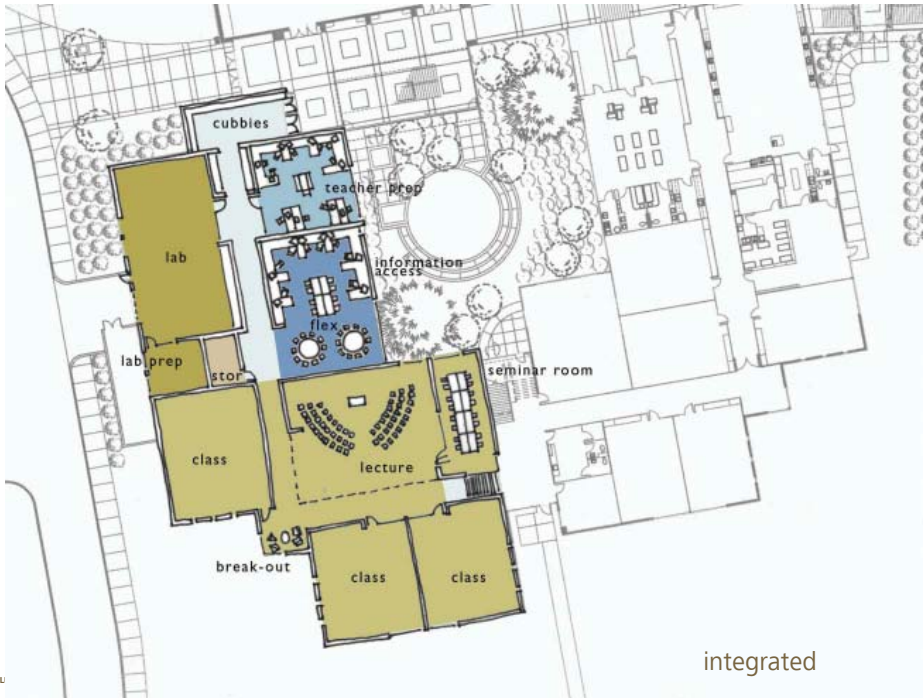
departmental

long-term adaptability



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long-term adaptability

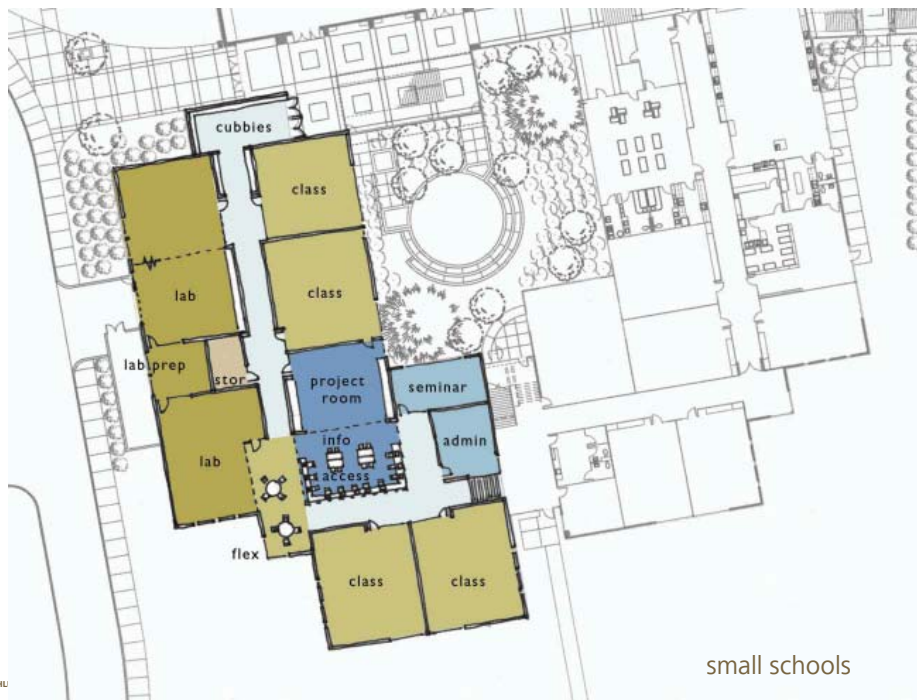


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long-term adaptability



long-term adaptability



Learning Everywhere



Facilitate Learning Everywhere

- Corridors**
- Outdoor Spaces**
- Breakout Spaces**
- Presentations Spaces – Large & Small**
- Collaboration Spaces**
- Connected**
- Transparent**
- Scaled**

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Facilitate Learning Everywhere

Engaging

Flexible | Adaptable | Convertible

Safe

Durable | Enduring

Healthy

Celebrates Culture

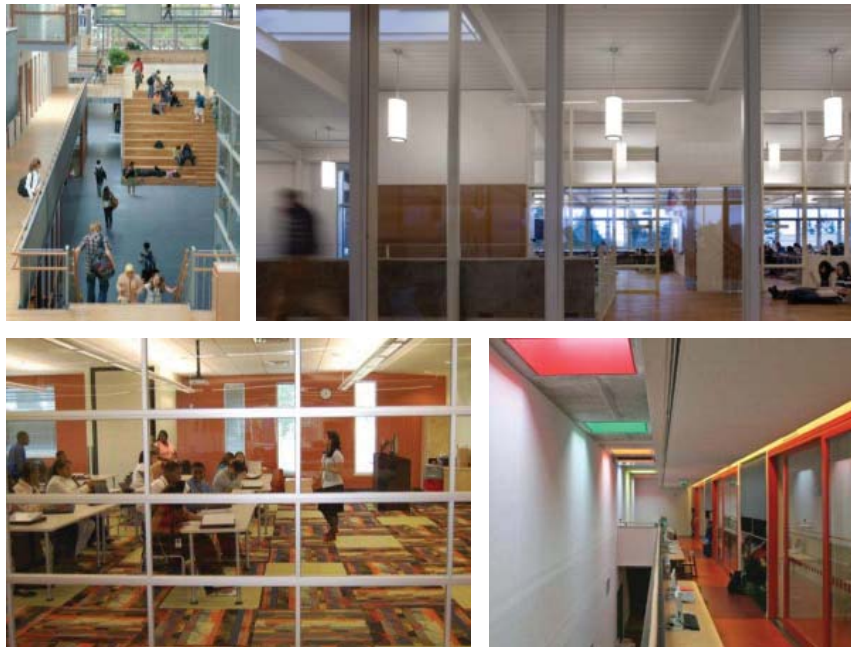
Challenging

Inspirational

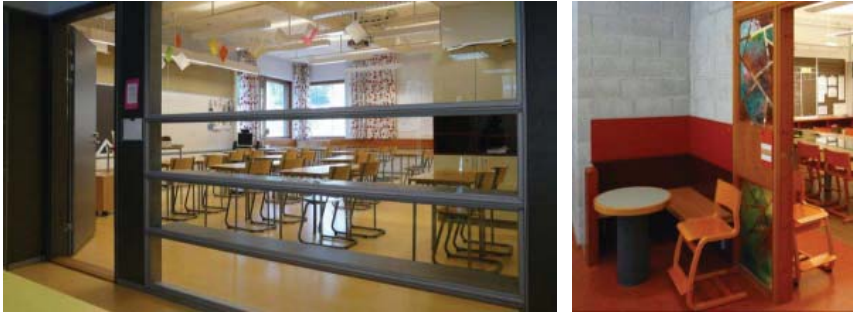
Supportive

Courageous

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Design Patterns



Learning Modalities – 21st Century School

- :: Independent study
- :: Peer tutoring
- :: Team collaborative work
- :: One-on-one with teacher
- :: Lecture format
- :: Project-based learning
- :: Technology-based learning
- :: Distance learning
- :: Research via Internet
- :: Student presentations
- :: Performance & music-based
- :: Seminar style instruction
- :: Community service learning
- :: Naturalist learning
- :: Social | emotional learning
- :: Art-based learning
- :: Storytelling (floor seating)
- :: Learning by building

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Partnerships



Seek Education Partnerships & Joint Use

Augment School Programs

**Provide Educational Opportunity
Before and After School**

Potential Funding Source

**Shared Sites
(Parks and Recreation & others)**

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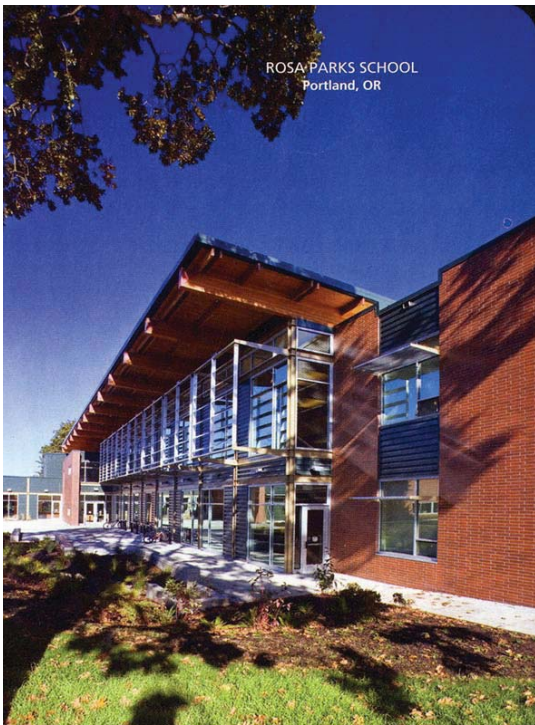
Aligning Services & Programs



Rosa Parks School, Portland, OR

Dull Olson Weekes

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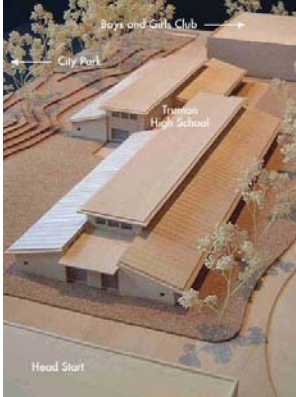


Rosa Parks School, Portland, OR

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Dull Olson Weekes



Sharing Facilities and Leveraging Resources



Truman Learning Center, Federal Way, WA

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Truman Learning Center, Federal Way, WA

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Truman Learning Center, Federal Way, WA

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Truman Learning Center, Federal Way, WA

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Truman Learning Center, Federal Way, WA

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Adapt and Re-use Existing Facilities



Adapt and Re-use Existing Buildings

**Additions and Renovations
to Existing Buildings**

**Keeps School Facilities in
Established Neighborhoods**

**Adaptive Reuse of Other
Building Types into Schools:
Warehouses, Office buildings, Retail**

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Expanding the Boundaries



Integrate Technology Throughout

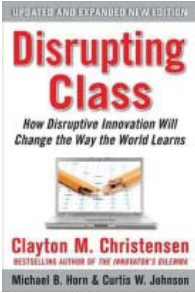
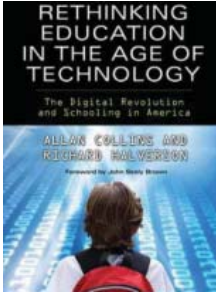
**Not Only about
Computer Literacy**

Visual Literacy

Collaboration

Storytelling

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Integrate Technology Throughout

**Rethinking Education
in the Age of Technology**

Allan Collins and
Richard Halverson

**Disrupting Class, How Disruptive
Innovation Will Change the Way
the World Learns**

Clayton M. Christensen
with Michael B. Horn
and Curtis W. Johnson

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Utilize Neighborhood & World as Campus

Utilize Skype and Other Technology to Foster Connections Locally & Internationally

Expand Learning by Creating Social, Collaborative and Meaningful Connections that are Relevant and Empowering

Utilize Neighborhood Venues for Drama | Music Presentations

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Maximize Site Connection to Community

Reduces the Need for Large Site

Utilize Parks & Recreation Centers and Sites, Potentially Freeing Up School District Land for More Outdoor Learning Opportunities

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The School Without Walls, Washington, DC

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Environmental Responsibility



Embrace Sustainable Design

Teachers and Students Perform Best when Building Performs Well:

Comfortable Environment

Free of Irritants | Toxins

Minimize Energy & Resource Use

Create Building as a Teacher of Environmental Stewardship & a Laboratory for Learning About Natural Processes

Increase User Performance

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Sustainable School Opportunities

Envision a sustainable school

Establish sustainability goals

Identify opportunities and strategies

Identify educational opportunities

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Environmental Impact of Buildings

65.2% of total U.S. electricity consumption

36% of total U.S. primary energy use

30% of total U.S. greenhouse gas emissions

136 million tons of construction and demolition waste in the U.S. (approx. 2.8 lbs/person/day)

12% of potable water in the U.S.

40% (3 billion tons annually) of raw materials use globally

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Benefits of High Performance Design

Environmental benefits
Reduce the impacts of natural resource consumption

Economic benefits
Reduce operating costs

Health and safety benefits
Enhance occupant comfort and health

Educational benefits
Improve quality of educational experience

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Benefits of High Performance Design

Increase student performance

NCEF

www.edfacilities.org

Daylighting

Heschong Mahone study

Quality of daylight /
improvement in learning

Indoor air quality

Healthier, more comfortable
environments/reduced
absenteeism

Acoustics

Good acoustics/good academic
performance

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Some Case Studies

CASE STUDY:
Early Childhood Learning Center
Mt Hood Community College
Gresham, Oregon





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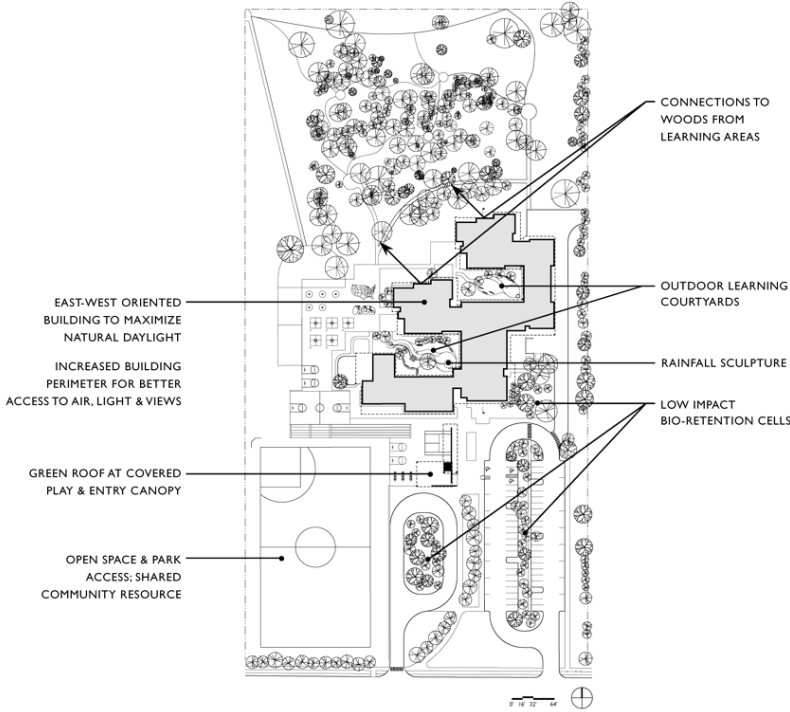


- | | | |
|---|----------------------------------|---------------------|
| 1 Head Start Production Kitchen | 6 Main Entry: Toddlers & Parents | 11 Main Play Area |
| 2 Play Room | 7 Family Center | 12 Infant Play Area |
| 3 Childcare Support / Admin | 8 Wet Play / Water Feature | 13 Nature Play Area |
| 4 Internal "Play Streets" / Circulation | 9 Covered Play | |
| 5 Main Entry: 3-5 Yr Olds | 10 Adult Education | |

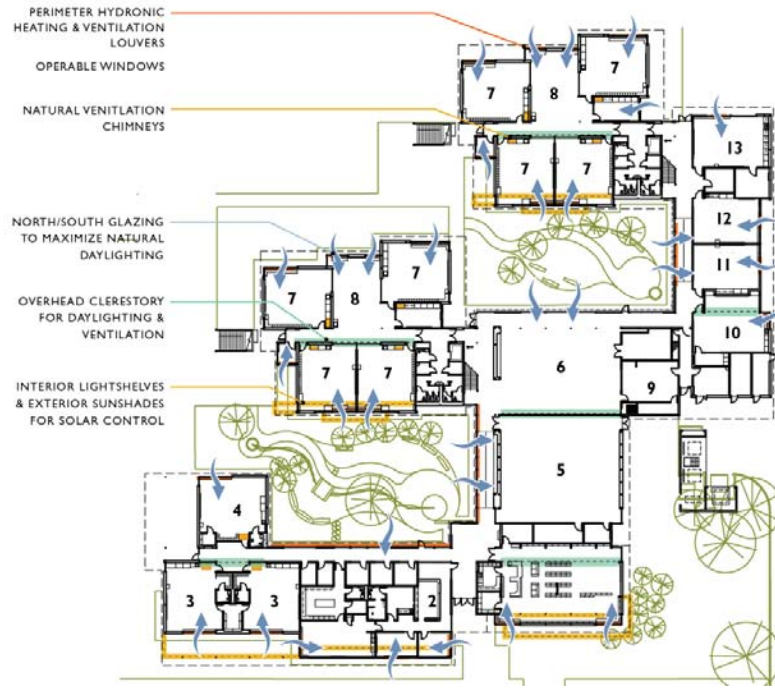




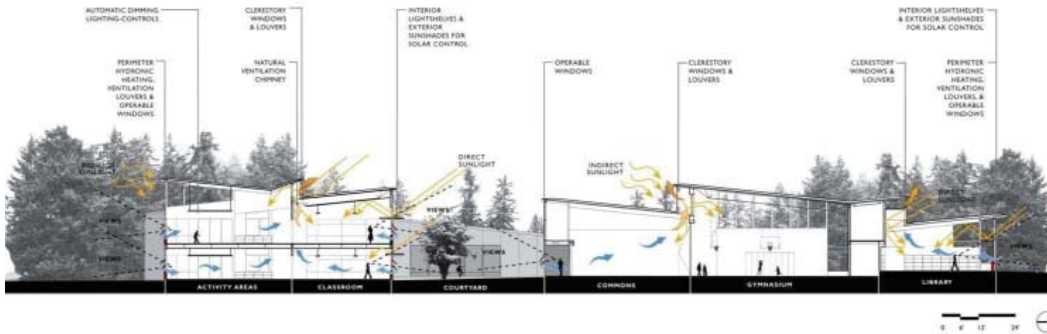
CASE STUDY:
Benjamin Franklin Elementary School
Lake Washington School District
Kirkland, Washington



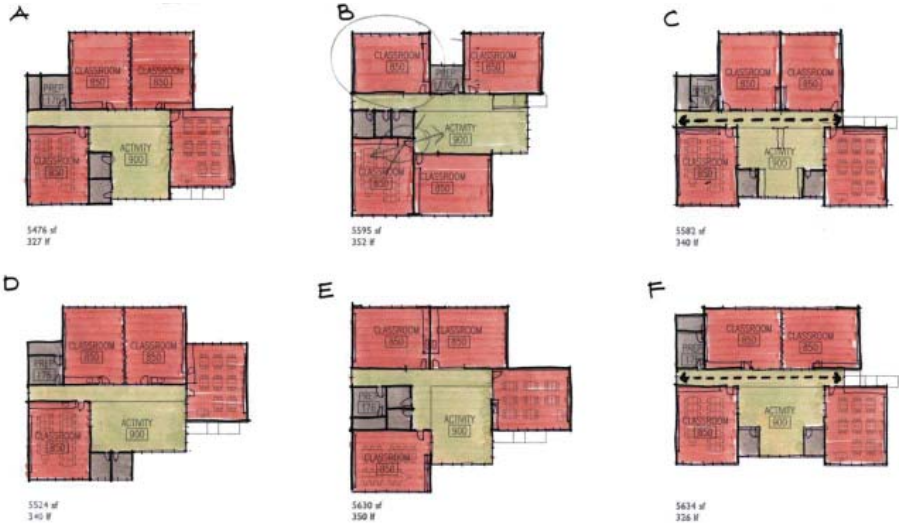
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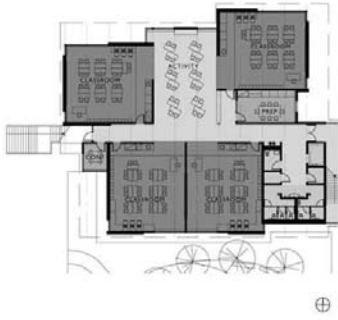
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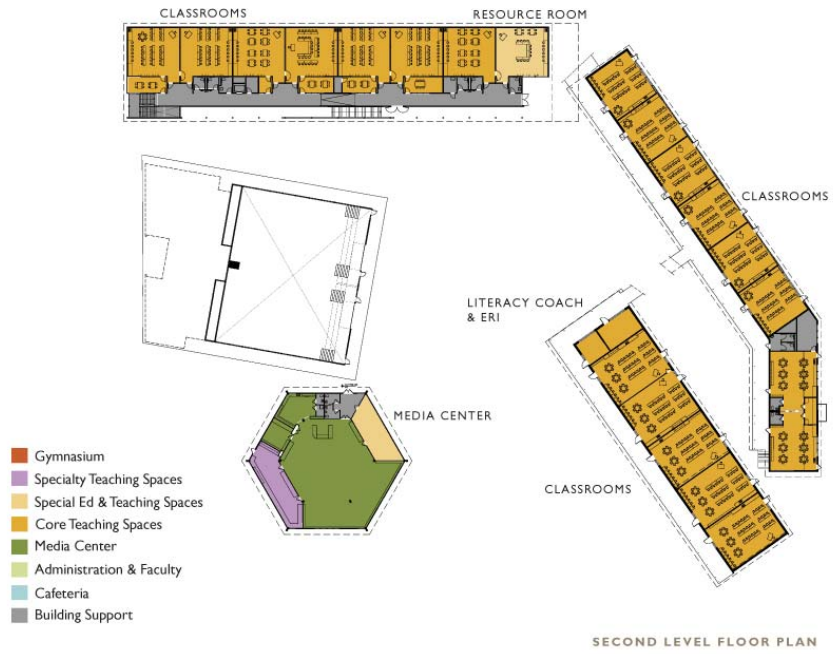
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CASE STUDY:
Lone Pine Elementary School
Medford School District
Medford, Oregon



Lone Pine Elementary School, Medford, OR

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Lone Pine Elementary School, Medford, OR

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02 DAYLIGHT SECTION BUILDING |



Lone Pine Elementary School, Medford, OR

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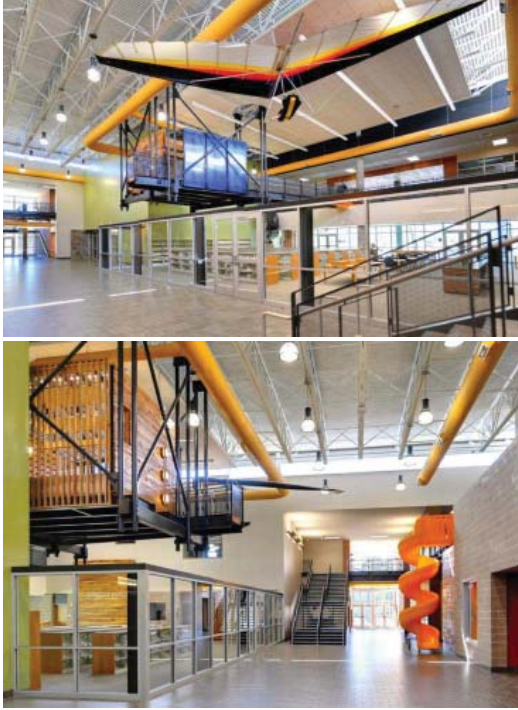
CASE STUDY:
Gloria Marshall Elementary School
Spring Independent School District
Spring, Texas



Gloria Marshall Elementary School, Spring, TX

SHW Group

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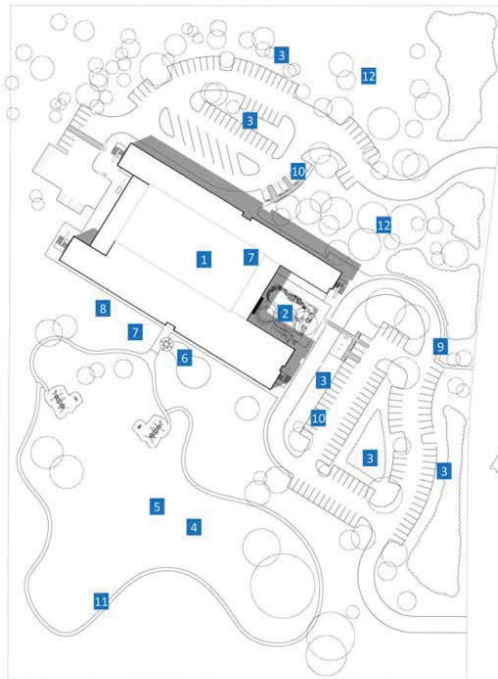


Gloria Marshall Elementary School, Spring, TX

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SHW Group



- 1 White roof
- 2 Eco Pond
- 3 Bio Swales
- 4 Geo-Thermal Field
- 5 Wind Turbine
- 6 Sun Dial
- 7 Photovoltaic Panels
- 8 Rainwater Collection
- 9 Bicycle Paths
- 10 Hybrid Car Parking
- 11 Jogging Trail
- 12 Native planting / No irrigation

Site Plan

Gloria Marshall Elementary School, Spring, TX

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Gloria Marshall Elementary School, Spring, TX

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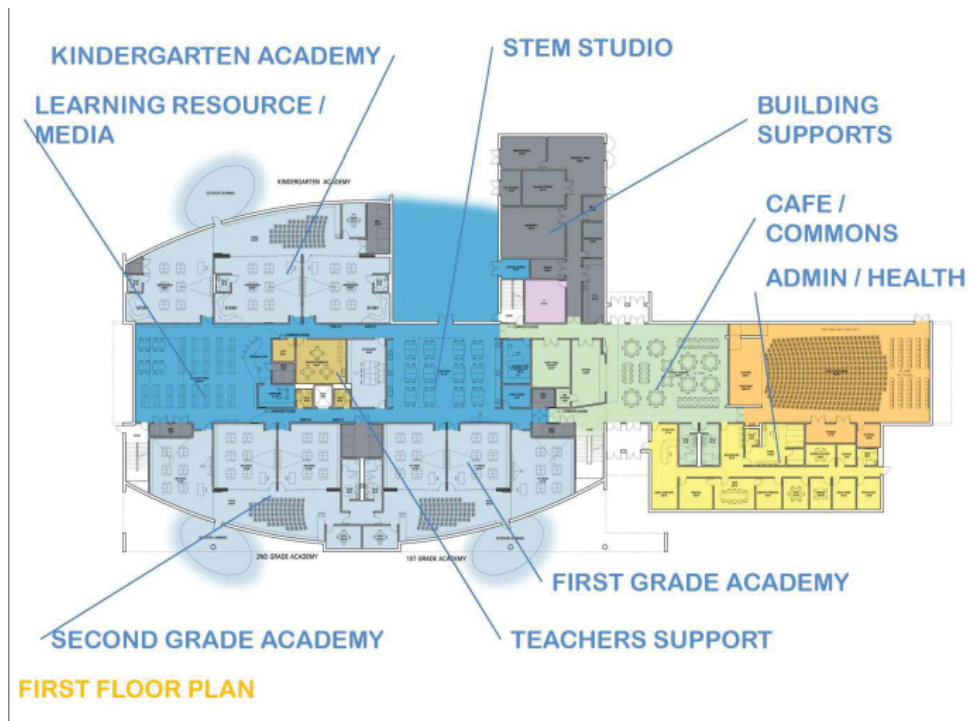
CASE STUDY:
Booker T. Washington STEM Academy
Unit 4 School District
Champaign, Illinois



Booker T. Washington STEM Academy, Champaign, IL

Canon Design

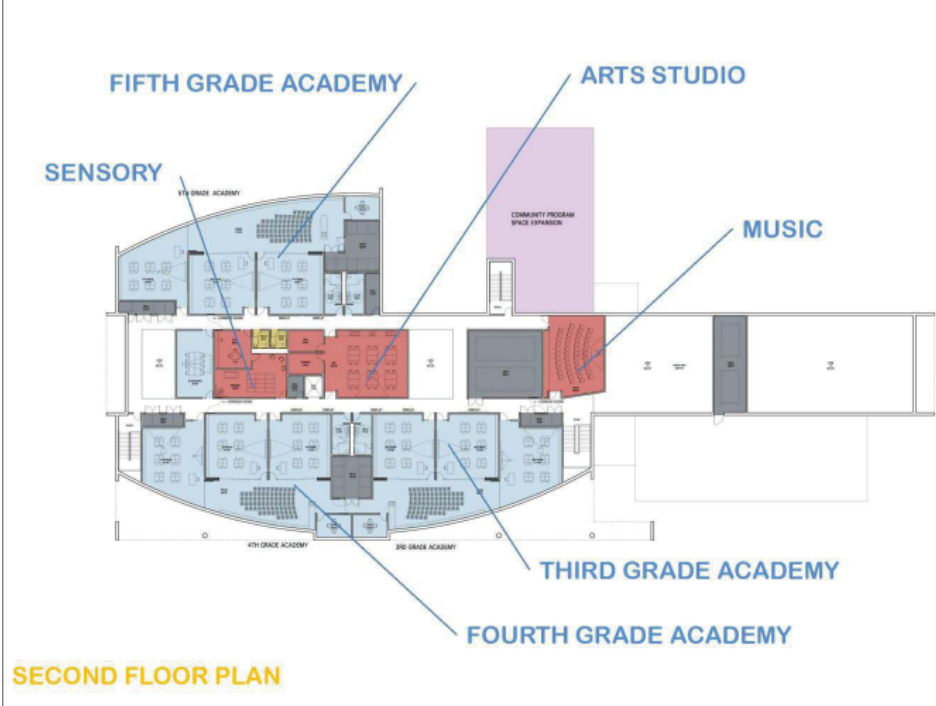
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Booker T. Washington STEM Academy, Champaign, IL

Canon Design

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SECOND FLOOR PLAN

Booker T. Washington STEM Academy, Champaign, IL

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Booker T. Washington STEM Academy, Champaign, IL

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Booker T. Washington STEM Academy, Champaign, IL

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Booker T. Washington STEM Academy, Champaign, IL

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CASE STUDY:
Gray Middle School
Tacoma Public Schools
Tacoma, Washington

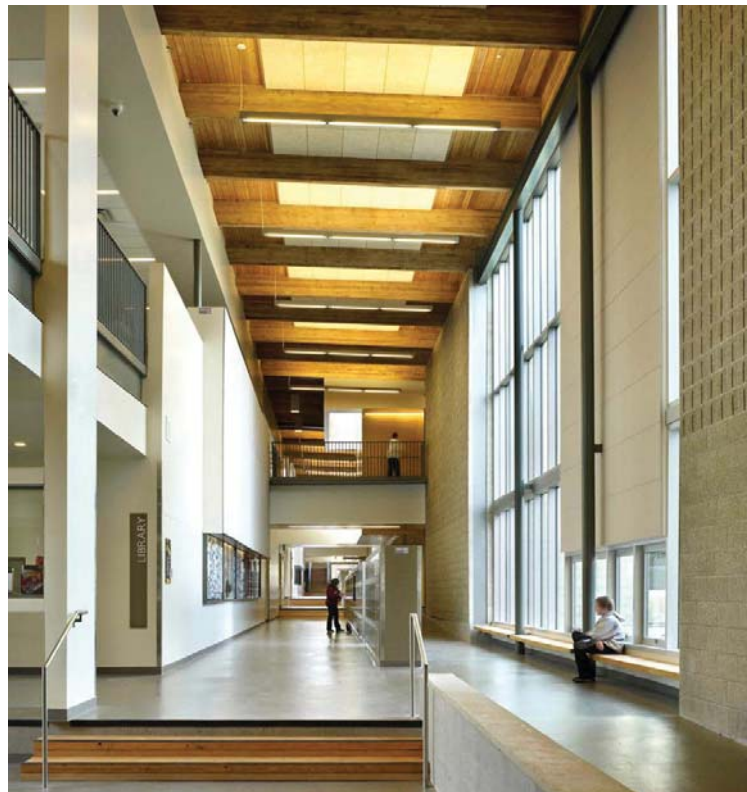


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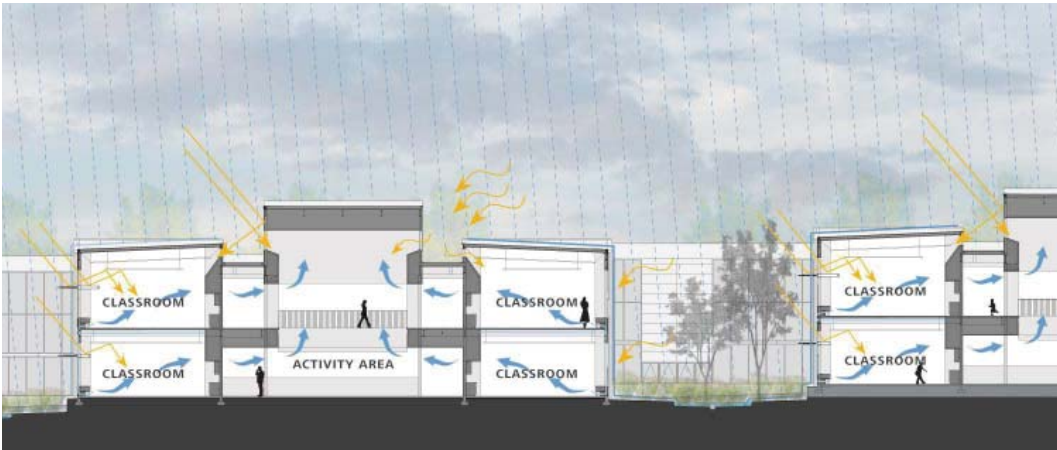
ELEMENTS OF THE 21ST CENTURY SCHOOL



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CASE STUDY:
Nathan Hale High School
Seattle Public Schools
Seattle, Washington



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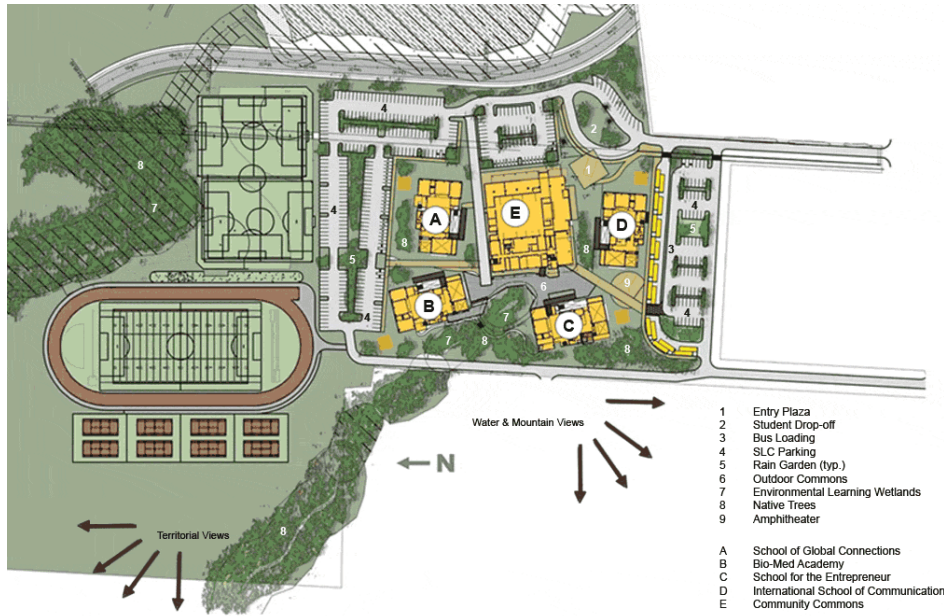
CASE STUDY:
Marysville Getchell High School
Marysville School District
Marysville, Washington



Marysville Getchell High School, Marysville, WA

DLR Group

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SITE PLAN

ACCOUNTABILITY RELATIONSHIPS AT THE CENTER IDENTITY FOCUSED LEARNING

Marysville Getchell High School, Marysville, WA

DLR Group

© 2011 MAHLUM



- | | | |
|---|---|--|
| <p>LEARNING ENVIRONMENT</p> <ul style="list-style-type: none"> 1 Core Learning 2 Wet Lab with Prep Room 3 Science Classroom 4 Flexible Lab 5 Applied Learning 6 Project Lab 7 Project Commons 8 Computer / Distance Learning Lab | <p>LEARNING COMMONS</p> <ul style="list-style-type: none"> 9 Student Resource Center 10 Specialize Learning <p>SOCIAL COMMONS</p> <ul style="list-style-type: none"> 11 Living Room 12 SLC Dining Commons 13 Outdoor Gathering | <p>ADMINISTRATION</p> <ul style="list-style-type: none"> 14 Office 15 Planning / Conference 16 Workspace |
|---|---|--|

Marysville Getchell High School, Marysville, WA

DLR Group

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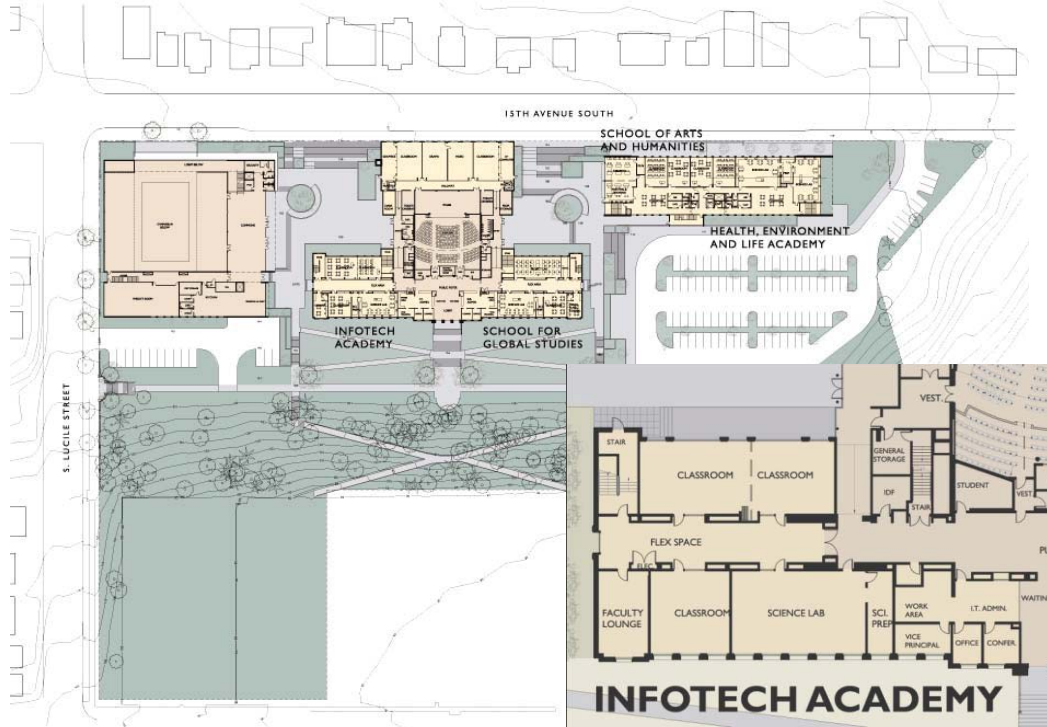
CASE STUDY:
Cleveland High School
Seattle Public Schools
Seattle, Washington



Cleveland High School, Seattle Public Schools, WA

Mahlum

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Cleveland High School, Seattle Public Schools, WA

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Cleveland High School, Seattle Public Schools, WA

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Cleveland High School, Seattle Public Schools, WA

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CASE STUDY:
Roosevelt High School
Seattle Public Schools
Seattle, Washington



Roosevelt High School, Seattle Public Schools, WA

Bassetti Architects

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Roosevelt High School, Seattle Public Schools, WA

Bassetti Architects

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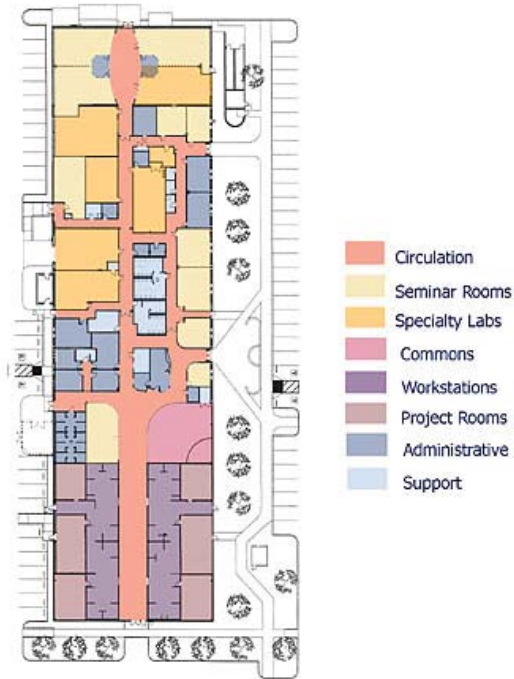


Roosevelt High School, Seattle Public Schools, WA

Bassetti Architects

© 2011 MAHLUM

CASE STUDY:
High Tech High
Public Charter School
San Diego, California



High Tech High, San Diego, CA

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NTD Architecture



High Tech High, San Diego, CA

NTD Architecture

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High Tech High, San Diego, CA

NTD Architecture

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High Tech High, San Diego, CA

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NTD Architecture

CASE STUDY:
STEM School
Cherry Creek School District
Englewood, Colorado



Cherry Creek School District STEM, Englewood, CO Hutton Architecture Studio

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Cherry Creek School District STEM, Englewood, CO Hutton Architecture Studio

© 2011 MAHLUM



Cherry Creek School District STEM, Englewood, CO Hutton Architecture Studio

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CASE STUDY:
The MATCH School
Boston Public Schools
Boston, Massachusetts



The MATCH School, Boston, MA

HMFH Architects

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The MATCH School, Boston, MA

HMFH Architects

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The MATCH School, Boston, MA

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The MATCH School, Boston, MA

HMFH Architects

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ADVISORY COMMITTEE MEETING 3

LONG RANGE FACILITY PLAN
Rosa Parks Elementary School
31 January 2012

TEACHERS PANEL FOR 21ST CENTURY SCHOOLS:

Michael Scott	Buckman Arts Elementary
Michael Williams	Grant High School
Amy Robbins	Forest Park Elementary
Anna Davis	Meriwether Lewis School
Paul Gouveia	Roosevelt High School
Daphne Bussey	Rosa Parks School



MEETING NO. 3 DISCUSSION SUMMARY

MEETING DATE: January 31, 2012 **TIME:** 5:30 PM
LOCATION: PPS Rosa Parks School

ATTENDEES: Committee: Scott Bailey, Ken Brock, Andrew Colas, Larry Dashiell, Lakeitha Elliott, Stuart Emmons, Shane Endicott, Louis Fontenot, Bob Glascock, Nancy Hamilton, Jeff Hammond, Bill Hart, Angela Jarvis Holland, Brett Horner, Sally Kimsey, Angela Kirkman, John Mohlis, Matt Newstrom, Scott Overton, Lydia Poole, Abbie Rankin, Bobbie Regan, Ted Reid, Rudy Rudolf, CJ Sylvester, Kevin Spellman, Dick Spies, Gwen Sullivan, Kevin Truong, Michael Verbout, Kate Willis, Edward Wolf, David Wynde

PPS: Bob Alexander, Nancy Bond, Judy Brennan, Paul Cathcart, Melissa Goff, Jeff Hammond, Karl Logan, Marlys Mock, Jim Owens, Sharon Raymore, Rhys Scholes, Carole Smith

Translators: Hashim Fai, Olga Filinova, Ngan Ha, Ariel Lavander, Ai-my Wong

Mahlum: Diane Shiner, Gerald [Butch] Reifert, Rene Berndt

Public:

COPY TO: Jide Akanbi, Tim Carman, Tripp Goodall, Teresa Guerrero, LeRoy Landers, Tony Magliano, Willy Paul, Trudy Sargent, Patrick Stupfel, Jason Thompson

The following represents the facilitator's understanding of discussions held and decisions reached in the meeting. Anyone with amendments to these minutes should notify the author within five (5) days of the minutes date in order to amend as appropriate.

INTRODUCTION TO ROSA PARKS

Principal Newsome: Newest Portland PPS School. 420 students on a daily basis. Built with community in mind. Share with Boys and Girls Club, access to recreation center. Partner with Home Forward (formerly Housing Authority of Portland). Neighborhood House. English language classes for parents during the week. Parent Resource Room is important place in the building. Parents in the center of the school. Glass allows for connection for the parents to the school. Wonderful place to work.

Superintendent Smith: Perfect environment for the 21st Century school discussion. Appreciate the group immersing themselves in the content and participating in other District meetings. This work is the underpinning of ultimate future bond package. The Board will be having public conversations soon if November this year is the right time for a bond. Reflection and information seeking period now, for several months. Board will then make that decision. Staff will be constructing various scenarios to review and float to the public.

Nancy: Feedback from the committee wanting to do a number of things that are not currently happening here. Want to have more of a dialog to keep the conversation alive. There are many committee members with deep understanding of specific issues who want to have a more active involvement in some of the key questions. What the committee is not addressing—not doing teaching and learning issues. These things will be impacted by facilities, but this is not the Advisory Committee’s charge. Plan must work for 10-years (at least). There are certain issues that drive urban schools. The group will develop core values and guiding principles that will test future directions. Plan needs to be flexible. Work ahead will be difficult. Want to hear from the group.

OVERVIEW OF PREVIOUS MEETING

LRFP provides the overall strategy for District planning. It is based on a body of foundational information regarding function, enrollment and condition. These foundational elements will feed into the overall strategies and criteria used to develop the Long Range Plan.

ELEMENTS OF THE 21ST CENTURY SCHOOL. PRESENTED BY BUTCH REIFERT

Links to presentations given at the meeting can be found on PPS website:
<http://www.pps.k12.or.us/departments/facilities/6760.htm>

A summary of the Advisory Committee’s discussion follows below. These notes reflect individual committee member’s comments during the meeting and have not been confirmed for accuracy.

ITEM DISCUSSION

TEACHERS PANEL

- 3.1. Like the transparency. Especially for parents to participate and feel welcome in the school.
- 3.2. Cave space is useful for students to finish assignments.
- 3.3. Like access to outside for projects and observations.
- 3.4. Difficult in older schools to have activities that can include all students.(i.e. Students in wheelchair can’t participate in activities in the basement for example).
- 3.5. How do we accommodate expansion? Forest Park has 12 portables.
- 3.6. Need space for volunteers to be able to work with kids.
- 3.7. Are there any issues with keeping kids engaged--given the distractions with a lot of glass? Teachers believe that students would grow accustomed to this over time.
- 3.8. There is limited space to store materials in most schools. Teachers need a lot of space for supplies.

LARGE GROUP DISCUSSION

- 3.9. Scott: The way teachers will teach in 21st Century schools will be different, especially in high school. There will need to be training the teachers in how to best utilize the space.
- 3.10. Stewart: Interested in how retrofitting existing buildings would occur to meet future needs and how that would work.

- Butch: First is to work with the grain of the building. Cleveland (in Seattle), as you move up through the building, there is more transparency.
- 3.11. Lakeitha: What is the educational outcome at Rosa Park? Humboldt is doing better than Rosa Parks. What is the impact to student learning? Whitepaper-14% gains in graduation rates. Should look at this as well as buildings.
Need to invest in buildings but not to the exclusion of helping kids do better.
- 3.12. Angela: New view of partnerships. Children with disabilities are the first group to be excluded. How could the space support special education needs? Silos are not 21st Century. What are cultural models and how are these reflected in the buildings and how do these define community? Organizing principles outside our normal experiences that could really represent strength and diversity
- 3.13. Kevin: Observation and question there were very few case studies from Oregon.
- 3.14. Lewis: Pragmatic approach. Many of the elements seen are things that go into successful commercial space such as daylight and air. How classrooms are used and learning outcomes are less understood. Even if 21st Century schools have the same outcome as older schools, they are still a healthier environment.
- 3.15. Andrew: Most of the case studies seem to be willing to pay more to have more sustainable elements. He believes that sustainable should be more comprehensive and encompasses environmental, social and economic elements. How many WBE, MBE, Emerging small businesses are being supported? These could give students a model to emulate (minority or women construction workers). This can impact the community. We should look for ways to impact the entire community (put Oregon businesses to work).
- 3.16. Shane: Any involvement where students had a meaningful and hands-on role in the design process. Big piece of the Equity question.
Butch: Truman internship example and elementary school visioning and drawing exercises.
McKinstry built and operates a STEM program where students work with the building to understand the systems (with simulated issues and troubleshooting exercises).
- 3.17. Guiding principle should draw from the students to allow them to have hands on ownership of the outcome. Have meaningful roles from beginning to end, hands-on work.
- 3.18. Stuart: Want to see the Finland phenomenon. Interested in seeing how these school designs compare with the US experience. Seem to utilize observation, hands-on and interactive work. There are no private schools in Finland. Focus is on equity.
- 3.19. How does PPS prioritize creating 21st Century schools? How will they decide what happens first with limited resources?
- 3.20. Michael: Important for students to see diversity working on the projects (design, construction, etc). Localized involvement of businesses in their neighborhood.
- 3.21. Lydia: Get the demographics and scores of the buildings Butch showed. If it isn't improving the learning then we might want to reprioritized (technology, more space, more tools)
- 3.22. Define values just on test scores? We should consider other factors such as: graduation rates, careers, academies, persistent into further education levels.
- 3.23. Stuart: Are there cool ideas that put into practice just didn't work? Could work against teaching and learning. (Adams, Clarendon?) Have the flexible schools worked?

- 3.24. Still unclear on what the committee is doing.
Develop core values.
Test scenarios for a long range plan.
- 3.25. Angela: Would like to see an example of a long range plan.
- 3.26. Lakeitha: SUN (Schools Uniting Neighborhoods) service system on the committee??
- 3.27. Kate: There were guiding principles that came out of the community several years ago, who developed guiding principles? Good to look back at these. Back our way into this. (Child, teacher, parent, and community intertwined). We don't want to build the architecture for the sake of architecture. Are we making certain assumptions about what we need our students to be able to do in the future? Capability—good thinkers, then what kind of facility is required to support this? How do we close this gap?
- 3.28. CJ: Get a copy of the entire Space and Place Conference. Would add to this the Equity policy.
- 3.29. Kevin: Encouraged independent travel around the neighborhood. Skyview in Vancouver Public Schools. Members of the committee could tour other school districts and share best practices.
- 3.30. Not too long ago the community went through a process of High School Re-design. Maybe this should be shared.
- 3.31. Ability to sustain the facility with staff and finances. Have to afford to be able to use it. How do we look at the funding model for this? Curious how much funding comes from the partners versus the District. Auto shop—why can't we utilize other peoples assets? Need a district wide system to do this. Not just on the individual school basis. Community is the school and the school is the community.
- 3.32. What is the state and the region all about? We have the ability to connect with industry and business and link in these as career pathways. Not just graduating students but provide the spark to provide for students to reach their dreams.
- 3.33. What needs to happen:: ways to assess the existing facilities for excess space or underutilized space. Can space be shared with other entities? Could other tenants create positive relationships with students? Ensure we are building relationships with the community. More stakeholders = more sustainability and inspiration.
- 3.34. Angela: Lot of expertise (asset based community work). Marry the work we are doing with where success is helping. Sunnyside Environmental School. Who has knowledge that isn't normally what we would think of to get us on the path. Process—mapping. There is a fatigue in the community. Need for something genuine to come from this. Tolerance is thin right now.
- 3.35. Design has to be flexible and transcend a particular benefactor.
- 3.36. Shane: Living Building Challenge as a framework. Community, people with long-term relationship with the school.
- 3.37. CJ: High School System Design. One thread is career technical education out of this work. Deeply embedded in this work. Five guiding principles. Community. True partnership. Teaching and Learning. Sustainability. Adapting to change continuously. Making this happen together. Did these make a difference (was taken into consideration in ballot measure in May 2011)? These principles were distributed during the meeting.
- 3.38. Brainstorm things that will come to the District and the Board over the next 10 years. How will we evaluate these in the future?

- 3.39. Kate: Bond pays for “this much” money for a new school? What are all the assets across the district and how does that change the equation. Broaden the base. Inventory and understand what we are talking about.
- 3.40. Who are we and what are our values? When we define this stakeholders can emerge to help move the facilities in the right direction.
- 3.41. Angela: people with disabilities. Equity. Let’s not continue to exclude people. We’ve built a culture of segregation. 30% of PPS schools are not accessible. (disability, children of color, economic). Legacy built up by not having the funding or the courage to address some of these issues.
- 3.42. Kevin: Student group is working on this equity issue with Superintendent Smith.

THEME SUMMARY FROM SMALL GROUP

- 3.43. Core values:
 - True sustainability—engaging youth and businesses.
 - Who is included in community—elders in action.
 - Dick—student centric, family centric (all members engaged).
 - Community pooling of resources (allows for some funding and create community schools). Flexible use.

PUBLIC COMMENT

- 3.44. Roosevelt community group. Refurbishment of track. SIG grant. Sustainability. Volunteers. Not just another educational experiment. Build community partnerships. Physical plant subcommittee, feeder school subcommittee and co-curricular subcommittee. Volunteer group. Working on this. Rich, diverse community.
- 3.45. Roosevelt development group. Experts on campus. Survey the community. Baseline information to begin planning and prioritization. Historic preservation, systems. Want this to be the model for high school modernization.
- 3.46. Roosevelt development group. Parent. Plan spaces in the schools to support learning that happens in the school. Schools need to be set up to make this happen. How authentic, highly engaged learning environment.
- 3.47. Roosevelt Vocational education. Auto shop could be a dynamic teaching environment to support vocational learning. Vocational programs important to students. Community partners will support this. More than half of the manufacturing in the state of Oregon are in the Roosevelt district.
- 3.48. Roosevelt Principal Williams –group is passionate about supporting the good work at Roosevelt. As we create our guiding principles. Plant seeds about community partners; want to be a part of the process so that it is sustainable. Transform teaching and learning.

WAYS TO IMPROVE THE PROCESS

- 3.49. Scott—homework assignment. Work on these individually and in small groups virtually. E-mail assignments out to the committee.
- 3.50. Consider the use of a forced choice matrix. Manageable small groups to have a conversation via e-mail.
- 3.51. Allow community testimony early on so that they don’t need to sit through the whole meeting.



LONG RANGE FACILITY PLAN

Advisory Committee Meeting 4
28 February 2012
Hosford Middle School



AGENDA

- **Gallery Walk**
Portland Public Schools Planning
and Public Input Processes 2007 to Present
- **Welcome**
Budget and Bond Update
Hosford Middle School
Context | Process
Gerald (Butch) Reifert
Carole Smith
Kevin Bacon
CJ Sylvester | Butch Reifert
- **Modern Learning**
PPS Modern Learning Initiatives
Modern Learning Symposium Panel Report
Melissa Goff
- **Public Comments**
- **Guiding Principles**
Committee | Mahlum

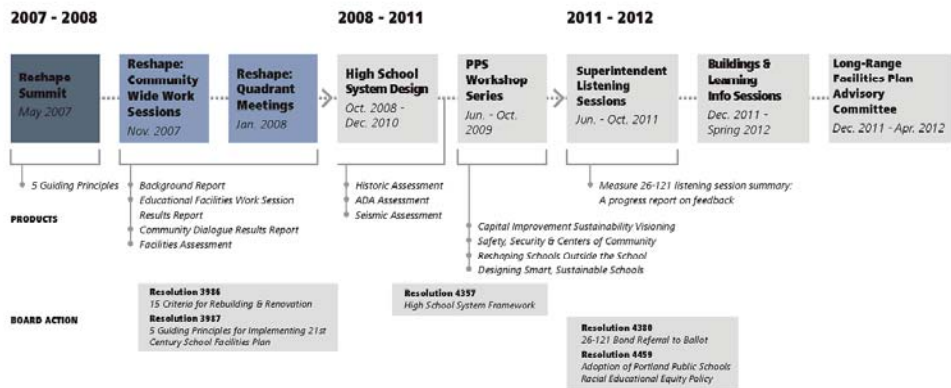
BACKGROUND

Process Review:

- All meetings are recorded
- Restrooms
- Note cards for public comment
- White Papers in advance of meetings
- Future meetings format:
 - 5:00 pm start time with facility tour
 - Topic presentation
 - Discussion
- Meeting minutes will record each meeting
- Website address:
 - <http://www.pps.k12.or.us/departments/facilities/6744.htm>

2007 - 2008

PPS FACILITIES PLANNING PROCESS



2008 - 2011



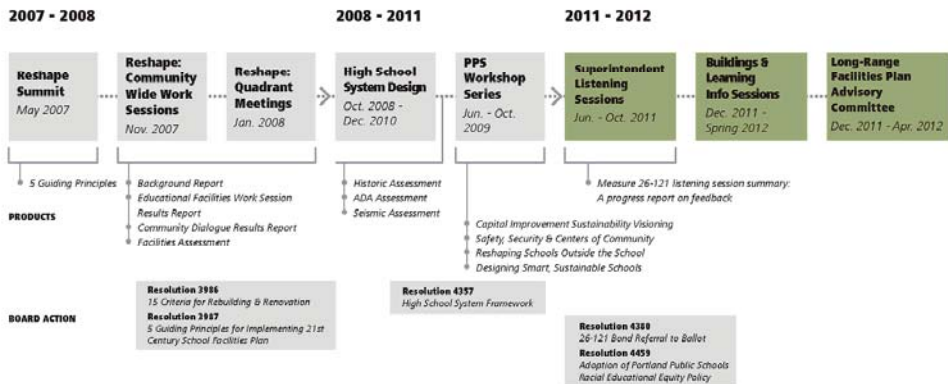
PPS FACILITIES PLANNING PROCESS



2011 - 2012



PPS FACILITIES PLANNING PROCESS



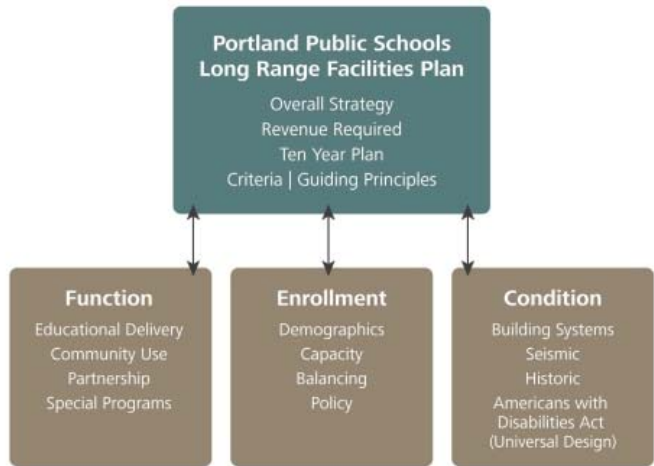
PPS FACILITIES PLANNING PROCESS



PPS FACILITIES PLANNING PROCESS



PPS FACILITIES PLANNING PROCESS

BACKGROUND



Binder Chapters | Meeting Topics:

1. Introduction and Enrollment
2. Existing Facility Conditions
3. 21st Century Educational Trends and Capacity
4. Enrollment Balancing
5. Policy | Regulations | Capital Investment Priorities
6. Draft :: Potential Scenarios
7. Recommended Scenarios
8. Final :: Board Presentation

MEETING 1



13 December 2011

Goal:

**Understand Enrollment History and
Projections for the District**

MEETING 2

10 January 2011

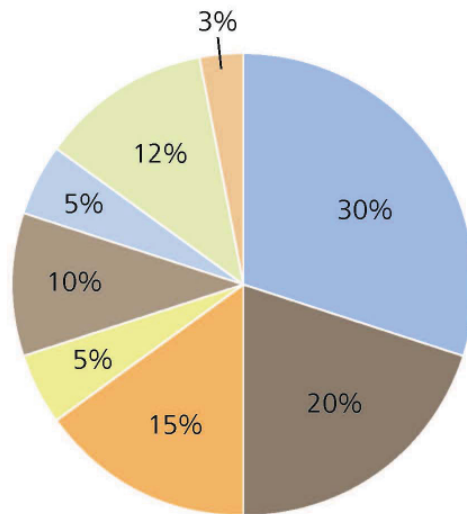
Goal:

Understand current facility conditions
and begin to think about priorities

MEETING 2

Emerging Themes

- Safety
- Capital Renewal Program
- Educational Adequacy
- Universal Design
- Historic Character



MEETING 3



31 January 2012

Goal:

**Understand the Elements and Trends
in Modern Learning Environments**

MEETING 4



28 February 2012

Goal:

**Establish and Refine the Guiding
Principles**

MEETING 5



13 March 2012

Goal:

Test Drive the Guiding Principles and Take a First Pass to Synthesize What You Know to Date

MEETING 6



20 March 2012

Goal:

Develop & Evaluate a Series of Scenarios & Refine the Scenarios

MEETING 7



10 April 2012

Goal:

Identify a 10-year plan and a Long-Range Plan with Recommendations on how to prioritize work

MEETING 8



24 April 2012

Goal:

Confirm Decisions to Date. Have they been captured in the document

PRESENTATION



Modern Learning

EXERCISE GOALS



Committee will refine guiding principles

Guiding principles will serve as the filter
to evaluate Long Range Plan options

Guiding principles should not overlap

EXERCISE



1. We will write out guiding principle on flip chart and post on the wall.
2. Sit in small groups based on your homework assignment.
3. Facilitator will lead discussion around the principle.
4. Feedback:
You each have been given three colored cards. You will be asked to express your level of agreement with each guiding principle. You will hold up your cards when you hear the guiding principle.
Green card = I agree with the guiding principle and believe it captures what is important for the LRF.
Yellow card = I agree but, I have questions, concerns or need more information.
Red card = I do not agree and cannot support the concept of the principle.
5. WRITE DOWN YOUR CONCERNS on post it pads provided (indicating the number of the principle on the note card)
We will ask to hear from the red comments.
We will collect the yellow comments and red comments to provide guidance for refinement of principle.

HOMEWORK



Mahlum will work with the Chair of each group to incorporate your feedback and incorporate comments.

We will have a new draft to you by the end of the week.

We will use the principles as the filter to evaluate key questions at the next meetings exercise

You have been given a list of key questions that will need to be answered in the plan. Please review and think about these questions for the next meeting.

NEXT STEPS



Questions:

- Was meeting duration sufficient?
- Are you getting what you need?
- What worked well?
- What to change for next meeting?

NEXT STEPS



Next meeting:

13 March 2012
Sunnyside Environmental School
3421 SE Salmon Street
Tour at 5:00 pm | Meeting begins at 5:30 pm

Mailing List:

If you would like to be on the mailing list; please sign up on the website or leave your contact information with staff

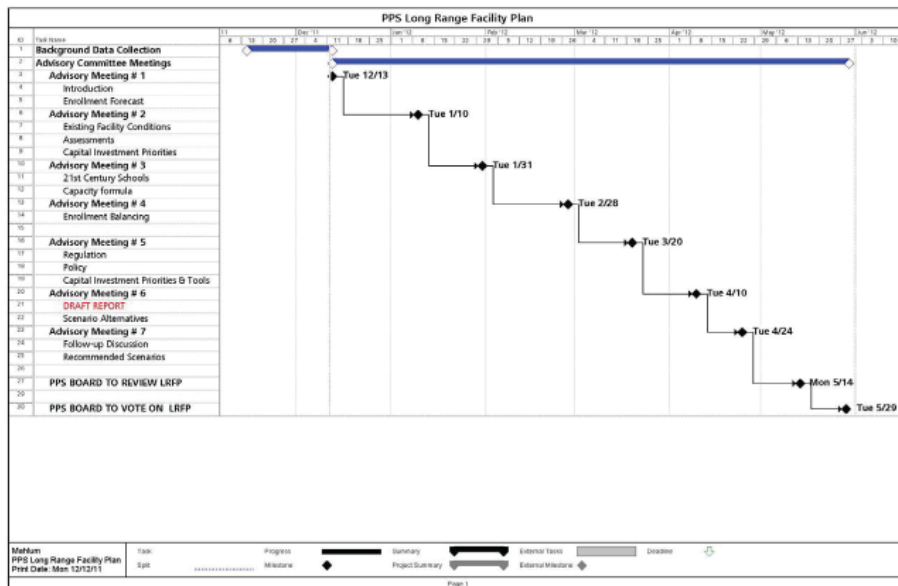
<http://www.pps.or.us/departments/facilities/6744.htm>

(There will be a button on the main page at PPS.net to get you there or type in Facilities Plan)



LONG RANGE FACILITY PLAN

Advisory Committee Meeting 2
 10 January 2012
 Jefferson High School
 Middle College for Advanced Studies



21st Century Learning in PPS: Where We Are Now

Melissa Goff, Executive Director, T&L

Learning and Teaching

Beyond meeting basic student and staff safety needs, learning and teaching must be prioritized in each conversation regarding improvement or design of facilities.

Use Your Notes!

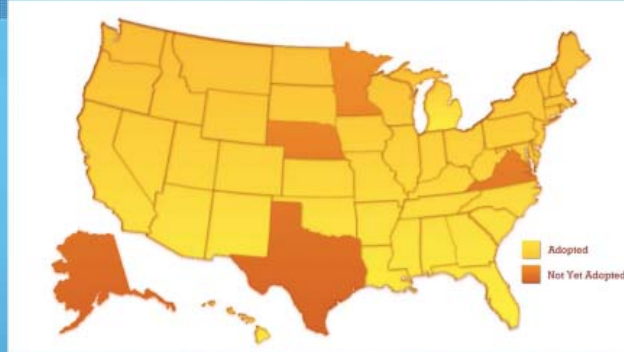
- Consider the following:
 - What do you hear that is **NEW** that should be part of the LRFP considerations?
 - What do you hear that we should **EMPHASIZE** as part of our LRFP considerations?

The First 12 Years of the 21st Century

- National shift in shared standards in core areas of English/Language Arts and Mathematics
- International increased interest in STEM education (Science, Tech, Engineering, Math)
- Students who are not just technology-savvy but technology-reliant
- Recognition of the power of relationships and collaboration in learning

Common Core State Standards

- Newly adopted standards for ELA and Mathematics released in June 2010
- State-led effort coordinated by National Governors Association and CCSSO
- Adopted by 45 states
- ODE & State Board October 2010



Why new standards?

- Aligned with college and career expectations
- Internationally benchmarked
- Students in each state learning to same levels
- Common expectations for all regardless of zip code
- Eliminate the disadvantage created by disproportionate numbers of poor, non-white and ELL students living in states with weakest standards (South, Southwest)

CCSS Assessments

- Begin in 2014-15
- Computer-based assessments
- Intention for both end-of-year reporting (summative) and informing teaching (formative)

Turn and Talk - Practice

- Share with your neighbor one item of importance you have **NOTED** as you've heard about the Common Core State Standards – 30 seconds each

Learning Implications for Generation Z (d.o.b. 1994-2009)

- Interactive devices = tools for learning
- Collaborative projects – including online
- Visual learning
- Learning as a game
- Focus on critical thinking & problem-solving NOT rote memorization
- Chunking learning into smaller pieces

Delivery of Instruction Implications

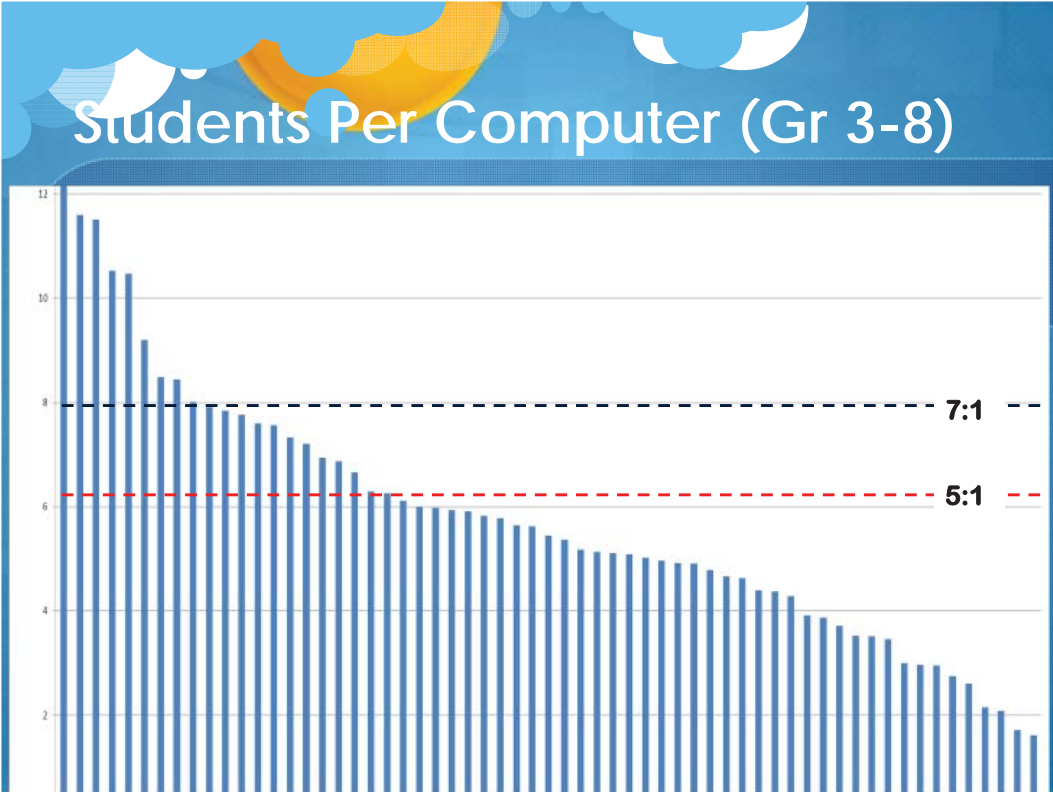
- Instruction must meet the needs of students of all races, economic strata, and learning abilities to meet highly rigorous expectations
- Increased need of technology capacity, including variety of digital devices
- Increased emphasis on collaboration as an asset to increase individual learning

Most Recent Curriculum Adoptions

- Highly interactive, focus on collaboration, and are designed for “chunking” activities
- Both need appropriate learning “space”
 - K-5 Math – Math Learning Center’s Bridges
 - 6-8 Science – SEPUP (Scientific Education for Public Understanding Program)

In the Future and Now (When Resources are Tight)

- Textbooks, handheld technology and online subscriptions
- Currently, our support for supplementing in subject areas that are underfunded or are not centrally supported, e.g.:
 - Discovery Education
 - Learn 360
- Optimizing access to resources = access to in-shape digital devices either within the classroom or in a lab setting



Upcoming Curriculum Adoptions

- 2013-14: CCSS English/Language Arts and ELD
- 2014-15: CCSS Mathematics
- 2015-16: Science
- 2016-17: World Languages
- Health/PE/Arts Adoptions TBA

Learning and Teaching

Beyond meeting basic student and staff safety needs, learning and teaching must be prioritized in each conversation regarding improvement or design of facilities.

Turn & Talk – LRFP Reflections

- How should we incorporate what you have heard tonight into the our Long-Range Facilities Plan? (1 minute each)

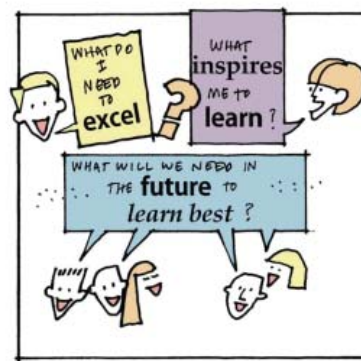


PPS -MODERN LEARNING ENVIRONMENTS SYMPOSIUM

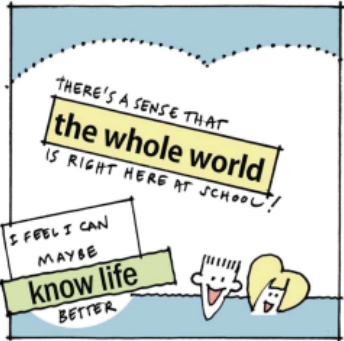
FEBRUARY 22ND, 2012

KEY LEARNING QUESTIONS

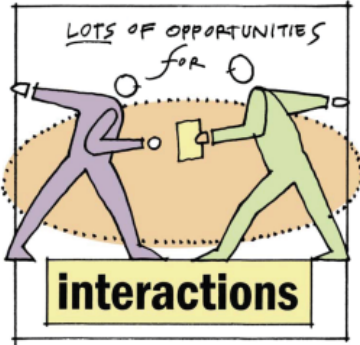
- Think of learners you know. What do they need to excel?
- What inspires a student to learn?
- Think to the future. As you can imagine learning, how will tomorrow's students learn?



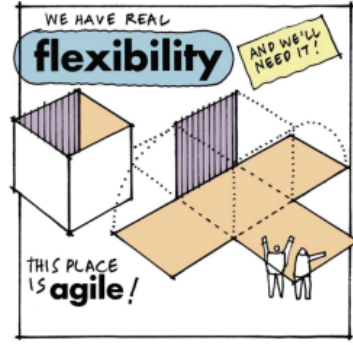
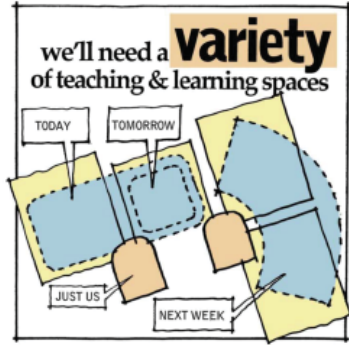
LEARNING



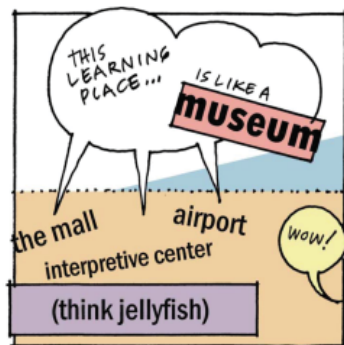
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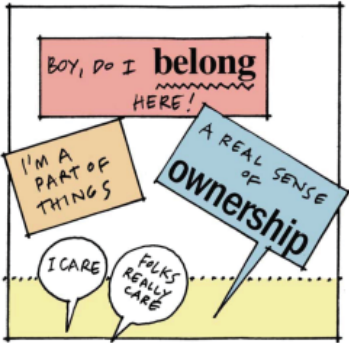
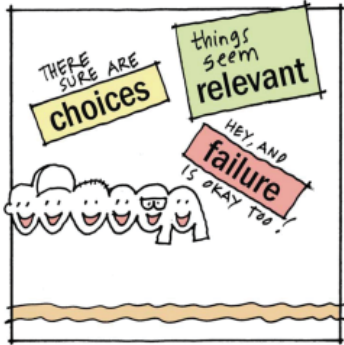
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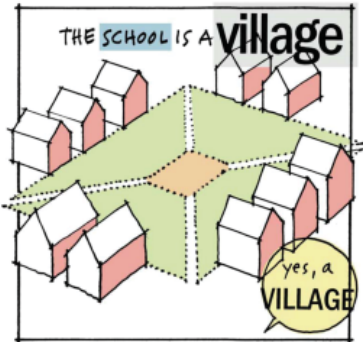
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CULTURE



COMMUNITY







MEETING NO.4 DISCUSSION SUMMARY

MEETING DATE: February 27, 2012 **TIME:** 5:00 PM
LOCATION: PPS Hosford Middle School

ATTENDEES: Committee: Abbie Rankin, Andrew Colas, Angela Kirkman, Bill Hart, Bob Glascock, Brett Horner, Dick Spies, Edward Wolf, Jason Thompson, John Mohlis, Kevin Spellman, Kevin Truong, Lydia Poole, Michael Verbout, Nancy Hamilton, Patrick Stupfel, Scott Bailey, Shane Endicott, Stuart Emmons, Ted Reid, Teresa Guerrero, Tim Carman, Willy Paul, Tim Carman, Tripp Goodall, Willy Paul, Patrick Stupfel, Jason Thompson

PPS Board Liaison: Bobbie Regan

PPS: Trip Goodall, Rudy Rudolph, Larry Dashiell, CJ Sylvester, Bob Alexander, Judy Brennan, Tony Magliano, Paul Cathcart, Melissa Goff, Ken Brock, Marlys Mock, Carole Smith, David Wynde, Rhys Scholes, Tony Magliano

Translators: Hashim Fai, Olga Filinova, Ngan Ha, Ariel Lavander, Ai-my Wong

Mahlum: Diane Shiner, Gerald [Butch] Reifert, LeRoy Landers, Rene Berndt

Public: Dave Porter, Scott Mutchiz, Rob Clark, Randall Heeb, Steve Pinger, Lilly Windle, Carol Turner, Richard Battaglia, Pamela Fitzsimmons, John Grone

COPY TO: Trudy Sargent

The following represents the facilitator’s understanding of discussions held and decisions reached in the meeting. Anyone with amendments to these minutes should notify the author within five (5) days of the minutes date in order to amend as appropriate.

INTRODUCTION TO HOSFORD MIDDLE SCHOOL

Principal Bacon: Small comprehensive neighborhood PPS Middle School. Hosford offers Spanish and Mandarin Immersion programs. While the Spanish Immersion will be moved to Mt. Tabor Middle School after 2012, students enrolled in the Mandarin are integrated with other students for literacy, science, math and exploratory classes. The outstanding science labs are designed for project and lab work promoting hands-on activities to understand the world around them. Curriculum offers wood and metal shops, music room.

CONTEXT OF TODAY’S MEETING

Chief Operations Officer Sylvester: Summary of PPS Facilities Planning Process which started in 2007 and resulted in the Long Range Facility Plan effort currently under way. May 2007, five guiding principles are developed during the PPS Reshape Summit. Community meetings in 2007 and 2008 resulted in the adoption of Resolution 3986 which establishes 15 criteria for rebuilding and renovation as well as Resolution 3987. Between 2008 and 2010 PPS

developed the High School System Design which includes a historic, ADA and seismic assessments which resulted in the adoption of Resolution 4357 High School System Framework. In 2009, PPS held a work shop series themed around capital improvement sustainability visioning; safety, security and centers of community; reshaping schools outside the school; designing smart sustainable schools. After Measure 26-121 did not pass by 600 votes, PPS initiates listening sessions from June – October 2011 to reflect on feedback and prepares to launch the Long Ranch Facility Planning process with establishment of the Advisory Committee in December 2011. PPS organizes various Building and Learning Info Sessions to inspire and engage the committee as well as the public.

Facilitator Reifert: The Long Range Facility Plan includes the development of an overall strategy, estimate of required revenue, a 10-year plan and criteria / guiding principles. Today's meeting marks the midpoint of a process organized around eight Advisory Committee Meetings which are focusing on the following subjects: Meeting 1: Enrollment trends, Meeting 2: Facility Conditions, Meeting 3: Modern Learning Trends, Meeting 4 (today's meeting): Establish Guiding Principles and capacity, Meeting 5: Test Drive Guiding Principles, Meeting 6: Develop Scenarios, Meeting 7: Identify 10-year plan and long range plan prioritization strategies, Meeting 8: Confirm decisions made to date. This work is the underpinning of a future bond package. The Board will be having public conversations soon to investigate if November 2012 is the right time for a bond.

Melissa Goff: Modern Learning Presentation. Research shows that a welcoming, warm learning environment results in 20% - 30% improvement in student achievement and attendance. National shift towards English Language, Arts, Mathematics, STEM (Science, Technology, Engineering and Math), address learning approaches for technology savvy and technology reliant Generation Z. In 2010, the Governor's Association introduced the Common Core State Standards to equalize student performance expectations across all states. The goal of new standards was to move beyond predictability of performance based on poverty level or race. Learning implications for Generation Z are: collaborative learning, learning shall be as exciting as playing a game, focus on critical thinking, "chunking" learning into seven minute sections to address short attention span. Most recent implications of curriculum reflects more collaborative group work, more physical movement inside classroom, use of objects to make math less abstract, project based teaching requires classrooms which allow separation into listening and lab spaces like Hosford science rooms. Appropriate learning space is key to success. Teaching shall not be solely based on technology due to inequity of access depending on student home / background. Support of learning and teaching shall be the primary focus of LRFP.

OVERVIEW OF PREVIOUS MEETING

Meeting # 4 focused on the presentation of modern learning trends and the collection of feedback on how they can inform the future of learning for PPS. Links to presentations given at the meeting can be found on PPS website:

<http://www.pps.k12.or.us/departments/facilities/6760.htm>

PPS MODERN LEARNING ENVIRONMENTS SYMPOSIUM

Jay Kezter: presented a two minute video montage which captured the creative energy of the symposium and introduced the speakers and subject matter. One hundred people

attended of which 70 were teachers. Links to presentations given at the meeting can be found on PPS website: <http://www.pps.k12.or.us/departments/facilities/6760.htm>

Jay introduces the teacher panel which shared the most important impressions, thoughts from the symposium, and how the symposium has influenced the way they teach.

A summary of the teacher's discussion follows below. These notes reflect individual teacher's comments and have not been confirmed for accuracy.

TEACHERS PANEL

- 3.1. Opportunity to dream was great.
- 3.2. Research into connection between increased brain activity due to physical movement was eye opening.
- 3.3. Teachers have to be taught how to teach in new spaces and how to use them to the fullest potential.
- 3.4. Teachers are starting to adapt low/no-cost strategies on their own.
- 3.5. Teacher have to let go of the fear to be expert regarding new technologies and let student teach them.
- 3.6. Learners shall become teachers.
- 3.7. Successful learning needs flexibility in time and space.
- 3.8. " Form follows function", PPS shall define the form / shape of modern teaching for district.
- 3.9. Modern teaching spaces shall inspire learning.
- 3.10. Research shows that students are the first to adapt / use a new space, teachers and learning methods will follow.
- 3.11. Appreciation that PPS acknowledges the power of the teachers voice and is willing to listen.
- 3.12. Awareness of the power of dynamic furniture.
- 3.13. Dr. Dieter Breithecker's studies sparked interest in kinesthetic learning methods.

PUBLIC COMMENTS

- 3.14. John: Community realizes the convincing need for new and improved facilities to support 21st Century learning but would like to see more research to understand decision making. Would like more research on the relationship of school size ceiling and student achievement.
- 3.15. Rob: Last bond amount was too high.

GUIDING PRINCIPLE EXERCISE

Facilitator Reifert, Shiner and Landers: Introduction of the Guiding Principles Exercise:

Facilitators led the advisory committee through the Guiding Principle conversation Please see the attached Exercise Summary for details of this portion.

The advisory committee voted and discussed the two guiding principles developed by each group number 1 through 4.

WAYS TO IMPROVE THE PROCESS

LeRoy Landers ensured the advisory committee that the PPS deeply cares about the outcome of this exercise and that we should not attempt to rush the discussion. It was decided to collect and document today's input and to continue the discussion during a future advisory meeting. PPS will strategize on how best to accommodate the additional time required.

Meeting adjourned at 8:00PM.

ISSUE PAPER #5.1 EFFICIENT USE OF SCHOOL SITES

BACKGROUND

A LRFP needs to address current school sites to understand first, if there are adequate sites within the district to meet long term needs and next are these sites of adequate size and distribution to meet long term projections. This evaluation is required to provide assurance that there is a sufficient inventory of properties relative to enrollment demands, and that they are being used effectively to address school needs. School sites must provide space for: the building, exterior instruction, play(hard, soft and covered), intramural/athletic activities, parking, pedestrian and vehicular circulation. Site area may need to meet other regulatory requirements including: property line set-backs, easements, fire separations, fire truck access, environmental restrictions (wetlands).

RELEVANCE FOR FACILITIES PLAN

Pursuant to the school facility planning statute, ORS 195.110:

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(E) An analysis of:

(ii) Measures to increase the efficient use of school sites including, but not limited to, multiple-story buildings and multipurpose use of sites.

The statute requires consideration of measures to efficiently use school sites and provides examples of such measures – multi-story buildings and multiple uses of school sites – but does not more precisely define them. This provides the District discretion in determining what efficiency measures to consider. This paper describes some of the measures the District has and can consider in making more efficient uses of its school facility sites.

ELEMENTS OF EFFICIENT USE OF SCHOOL SITES

Multi-story buildings

The District makes extensive use of multi-story buildings. Currently 53 of the District's 88 active school sites have two or more stories. Local building codes previously restricted younger students (K thru 2nd grade) from being taught on floors above or below the main floor. However, these codes have been revised to remove this restriction when certain conditions are satisfied such as installing fire sprinkler systems. The District currently has numerous K5 and K8 multi-story buildings without sprinkler systems which restrict the flexibility of interior use. At the same time, multi-story buildings provide significantly more student capacity using the same footprint as a single-story building. As land costs increase, multi-story buildings become more cost-effective to build and operate.

Land costs in the District have risen significantly in the last 20 years. Therefore, the District has recently made it a practice to construct multi-story buildings when new schools are built. Rosa Parks Elementary School is a good example of this.

Shared use & Partnerships

Another effective way of maximizing the use of a school site is to share the use with other organizations. It was found during multiple school facility design workshops that community members support the partnership between the District and Portland's Parks & Recreation Department, for the use of outdoor and indoor space. This shares not only the use of a site but the costs associated with fields and outdoor recreation space and operating the facility's indoor recreational and instructional space.

District school facilities are "community assets" that are used in a variety of ways by families and community groups.

There are other shared use partnerships that the District has and can enter into and develop. Some natural pairings include those with the City of Portland and other educational (e.g., Portland Community College) and community service providers (e.g., Boys & Girls Clubs, YMCA, etc.)

There may also be opportunities for District schools to share sites with other District functions and facilities. This includes schools and school programs that share buildings on a site and have their own buildings but share the site itself. In Portland, Abernethy Elementary School and the Environmental Middle School shared buildings on a southeast Portland school site until the middle school grew to a point where it needed to move to its own site nearby. In Forest Grove, Fern Hill Elementary School and Neil Armstrong Middle School were constructed on the same site. Their buildings are separate but they share fields and other outdoor space. North Clackamas School District also has co-located schools: Sunrise Middle School and Clackamas High School, and Happy Valley Elementary and Middle Schools, which opened in 2008 and 2009.

A related form of schools sharing sites is the K-8 model, which effectively combines two schools – an elementary school and a middle school. The District now has 30 K-8 schools in active use.

Finally, there are several partnerships that support career-technical education which benefits both students and the community. The District looks for opportunities to develop and enhance these relationships as part of its strategic framework.

Modular classrooms

Modular classroom buildings are an affordable and flexible method for responding to fluctuations in school enrollment and increasing the efficient use of a school site. The modular buildings used by the District typically consist of two classrooms which will accommodate approximately 25 students per classroom.

The use of modular buildings must be balanced with site considerations and issues of educational quality and equity between schools. The following site conditions must be considered:

- :: Environmental constraints/conditions – steep or changing slopes; streams, wetlands, or other sensitive lands
- :: School features – parking, play areas and fields
- :: Development code – how modular buildings are classified and regulated according to zoning code; building setbacks from lot lines required by the code.
- :: Fire safety – access roads and proximity to hydrants
- :: Core facilities – the ability of the school’s core facilities (e.g., cafeteria, gym, restrooms, etc.) to accommodate additional enrollment.

Other issues to consider when making decisions about using modular buildings include educational quality and equity. There is a growing body of research indicating a positive relationship between the quality of a school facility and student achievement. It cannot be assumed that permanent classrooms always provide a better learning environment than modular classrooms. But, because modular buildings are designed to be semi-permanent, they often lack some of the architectural quality and special features or amenities that permanent classrooms have. These differences may make a difference in student achievement. When some schools have more modular buildings than others, there is the potential to foster inequality between schools.

Student & Staff parking

Required vehicle parking standards are a local zoning code issue that can add to the need for larger school sites. The following strategies can be used to mitigate requiring larger sites:

1. Reimbursing the local transit agency for allowing the students to ride for free;
2. Providing better bicycle storage facilities on campus;
3. Making shared parking arrangements with various organizations in the neighborhood.

The transit and bicycle measures require schools that are well-connected to their service area by transit and bicycle routes. While all of these measures could reduce the demand for parking spaces on the school site, shared parking arrangements most directly affect the amount of the school site being dedicated to parking. Shared parking arrangements require nearby organizations with ample parking and compatible use schedules, which may not be available at all school sites.

School Site Size

School site sizes in the District are established and unlikely to change. There are several options to reduce the space on a school site dedicated to non-educational uses, such as field and playground space or parking. However, the following factors should be considered in making these types of decisions:

Good walking, biking, and transit access should be available to reduce the demand for vehicle parking. Otherwise, there is the risk that parking will overflow into the surrounding neighborhood, which can create livability issues and complaints from residents.

Sufficient parking is an issue for parents and others who volunteer at schools during the daytime. As schools have come to rely more on volunteers in times of operating budget shortfalls, this is a consideration.

School sports and extracurricular activities have consistently been a highly regarded value of families in the District. Unless there are convenient alternatives to providing space for these activities, very careful consideration should be taken when evaluating whether to reduce this space on a school site.

Swing Space

Due to the extensive work required to upgrade many schools to achieve modern learning environments, entire schools will need to temporarily relocate into different facilities while construction is completed. These facilities that will temporarily house displaced students are called “swing space”. In some instances, currently vacant school buildings might serve this purpose. For example, after the fire at Marysville K8 in 2009, the students temporarily relocated to Rose City Park while the District pursued funding for partial reconstruction of Marysville.

Stabilization for swing space occupancy should include providing adequate heat, preventing water intrusion, increasing accessibility and providing some minimal level of safety and security measures. Several of the District’s vacant school buildings would require minimal upgrades to temporarily accommodate students. For example, Rose City Park, Kellogg and Marshall.

The number of available swing space sites directly impacts the volume of construction that can take place at any given time. It can also limit the student throughput of a given geographic area. A primary objective is to limit the maximum travel time for any student to the extent feasible.

Any school recommended for replacement or major alteration that might require student displacement will require an analysis of the site and its relationship to the neighborhood in order to determine any desirability to work on-site around the existing buildings. This analysis would also include construction “phasing” or sequencing the work during periods when students are absent.

A site will primarily be judged as a swing space candidate location if it has adequate enrollment capacity, is within the geographical location constraints, and is compatible with the grade configuration. Capacity will match existing enrollment or the site will have capacity to accommodate additional modular buildings.

Given the total number of District facilities requiring major renovation or replacement, swing space will be required for many years to complete the transformation to modern learning environments.

SUMMARY

There are a variety of ways in which the District makes efficient use of its school sites including use of modular classrooms, building multi-story schools, sharing use of school sites for both District and other public/community agencies, locating schools on smaller sites, alternative parking arrangements and use of swing sites.

However, the District must consider specific site conditions and the values and demands of the community when evaluating these options. Site conditions such as steep slopes, wetlands and development code regulations that establish use standards for school buildings and modular classrooms, etc. are also important considerations. Community values may include providing enough parking for volunteers, connected and safe walking paths, biking, transit access, providing fields for sports, extracurricular activities and shared uses with the Parks and Recreation Department and other community service providers.

ISSUE PAPER #5.2 ALTERNATIVES TO CONSTRUCTION

BACKGROUND

The LRFP will address other ways to accommodate programmatic growth or change that would not necessitate new construction or renovation. A variety of methods can be employed to alleviate the need for new or expanded sites. These can include: bussing students around the District to increase utilization at under enrolled schools, making boundary changes to improve student distribution, scheduling year-round school, allowing split shifts, sharing space with other districts, creating magnet schools to attract students to facilities with declining enrollment, consideration of different grade configurations to alleviate pressure in overcrowded facilities or locating modular buildings on existing over-crowded sites. This paper explores the implications of some of these strategies.

RELEVANCE FOR FACILITIES PLAN

Pursuant to the school facility planning statute, ORS 195.110, PPS must study alternatives to building new schools or performing major renovations when planning how to accommodate projected enrollment.

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(E) An analysis of:

(i) The alternatives to new school construction and major renovation

As with making more efficient use of school sites, the statute does not specify what alternatives must be studied. This “white paper” explores program changes, the use of modular classrooms, and public/private partnerships as alternatives to new construction and major renovation. Some of these ideas overlap with the statute’s requirement that the efficient use of school sites also be analyzed. Please see Issue Paper #4 for that discussion.

ELEMENTS OF ALTERNATIVES TO CONSTRUCTION

Program changes

The District has historically reviewed program alternatives and considered a variety of changes that schools could institute to potentially increase the capacity of existing school facilities to serve projected enrollment:

1. Year-round schedule
2. Double shift schedule.

Year-round school schedules have been shown, in some school Districts, to have educational benefits. However, with all the students attending at same time, there is not a significant difference in the school’s capacity. In fact, it has the potential to make ordinary maintenance and repair along with capital improvements more difficult because there are few extended periods of time when the school is unoccupied (as compared to schedules in which classes are not held during the summer). Major maintenance and renovations would require closing a school and transporting students temporarily to another location. See Issue Paper #5.1 for the discussion on “Swing Sites”.

A double shift schedule essentially splits the students into two groups: one that attends during the morning shift and one during the afternoon shift. Of these programming options, the double shift has the potential to free up the greatest amount of school capacity; theoretically, this could make 50% more capacity available during each shift. However, this schedule can create challenges for working parents coordinating care as well as interfere with extracurricular and “after-school” activities.

Given our current school building portfolio along with projected 10-year enrollments, it is not necessary at this time for the District to consider altering the existing 9-month school schedule.

Vacant & Leased Buildings

The District maintains a portfolio that includes former schools that are currently being leased, used as swing sites or are vacant. Given the projected growth of the District’s student enrollment, these “underutilized” school facilities can be considered for “reactivation” to serve students again. While there are capital costs associated with modernizing and improving these buildings, the costs are significantly less than constructing new capacity or doing a major renovation at the existing site. And since the District owns the property, there are no land costs. The inventory includes five administrative sites, four of which could be used as schools. There are nine facilities that are currently closed, eight of which could be used as schools. Three of which are being actively marketed, three are swing sites and two of which are leased to other entities outside PPS.

Building Status	Number	Square Footage
Administrative	4	335,035
Closed Facilities	6	157,832
Facilities Leased to Others	2	73,490

- Administrative – Several buildings across the District are used for administrative purposes including Rice and Marshall sites.
- Closed – The PPS building inventory also includes vacant school sites. Some of these schools may be potential “swing” sites to house students while repair or renovation work is being performed at active school sites or used for interim administrative purposes.
- Leased Sites – Leased sites are previously-closed school buildings the District leases to generate long-term revenue. These sites are usually leased by tenants for consecutive years. The Kenton and Edwards sites are examples. The District generated \$ 1.5 million in lease revenue that contributed to the General Fund in FY 2010-2011.

The current inventory of vacant and leased buildings suggests an ability to accommodate anticipated increases in student enrollment over the next ten years.

Modular Buildings

Modular classrooms offer solutions both for making more efficient use of a school site (Issue Paper #5.1) and providing a substitute to constructing new permanent buildings. Modular classrooms offer flexibility in responding to changes in enrollment and cost less than permanent buildings to purchase and operate. Table 1 shows the number of Modular classrooms in use in the district in September 2011, and the corresponding student capacity that these portables provide.

Table 1. Modular Classrooms in PPS, September 2011

	Number of Modular Buildings	Student Capacity*
K5 Schools	26	1,398
K8 Schools	31	1,549
Middle Schools	4	163
High Schools	6	427
Total	67	3,537

*Based on 34 square feet per student for elementary students and 30 square feet per middle and high school students

As discussed in Issue Paper #5.1, modular classrooms tend to lack some of the architectural quality and special features or amenities that permanent classrooms have. It is these differences that may make a difference in student achievement. When some schools have many more portables than others, this potentially creates inequality—the potential for lower performance and achievement related to more portable classrooms and fewer permanent classrooms.

Public/private partnerships

There may be opportunities for public/private partnerships to support District programs in lieu of new construction or major renovations. For example, PPS recently leased a portion of the ground floor of an affordable family housing development in NW Portland for an early childhood learning program.

In general, lease arrangements are made on a case by case basis to support educational programs objectives.

The Ramona Early Learning Program does not have a library, gymnasium, or cafeteria, which is not unusual for alternative programs or private schools but is unusual for PPS schools. However, the last elementary school that PPS opened – Rosa Parks School in North Portland – was constructed in collaboration with the Boys & Girls Club and is sited adjacent to a Portland Parks & Recreation gymnasium with agreements in place for mutual use and benefit.

The District's Career Technical Education programs have historically, and will in the future, have robust partnerships with industry both in the schools and with internships at industry partner sites.

SUMMARY

Program changes, use of modular classrooms, vacant buildings and public/private partnerships can provide additional capacity and may influence the extent of major renovations.

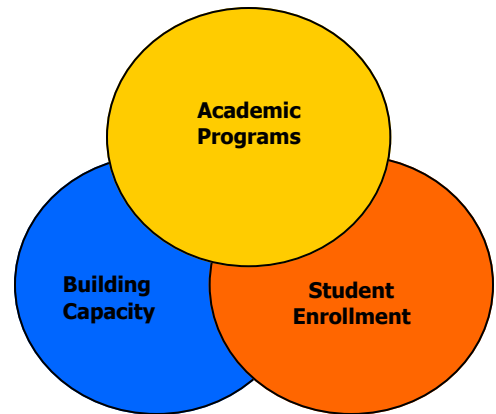
It is important for the District to explore options for increasing the amount of school capacity without having to make major capital investments. It is requested that the Committee indicate whether these strategies have potential as alternatives to new capacity improvements and major renovation from a community perspective, and whether there are other strategies to suggest.

ISSUE PAPER #5.3 SCHOOL UTILIZATION

School Utilization Components

BACKGROUND

School utilization planning is necessary to provide effective learning environments for all students. Well utilized schools have ample learning spaces for all students in attendance, as well as sufficient common spaces to support educational programs and enrollment. School utilization planning requires an understanding of space needs for the range of academic programs offered in a school, as well as classroom and common spaces available for student use and the number of students anticipated in the future. This paper focuses on student assignment and building capacity components of school utilization.



In simplest terms, utilization is the portion of a building's space that is assigned to students. So a school with 500 students and 500 classroom seats would be operating at 100% utilization, while the same building with only 400 students would be operating at 80% utilization. In this paper, we will examine:

- Student assignment policies and practices that influence school enrollment,
- Current school size target enrollment ranges to meet program goals,
- A new model for assessing building capacity based on instructional use, and
- Trends in school utilization expected in the next decade

We will also propose a set of recommendations for responding to future over- and under- utilization issues.

RELEVANCE FOR FACILITIES PLAN

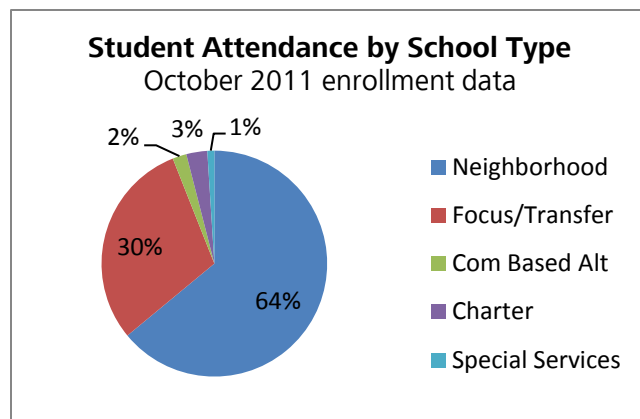
State law (ORS 195.110) requires large school districts with K-12 enrollment more than 2,500 students to develop long range facilities plans. School facility plans must contain "objective criteria to be used by an affected city or county to determine whether adequate capacity exists to accommodate projected development". Once a large school district's long range facilities plan is adopted into a local jurisdiction's comprehensive plan, the local jurisdiction has the ability to limit or deny application for new residential development if the school district identifies the lack of student capacity based on a student capacity formula and the local jurisdiction has considered options to address school capacity.

PPS Board Resolution No. 3986, criteria to determine the order of rebuilding and renovation of PPS school building to create 21st century schools, identified enrollment as a key criteria by which to assess capital investment in district schools: “right size” schools by “analyzing transfer patterns and making adjustments, evaluating boundary changes to balance enrollment between adjacent schools, and increasing the physical capacity of the school”.

The instructional space and core facilities of every school should be sufficient to support the district’s desired enrollment size that will support the delivery of the best educational model. The district overall has sufficient facility space for the forecast 50,399 students of 2021. However many individual schools do not have adequate space for their forecast enrollment of 2021. One of the tasks of the district’s enrollment balancing process and long range facilities plan is to ensure adequate space and capacity for the number of students needed for the district’s desired program, so that every student has access to a high quality education regardless of race or class.

STUDENT ASSIGNMENT PRINCIPLES

Portland Public Schools provides a guaranteed school for every grade K-12 student based upon their home address. PPS also provides a number of options for students to attend other schools, including other district neighborhood and focus (or magnet) schools, independently operated charter and alternative schools, and schools designed to meet individual students’ specialized learning needs. The chart below shows the current distribution of K-12 students by type of school attended.



The Portland model of both guaranteed neighborhood schools and a robust choice portfolio is somewhat unique when compared with other similarly sized school districts. In general, suburban districts offer fewer choice options, while other urban districts are more likely to offer choices and use lotteries to assign students instead of neighborhood guarantees.

At the individual school level, attendance at either neighborhood or choice schools can vary greatly. For example, 87% of high school

students who live in the Wilson neighborhood attend that school, while 22% of the high school students in Jefferson neighborhood are enrolled there. Enrollment planning assumes that current patterns of attendance continue to occur. However, space availability, special program locations and other factors can modify neighborhood “capture rates” significantly. For example, in 2006, 62% of the K-5 grade students in the Abernethy neighborhood attended that school instead of other public school choices. By 2011, the neighborhood “capture” rate for Abernethy increased to 73%. Likewise, it is anticipated the Middle College Program at Jefferson will result in increased capture rate modifications as will any full modernization/expansion of existing schools wherever they may occur in the District.

In recent years, Portland has limited choice into other neighborhood schools, reduced the size of Benson (an all-choice technical high school) and approved the start-up of new charter schools. All of these changes are tracked by district staff and PSU demographers and included in annually updated enrollment forecasts. Annual enrollment changes are also analyzed each fall through an enrollment

data analysis process, which incorporates historic, current and forecast enrollment data with demographic characteristics and transfer patterns. The results of the analysis include:

- A list of schools with projected enrollment significantly greater or lesser than school capacity,
- An assessment of the degree to which forecast enrollment may inhibit delivery of an adequate and effective academic program and/or cost efficient use of a school, and
- Options to address identified enrollment issues, including:
 - a. enrollment changes through transfer limits or boundary adjustments,
 - b. program changes, which may include different grade configurations,
 - c. facility modifications to increase capacity, and
 - d. opening or closing schools.

In recent years, PPS has seen increased enrollment across the district. This trend is expected to continue and it is likely that more schools will be operating at or above enrollment capacity. These schools will have to offer educational programs with less space per student to do so. At the same time, some schools continue to see declining enrollment, or are operating in buildings with such small capacity that they could never reach enrollment targets for educational programs. Schools in these categories (see Exhibit B) would be considered for the types of changes listed above.

Each of the options listed above have the potential for positive and negative academic and operational impacts. Facility changes are often seen as solutions of last resort because of the cost of adding new capacity. However, enrollment or program changes have the potential to be disruptive to a school community, and may have a negative impact on student achievement.¹ Enrollment and facility planning staff meet with regional administrators and other district leaders to refine the analysis, including potential risks and benefits, before developing enrollment action plans which are shared with the Superintendent and School Board annually. The 2011 enrollment analysis list for elementary, middle and K-8 schools is attached to this paper as Exhibit B, for reference. (Note: The utilization rate used for this analysis was based on teachers assigned to a school divided by the number of classrooms in the building. A different method for calculating utilization is proposed later in this paper.)

A community engagement process is conducted at each school subject to changes due to over or under-utilization. The process allows stakeholders to provide input on the risks and benefits of each potential solution, both for the school in question and for nearby schools, before a single option is selected by the Superintendent and recommended to the School Board for approval.

SCHOOL SIZE TARGETS

While school building size is often a reflection of the educational models in place at the time a school was constructed, school size targets are based on current thinking regarding the number of students needed to meet a district's program goals. Targets are based on existing resources and staffing ratios, and are not meant to serve as program ideals, but rather as ranges for planning purposes. School size targets may vary through the years, as educational program models and funding levels change. While larger schools are more efficient from a staffing and operations perspective, they may not provide the personalized school climate and learning supports that are available at smaller schools. The following enrollment targets were developed for the 2011-12 school year.

¹ Douglas Ready, Valerie Lee & Kevin G. Welner, Educational Equity and School Structure: School Size, Overcrowding, and Schools-Within-Schools <http://nepc.colorado.edu/files/1882.pdf> (2004)

2011-12 PPS School Size Target Ranges*

School type	Floor	Target	Ceiling
Elementary	300	450	100% utilization
K-8	350	500	100% utilization
Middle	450	600	100% utilization
High	1200	1350	100% utilization

*Does not include focus, alternative and special schools

It is generally assumed that schools with enrollment near the target size are able to provide a full academic program. However, schools with enrollment near or below the target “floors” may not be able to offer a full program without supplemental funding. Target “ceilings” are based on classroom capacity, not program size. Different enrollment targets exist for district focus, alternative and special schools.

STUDENT CAPACITY MODELS

It has been several years since PPS consistently estimated the student capacity of its schools. There are a wide variety of student capacity models used by other districts, within and outside of Oregon.

In anticipation of the 2012 Long Range Facility Plan update, a committee of district staff including high school, middle school, and K-8 administrators evaluated capacity models for applicability and suitability for district uses. This group of educators felt any district capacity method should:

- Be flexible;
- Be based on physical space and adaptable to school program and configuration;
- Understand program space requirements;
- Describe a reasonable number of students per classroom;
- Acknowledge annual changes in teacher/student ratio; and
- Begin to inform educational specification standards.

A list of all the capacity models evaluated can be found in Exhibit D. Most of the models identified were excluded from further review due to the degree of complexity, and failure to account for program variations and special programs such as Special Education, Head Start and ESL.

For the purposes of this paper, the PPS committee focused on three different models: net area, instructional space and number of classroom models. A description of each is found below. The schools represented by the committee members were used for testing the models. The bar chart below provides the result of these tests.

- **Net area model** divides the net area of the school building (entire building minus SPED and ESL classrooms) by a square foot per student factor to determine student capacity;
- **Instructional area model** divides instructional areas (spaces with teachers assigned to them) by a square foot per student factor to determine the student capacity of each space; and
- **Number of classrooms model** applies a student per classroom ratio to all regular classrooms to determine student capacity.

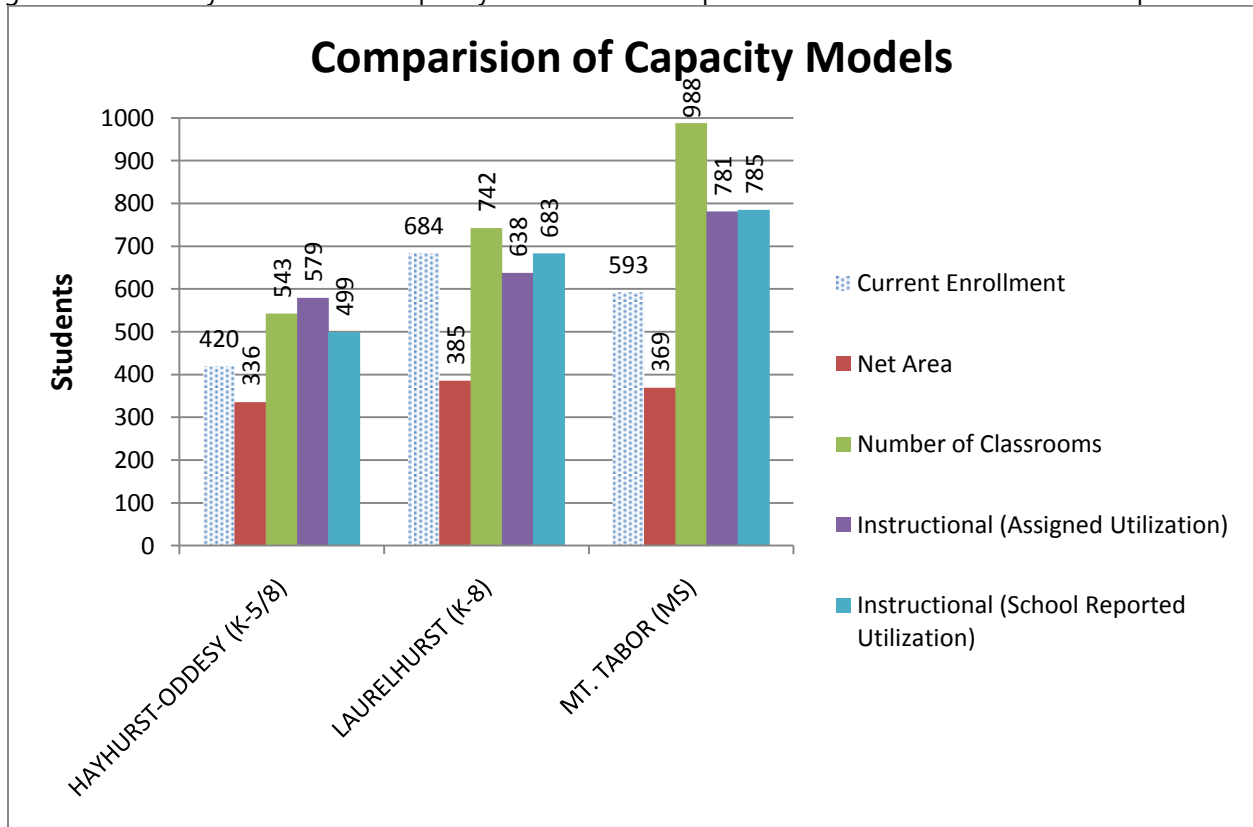
All of the models either subtract or discount classrooms used for special education purposes noting that the student capacity of these spaces is different than “regular” classroom areas. Most models identify gymnasiums as having student capacity primarily for older grades.

The district’s current assessment of space utilization within each school is the ratio of full time equivalent (FTE) teachers per classroom. This is referred to as the school’s utilization rate and was one of the primary measures of space need in recent enrollment balancing activities within the district. While this is a useful tool for district-wide assessment of space utilization it does not account for the variation in sizes of classrooms or the frequency of the room use or use of classrooms by other special programs (SPED or ESL).

The primary strengths and weakness of these models are identified below. See Exhibit D for more detail of each model.

Model	Strengths	Weaknesses
Net Area	<ul style="list-style-type: none"> • Easy to apply and understand • Little information needed • Accounts for strain additional classrooms put on core facilities 	<ul style="list-style-type: none"> • Does not account for SPED and ESL student capacity needs • Cannot gauge variability of common spaces between schools • Does not account for program space needs
Instructional	<ul style="list-style-type: none"> • Allows flexibility of instructional space • Easy to understand • Easy to calculate 	<ul style="list-style-type: none"> • Identification of instructional spaces takes time to evaluate
Number of Classrooms	<ul style="list-style-type: none"> • Easy to calculate 	<ul style="list-style-type: none"> • Does not account for variability in size and type of classrooms within and among school buildings • Does not account for program space needs

The PPS committee evaluating capacity formulas believed the instructional model provided the greatest ability to estimate student capacity while simultaneously giving building administrators the greatest flexibility to assess the capacity of instructional spaces based on current use of the spaces.



The instructional model allows for a determination of design capacity (all *potential* instructional spaces being used 100% of the school day) and a functional capacity (design capacity minus the instructional spaces being used for non-instructional purposes – office space, resource rooms, space leased to other users). The determination of functional capacity is best performed at the individual school level. Determining what percentage of a school day instructional spaces are being used (utilization) can be done by assigning a school-wide utilization factor to all instructional spaces or by having building administrators identify how often instructional spaces are being used.

The utilization rate identifies how much of the functional capacity is being used. Most schools do not operate at 100 percent of the available student capacity. Teacher planning periods, specialized classrooms used by a portion of school students (e.g. science labs, art rooms) mean that not all instructional spaces are used every period of every day. However, the program needs of each school may require the use of traditional instructional spaces for non-instructional uses such as resource rooms, counselors, therapists, etc.

The functional capacity and utilization of instructional spaces identified by school principals and administrators provides the most accurate assessment of how each school program makes use of available instructional space. PPS staff recommends the student capacity identified by each school principal be the capacity information used for school utilization and planning purposes. Annual updates of student capacity using the instructional model should be conducted to note changes in school programs and utilization of spaces. As the use of a student capacity model for the district is new, the model should be evaluated within a short period of time (2 years) to determine the need for changes to the model that more accurately reflect the student capacity of district schools.

Any student capacity model adopted by the district should only be developed for the purposes of comparing student capacity to future enrollments and any target enrollments established by the district. As noted above, the identification of enrollment and capacity disparities should be a signal of the need to engage in the enrollment balancing process. If the right size of a school program requires the need for a school enrollment greater than the physical space allows as suggested by a capacity model, this may suggest the need for capital investment in the school to provide the space needed to accommodate the program.

TRENDS IN SCHOOL UTILIZATION

Throughout the next decade, PPS is expected to add about 3,600 students above current district enrollment (using the medium growth scenario forecast of the PSU enrollment forecasts). If the Long-Range Facility Planning Committee agrees, using the instructional capacity model described above, staff will be developing school-by-school utilization analysis this spring, which will be an essential tool for future enrollment and facility planning.

As noted, instructional capacity calculations are based on current program space requirements, and are subject to change based on program needs. For example, in the past several years, PPS has converted kindergarten curriculum from a half-day model to a full-day program. As a result, the need for kindergarten space has nearly doubled across the district: Schools that in the past could accommodate 50 kindergarten students in one classroom—25 in the morning program and 25 in the afternoon program—now need two classrooms for the same purpose.

Other changes that impact utilization include the district-wide increase in numbers of students who receive additional services for language-instruction or disabilities, and the trend of inviting partner organizations into schools to provide mentoring, counseling and other supports. When considered together, it is clear that school utilization is an evolving measure, and that our facilities as currently configured may not be “right-sized” to meet the needs of future students.

SUMMARY

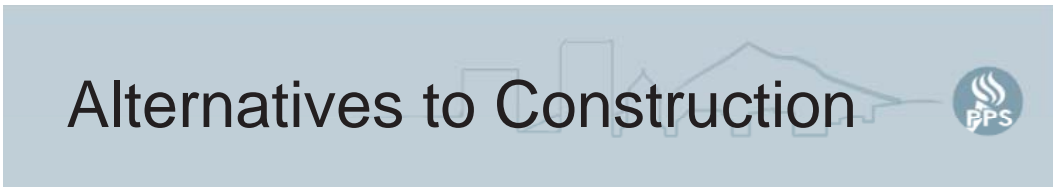
We recommend that the long range facility plan advisory committee endorse:

- The district’s data analysis and enrollment balancing process as the mechanism by which to identify discrepancies between school enrollments, program sizes, and student capacities;
- Consistent application of an instructional student capacity model district-wide on an annual basis;
- Incorporation of each schools’ utilization of available student capacity into the long range facility plan;
- A thorough consideration of program space needs when the district’s capacity model is updated;
- The use of target program size as the primary determinant of the physical size of each school when new capacity is added;
- Frequent evaluation of desired program size against student capacity at every school;
- Identification of facility expansion as one of several options to accommodate district established program size after available student assignment options have been explored;
- Permanent facility expansion should strive to provide parity of common spaces amongst school types; and
- Non-permanent facility expansion such as the addition of modular buildings should be considered to support temporary enrollment fluctuations



SCHOOL UTILIZATION

*Overview of PPS Enrollment
Balancing
and Student Capacity*



Alternatives to Construction

- Requires an analysis of alternatives
- Elements of alternatives evaluated include:
 - Program Changes
 - Vacant & Leased buildings
 - Modular Classrooms
 - Public/private partnerships

Efficient Use of School Sites



- Requires an analysis of measures to increase efficiency.
- Elements of efficient use evaluated include:
 - Multi-story buildings
 - Shared use & partnerships
 - Modular classrooms
 - Student & Staff parking
 - School site size
 - Swing space

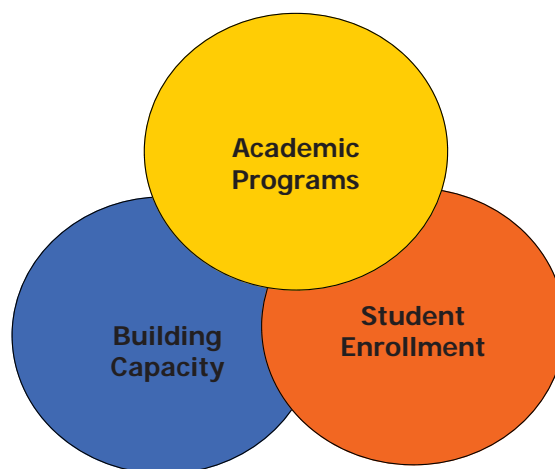
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School Utilization

Introduction



School Utilization Components



4

School Utilization

Planning Process



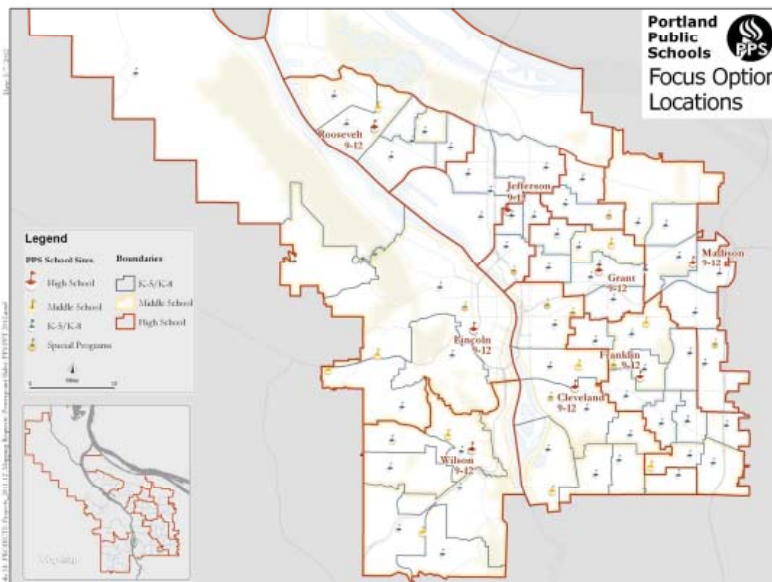
- Provide facilities to support enrollment and program needs



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School Utilization

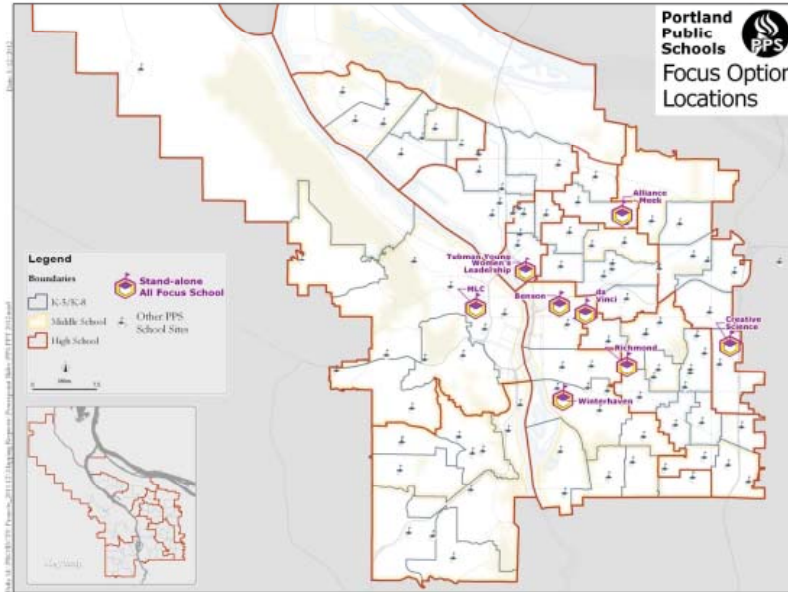
Focus Options Schools – High School Clusters



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School Utilization

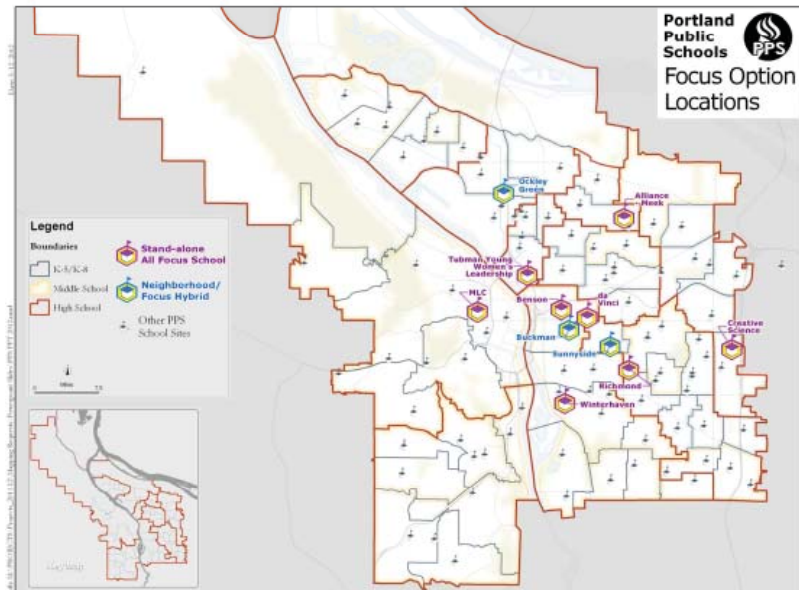
Focus Options Schools – Stand Alone



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School Utilization

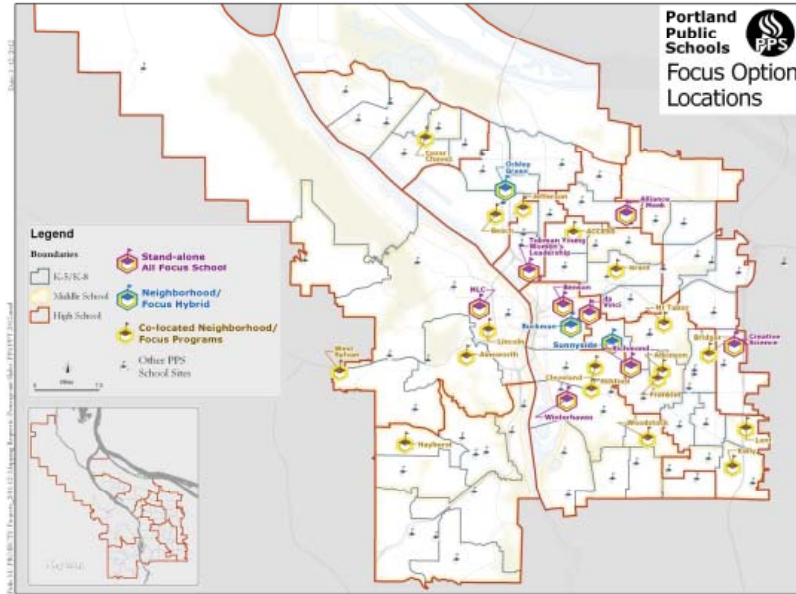
Focus Options Schools – Focus & Hybrid



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School Utilization

Focus Options Schools – Co-located



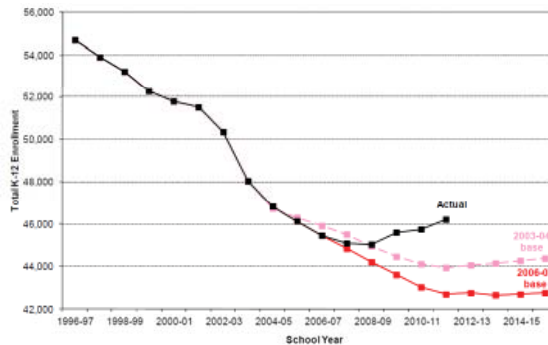
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School Utilization

Enrollment Assessment



- **PPS** annually forecasts enrollment at each school
 - Forecasts make assumptions
- **Things Change:**
 - School Choice
 - Demographic fluctuation
 - Educational program requirements
 - New housing development



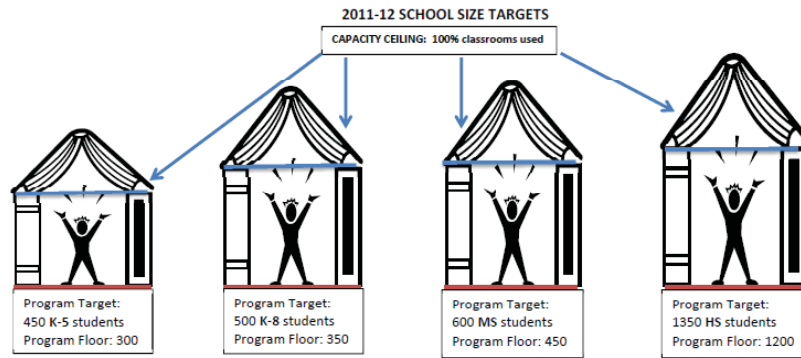
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School Utilization

Enrollment Analysis

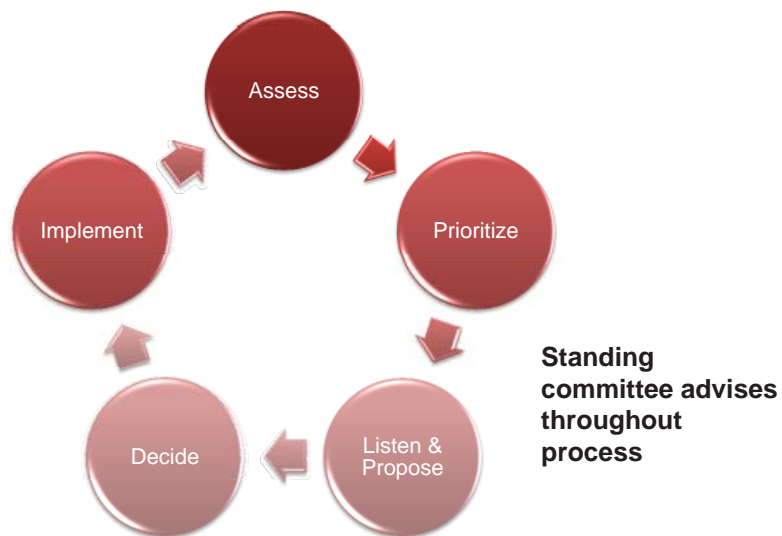


- Annual look at multiple enrollment factors
- Compare to school size targets

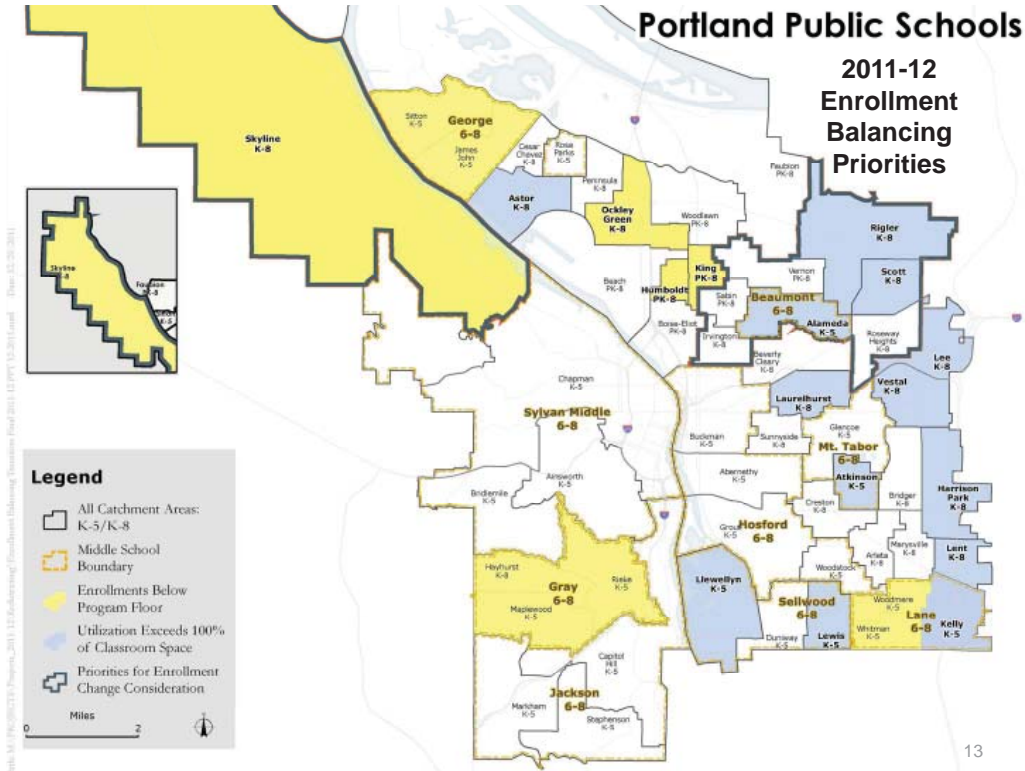


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Annual Review & Change Process



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School Utilization

Options for change: Sunnyside



Transfer provisions

YES Transfers reduced beginning 2009

Boundary changes

Possible

Facility changes

YES Library reconfiguration 2009; Modular 2010

Program moves

YES EMS to Sunnyside 2004; Family Co-op to Bridger 2005; DHH to Creston 2005

Grade reconfiguration

YES

School initiation/closure

Possible with replication

School Utilization

Student Capacity



- Why student capacity model is needed:
 - Determine space needs based on physical capacity & program needs rather than staffing model
 - Planning tool: respond to future enrollment issues
 - Identify improvements needed for capacity
 - Required by state law (ORS 195.110)
- PPS has used many models over the years
 - Often not related to size of instructional space

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School Utilization

Student Capacity



- Number of different capacity methodologies
 - Net area
 - Number of classrooms
 - Instructional
- All models discount capacity of special programs (SPED; ESL)
- All make use of standards:
 - Students per classroom
 - Square feet per student
- Based on physical space vs. staffing model

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School Utilization

Student Capacity



- Student capacity should reflect program needs
- Current day capacity different (often less) than when the school first opened
 - Educational program requirements
 - Special programs
 - Changes in building and fire code
 - Demographic changes

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School Utilization

Evaluation of Models



- PPS team evaluated three models
 - All have pros/cons; none are perfect
 - Evaluate models most relevant to PPS
- Preferred instructional model
 - Flexibility to identify instructional spaces
 - Related to the physical size of instructional spaces
 - Able to compare differences in common spaces between schools

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School Utilization

Instructional Model



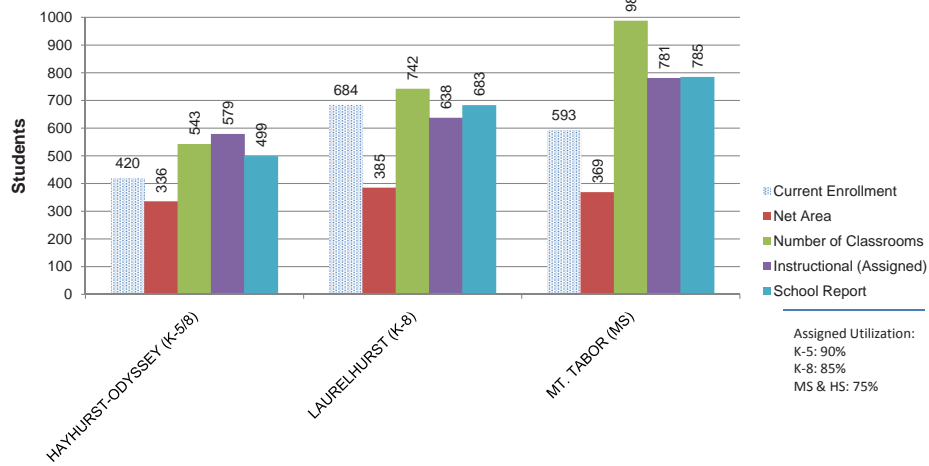
- Compares physical capacity to utilized capacity
 - Design capacity (all space used all the time)
 - Utilized capacity (planning periods; specialized rooms, etc. by school type)
- Acknowledge other uses of building spaces
 - Mixed use of space
 - Community use

School Utilization

Model Comparisons



Comparison of Capacity Models



School Utilization

Next Steps



- All schools be asked to use instructional model
- Results become part of long range facilities plan (LRFP)
- District adoption of LRFP: implementation of capacity model

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School Utilization

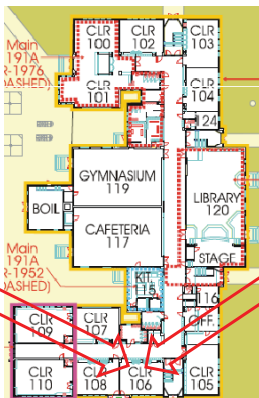
Example – Full Day Kindergarten



- Kindergarten
 - 2003: Of 3,546 students, 56% were full-day
 - Classrooms required: 80 full-day, 31 half-day



Half Day Kindergarten Class



Half Day Kindergarten Class

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School Utilization

Example – Full Day Kindergarten



- Kindergarten
 - 2012: Of 4,064 students, 98% are full-day
 - Classrooms required: 161 full-day, 1 half-day
- 50 more classrooms needed for kindergarten
 - More families choosing full-day option
 - 500 student enrollment increase

Full Day Kindergarten Class



School Utilization



- QUESTIONS ?

discussions about topics and to make recommendations for guiding principles forming foundation of LRFP. After first discussion of guiding principles in committee meeting 4 an advisory group has distilled information received prior to today's meeting and proposes three core topics for the LRFP, four guiding principles and two goals which are applied to each principle. A detailed introduction and discussion will follow later tonight.

Leroy: After the information gathering process we will shift gears during next meetings:

Meeting 5 (today) will continue to hone guiding principles.

Meeting 6 (March 20) will define / confirm core topics

Meeting 7 (April 10) the committee will develop scenarios which result in plan approaches.

Ideally one more meeting would be added to allow more time.

The committee agreed to add one more meeting by show of hands. LeRoy proposes to have committee vote on preferred dates for Meeting 7a (April 3 or April 17).

Meeting 8 Committee will recommend a preferred scenario to PPS Board for consideration

In regard to LRFP, we have to ask the fundamental question: do nothing, do everything, do something in-between, the answer serves as the basis for a long-term plan. A proposed way to categorize/prioritize the plan could be:

- Health/life safety/accessibility (seismic as a sub-line item)
- Maintain operations
- Protect capital investment
- Educational Enhancement
- Accommodate Growth
- Ancillary Facilities
- Temporary Facilities/Moves
- Land

Basic approach to existing facilities, renovation vs. replacement, is there a tipping point?

- Cost comparisons
- Historic considerations
- Use of land (one vs. two story)

During the scenario development meetings committee will ask questions such as:

A) How much should be included in the ten year plan? (Think of this as a percentage of the overall district need that has been identified (as represented by capital expenditure). (This is also a question of how long you believe it should take to address total district need).

B) How should these capital resources be distributed among various need categories? (Think of this as a percentage distribution of the total capital resources associated with the ten year plan).

C) Are there any other strategies with significant impact, other than allocation of capital resources that could be leveraged to address the facility needs of the district.

D) What is an appropriate approach to distribution of capital resources across the district? (Two possible strategies are "more or less even distribution based on need" vs. strategically focused distribution – there may be other approaches)

LeRoy walked through the core topic of Enrollment to illustrate process:

Enrollment (who, how many, and what the projections say)

Utilization (how much space PPS has, how it overlaps with that required)

Facts/Tools:

1. Capacity of facilities (district wide and individual)
2. Current enrollment by facilities (district wide and individual)
3. Projected increase or decrease
4. Capture rate
5. Poverty
6. Diversity
7. Performance

Metric: Possible Approaches:

Growth/over enrollment-no build

1. Accept over enrollment as it comes – no facility change
2. Re-boundary
3. Cross district bussing
4. Year-round school (operational cost)
5. Split shifts (operational cost)
6. Magnet strategies to shift enrollment
7. Grade configuration changes
8. Eliminate in-district transfers

Growth/over enrolled-build

1. Add modulars (operational cost)
2. Add permanent building capacity to existing (no other renovation)
3. Renovate existing + add
4. Build new w/ add

Little growth/under enrolled

1. Accept under-enrollment as is
2. Re-boundary
3. Cross district bussing
4. Magnet strategies to increase enrollment
5. Grade configuration change
6. Eliminate in-district transfers
7. Consolidate and temporarily close

Strategies associated with capture rate, poverty, diversity, performance in mind?

Questions:

Q: What are the key issues associated with this topic (what needs to be addressed)?

Q: What are the preferred strategies to manage these issues?

Q: Which sites can physically support expansion of facilities, if required? (one and two story)

SMALL GROUP EXERCISE – GUIDING PRINCIPALS – CORE TOPIC EVALUATION

Butch: Introduces Carol Turner, Small Group Exercise Facilitator

Carol: Prior to exercise we want to hear from Group 6 and 7 who did not have a chance to report on fine tuning of the guiding principles discussed during last meeting due to time constrains:

GROUP 6:

1st Guiding Principle: Technology = We must create learning environments that will serve our students well in the future –which is now. This means ubiquitous technology in school. It means understanding our students’ other learning media and networks, so we can teach them more effectively.

2nd Guiding Principle: Accessibility = All facilities will be barrier free

No additional comments from group 6 to report.

GROUP 7:

1st Guiding Principle: Historic, Renovation, Replacement. In many cases, our school buildings represent a historic legacy for our community. We believe it is our responsibility as citizens to honor these community assets.

Abby: Speaker for Group 7, PPS shall include environmental impact statement with all capital project contracts. Always consider triple bottom line with each project: Equity, Environment, Economy. Renovation shall be considered before replacement.

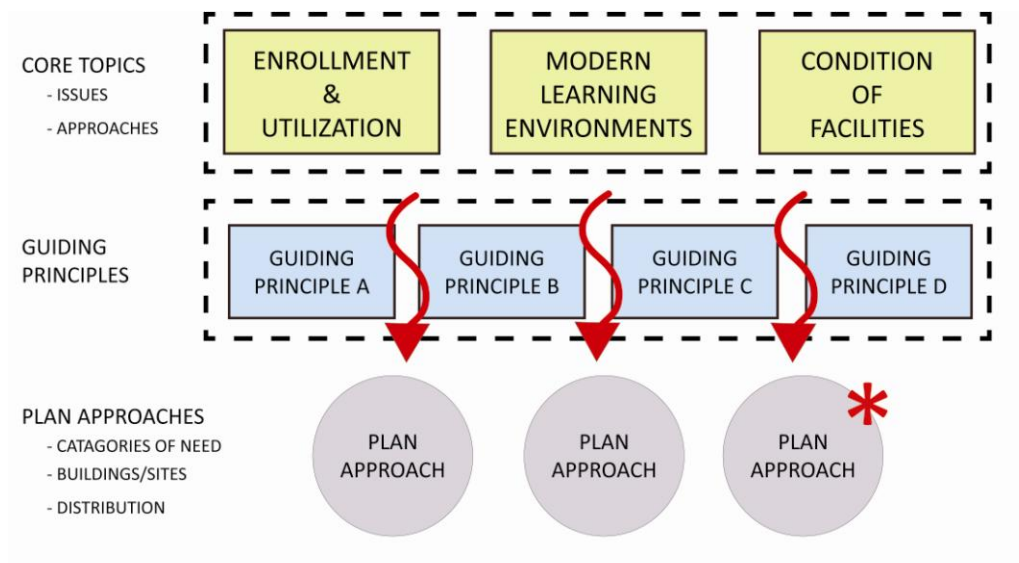
2nd Guiding Principle: Partnerships. We must create facilities that serve the community and that enlist the community in service to children and youth. It means partnerships at all levels—government, business and neighborhood—to create better school facilities and to provide services in support of students and families.

Abby: We propose to change title to Relationships. Considered more long-term, integrate schools into entire fabric of society to form all sorts of relationships.

Also see copy of written summary from Abby for more details.

Carol walks through the binder package.

DESTILLATION OF GUIDING PRINCIPLES BETWEEN MEETING 4 AND 5



Nancy, Kevin: After committee discussion about guiding principles had to be cut short due to time constraints at meeting 4, a sub-committee consisting of CJ, Carol, Nancy and Kevin reviewed the principles and felt that some of them belonged to different system categories. I.e.: "Historic Buildings" versus "Partnerships". The sub-committee felt the need to restructure the organizational model addressing "This is what" and "This is how".

Mahlum introduced

The three emerging core topics of LRFP are:

1. Enrollment & Utilization
2. Modern Learning Environments
3. Condition of Facilities

Nancy and Kevin proposed the following model:

Out of which four guiding principles emerged:

1. Strong Partnerships, Communities and Neighborhoods
2. Sustainability
3. Fiscal Responsibility
4. Equity

Two goals are applied to each principal:

Goal 1: Provide Modern Educational Environment Serving All Students

Goal 2: Provide Safe, Warm and Accessible Facilities

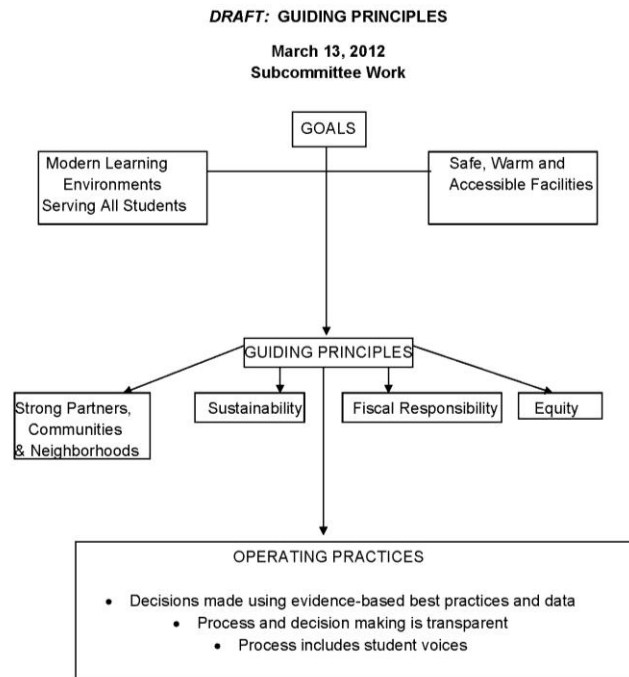
Nancy asks if committee concurs with overriding topics for LRFP.

LARGE GROUP DISCUSSION

- 3.1. The overriding goal shall be "Improving Student Outcome". Majority of committee disagrees and feels that Safety and Accessibility are equally important.
- 3.2. Angela JH: My definition of "Modern" includes Universal Access, but not sure if everyone in the committee has the same understanding. Clarification of terms would be helpful especially since the current PPS Board defines access only in racial terms.
- 3.3. Majority of committee agrees to define access in racial, economic and universal access terms.

Carol: Describes a diagram she developed to identify how the two goals relate to the four guiding principles and that three Operating Practices go across all other topics. They include:

- 1. Decisions are made using evidence based best practices and data
- 2. Process and decision making is transparent
- 3. Process includes student voices



Carol: Describes LeRoy’s diagram which illustrates how the three LRFP core topics are filtered through the four guiding principles to create LRFP approaches. See notes by Carol for group work results.

CONT. LARGE GROUP DISCUSSION

- 3.4. Angela K.: Add enrollment size and facility size to the LRFP core topics.

- 3.5. Carol: Enrollment size and facility size are included in Equity. Detail clarifications of all goals and guiding principles are included in the handouts at each table to be used during the small group exercise.
- 3.6. CJ: Since Historic Buildings is no longer a separate guiding principal it should be added to principle A: Strong Partnerships, Communities and Neighborhoods
- 3.7. Committee question: Can the small group also discuss / refine the two goals?
- 3.8. Carol: Yes
- 3.9. Angela JH: I want to plead again for universal access to be clearly identified as a goal. Currently PPS has an annual operating budget of \$50,000 to improve accessibility in all schools. In order to make all schools accessible by 2015 a total of \$3.5 million is needed. This is an important civil rights issue and I want to make sure that there is a real commitment by PPS to provide access for all.

SMALL GROUP EXERCISE

Carol: Purpose of exercise is to fine tune guiding principles and hone in goals in small group work. Guiding principles are most useful if each has a key aspect which is clear, precise and distinct from others. Form 4 groups (6-8 committee members each) around the four guiding principles (A, B, C, D), exercise timeframe is 25 minutes for discussions. Each group will share comments / results.

Carol introduces 1-5 consensus model to be used for tonight's group exercise:

5 = I fully support, fight for it

4 = I support

3 = I am OK with that

2 = I can live with that

1 = I am totally against it and will fight against it

See notes by Carol for small group work results / summary. Nancy ask for all small group comments to be collected and the flip charts made available for the upcoming sub-committee meeting Thursday (March 15).

A summary of the Public Comment follows below. These notes reflect individual comments during the meeting and have not been confirmed for accuracy.

ITEM DISCUSSION

PUBLIC COMMENT

- 3.10. Lainie Block Wilker: I am a PPS Parent Education Advocate. With a \$27 million shortfall, how many buildings can we operate without consolidation? The largest educational shortfall is currently experienced by high school students who have to endure a 3hr block in the middle of the school day during which no classes are available. PPS cannot afford to operate nine high schools. According to research, only enrollment of 1,600 – 1,800 students allows for full program at each high school. Consolidation is also needed to achieve diversity through equity. We are outlining strategies and benefits in one handouts how consolidation several high schools in order to provide robust educational programs. Another hand-out describes how consolidation of K-8 schools would benefit students. A middle school requires 500

students for full program. Please also see the report of local architects on the matter and check out: www.LearnNowBuildLater.org for more information. (All four handouts are attached to the minutes).

- 3.11. Kevin T.: Vancouver School District also had great success with consolidation.

EFFICIENT USE OF SCHOOLS AND SITES

Jim Owens: Review of white paper, efficient use of schools includes multi-story buildings, shared use + partnerships, modular classrooms, student / staff parking reductions, school site sizes sufficient to meet school needs, swing space. PPS school sites are generally much smaller than surrounding suburban school sites. Alternatives to constructing additional facilities construction include program changes, leasing vacant buildings (potential revenue), modular classrooms as a low-cost-quick-fix, public / private partnerships (Rosa Parks).

SCHOOL UTILIZATION

Judy Brennan: Review of white paper, Utilization is concerned with Academic Programs, Building Capacity and Student Enrollment. Utilization = Enrollment divided by Capacity. PPS provide3s every student with an enrollment guarantee with a choice between neighborhood school or a focus option school (enrollment through lottery). PPS annual enrollment forecast tries to forecast the delta between need and ideal school size. PPS has a transfer policy in place in order to move students between over and under-utilized schools – through a balancing approach. Facility changes are the most expensive option to respond to changes in enrollment, PPS tries other enrollment balancing options first.

Larry Dashiell: Why do we need a student capacity model? Needed to determine space needs based on physical capacity, identify needed capacity improvements, and it's required by state law. PPS administrators have evaluated three different capacity models. All capacity models have pros and cons and discount the capacity of special programs. PPS prefers the instructional model because it allows greater flexibility to identify instructional space, relates to the physical size of instructional space and enables PPS to compare differences in common spaces between schools . The models compare design capacity and utilized capacity. Models can produce a variety of different results. Adoption of the long range facilities plan by district will implement a student capacity model.

CONT. LARGE GROUP DISCUSSION

- 3.12. Angela JH.: Define how "Discounting" relates to Special Ed spaces.
- 3.13. Paul: The instructional model acknowledges that the capacity for special ed is less than other classrooms.
- 3.14. Committee question: Does PPS supports consolidation of middle schools to offer better programs?
- 3.15. Jim: Yes, PPS supports consolidation of middle schools to offer better programs.
- 3.16. LeRoy: asks for show of hands if additional meeting date shall be April 3 or April 7 and receives 13 Yes' for both dates. He explains that the sub-committee will decide.

MEETING ADJURNED

Butch thanks all attendees. Next meeting will be at held on March 20 at Markham ES at 5:30PM (optional tour at 5:00).

ISSUE PAPER#6.1

CAPITAL INVESTMENT – TOOLS, BONDS, PARTNERSHIPS

BACKGROUND

The majority of operating funds for public schools in Oregon are allocated by the state under a funding formula that is primarily based upon the number of students enrolled in each school district. Three-quarters of Portland Public Schools (PPS) general fund budget comes via the state school fund (SSF), which is funded by local property taxes and by state appropriations.

PPS General Fund 2011-12		
Beginning Fund Balance/Reserves	\$ 31,541,461	7%
SSF - Local Property Tax	\$ 178,446,000	38%
SSF - State Appropriation	\$ 161,808,270	35%
Local - Local Option Levy	\$ 54,567,485	12%
Local - Gap	\$ 18,795,000	4%
Multnomah ESD	\$ 6,795,000	1%
Federal Funding	\$ 7,000	0%
Other	\$ <u>16,500,491</u>	4%
Total	\$ 468,460,707	

Direct local funding is only 16% for PPS and the district's ability to raise local funding is limited in terms of the amount that can be levied and the arcane rules about property tax limitations that currently reduce the actual collections because of a decline in market value of residential property.

The main source of capital funding for schools in Oregon is voter-approved bonds. School districts typically borrow money to build or improve schools and repay the borrowing with special property tax money. In recent years, the federal government has provided very limited capital funds to school districts for specific purposes as part of national economic stimulus efforts.

RELEVANCE FOR FACILITIES PLAN

Pursuant to the school facility planning statute, ORS 195.110:

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(D) Financial plans to meet school facility needs, including an analysis of available tools to ensure facility needs are met.

(E) An analysis of:

(ii) Measures to increase the efficient use of school sites including, but not limited to, multiple-story buildings and multipurpose use of sites.

(F) Ten-year capital improvement plans.

OPERATING FUNDS AND CAPITAL FUNDS

Building a new school and making substantial improvements to an existing school building are examples of capital expenses. Paying the salary of teachers or principals is an example of an operating expense. Paying the electric bill for a school is an operating expense; replacing the wiring is a capital expense. Patching the roof is an operating expense; replacing the roof is a capital expense.

Oregon law dictates how school districts and other local governments manage their funds. The Oregon Revised Statutes and the Oregon Constitution make special provisions for “capital funds” for school districts that define how they can be raised and how they can be used.

One rule is that capital funds may be used only for capital expenses. They may not be used for operating expenses such as teacher salaries or a school’s electric bill. Another rule (from the Oregon Constitution) is that taxes to pay for capital expenses are not capped by property tax limitation measures that restrict taxes that pay for operating expenses.

While capital funds may not be used for operations, operating funds may be used for capital expenses. Thus, it is legal to spend operating funds to build or improve school buildings. For example, a school district like PPS, without a capital bond in place, may choose to use operating budget dollars to pay for unavoidable capital needs. However, that reduces the amount of funding that is available to pay for teachers.

Since the passage of property tax measures in 1990 and 1997, funding for schools has not kept pace with inflation. As a result, in Portland Public Schools class sizes have increased, course offerings in art, music and physical education (among others) have been reduced, and maintenance on buildings is at a minimum.

As a consequence, it is increasingly difficult to allocate operating funds for capital uses. Currently, Portland Public Schools uses some of its operating money for urgent building needs that could be paid for with capital money if it was available. That could free operating funds for much-needed preventive maintenance.

CAPITAL BONDS

Any capital bond has to be voter-approved and is repaid with an additional local property tax. PPS may seek approval in May or November in any year, because of the voter turnout rules for other elections.

General Obligation (GO) Bonds are a familiar school capital financing instrument. Typically, a school district determines a total dollar amount of need, and then asks for voter authorization of debt in that amount. The total bond debt is typically long-term; twenty or twenty-five years is a common repayment period. The district then sells these long-term GO bonds, and services (pays back) the debt with taxes collected annually from district property owners. The calculation for this tax is based on Assessed Value (AV) of property. AV is not precisely predictable each year, so tax rates must be adjusted annually in order to generate the required debt service amount. In Portland, the AV grows by a statutory 3% maximum each year. This produces a relatively predictable basis.

Long-term debt instruments are very useful when a large amount of funds is needed in a short period of time, and when the ability to repay necessitates many years of payments. Mortgages are a familiar example of this. Characteristics of this long-term amortization model include access to most of the funds at the outset and lower regular payments. Characteristics of this model also include longer repayment time, higher total interest costs, and a long-term obligation that may limit additional borrowing until the debt is retired.

PPS has substantial capital needs. It is unrealistic to finance all of the work with one bond issue: both because the cost would be too high for tax payers, and because PPS could not manage all of the work in that time frame. So it makes more sense to consider a series of bond issues over a similar thirty period. The debt can be structured to ensure that most of the debt is repaid in the short-term which has two advantages: interest costs are lower, so the majority of taxpayer dollars goes into capital projects; and subsequent bond issues can be proposed without increasing the annual rate to taxpayers.

To illustrate the lower interest costs, consider the following two examples of an \$83 million financing need. Under the traditional structure a school district capital program is financed with 25 year GO bonds. If the capital program needs to spend \$83 million over three years and the taxpayers agree to repay that amount over 25 years, at 4.3% interest per year, the annual debt service is about \$5,500,000. Over 25 years, the total repayment is approximately \$137,500,000. Of that total, \$83 million will go to the building program, and \$54.5 million will go to interest payments.

If this example of a capital program was financed with 5 year GO bonds and taxpayers agree to repay the \$83 million over 5 years, at 4.3% interest per year, the annual debt service is about \$18,800,000. Over 5 years, the total repayment is approximately \$94,000,000. Of that total, \$83 million will go to the building program, and \$11,100,000 will go to interest payments.

AN EXAMPLE OF CREATIVE FINANCING AND TAKING ADVANTAGE OF PARTNERSHIPS: ROSA PARKS SCHOOL

Rosa Parks School is an example of creative financing which attracted foundation and grant funding while blending not-for-profit, private for-profit investors and public dollars to support housing & community development goals while simultaneously moving forward on the educational mission of the school district.

Rosa Parks School, which opened in 2006, is located on the New Columbia development in North Portland. The total project cost was \$20.2 million. PPS partnered with the Housing Authority of Portland (HAP), now known as HomeForward, to pull together complex and very creative financing for this project. Boys & Girls Club provides before- and after-school programs to students in this

neighborhood and agreed to become partners with a built-in space for its use at the site and joint use of shared space with the school.

\$18.2 million of funding was provided through a number of special purpose financial entities – with funding from Boys & Girls Club (14%), HAP (15%), New Market Tax Credits (NMTC) (21%) and PPS (48%). PPS and Boys & Girls Clubs lease the school from one of the special purpose financial entities for 7 years (the term of the tax credits) and then have an option to purchase the property. The remaining \$2 million was the cost of a gymnasium, which was built at the adjacent community center and funded by Portland Parks & Recreation. See Exhibit A.

This is an example of many features that PPS has been urged to consider in capital projects: community partnerships (City, HAP, Boys & Girls Clubs), private fundraising, and creative financing (NMTC). The good news is that on a \$20.2 million project PPS share of the cost is \$8.8 million, which is remarkable. And the district gets to use the facility for six years at a modest annual cost before having to pay for it.

However, even with this extensive third-party financing there is still a significant cost to the school district. PPS has to come up with \$8.8 million and the other features of this partnership are not replicable in all locations: there are limited numbers of partners who can raise this level of capital and with whom PPS would want to commit to a long-term partnership; tax credits are only applicable in certain zip codes; the HAP donation was a function of the urgent need and special nature of this HOPE VI redevelopment; and City of Portland funding for co-located facilities won't always be possible.

PPS COMMITMENT TO PARTNERSHIPS AND CREATIVE FINANCING

PPS is committed to exploring ways to fund future school construction or renovation in similar ways where this is possible. Three of the projects included in the May 2011 capital bond had already identified potential examples that are indicative of this intent. The Faubion School project included a partnership with Concordia University, the Jefferson Middle College project is a partnership with Portland Community College, and the planning project for Lincoln High School would likely involve Portland State University, the Portland Development Commission and possibly other partners for development of the LHS site.

OTHER SOURCES OF CAPITAL FUNDS

In addition to capital bonds, there are some additional sources of capital funding: including Construction Excise Tax, Cool Schools Funds (Senate Bill 1149), state grants; but these are limited both in amount and in how they can be used. Last year (FYE 6/30/11) PPS received \$1.36 million in CET funds. PPS annual proceeds under SB1149 is currently around \$900,000 and can only be used for certain energy-related projects. State grants are very limited too and may fund no more than \$500,000 to any school district in any biennium. In Oregon, unlike California, Washington and Alaska for example, the state does not provide any support or additional funding for districts that approve capital bonds beyond these limited grants. Likewise, the federal government does not have a regular program to provide capital funds for school districts; recent federal stimulus funds were a limited exception.

In FY 2012-13 PPS will use CET funds to (a) service the short-term debt that supports its current capital activity, the replacement of oil-fired boiler burners in 47 schools, and the purchase of Rosa Parks School, and (b) partially fund its Capital Asset Renewal Plan that will fund capital maintenance in PPS schools. PPS can use \$1.2 million of SB 1149 funds towards the \$9.1 million cost of the boiler burner project. And PPS has applied for grants to partially offset the cost of adding modular

classrooms at several sites. All of these funding sources will help towards the cost of these projects but PPS will need additional capital for the majority of the costs of each of these projects.

SUMMARY

PPS needs to renovate or replace essentially all of its school buildings. The cost of this work in current prices is in the range of \$2.5 - \$3 billion. PPS will take advantage of every additional funding source (such as those described above) that is available but these will come nowhere close to the amount of funding that is required. **The only source of capital that will allow PPS to do what is needed is voter-approved capital bonds.**

ISSUE PAPER #6.2 PRINCIPLES OF ACCESSIBILITY & BEYOND

BACKGROUND

Portland Public Schools (PPS) has a goal of full program accessibility for each building, providing all-inclusive access to programs, activities, and services. However, the goal of accessibility is more than just providing barrier-free structures, and its achievement is far more challenging than simply adhering to standards and codes. By implementing the principles of universal design, PPS can attain the goal of full program accessibility while also providing thoughtful, inclusive learning environments that convey equity, safety, independence, dignity and added benefits for all users.

RELEVANCE FOR FACILITIES PLAN

Pursuant to the school facility planning statute, ORS 195.110:

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(C) Descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district.

Appreciation for both the context and complexity of accessibility should inform the efforts of everyone engaged in the development and operation of our schools. The Architectural Barriers Act of 1968 was the first law that mandated accessibility standards for education facilities. Section 504 of the Rehabilitation Act of 1973 and the Education for All Handicapped Children Act of 1975, which was amended and renamed the Individuals with Disabilities Education Act (IDEA) of 1990, guaranteed students with disabilities the right to equal educational opportunities. The American with Disabilities Act (ADA) of 1990 requires public places and publicly funded projects to provide physical and programmatic accessibility to people with disabilities.

Universal design, however, is a worldwide movement that approaches the design of the environment, products, and communications to be usable by all people without adaptation. Known elsewhere in the world as design for all, life-span design, and inclusive design, universal design consists of seven governing principles calling for designed environments that are equitable, flexible, intuitive, perceptible, safe, easy, and accommodating. These principles should be applied to evaluate existing PPS buildings, guide the design process when adaptation is required, and educate both designers and users about the characteristics of more usable learning tools and environments.

In future capital work, the district minimum standard shall be the General ADA Guidelines and Standards outlined in the 2009 PPS Facility Assessment as amended and updated from time to time.

The following Principles of Universal Design were developed by The Center for Universal Design in collaboration with a consortium of universal design researchers and practitioners across the United States. Use or application of the Principles in any form by individual or organization is separate and distinct from the Principles and does not constitute or imply acceptance or endorsement by The Center for Universal Design of the use or application.

1. QUITABLE USE

The design is useful and marketable to people with diverse abilities.

- a) Provide the same means of use for all users: identical whenever possible; equivalent when not.
- b) Avoid segregating or stigmatizing users.
- c) Provisions for privacy, security, and safety should be equally available for all users.
- d) Make the design appealing to all users.

2. FLEXIBILITY IN USE

The design accommodates a wide range of individual preferences and abilities.

- a) Provide choice in methods of use.
- b) Accommodate right- or left- handed access and use.
- c) Facilitate the user's accuracy and precision.
- d) Provide adaptability to the user's pace.

3. SIMPLE AND INTUITIVE

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

- a) Eliminate unnecessary complexity.
- b) Be consistent with user expectations and intuition.
- c) Accommodate a wide range of literacy and language skills.
- d) Arrange information consistent with it's importance.
- e) Provide effective prompting and feedback during and after task completion.

4. PERCEPTIBLE INFORMATION

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities

- a) Use different modes (pictorial, verbal, tactile,) for redundant presentation of essential information.
- b) Provide adequate contrast between essential information and its surroundings.
- c) Maximize "legibility" of essential information.
- d) Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- e) Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

5. TOLERANCE FOR ERROR

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

- a) Arrange elements to minimize hazards and errors: most used elements, most accessible: hazardous elements eliminated, isolated or shielded.
- b) Provide warnings of hazards and errors.
- c) Provide fail safe features.
- d) Discourage unconscious action in tasks that require vigilance.

6. LOW PHYSICAL EFFORT

The design can be used efficiently and comfortably and with a minimum of fatigue.

- a) Allow user to maintain a neutral body position.
- b) Use reasonable operating force.
- c) Minimize repetitive actions.
- d) Minimize sustained physical effort.

7. SIZE AND SPACE FOR APPROACH AND USE

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture.

- a) Provide a clear line of sight to important elements for any seated or standing user.
- b) Make reach to all components comfortable for any seated or standing user.
- c) Accommodate variations in hand and grip size.
- d) Provide adequate space for the use of assistive devices or personal assistance.

BACKGROUND PLANNING AND DESIGN PRINCIPLES

The following planning and designing principles should be considered when building or renovating school facilities.

Provide versatile classroom spaces.

Classrooms that provide a variety of choices in the physical environment are important to meet the wide range of educational requirements for all students, and for helping all students become successful learners.

For example, students may sometimes benefit from greater physical and acoustical separation between activities to reduce distractions. An appropriate arrangement includes a large common classroom area, an alcove off the classroom, and a small room adjacent to the classroom that is acoustically isolated, but visible from the common classroom area. Modular furniture can also provide versatility.

Use universal design.

Accommodate, to maximum extent possible, people with diverse mobility, agility, and perceptual acuity.

Minimize travel distances.

Physical education, music, art, the library, food services, and elevators should be centrally located to provide reasonable travel distances for all students.

Arrange all classrooms in clusters by age groups and provide a variety of instructional spaces for use by all students.

All students benefit from instruction in a variety of size groups and appropriate spaces are required for all students. Provide appropriate size spaces for various size group activities, ranging from larger group spaces where more than one class can join together to spaces for a typical class size, to spaces for small group instruction and individual instruction.

Provide for parental involvement.

Parental involvement is critical for all students. Provide rooms for parents to plan for and participate in meetings and for volunteer work to be supported.

Maintain student dignity.

Accommodations should avoid separating students from their peers in instructional settings, drawing unusual attention to them, or limiting their educational opportunities. Accessible features should be integrated, to allow all students to participate fully in group activities.

Provide accessible outdoor play areas.

Design natural features so that all students may use them.

Enhance classroom acoustics.

Minimizing background noise, providing classroom amplification, and acoustically appropriate material can positively impact all students.

Improve indoor air quality

Controlling humidity, providing outdoor air, and eliminating contaminants is critical to ensuring successful learning.

SUMMARY

Portland Public Schools accommodates, to the maximum extent possible people with diverse mobility, agility and perceptual acuity. To achieve this guiding principal the principles of Universal Design is incorporated into the design of our facilities. They are:

Equitable Use: The design is useful and marketable to people with diverse abilities.

Flexibility in Use: The design accommodates a wide range of individual preferences and abilities.

Simple and Intuitive: Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills or current concentration level.

Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Tolerance for Error: The design minimizes hazards and adverse consequences of accidental or unintended actions.

Low Physical Effort: The design can be used efficiently and comfortably and with a minimum of fatigue

Size and Space for Approach and Use: Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture.

References and Resources

PPS Facility ADA Assessments, Ankrom Moisan Architects, 2009

<http://www.pps.k12.or.us/departments/schoolmodernization/2053.htm>

Creating Accessible Schools, James Ansley, 2000, National Institute of Building Sciences

<http://www.ncef.org/pubs/accessibility.html>

Accessibility Regulations and a Universal Design Philosophy Inspire the Design Process: Instead of stifling creativity, a climate of access pushes architects to be inventive, Barbara Knecht, Architectural Record

<http://archrecord.construction.com/resources/conteduc/archives/0401edit-1.asp>

The Principles of Universal Design, Center for Universal Design, NC State University

<http://www.ncsu.edu/project/design-projects/udi/center-for-universal-design/the-principles-of-universal-design/>

Planning and Designing for Students with Disabilities, Allen C. Abend, R.A., 2001

<http://www.ncef.org/pubs/disabilities.pdf>

Universal Design in Educational Environments, Fred Tepfer, 2001
<http://pages.uoregon.edu/ftepfer/SchlFacilities/UDHweb.html>

Institute for Human Centered Design

<http://www.humancenterreddesign.org/>

Center for Applied Special Technology

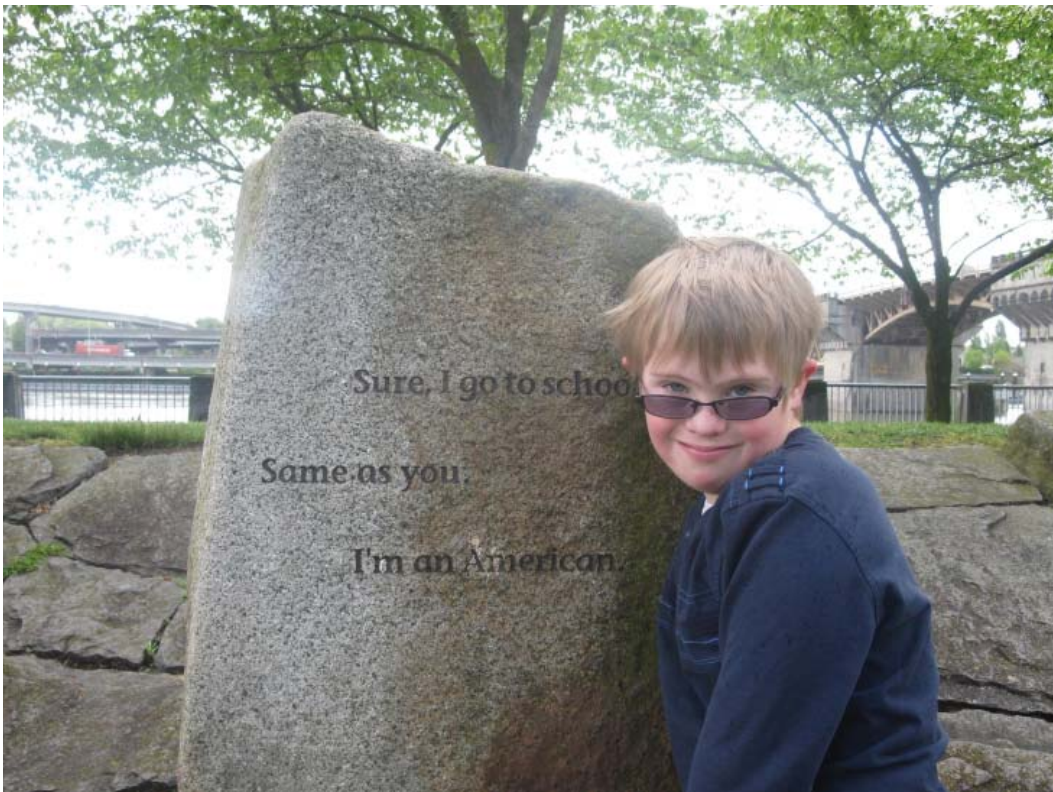
<http://www.cast.org>

Access and Inclusion Universal Design for Living and Learning.

By Angela Jarvis Holland
NWDSA.ORG

Studio photos courtesy of Jodi Collins
Urban photography

Music Daniel Jarvis Holland and Earl Marson,
produced by Quinn JarvisHolland
(PPS students)



Each public agency must ensure that, to the maximum extent appropriate, children with disabilities are educated with children who are nondisabled.

-- Least Restrictive Environment, IDEA mandate 1975

In 1882 “undesirables, idiots and the feeble minded” were not even allowed into the U.S.

In 1970, U.S. schools educated only one in five children with disabilities. Many states completely excluded certain groups such as deaf, blind and mentally retarded students.



We now know that the average child with Down syndrome will learn to read and write. They will be able to work in our communities with relevant supports.



PPS Schools are on average 65 years old, which takes us back to the year 1947

When these schools were being built, many children with physical and intellectual disabilities were sent to Fairview Institution and were considered uneducable. So most of our schools, by design, segregate children.



ACCESS IS ALSO ABOUT CURRICULUM

- With supports and differentiation as well as a lot of her hard work. Eleanor Bailey graduated from grant High school with a regular diploma.
- We need universal design of instruction to reach all of the bell curve.

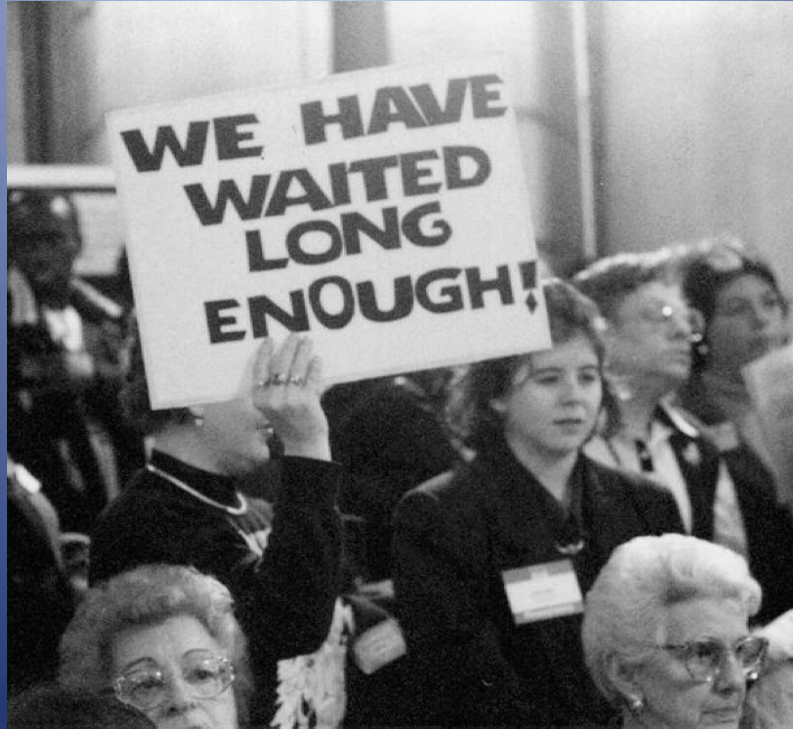


EQUITY

All students regardless of class race or disability need a high quality education.

- We need to celebrate the diversity of our students and support training to encourage competencies related to culture, disability, class, and race.
- Sharing all of our skills across silos will help create truly accessible schools

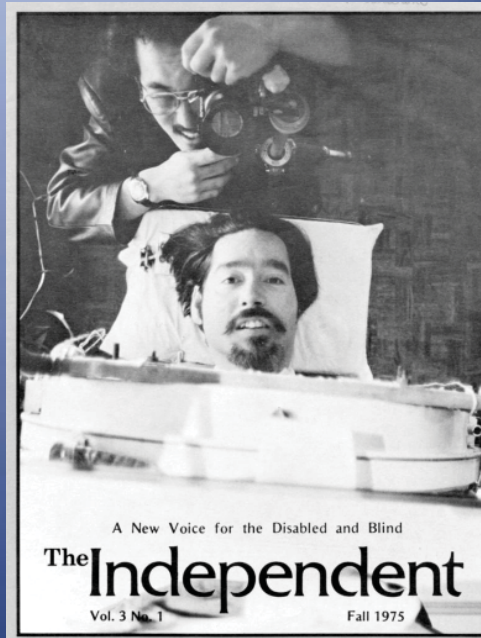




We know what is possible

Curb cuts were one invention we all benefit from

- Pioneers such as Ed Roberts showed us what activists who had a vision could teach us.
- “midnight curb cutters” created solutions before we had laws.



Lets support great teachers

Where we have success lets

Shine a light on it.

Allow time for sharing

Inspiration.



Special education is often a scapegoat for system wide failures

- If general educators “push out” differences rather than work with specialists to embrace them in the class, we will continue to segregate.
- If we refuse to follow ADA and invest in access we will continue to segregate.



We all need to get involved

A vision of all children learning and thriving together will need leadership and courage.

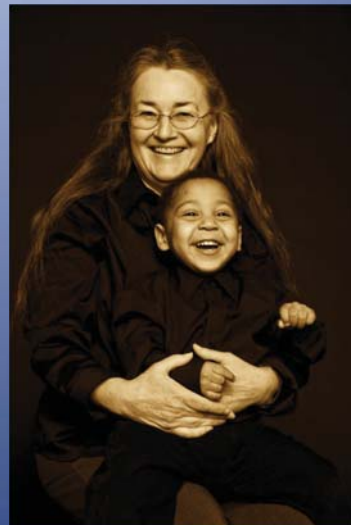
It will need investment in teachers, buildings and civil and human rights.

It will need you!



Neurodiversity requires differentiation not segregation

- Diversity is the norm, not the exception, wherever individuals are gathered, including schools.
- We need flexible spaces and rich welcoming environments with flexible teachers!



EQUITY AND BELONGING

Community and friendships are among the gifts a school can bring.



We need the experts

Listening to speakers who may make us uncomfortable will help us all grow



Chief Joseph School 1949-2012

No elevator to second floor

No access to stage

Etc

Etc

Etc



Some groups are tired of waiting
for their share of the treasure.

ARRRRRRRE
you going to
honor ADA?



Can we see through another's eyes?

- Accountability is requirement of the entire school community—not just special education Leadership is needed at all levels—classroom, building, district,
- greater school community—to ensure that all students receive an appropriate education.”
- NABSE Focus Groups, 2001



Rosa Parks School

- Our most accessible school building

It has spaces to share resources teachers and accommodate multiple modalities of teaching and sensory needs of students.

It welcomes parents and volunteers and has a family/volunteer space .



We are all teachers we all learn from each other.

- We need to help students and parents cherish and preserve the ethnic and cultural diversity that nourishes and strengthens this community - and this nation."



Volunteers come in every shape and size we need to let them all in.

- We cannot continue to ignore classrooms, auditoriums, lunch rooms, gyms that prevent parents, teachers, students and volunteers from being a part of the school community.



Guiding principals should embrace diversity and create equity for all

We respectfully suggest

All students regardless of class
race or disability

Safe, Warm Accessible And Dry

Honor human and civil rights ,
IDEA, ADA and 504

They are not just good ideas
they are the law.



ISSUE PAPER #6.3 SUSTAINABILITY PRINCIPLES OF DESIGN

BACKGROUND

Portland Public Schools (PPS) has worked to incorporate sustainable practices – ones that preserve resources and minimize environmental impact – in its daily operations and into future design plans. PPS is Portland’s second largest property-owner and one of the city’s largest employers. Heeding this, the Portland Public Schools Board of Education attends to the environmental, social and economic future of Portland as it sets policies and practice. These three pillars of sustainability shall be integrated into all facilities decisions.

RELEVANCE FOR FACILITIES PLAN

Upholding these pillars begins by following the logic of the waste hierarchy: reduce, reuse, recycle. PPS practices this in regard to solid waste and materials, as well as towards energy usage through a methodology of: behavior adaptation, efficiency improvements and, finally, energy generation.

Pursuant to the school facility planning statute, ORS 195.110:

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

C) Descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district.

In future capital work, the district shall extend this thinking through the design, construction and operation of high performance buildings and educating building occupants on maximizing the

environmental performance of every PPS building. Whole building systems, the construction process, building materials and furnishings will be designed to conserve environmental and financial resources for the life of building projects. And, as with all district action, social equity interests will play a critical role in the successful implementation of these principles. PPS buildings serve the present and future; as such, all plans should take into account the resources available for at least seven generations¹.

PPS needs to develop resource savings techniques that are easy to understand and operate. Systems must be simple and easy for teachers/staff/students to understand the resource-saving technique. Without this level of continual training of teachers, staff and students, the facilities team will be forced to address these improvements with either a “hands-on” approach, or remotely via technology. PPS is committed to involving students, families, teachers and community partners in all aspects of the following principles.

1. WHOLE SYSTEM DESIGN

SUPERINSULATED, PASSIVE SCHOOLS

Building designs will consider the integration of all building systems to increase passive building performance.

- a) Integrate passive design elements with active building systems in the design of new or remodeled buildings, to the maximum extent feasible. Starting with optimal building orientation in new construction and well-insulated shells in all major work, buildings shall take advantage of natural ventilation, sunlight, shading and thermal masses to regulate interior temperatures and help maintain comfortable environments year-round. All spaces shall take advantage of daylighting opportunities.
- b) Use low-tech infrastructure that supports high-tech learning environments.
- c) Attain minimum LEED silver certification, or equivalent, for all major renovations; achieve minimum LEED gold certification, or equivalent, for new construction. Use the Living Building Challenge’s holistic approach as aspirational guidelines for all design and planning.

2. LONGEVITY

DURABLE, PRACTICAL, HANDSOME MATERIALS

Facilities will be designed to ensure long-term, effective performance.

- a) Specify durable materials and systems that require minimal maintenance, non-toxic upkeep and are sensitive to the earth’s limited resources.
- b) Design building layout and building systems to provide flexibility for shifting populations and program needs throughout generations.
- c) Plan walls, load-bearing and otherwise, that consider the potential need for school reconfiguration or expansion in the future.
- d) Establish a culture of understanding and ownership for how users interact and relate with the building.

¹ Clarkson, Linda, Vern Morrisette, and Gabriel Régallet. "Our Responsibility to the Seventh Generation." *IISD.org*. International Institute for Sustainable Development, 1992. Web. <http://www.iisd.org/pdf/seventh_gen.pdf>.

3. CONSTRUCTION & DESIGN

LONG LIVES, GOOD INVESTMENTS

The design process will use sustainable practices.

- a) Collaborate with students, teachers and school communities during the design phase of each major renovation or modernization project. To the extent feasible, use the construction process as a learning laboratory for students.
- b) Before deconstruction, balance potential lifecycle savings of new construction with the embodied energy investment in existing buildings and the lifecycle savings of those buildings if renovated.
- c) Respect and preserve historic elements unique to neighborhoods.
- d) Use high-quality salvaged or reused materials, to the extent practical, in order to limit the use of virgin materials during construction.
- e) Utilize local materials, equipment and labor when possible to limit ecological footprints and help sustain local economies.
- f) Install materials in a way that makes repair minimally invasive and facilitates the ability to salvage them for future use or decommission them in an earth-conscious manner.

4. BUILDING ENVIRONMENTS

HEALTHY CLASSROOMS: INSIDE & OUT

Buildings will provide healthy, productive learning environments that support education and curriculum, while facilitating the next generation's education on environmental stewardship.

- a) Design for daylight opportunities with windows that not only minimize electric lighting requirements but give students a visual connection to nature.
- b) Select heating and air conditioning equipment that ensure good air quality and year-round comfort while minimizing acoustic impact.
- c) Incorporate acoustic standards into building designs to ensure acoustically neutral learning environments.
- d) Include low-cost features such as signage to support education about sustainable building features and resource conservation. Also consider Window Boxes incorporated throughout the building to provide students, employees and visitors a direct view of what is behind the walls, ceiling and floors with displays both audio and text explaining content, when feasible. In addition, use tracking displays that show how much actual resources or energy is being saved and/or used. Include information that describes past performance to give the new information more meaningful context. In addition to making details and information visible, also post questions that encourage students and teachers to consider, create and innovate regarding building environments and performance.
- e) Allow building occupants flexibility in the amount of lighting and visual distraction within each space.

5. ENERGY EFFICIENCY

LOWER BILLS, LARGER SAVINGS

Buildings will include capacity-appropriate, energy-efficient systems.

- a) Choose HVAC systems influenced by long-term environmental and lifecycle costs.
- b) Minimize need for air-conditioning by maximizing cross-ventilating and night flush opportunities.
- c) Prioritize rehabilitation of original windows over replacement to reduce waste while recognizing embodied energy and historic value. Balance heating efficiency, daylighting, environmental impact and lifecycle cost when considering replacement windows; rehabilitate existing buildings to uphold the building's historic integrity.
- d) Design lighting plan and fixtures to provide sufficient direct and indirect lighting levels for the space's activity needs.
- e) Construct building envelopes that operate in tandem with the ventilation systems; insulate existing buildings in all locations targeted as both cost-effective and performance-enhancing. Balance the cost of insulation against lifecycle HVAC costs.
- f) Select electronic equipment that meets or exceeds Energy Star ratings, when applicable.

6. SITE IMPROVEMENTS

MORE OUTDOORS

Schools and their grounds will be interconnected to increase opportunities for learning indoors and out.

- a) Provide access to outdoors including views to nature from the classroom, and outdoor learning opportunities through gardens, learning patios and covered play areas.
- b) Integrate biophilic design principles into school and campuses to encourage children's natural connection to nature and the outdoors.
- c) Select exterior lighting that is "night sky" and neighbor friendly.
- d) Eliminate unnecessary paved surfaces throughout school sites.

7. ENERGY GENERATION

RENEWABLE INVESTMENTS

Pursue and invest in renewable energy generation equipment when feasible and/or required.

- a) Select renewable energy generation equipment based on the conditions appropriate for the site, in a manner that maximizes the energy produced for the amount invested.
- b) Pursue partnerships, tax credits and incentives to expand opportunities for energy generation on school grounds.
- c) Explore opportunities to partner with renewable energy manufacturers, designers, engineers and researchers to incorporate new technologies, materials and systems that both meet or exceed goals; and provide teachers and students' opportunities to experience and learn with cutting edge practices and technologies.

8. WATER AND WASTE

CLEANER WATER TO THE RIVERS

School facilities will incorporate water-conservation and waste-reducing infrastructure.

- a) Identify opportunities to implement greywater reuse systems such as in toilets or for irrigation.
- b) Identify opportunities to manage stormwater on-site including reuse of stormwater as greywater.
- c) Select plants and landscaping that require low-upkeep and no irrigation after establishment.
- d) Install infrastructure that supports the reuse of materials (e.g. dishwashers to support reusable trays).
- e) Furnish buildings with consistent, easy-to-recognize recycling and compost receptacles.

9. TRANSPORTATION

FEWER ENGINES RUNNING

Minimize fossil fuel expenditures for student and staff commutes.

- a) Encourage bicycle and pedestrian travel through grounds layout and building design.
- b) Site and building design should provide safer, more efficient pick-up and drop-off areas for students to minimize vehicle congestion and idling.
- c) Ensure students and staff have access to covered, well-lit bike parking.

10. INFORMATION FEEDBACK

SMARTER BUILDINGS

Building system performance will be effectively measured, monitored and modified.

- a) Provide access to building performance data and the opportunity for classroom curriculum use in order to inform and educate users in resource use and conservation.
- b) Automate building use data for building managers to streamline maintenance and ensure optimal system performance.

SUMMARY

High performance buildings is not only about conserving resources but also about maximizing the performance of the building occupants, our students. Portland Public Schools works to incorporate sustainable practices into the design of renovation projects, new schools and its daily operations. The three pillars of sustainability: environmental, social and economics are integrated into the design of our facilities.

ISSUE PAPER #6.4 PRICIPLES OF HISTORIC STEWARDSHIP

BACKGROUND

Many Portland Public School buildings are historically significant and they are often integral to the fabric and character of Portland’s neighborhoods. These historic buildings help to make our communities more livable as well as instilling civic pride and a sense of place. By maintaining these buildings we also maintain the original fabric of the community they serve, which preserves this culture of place. Historic rehabilitation within Portland Public Schools is a primary consideration and key component to thoughtful, sustainable, cost effective development.

RELEVANCE FOR FACILITIES PLAN

Pursuant to the school facility planning statute, ORS 195.110:

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(C) Description of physical improvements needed in existing schools to meet the minimum standards of the large school district

(E) An analysis of:

(i) The alternative to new school construction and major renovation

The best practices of “reduce, reuse, recycle” can be applied to our historic school buildings. Among all the energy-saving, environmentally sensitive strategies that can be employed, reuse is the most sustainable. In regards to issues such as solid waste disposal, energy conservation, embodied energy,

recycling, walkable neighborhoods, community-centered education, and the local economy, maintaining and rehabilitating historic school buildings is a high priority strategy.

By investing in our existing heritage, the goals of PPS become consistent with the goals of the City of Portland as a whole, which is highly regarded as a model livable city of sustainable development.

1. PROTECTION AND COLLABORATION

Seek out expertise and guidance to protect historically significant school buildings.

- a) Inform and consult with the State Historic Preservation Office (SHPO) to avoid inadvertent impacts to historic properties (in accordance with Oregon Revised Statute 358.653). Impacts may be the result of construction projects, as well as the transfer of properties out of public ownership.
- b) Build a strong relationship with the Portland Landmarks Commission, which provides leadership and expertise on maintaining and enhancing Portland's historic and architectural heritage.
- c) Work with other local preservation partners and gain community collaboration in decision-making.
- d) Prioritize maintenance and repair to avoid deterioration of historic buildings.
- e) Utilize the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Structures to develop an approach to maintain and improve the condition of historic schools.

2. RECOGNITION OF HISTORIC CONTEXT & ARCHITECTURAL CHARACTER

Acknowledge the significant relationships between people, buildings and the surrounding physical landscape as well as the social and economic forces that shape them.

- a) Appreciate that historic buildings are the memory of a place conveying significance, meaning and value. The 2009 PPS Historic Assessment includes the cultural meaning of the building within its context.
- b) Instill pride by acknowledging local and national designations. The school district includes Portland Landmarks (Benson, Duniway and Woodstock), contributing resources to NRHP Historic Districts (Irvington, Abernethy and MLC), and contributing buildings to City of Portland Conservation Districts (Kenton, Woodlawn, Irvington and Jefferson).
- c) Preserve, rehabilitate and reuse features of older and historic buildings which cannot be duplicated.
- d) Prioritize repairing and maintaining original windows to the extent feasible over replacement. Prioritize restoring the character lost in original window replacements. Windows are frequently the most character defining feature of an older or historic building. The energy savings and environmental impact of replacement windows should be analyzed prior to decision-making.
- e) Recognize that nearly all PPS school buildings are over 50 years old, while approximately half of our school buildings are considered eligible for the National Register of Historic Places (NRHP) nomination. Approximately 68 of PPS buildings were recorded at the reconnaissance level by the City of Portland beginning in the 1980's.

3. MODERNIZATION OF HISTORIC SCHOOLS

Adapt to current educational and cultural goals while meeting modern building standards.

- a) Reflect current needs of all students to meet the challenges of the global economy.
- b) Strengthen and expand the uses of each school as central to community.
- c) Implement accessibility upgrades and universal design elements to ensure access and inclusivity for all students, staff, families and community members.
- d) Require energy efficient upgrades to ensure cost effectiveness and contribute to sustainability.
- e) Seismically improve buildings for life safety and to protect these resources.

4. EXISTING IS SUSTAINABLE

Reuse is more environmentally responsible than new construction¹.

- a) Evaluate and balance the potential lifecycle savings of new construction with the embodied energy investment of existing historic buildings.
- b) Require full feasibility studies of renovating older and historic schools by design professionals with historic renovation expertise prior to considering demolition of school buildings. Investing in historic school buildings saves construction and demolition debris from landfills.
- c) Recognize that building reuse conserves energy.
- d) Deconstruct buildings when necessary (versus demolition) to reduce waste.
- e) Require salvage and reuse of historic features, many of which are irreplaceable.

5. TEACHING THE VALUES OF REUSE

Students, parents and teachers cultivate the sense of ownership that naturally results from reuse and rehabilitation, galvanizing the community as a whole.

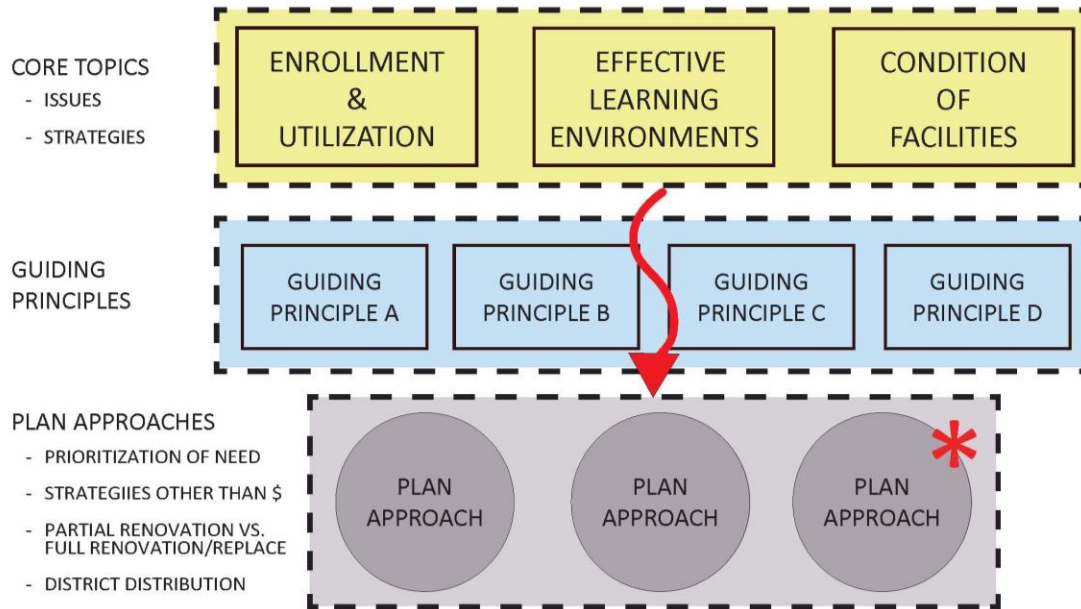
- a) Recognize that historic district designations and historic rehabilitation help to maintain and increase property values over time.²
- b) Acknowledge that historic rehabilitation creates more local jobs than new construction, with a greater proportion of construction costs in labor and less in materials.³
- c) Recognize that neighborhood schools encourage walking and biking in a city that values walkable neighborhoods.
- d) Require feasibility studies which include environmental impacts to compare reuse options of historically significant buildings as compared to new construction.

SUMMARY

Portland Public Schools recognizes the importance of historic buildings and their place in our community. Their renovation supports the sustainability goals of the District while supporting local communities and preserving our history.

References

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- ² Rypkema, Donovan D., 1994. The Economics of Historic Preservation
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- Portland Public Schools Historic Building Assessment, by Entrix, 2009. <http://www.pps.k12.or.us/departments/schoolmodernization/1627.htm>
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- The Secretary of the Interior's Standards for the Treatment of Historic Properties, Weeks and Grimmer, 1995, Heritage Preservation Services, 2003. http://www.nps.gov/hps/tps/standguide/overview/choose_treat.htm
- Why Johnny Can't Walk to School: Historic Neighborhood Schools in the Age of Sprawl, by Constance E. Beaumont with Elizabeth G. Pianca, National Trust for Historic Preservation, 2000.
- Helping Johnny Walk to School: Policy Recommendations for Removing Barriers to Community-Centered Schools, by Renee Kuhlman, National Trust for Historic Preservation <http://www.preservationnation.org/issues/historic-schools/helping-johnny-walk-to-school/helping-johnny-walk-to-school.pdf>



Upcoming meeting topics are:

- Meeting 6 (Tonight) = Discussion of core topics
- Meeting 7 (April 3th) = Develop Plan Approaches
- Meeting 8 (April 10th) = Refine Plan Approaches
- Meeting 9 (April 24th) = Identify Preferred Approaches

SMALL GROUP EXERCISE

Small groups will discuss one of two topics during the exercise: Enrollment & Utilization and Condition of Facilities. But before we start Diane will give update on guiding principles.

GUIDING PRINCIPLES STATUS / UPDATE

Diane: Since the last Advisory Committee Meeting the sub-committee has develop the goals and guiding principles further during one meeting on March 13 and March 15. One goal has been added based on request by the advisory committee during Meeting 5.

There are now three goals which apply to the guiding principles:

GOAL 1: Effective Educational Environments Serving All Students
Facilities support student outcomes equitably. Create effective, accessible and inclusive learning environments that help all students achieve; that nurture and inspire learning, challenge and support students, teachers, parents and community; and that encourage learning beyond building walls—into the community and around the world.

GOAL2: Safe and Accessible Facilities that Meet Students’ Basic Needs
Facilities reflect the importance of education in the community. The quality of the building environment contributes to positive relationships and productive learning. Basic needs include life/safety, and reasonable building temperature, light, air quality, access, acoustics and security.

GOAL 3: Support of Academic Program Needs through Optimal School Utilization

The physical size of schools should reflect the academic program needs of each school. When enrollment exceeds or falls below optimal student capacity or program size, the District will engage an enrollment balancing process (including but not limited to transfer limitation, attendance boundary changes, grade reconfiguration, school consolidation and facility changes).

The four guiding principles which shall direct the group in the development of the LRF approaches are:

Guiding Principle A: Strong Partnerships among Schools, Neighborhoods and Communities.

Schools will thrive when our entire community is invested in their success. Every citizen of Portland is a stakeholder in schools. It is critical to promote a seamless, integrated relationship among stakeholders to support our schools. School facilities will be inclusive and central to the communities and neighborhoods that they serve and open and accessible to all for community use.

Guiding Principle B: Sustainability

Building designs will integrate passive systems to achieve the most cost-effective, long-term energy, water and waste solutions while providing flexibility, creating a healthy and productive learning environment while maximizing educational performance.

Guiding Principle C: Fiscal Responsibility

Fully fund the cost of school facilities and their operation. Stay current with preventative maintenance. Budget for total cost of ownership. Public monies shall be leveraged whenever possible through partnerships with other agencies and private enterprises. Commit to transparent and audited financial budgets, forecasts and expenditures.

Guiding Principle D: Facilities Support student outcomes in an equitable fashion

Provide facilities that support effective, accessible, inclusive learning environments for all students.

The sub-committee has started to develop methodologies for each guiding principal but these need further work and are not ready to be discussed tonight. The guiding principles will help the Advisory Committee develop the LRF approaches. The Advisory Committee prioritize need, explore strategies other than capital investment, and investigate partial renovation versus replacement and distribution of the capital improvements during the next meetings. The Advisory Committee will test drive the guiding principles when discussing two topics during this meeting: Enrollment & Utilization and Condition of Facilities.

LARGE GROUP DISCUSSION

- 3.1. Scott Bailey: Are the guiding principles still work in progress?
- 3.2. Diane: Yes, they are.
- 3.3. CJ: We can use the yellow sticky cards to add additional comments to the guiding principles

PUBLIC COMMENTS

- 3.4. Will Dunn: Member of Lincoln High School Parent/ Neighborhood Group. Group completed a 2008 Lincoln High School Report and parents gathered in 2012 to review progress since 2008. Parents are in support of new classrooms to allow for 21st Century learning with break-out and small group learning spaces. Parents are also in support for partnerships. Use Lincoln High to develop 21st Century school prototype / template to be applied to all other PPS schools. We support LRFP.
- 3.5. Larry Grand: Lincoln neighborhood parent, also in support for partnerships, students want to collaborate, teachers want 21st Century schools, we demand that every child entering kindergarten in PPS district shall be able to graduate from a 21st Century school, PPS schools shall match the great DNA of Portland. Funding reductions are mainly responsible for poor performance, not fear but vision shall be the base for future of PPS
- 3.6. Bob Clark: From SW Portland, capital investment white paper recommends a five year bond, when comparing five year to 25-year bond advantages are money goes into building not into interest payments, more building for lower cost to taxpayer.
- 3.7. Jessica Christianson: Local parent at Markham. PPS needs better "sales pitch" to explain what improvement will be completed for the money, show practical benefits, in support for warm, safe and dry schools, that should be highest priority.

UPDATE ON UNIVERSAL ACCESS SYMPOSIUM ON MARCH 8TH, 2012

CJ and Angela JH: PPS organized a great symposium with Angela Jarvis Holland at Grant High School. Invited speakers were: PPS staff and Parents, Michael Baily (Chair, Board of Directors, National Disability Network), Ruth Falco, Ph.D. (Professor, PSU Graduate School of Education), Robert Ford (Director of Special Education, PPS), Angela Jarvis Holland (Executive Director, Northwest Down Syndrome Association), Thomas Keating, Ph.D. (Director, Eugene Research Institute), Dean Westwood, MSW (Training Coordinator, OHSU, CDRC Leadership Education in Neurodevelopmental Disabilities Program Director, Community Vision-AbleCorps). The biggest take-away is that universal access is a civil rights issue. In 1975, Individuals with Disabilities Education Act (IDEA) became a federal requirement to provide free appropriate education for all people with disabilities. In 1990 ADA was implemented as law, PPS hired Ankrom Moisan Architects to conduct an accessibility report for all PPS schools, the report provides cost to make all schools within PPS accessible and to comply with federal law.

Tony: Asked questions of the group to make us aware all of the benefits of universal access elements. Who has used close captions on TV when at gym? Who has used as curb-cut with his bike or baby stroller? Who has used automatic door opener at airport or hospital? Who can read the Chinese restroom gender signage? Who can read the universal symbol for man and woman?

Angela JH: Shares a Power Point her son has put together and helped to compose the music for.

Angela JH: Stop segregation in our schools! Create a better future for PPS.

CJ: On April 28, an all-day (8:30 – 5:00) conference around universal access will be conducted and all committee members are invited to attend.

CAPITAL INVESTMENT – TOOLS, BONDS, PARTNERSHIPS

David Wynde: The majority of operating funds for public schools in Oregon are allocated by the state under a funding formula that is primarily based upon the number of students enrolled in each school district. Three-quarters of Portland Public Schools (PPS) general fund budget comes via the state school fund (SSF), which is funded by local property taxes and by state appropriations. The main source of capital funding for schools in Oregon is voter-approved bonds. School districts typically borrow money to build or improve schools and repay the borrow with property tax money.

Capital funds may be used only for capital expenses not for operations, operating funds may be used for capital expenses or for operations. Partnerships as a strategy for supplement capital improvements are only acceptable when they bring money. Partnerships at Rosa Parks allowed PPS to build the school for 57 cents for each Dollar. Current dire situation, next year we do not have the money to fund things PPS is doing this year. Conclusion: We need a capital bond!

PUBLIC COMMENTS CONT.

- 3.8. Scott Bailey: Can you explain the cash flow for a 5-year bond versus 25-year bond?
- 3.9. David: Typically capital projects are financed over 25 years to keep tax payer burden low but lot of money goes to interest. At PPS 83.5 out of 85 schools need major work, substantial capital is required, advantage of 5-year bond, more money goes into capital investment, less into interest.
- 3.10. Scott Bailey: What is the cost and what are the chances for future bonds if tax payer burden is very high due to 5-year term?
- 3.11. David: Advantage is that a 5-year bond is paid off after 5-years. In the case of a 25-year bond, a second bond would have to layered on top of the first bond.

SMALL GROUP EXERCISE – GUIDING PRINCIPALS – CORE TOPIC EVALUATION

LeRoy: During the exercise each small group will discuss one of two topics: Enrollment & Utilization and Condition of Facilities. A list of issues, metrics and strategies associate with each topic has been prepared by the sub-committee and is displayed at each table. One Mahlum team members will facilitate the discussion at each of the four tables. After 55 minutes of discussion the small teams will report back to the large group. Please see the summary for the initial text provided. The questions to be discussed at each table are as follows:

ISSUES:

1. Are there any major issues that have not been included in the current list?
2. Which of the issues listed are relevant and must be considered during the development of the LRFP? Are any of the issues irrelevant to the development of the LRFP?

STRATEGIES:

1. Are there any major strategies that have not been included in the current list?

2. Which of the strategies listed are relevant and must be considered during the development of the LRFP? Which of the strategies are irrelevant, or simply beyond consideration? Questions specific to Conditions of Facilities: (30 minutes maximum)
3. Do you think capital expenditure is required to address the condition of PPS facilities?
4. Given the total estimated cost required to address all deficiencies exceeds \$2 billion dollars, how much capital expenditure, if any, should be included in the 10 year plan?
5. Considering the issues associated with enrollment and utilization, how should capital expenditure be distributed across the district? Should it be evenly distributed, or strategically targeted? Why?
 - a) How would you prioritize (rank) the desirability of the following non-capital construction strategies for management of enrollment/utilization issues
 - b) Accept current over and under enrollment issues as is
 - c) Re-boundary
 - d) Cross district bussing (with increase in operational cost)
 - e) Year-round school (with increase in operational cost)
 - f) Split shifts (with increase in operational cost)
 - g) Magnet strategies to shift enrollment
 - h) Grade configuration changes
 - i) Eliminate in-district transfers
 - j) Consolidate and temporarily close
6. Considering the condition of all PPS facilities, how should capital expenditure be distributed across the district? Should it be evenly distributed based on need, or strategically targeted?
 - k) How would you prioritize (rank) the following condition related “need categories”?
 - l) Health/life safety/accessibility
 - m) Seismic
 - n) Maintain basic operations (replacement to keep schools open and running)
 - o) Protect capital investment (don’t let current problems create bigger problems later)
 - p) Educational enhancement
 - q) Address enrollment/utilization issues (growth, under-enrollment)
7. Under what conditions should the district consider full renovation of a facility? Under what condition should the district consider replacing a facility?
8. Are there instances when the district should not allocate capital expenditure to a facility?

SMALL GROUP EXERCISE – ENROLMENT / UTILIZATION – REPORTING BACK

Additions to proposed sub-committee text in red, text replacement in bold. We believe these are the key issues to be resolved with regard to this topic, using the school size target ranges:

Rank the issues:

- a. **Capacity of facilities**
- b. **Enrollment at facilities (current/future)**
- c. Capture rate

- d. Poverty
- e. Diversity/Disability (1 group added this)
- f. Performance (? How-measured by test scores)
- g. Facility condition (1 group added this)

Confirm the metric: 1. School size target ranges

Discuss the strategies:

1. We believe **capital expenditure is required** to meet the PPS Facility Needs (unanimous)
2. One group believes that expenditures **on the order of \$500 M every 5-6 years** will be required.
3. The majority of the group believes that expenditures should be predominantly **strategic**, with some portion of money allocated to fixing health, life-safety and accessibility. One group identified as mandatory fixing accessibility at every school so that students (parents etc.) could enter the building, get to each floor and have a toilet they could use.
4. Prioritized Strategies (1 is first priority and 9 is least acceptable)
 1. Eliminate in-district transfers
 2. Re-boundary
 3. Year-round school (with increase in operational cost) Educational benefit; **1 group eliminated this as a solution to facility utilization issue**
 4. Magnet strategies to shift enrollment (choice-need transportation; **1 group eliminated this**)
 5. Grade configuration changes (choice-need transportation)
 6. Consolidate and temporarily close
 7. Split shifts (with increase in operational cost) (too much time spent in transportation; **1 group said OK only at HS level**)
 8. Cross district bussing (with increase in operational cost; **1 group eliminated this**)
 9. Accept current over and under enrollment issues as is (**1 group said only as a temporary measure**)

General Comments

- Defer some maintenance and repair to allow a combination of repair and modernization
- No strategy is painless. Eliminating transfers is the simplest on paper, but will result in emotional fall-out for families and communities
- Year round school may have benefits with regards to student achievement but will have operational costs and program challenges

What we heard continues...

- Split shifts are hard for mixed age families.
- DO NOTHING IS NOT AN OPTION
- CROSS DISTRICT BUSSING IS NOT A GOOD OPTION
- Consolidate and temporary closures has had mixed success in the past
- Other ideas: capacity for partners and other revenue generating sources; buy a building to accommodate growth
- Is there demographic information on location of students with disabilities
- A temporary birth-bulge would not require additions.
- Magnet strategies can be bad for diversity
- Diversify uses in under-utilized schools
- Preserving historic schools is important

- Minimizing costs is important
- Seismic needs to be fixed soon.
- Fix the worst condition schools first as a strategy with targeted specific repairs for health, life safety, Accessibility, seismic)
- Widespread ADA issues should be a priority
- Defer renovations on schools which will/may close

SMALL GROUP EXERCISE – FACILITY CONDITION – REPORTING BACK

Additions to proposed sub-committee text Red, text replacement in bold Black. We believe these are the key issues to be resolved with regard to this topic, using the “tipping point”(FCI) to determine full renovation:

Rank the issues:

- a. FCI ranking (one group broke this out. Said FCI is a metric, not an issue)
Systems (Plumbing, HVAC, Electrical, Communications, Security, Fire Systems)
Interiors
Elevators/Access
Structural
Exterior
Roofing
- b. Historic value
- c. Seismic condition (one group felt that this should not be separated out)
- d. Accessibility (one group felt that this should not be separated out)
- e. Modern learning environment (One group added this category-size of room, obsolete systems, equipment technology)

Confirm the metric: 1. Tipping point to consider full renovation or replacement

Discuss the strategies:

Group Response

1. We believe **capital expenditure is required** to meet the PPS Facility Needs (unanimous)
2. One group believes that expenditures **on the order of \$2 B over 10 years** are required, but what will the community support?
3. A **targeted capital plan** should be **equitably distributed** across the district. Work should include a combination of target and other priority work spread across the district.
4. Prioritized Strategies (1 is first priority and 9 is least acceptable)
 1. Health/life safety/accessibility/Seismic (**1 group moved this up**)
 2. Seismic
 3. Maintain basic operations (replacement to keep school open and running)
 4. Protect capital investment (don't let current problems create bigger ones later)
 5. Address over enrollment/utilization issues (growth, ~~under-enrollment~~)
 6. Educational enhancement
 7. Non-capital strategies in combination with capital
 8. Partnerships

General Comments

- Defer some maintenance and repair to allow a combination of repair and modernization
- A targeted plan is more cost effective

- Lower prioritization based on low enrollment? Invest where kids are?
- Seismic and accessibility dollars should be called out separately
- Full replacement when the materials used in construction are of poor quality
- FCI cut-off should be determined (or range)
- Value to community (including addressing poverty)

CONT. LARGE GROUP DISCUSSION

- 3.12. Committee question: What magnitude of earthquake are new schools are designed for?
- 3.13. Jason: School are designed not to a magnitude, but life-safety criteria. The goal is to maintain structural integrity to allow full evacuation. The building may not be re-usable after the event.
- 3.14. Scott Bailey: I am still unclear about where we are going with this process.
- 3.15. LeRoy: One of tonight's big questions was: Is a capital investment bond needed for PPS? And we heard from all of you a clear YES. The other big question was: Define how much money should be spend over the next 10 years? All of the groups struggled with that answer, which is a clear indication that more time is needed to figure out what amount seems appropriate and achievable. These are both clear directions for the PPS board.
- 3.16. I feel that one can provide a great education in a simple facility.

MEETING ADJURNED

Butch thanked all attendees. Next meeting will be at held on April 3rd at 5:30PM at Faubion Elementary School.

(Optional tour at 5:00).

ISSUE PAPER #7.1 TEN-YEAR CAPITAL IMPROVEMENT PLAN

BACKGROUND

A Capital Construction Improvement Plan is a comprehensive plan that addresses major capital improvements including modernization, major alterations and other improvements to District facilities as described here. Typically funded through one or more general obligation bonds (GO Bonds), requiring a ballot measure(s) that voters approve, a large capital construction program is the primary means to address needed improvement work throughout school districts in Oregon.

RELEVANCE FOR FACILITIES PLAN

Pursuant to the school facility planning statute, ORS 195.110:

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(F) Ten-year capital improvement plan

The statute requires consideration of a capital plan to address needed capital improvements to school district facilities. This paper describes some of the planning considerations to develop the plan. For purposes of defining terminology, Article XI, Section 11k of the Oregon Constitution defines "capital costs" as costs of land and other assets having a useful life of more than one year, including costs associated with acquisition, construction, improvement, remodeling, furnishing, equipping, maintenance or repair. "Capital costs" does not include costs of routine maintenance or supplies.

CAPITAL ASSET RENEWAL (CAR) PLAN

The CAR Plan is a strategy designed to extend the useful life of District facilities, ensure public capital investments are properly preserved and reduce deferred maintenance costs. In 2011, the School Board adopted a CAR policy to provide for life-cycle renewal of major building components the District has invested in over the last several years, or will invest in the future, replacing components when they come to the end of their useful life. These include Rosa Parks and Forest Park Schools as well as for any newly modernized or renovated buildings in the future. Major building components include, but are not limited to, items like roof replacements; boiler upgrades; major mechanical, electrical and plumbing upgrades; and athletic facilities.

CAPITAL CONSTRUCTION IMPROVEMENT PLAN (CIP)

In addition to the CAR Plan, a comprehensive CIP can be designed around building improvements and extension of the useful life for facility systems. Here are the Long Range Facilities Plan Advisory Committee guiding principles which are intended to guide the CIP development.

GOAL 1: Effective Educational Environments Serving All Students

GOAL 2: Safe and Accessible Facilities that Meet Students' Basic Needs

GOAL 3: Support of Academic Program Needs through Optimal School Utilization

Guiding Principle A: Strong Partnerships among Schools, Neighborhoods and Communities

Guiding Principle B: Sustainability

Guiding Principle C: Fiscal Responsibility

Guiding Principle D: Inclusive Facilities

CIP groupings for scope and budget alignment allow PPS staff and community members to use common terminology for capital improvement work. Each category describes work scopes that achieve specific objectives relative to the improvements themselves:

- A. Program capacity improvements – Work scopes that result in increased student capacity at a particular school site, such as:
 1. Expansion to accommodate current or anticipated student enrollment or program growth (if District's enrollment balancing process cannot provide needed space).
 2. Includes combination of core facility upgrades such as the library, cafeteria, gymnasium, restrooms, main office as well as additional classrooms. Expansion of the core facilities results when they are inadequate to support the number and size of instructional spaces and/or program space requirements.
 3. Provision of facilities to support PreK early learners.
 4. Provision of facilities to support child care for student parents.
 5. Provision of facilities to provide wrap-around social and educational supports for students and their families, as appropriate.

- B. Educational facility improvements – Work scopes that improve educational adequacy and provide a more modern learning environment, such as:
1. Classroom updates to support teaching, learning and a rigorous program such as media and technology labs, science labs and equipment, music and visual and performing arts rooms -- according to the needs at each school.
 2. Interior space improvements and/or additions.
 3. Auditorium, gymnasium, cafeteria and media center (library) upgrades and additions.
 4. Science room upgrades and additions.
 5. Addition of covered play areas and structures, expansion of multi-purpose rooms and gymnasiums to assist in compliance with expanded Physical Education requirements for grades K-8, effective 2017.
 6. Special Education (SPED) classroom upgrades – upgrade existing SPED classroom space or building new classroom space to accommodate SPED classroom activity.
 7. Cafeteria equipment and expansion of kitchen, serving line and seating capabilities.
 8. Campus Wide Technology Improvements – Upgrades to other campus infrastructure such as School-wide bell/clock systems, exterior audio, multi-media (audio/visual, interactive technologies, etc.) in gymnasiums, theaters, cafeterias, auditoriums, offices, and common areas.
 9. Signage – Address a common digital or other technology signage allowing for broadcast of messaging from a centrally managed system leveraging the PPS network infrastructure.
 10. Video Surveillance – Address a common video surveillance system to allow for 24/7 passive monitoring of all facilities from a centrally managed system leveraging the PPS network infrastructure.
 11. Furniture, fixtures and equipment in schools.
 12. Head Start and pre-K classroom and support space improvements.
 13. Athletic Facilities – Upgrade or develop outdoor play areas and fields.
 14. Outdoor Learning Environments and School Gardens – Develop or improve outdoor learning spaces including classrooms, patios and learning gardens.
- C. Physical facility improvements – Work scopes that address needed capital improvements or extension of useful life for individual building systems, such as:
1. Structural: Make seismic improvements using most recent design criteria.
 2. Exterior enclosure: Structural and fascia issues such as water-related deterioration, masonry rehab, dry rot/mold, windows, doors and below-ground elements. Like kind replacement of windows that have structurally deteriorated beyond repair. Address deficiencies using most recent audits.
 3. Roofing: Both partial and full reroofing improvements that may include seismic elements if needed.
 4. Interior: Finish upgrades, flooring, ceiling grid & wall coverings
 5. Conveyances (stairs, ramps & elevators): Upgrades as needed and appropriate. Address deficiencies using most recent audits and universal design concepts.
 6. Plumbing: Interior and exterior pipe upgrades, restroom upgrades.
 7. Mechanical (HVAC): Mechanical upgrades of heating/ventilating systems. Implement direct digital control technology to enhance energy effectiveness.

8. Fire & Life Safety: Fire alarm panel upgrades, building sprinkler system additions and upgrades.
9. Electrical: Replace and upgrade interior lighting, and supplement exterior lighting where safety issues have been identified.
10. Communications & Security (Technology): Wired and wireless infrastructure improvements. Access control improvements to allow building and specific door access via a centrally managed badge/key card access system.
11. Specialties (e.g. cabinets, stage equipment & bleachers): Inspection program items. Upgrade as needed and appropriate. Signage improvements for monument and way finding.
12. Special Demolition & Hazardous Material – Abatement of asbestos containing materials.
13. Site work – Paving & storm drain management improvements. Playground equipment, structural improvements to covered play and hard surface area improvements. Paths of travel, outdoor classrooms, learning gardens and site landscaping.

Note: ADA/Universal design requirements are incorporated into the individual building system components. For example, addition of elevators to multi-story buildings is included in the “Conveyances” category. Also, entrance ramps adjacent to building entrances are included in the “Site” category. See Issue Paper # 6.2 entitled “[Principles for Accessibility & Beyond](#)” for more details.

Building code compliance is assumed in all design and construction work. For example, many upgrades are driven based on certain existing conditions such as the requirement to provide fire sprinkler systems throughout a building when more than 50% of the building is being altered. In some instances these requirements are not identified until plan review by the City of Portland.

- D. Land acquisition – Any land requirements to support District plans.
- E. Ancillary facilities – Those items necessary to support non- school facilities (BESC, nutrition services, transportation, warehousing, etc.). Lower priority at present. However, ancillary facilities should be considered as part of any capital improvement plan as they exist to support District schools and student needs.
- F. Bond costs – Debt service, financing and legal costs, PPS staff & consultant costs to manage at program level.

CIP FUNDING

A comprehensive capital improvement plan over a 40 year period might look something like this:

Bond Category	Bond Funding Block Options				
	A	B	C	D	E
	2012	2020	2028	2036	2044
Program Capacity	20%	20%	20%	20%	20%
Educational Facility	10%	20%	25%	25%	20%
Physical Facility	20%	20%	20%	20%	20%
Land	0%	0%	0%	0%	0%
Ancillary	0%	0%	25%	50%	25%
Bond costs	\$5M	\$5M	\$5M	\$5M	\$5M
Total	\$AM	\$BM	\$CM	\$DM	\$EM

Each funding block option would allocate project budget to categories at each selected site. Over the period 2012 thru 2052 all schools and ancillary facilities would have some investment based on this type of allocation assuming bond program “refresh” every eight years. There are both 4 year and 6 year options as well.

Block funding option budgets would be based on voter approved capital construction bond measures using a variety of debt instruments including general obligation (GO) bonds. Funding would likely be constrained based on cost per thousand of assessed property value.

OTHER PLANNING CONSIDERATIONS

A. School enrollment considerations

School size (enrollment) targets for each school level should inform the District’s updated 2012 Long Range Facility Plan. School size targets are based on the district’s current thinking regarding the number of students needed to provide staffing levels that support robust district program goals. School size target also suggest a program floor that identifies the minimum number of students to provide district program goals. Planning capacity represents the estimated minimum school capacity when planning for replacement or full modernization. *Current* suggested enrollment targets, floors and ceilings are as follows:

School Level	Program Floor	Program Target	Planning Capacity
K-5	300	450	600
K-8	350	500	675
Middle	450	600	675
High	1,200	1,350	1,500

Each school and high school cluster currently has different *capture rates* (students residing in a school boundary that attend their neighborhood school). Ten year enrollment projections include *low, medium and high forecast*. The school size targets identified above reflect target program size based on *current demographics*. *Changes to capture rates, enrollment projections, demographics, staffing funding formulas and/or program requirements could revise target levels to more robust program levels. Projecting into the future, the district needs to make determinations about these various factors as they influence the program capacity desired when district schools undergo modernization and renovation.*

A. Student capacity considerations

Using the proposed "Instructional Model" to determine capacity, District staff will annually measure actual enrollment and divide by capacity to derive "utilization" for each school. For example, if K-5 school X has an enrollment of 435 students and a capacity of 457 students then the utilization would be $435/457$ or 95%. Schools exceeding certain utilization thresholds might be considered for new capacity addition projects that would result in increased capacity after other non-capital options (e.g. enrollment balancing) have been exhausted. See Issue paper 5.3.

B. Life-Cycle Costing

The District is looking at maximizing life-cycle costing as it relates to facility improvements. This means that the initial design and construction must consider and support the District's ability to operate the facility in as cost-effective a manner as feasible over the expected extended life of the building.

C. Standardize Physical Facilities Across Schools

Every school needs to provide an appropriate, culturally relevant environment for students to succeed regardless of race or class. The District needs to define a standard physical facility template (educational specification) for delivery of educational opportunity and then work over time to ensure that all schools have the ability to meet this standard. All the while recognizing and supporting the ethnic and racial diversity of our students and community by creating welcoming environments that reflect that diversity.

D. Leverage partnerships

Public and private providers of educational, health, social and culturally relevant (“wrap-around”) services benefit students and parents by coordinated delivery. To the extent District facilities provide space for the inclusion of these providers, student needs are better met as are their opportunities to succeed. Often these service providers have different space requirements than are typically afforded through the conversion of classrooms. The District’s educational specifications should identify how wrap-around services can be incorporated into schools where such services are needed.

The District intends to pursue partnerships with other entities; both public and private, to leverage PPS resources while maximizing efficiency and realizing economies of scale and innovative solutions.

E. Land needs

Pursuant to the school facility planning statute, ORS 195.110:

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(B) Identification by the city or county and by the large school district of desirable school sites.

The District acquired most of its school sites during the early to mid-20th Century and is well established in City of Portland land use plans. Based on projected enrollment over the next ten years, there does not appear to be a need for additional land to build new schools. However, significant housing development in areas of the district with a low density of school sites may require the need to provide additional capacity at school facilities. Currently, the District’s schools fall into the following ranges:

School Level	Building Size (1,000 SF)	Site Size (acres)
K-5	15+ to 80+	>1 to <12
K-8	36+ to 110+	>2 to <10
Middle	25+ to 212+	>5 to <37
High	69+ to 391+	>4 to <22

K-5 Schools

Site size 1 to 12 acres

Site features Covered Play area – 2 basketball courts
Soft play area with play equipment
Soccer field size grass area

Typical enrollment Room for two double modular buildings (4 classrooms)
450 students (range from 300 to 600 students)

K-8 Schools

Site size	2 to 10 acres
Site features	Covered Play area – 2 basketball courts Soft play area with play equipment Soccer field size grass area Room for three double modular buildings (6 classrooms)
Typical enrollment	450 students (range from 300 to 675 students)

Middle Schools

Site size	5 to 37 acres
Site features	Covered Play area – 4 basketball courts Football/soccer field(s) Baseball/softball field(s) Room for four double modular buildings (8 classrooms)
Typical enrollment	600 students (range from 450 to 675 students)

High Schools

Site size	4 to 22 acres
Site features	Football/soccer stadium Track with bleachers Baseball/softball field(s) Tennis Courts Room for six double modular buildings (12 classrooms)
Typical enrollment	1350 students (range from 1200 to 1500 students)

Similar guidelines are not proposed for focus/option program schools. Generally, individual focus/option programs tend to have fewer students than traditional programs at the same grade level. This allows flexibility in siting the programs. Siting possibilities include offering focus/option programs in existing schools, in stand-alone schools but in smaller buildings on smaller sites, or in leased buildings.

F. Estimating models

The District uses Portland Metro area cost estimates to develop preliminary costs for capital improvements. Rider Levett Bucknall’s (RLB’s) USA Report profiles “hard construction” cost estimates on a quarterly basis. For first quarter 2012 their cost ranges are:

School type	Low	High
Elementary (PreK-8)	\$180/SF	\$235/SF
High Schools (9-12)	\$190/SF	\$250/SF

Note: costs vary as a consequence of factors such as site conditions, standards of specification, market conditions, etc. RLB’s values represent “hard construction” costs based on dollars per square foot of gross floor area. They do not include costs of demolition, hazardous material

abatement or exterior site work (walkways, outdoor learning areas, play fields/equipment, parking, exterior signage, storm drain systems, lighting, athletic facilities, etc.).

In addition to the “hard construction” costs of the building combined with site specific costs, four other cost components are added to reflect full capital improvement costs at a project level;

- A. “Soft” cost estimates – costs associated with architectural/engineering design, permitting, systems development charges, project management, etc. are added as a percentage of “hard construction” costs. 27% is used although this figure can vary based on specific project requirements.
- B. “Contingency” cost estimates – costs associated with unknowns such as unforeseen conditions, jurisdiction requirements, design error/omission and changes in work scopes. Typically 10% is used for new construction and 15% is used for major alterations/modernizations.
- C. “Site” cost estimates – when preparing project estimates using the gross square footage method, additional consideration must be taken for other scope components. Site improvements such as upgraded play fields, parking, storm drain, lighting improvements, etc. need to be factored into project scoping and budget estimates.
- D. Furniture, Fixtures & Equipment (FF&E) cost estimates – Furthermore, necessary furniture, fixtures & equipment (FF&E) items need to be added. District estimating methodologies strive to account for a complete & usable facility to ensure readiness for student & staff use.

Here is an example of how a “full modernization” (major renovation of existing school building) of a K-8 school might look assuming the school is 80,000 gross square feet, on a 100,00 square foot site and the RLB value of \$207/SF (midrange) is selected:

Hard cost building = 80,000 s.f. X \$207/s.f. = \$16,560,000

Hard cost site = 100,000 s.f. X \$8/s.f. = \$800,000

Soft cost = 27% of the hard costs or \$17,360,000 X 0.27 = \$4,687,200

FF&E = \$12/s.f. = \$960,000

Subtotal = \$17,360,000 + \$4,687,200 + \$960,000 = \$23,007,200

Contingency = 15% of the Subtotal or \$23,007,200 X 0.15 = \$3,451,080

Total project cost = \$Subtotal + \$Contingency = \$26,458,280

In this example while the “hard construction” cost per gross square foot is \$207, the total project cost per gross square foot is \$331.

SUMMARY

PPS has identified a significant backlog of improvement needs based on capacity shortfalls, physical facility deficiencies and outdated teaching and learning environments.

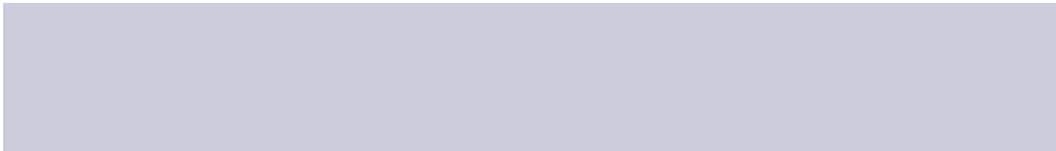
Clearly the magnitude of the facilities requirements suggests that a series of voter-approved capital ballot measures are most suited to effect necessary improvements. Given the District's student growth projection (medium range), configuring schools to provide target program enrollment requires further analysis and action.

Using the "Instructional Model" to determine student capacity at the individual building level in conjunction with target program enrollments should inform planning efforts to configure schools. In some instances, consolidation of schools can and should be considered.



Ten-Year Capital Improvement Plan

Overview of Planning Considerations



Maintenance vs. Improvement

- No specific requirements in ORS 195.110
- Compare & contrast:
 - “Ordinary Maintenance & Repair” to maintain a “Public Improvement”
 - “Capital Improvement”



Two Plans – CAR & CIP



- Capital Asset Renewal (CAR) Plan
 - Targets physical facility improvements
 - Extend asset useful life. Oriented around building systems.
 - Generally uses non-Bond financing
 - Time frame: 20-years
- Capital Construction Improvement (CIP) Plan
 - Major Improvements
 - Aligned to LRFP guiding principles
 - Generally requires voter approved Bond
 - Time Frame: 10 years

3

CIP Plan



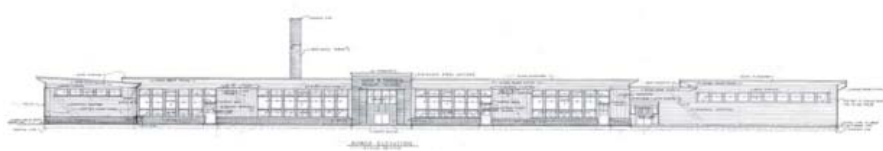
- Organizes “improvements” in categories:
 - Schools: Capacity, Educational & Physical Facility
 - Ancillary: Physical Facility
 - Land: Additional needs?
 - Bond costs (Debt service, Escalation, Program staff, Financing costs, etc.)
- CIP funding “assumed” over long term
- Emphasis on how buildings support students and educational program delivery

4

CIP Planning Considerations



- School Enrollment – “targets”, “floors” & “ceilings”
- Student capacity – identify capacity needs/improvements using “Instructional model”
- Life-cycle costing – life-cycle vs. initial cost



5

CIP Planning Considerations



- Standardize improvements across schools –
 - Educational specifications: design of learning environments. See issue paper #7.2 “Other Program Considerations”
- Leverage partnerships – accommodate “wrap around” services
- Land needs – space to accommodate programs

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CIP Planning Considerations



- Estimating models
 - Conceptual design approach
 - Very rough estimates. Further clarity developed post-bond during planning & programming phase.
 - Capital improvement work is performed using public contracts.
 - “Soft” costs vs. “Hard” costs – Consultant and Builder
 - “Contingency” costs – Risk measure at project level
 - Furniture, Fixtures & Equipment and site costs

7

Ten-Year Capital Improvement Plan



- QUESTIONS ?

8

ISSUE PAPER #7.2 OTHER PROGRAM CONSIDERATIONS

BACKGROUND

Like many urban school districts, Portland Public Schools (PPS) offers programs and special services beyond K-12 general education instruction to support students whose needs are not met in traditional school settings. PPS also partners with Multnomah County, Portland Parks and Recreation, and other “wrap-around” service providers to give students access to health clinics, dental services, and before and after school care. Providing these services have shown to improve student readiness and achievement.

RELEVANCE FOR FACILITIES PLAN

State law requires large school districts with K-12 enrollment of more than 2,500 students to develop long range facility plans. School facility plans must include “descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district”. Districts are also required to “...identify school facility needs based on population growth projections...” per ORS 195.110(9)(a).

The Portland State University Portland Public Schools Enrollment Forecast, completed in November 2011, estimates over 4,500 additional students enrolled at PPS by 2022 (PSU “medium” range forecast over 2010 enrollment). While this enrollment increase in itself poses the potential need for new or modified district facilities, PPS will also experience increases in population of students with special needs.

Additionally upcoming state mandated requirements for Physical Education (2017) and recent full-day Kindergarten legislation will significantly increase the need for District facility space for these programs.

The district currently provides alternative education options, community based programs, charter schools and special services including Special Education, English as a Second Language, and online learning. The district also partners with agencies that provide Head Start, full and half-day Kindergarten, and Pre-Kindergarten programs. These programs typically have space and facility requirements that were not anticipated during the era of design and construction of most PPS facilities.

EARLY LEARNERS AND CHILDCARE

Many PPS schools offer on-site early learning programs and before and after school childcare. These programs have shown results in improved school readiness of children entering Kindergarten. The space and equipment needs of these spaces are often such that they cannot be accommodated in general education classrooms.

EARLY LEARNERS AGENDA

The PPS Office of Early Learners recently completed a Birth-to Five School Readiness Plan that seeks to expand partnerships with wrap-around service providers to broaden access to services and programs for students and parents with an aim to expanding the number of low income Pre-K children and families served ensuring children enter first grade "school ready". The plan calls for the development of school based early learners education consortiums with community non-profit and health and human service partners over the next five years. Current early learner programs are scattered throughout 26 PPS school sites. The plan suggests the centers be co-located in vacant one story schools, under-enrolled schools and/or school sites that have already initiated collaborative community partnerships in north, northeast and southeast (high poverty) regions of the district. The plan also calls for the development of full-day Kindergarten classrooms in all of the District's K-5 and K-8 schools.

HEADSTART

Head Start is a federally-funded program primarily for low-income children designed to provide social competence by providing educational and family support services. PPS; the Community Action Organization; Albina Head Start; Friendly House and Neighborhood House provide federal Head Start and Oregon Pre-K services to low income four and five year olds and their families throughout Multnomah County. Community Action and Albina Early Head Start also provide Early Head Start services for children through age three. PPS provides classroom space in nine PPS facilities and serves 836 low-income three and four year old children and their families. Full and half-day programs are offered September through June.

PPS's program has existed since the 60's and in the past had Federal money that allowed for the purchase of modular classrooms for PPS campuses to support the various classrooms. These funds are no longer available. When space is available, PPS also has placed Head Start programs in interior classroom spaces, and use modular classrooms for older student grades.

Historically school capacity has limited the number of Head Start classrooms PPS can provide. PPS anticipates that the demand for Head Start programs will continue to grow.

TEEN PARENT SERVICE (TPS)

PPS's Teen Parenting Services (TPS) provides counseling and support to students who are pregnant or parenting. In 2010-11, 174 students (out of a total of 350 pregnant or parent students District-wide) were served by the program which provides on-site childcare services to teen parents through the District's Early Head Start programs and other alternative childcare providers at various locations. The 2010-11 graduation rate for high school seniors for whom child care was provided was 100%. In comparison, the graduation rate for all TPS seniors was 55%.

PRE-KINDERGARTEN

Nine PPS schools (ten including the Early Learners Academy at The Ramona) offer free Pre-Kindergarten (Pre-K) programs. Most schools provide one classroom for Pre-K students. Additional Pre-K programs are available at other schools for a fee. The PSU enrollment forecast for PPS does not estimate the number of Pre-K student for 2010. The current program serves 410 four-year olds.

KINDERGARTEN

Every PPS elementary and K-8 school currently offers full-day Kindergarten. Ninety-eight (98%) of Kindergarten students in the district are in a full-day program. State funding for Kindergarten only covers half-day Kindergarten. Thirty-four PPS schools offer a full-day Kindergarten program at no cost to parents. Twenty-seven schools offer half-day programs with parents paying for the additional half-day if desired.

Kindergarten enrollment in the district uses 162 classrooms, 161 of which are for full-day programs. In 2003 only 56% of the 3,546 Kindergarten students were enrolled in full-day programs.

The PSU student enrollment forecast for PPS estimates an increase of 192 Kindergarten students by 2022. The District's goal is to maintain Kindergarten class size at 25 students per classroom. When class size increases beyond 25 Kindergarten students, schools either devote another classroom to the Kindergarten program or the District provides an educational assistant to the classroom.

SUN PROGRAM

The Schools Uniting Neighborhoods (SUN) Program offers a variety of before and after school and summer educational and family activities. The SUN program utilizes a variety of school spaces to include gyms, classrooms, cafeteriums, and outdoor play areas. Thirty-two (32) PPS schools have SUN programs cooperatively paid for by the City, County, and PPS.

SPECIAL SERVICES

Special services administered by the District include the Community Transition Center that supports young adults as they transition to life after high school, the Pioneer Program that serves children with behavioral and medical needs, and a small number of other programs designed for students with different needs. In 2011, 502 students were enrolled in special services. In 2003-04 the

administration of many special services programs¹ was transferred to the Multnomah Educational Service District (M.E.S.D.) causing a 77% decrease from the number of students reported in special service programs in 2001-02.

INTEGRATED STUDENT SUPPORT (SPECIAL EDUCATION)

The provision of Special Education services by public school districts is required by several statutes. Section 504 of the Rehabilitation Act of 1973 is a federal civil rights statute that prohibits discrimination against persons with disabilities. Section 504 applies to recipients of federal funds, including public schools. The Americans with Disabilities Act of 1990 (ADA) extends the protections of Section 504 without regard to federal funding. The ADA also applies to public schools. Some students with disabilities qualify for special education services and supports under the Individuals with Disabilities Education Act (IDEA).

PPS is responsible for evaluating the eligibility of school age students for special education services and developing an individualized education plan (IEP) for each student. In 2011, 14% of all PPS students received services through the District's Special Education (SPED) program (see table 2 for more detail). These percentages have remained constant for a number of years.

The PPS SPED continuum provides program support for students in grades K-5 in a single school when possible. The continuum approach recognizes the differing level of supports for the various levels of need for SPED students and provides program supports accordingly. A majority of these students receive full or part-time instruction throughout the day for cognitive or remedial learning assistance. Classroom modifications for this instruction are usually minor, but the number of students per classroom is often less than general education classrooms. Currently most schools provide at least one room (learning center) for this purpose.

SPED classrooms providing students with staff support for behavioral and medical conditions require more substantial modifications and increased area per student and often require a self-contained special education classroom. There are 86 self-contained classrooms in PPS schools. They are distributed as follows.

Table 1. Self-contained classrooms in PPS

<i>School Level</i>	<i>Number of Self-Contained Classrooms</i>
K-5	21
K-8	28
MS	14
HS	23

¹ Hospital Programs (Emanuel, Oregon Health Science University, Oregon State and Shriners Hospitals); M.E.S.D. Functional Living Skills; Portland Early Intervention Program (PeiP) and Columbia Regional Programs (Autism, Deaf and Hard of Hearing, Orthopedic and Vision Services).

SPED program administrators have indicated the need for additional and/or larger classrooms. The PSU enrollment forecast for PPS cannot provide an estimate of the number of SPED students in 2022. However, PPS SPED program staff indicate that an average of 200 additional SPED students have been added in each of the last two years.

ENGLISH AS A SECOND LANGUAGE (ESL)

The English as a Second Language program is mandated by federal law (Title III of the Elementary and Secondary Education Act of 2001) and requires each school to develop and implement high-quality instructional programs to prepare all students for an all English instruction setting.

Table 2. PPS 2011 Special Education¹ (SPED) and Limited English Proficiency (LEP)²

School Level	SPED		LEP	
	Students	Percent ³	Students	Percent ³
Elementary	3,726	14%	3,317	12.5%
Middle	740	14%	208	4%
High School	1,324	12%	584	5.4%
Focus/Alternative Programs	154	9%	8	5%
Community Based Programs	251	22%	90	7.8%
Special Services (C.T.C., DART Pioneer Program)	359	72%	5	1%
Charter Schools	205	13%	24	1.6%
Grand Total	6,759	14%	4,236	9%

¹ Special Education (SPED) is the count of students at each school with records flagged indicating participation in Individualized Education Plans (IEP), that is Special Education program students. (source: eSIS)

² Limited English Proficient (LEP) is the count of students eligible to receive English as a Second Language (ESL) or Bilingual Services.

³ Percent of school level

Any significant renovation or rebuild of existing school buildings needs to either incorporate classrooms for SPED and ESL instruction or the flexibility to provide instructional spaces in the future on an as-needed basis.

EDUCATION OPTIONS

Alternative education options can be either district operated or community-based. A central component of the mission of Portland Public Schools is to “support all students in achieving their very highest educational and personal potential.” Education Options mission is to “provide educational options for all youth that empower, engage, and prepare them for college, work training, and citizenship while serving as a vanguard for systemic educational change.” The District is committed to providing an appropriate learning environment for all students. These options are developed to meet the needs of a specific student population. Alternative education options can be either a program of a school or an independent school. To meet student’s needs, alternative education options generally offer something different from or in addition to the regular curriculum and may offer something different from regular school hours.

In 2011, PPS enrolled over 1,600 students in alternative programs primarily housed in PPS facilities. This represented a 5.8% increase over the last 10 years. These programs include the ACCESS program, Head Start Early Childhood Education, the Metropolitan Learning Center (MLC) and the Teen Parent Program.

Portland Public Schools' Alternative Education Options has contracted with approximately 15 community-based education agencies or organizations in the Portland area to serve students who have dropped out or are at risk of dropping out of PPS schools. Students must be referred to the program by the students' school, community agencies, or through self-referral. More than 1,000 students were enrolled in community-based programs, primarily housed in non-PPS facilities.

FOCUS SCHOOLS AND IMMERSION PRGRAMS

The district offers a number of focus programs and schools including 12 language immersion programs enrolling over 2,400 students and 10 focus/alternative programs enrolling over 2,300 students. Some programs are housed within existing schools (e.g. the Access program in Sabin School) or entirely within a school (e.g. Sunnyside Environmental School). These programs often employ different curricula and may require different space needs than a more traditional general education model.

PHYSICAL EDUCATION

In 2007, the Oregon Legislature enacted House Bill 3141, which calls for a minimum of 150 minutes of weekly physical activity for students in grades Kindergarten through fifth, and 225 minutes for students in grades 6-8. School districts are required to provide students with a specified amount of physical activity starting in the 2017-18 school year. To meet this requirement, PPS will need to evaluate the adequacy of existing facilities to meet the needs of the District’s enrollment in 2017 and 2022, the 10-year capital plan horizon.

HEALTH AND DENTAL CLINICS – WRAP AROUND SERVICES

The Multnomah County Health Department operates school-based health centers at 10 schools (six high schools and four elementary schools). The Children’s Dental Center is located in Creston School serving over 2,500 students a year. Demand for these services continues to rise and opportunities to bring additional partners and service providers into PPS facilities continues to grow. PPS strongly

supports wrap-around services such as these and the partners that provide them. Future design and construction activities must consider these opportunities and investments on a case-by-case basis.

ONLINE AND BLENDED LEARNING

Many students have learning needs beyond what a traditional classroom can offer. Currently, PPS uses online resources primarily to meet the needs of students who must recover to recover course credits to stay on track for graduation. Last year PPS students earned over 1,200 semester credits with online independent study supported by the District.

Online learning has often involved independent study by students. As this form of study progresses in PPS, students will have a highly qualified teacher to guide them. The teacher may or may not be located at their school site. In the future these services will be extended to homebound, home-schooled students and students who by choice want to be full-time online learners. With the growing digital resources available to teachers, they may choose to provide more and more learning resources online to students. Online learning is one strategy for PPS to meet the milestone targets of on-track to graduate and on-time graduation.

Online learning does not have to be separate from face-to-face classes. “Blended learning” is the integration of face-to-face and online learning to help enhance the classroom experience and extend learning through the innovative use of information and communications technology. Blended strategies enhance student engagement and learning through online activities to the course curriculum, and improve effectiveness and efficiencies by reducing lecture time. The “flipped classroom” has students get the content outside of class (online) and come to class to apply it, discuss it, or get support from a skilled teacher.

The design of schools in the future need to create spaces for teachers and students that preserve the ability to interact with each other and provide easy access to online content. The technology is a tool they will use along with face-to-face (or virtual) discussions, community-based activities, multimedia tools, and individual research. Virtual learning spaces need to provide places for learners to get support from teachers and other learners. Teachers and places for interaction are essential to quality 21st century learning.

An individual school or district-wide could provide dedicated space for students and teachers who, because of learning needs, choose to be primarily virtual learners. The Virtual Learning Space should have conference rooms, tools for multimedia creation, video conferencing equipment, and collaboration tools. Technology and ancillary support resource needs to allow for students who may bring in their own devices and want to access these tools and resources. With this in mind the District must strive to provide ubiquitous technology support for learning media, networks, district, and personal services.

Students and teachers need to have access to technology anytime and anywhere. Designating a school space for a just a computer lab will limit learning if that is the only place where online or blended learning is supposed to happen. Schools need to have flexible collaborative spaces with a robust infrastructure and technology for sharing learning via multimedia. Students who don't have technology tools at home will need to have access supported by the school as a matter of equity.

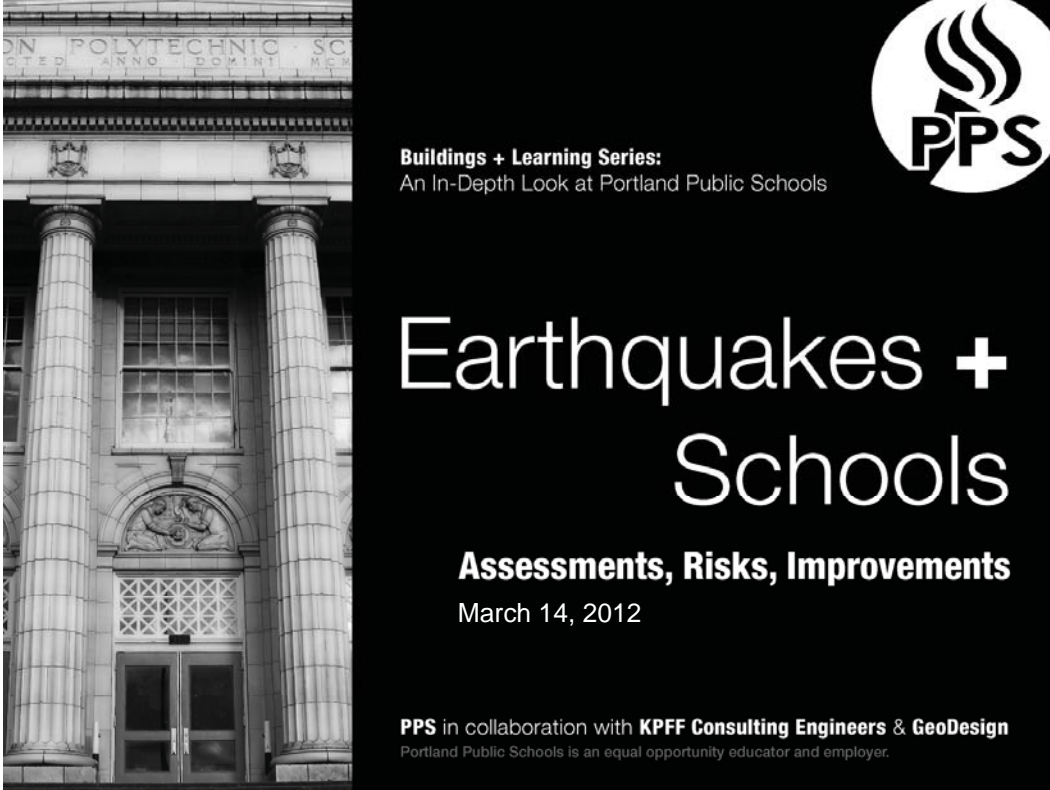
For more in depth information:

PPS board report and other resources <http://www.pps.k12.or.us/departments/education-options/6477.htm>


International Organization for K-12 Online Learning
<http://www.inacol.org/research/promisingpractices/index.php>

SUMMARY

PPS offers and hosts a variety of programs and partners designed to support the needs of students and families with the goal of helping every student succeed. It is clear the increased success and demand for these programs will foster space needs in the future that must be designed and integrated district-wide into the overall program delivery of each PPS school.



Buildings + Learning Series:
An In-Depth Look at Portland Public Schools




Earthquakes + Schools

Assessments, Risks, Improvements
March 14, 2012

PPS in collaboration with **KPFF Consulting Engineers & GeoDesign**
Portland Public Schools is an equal opportunity educator and employer.

Earthquakes + Schools



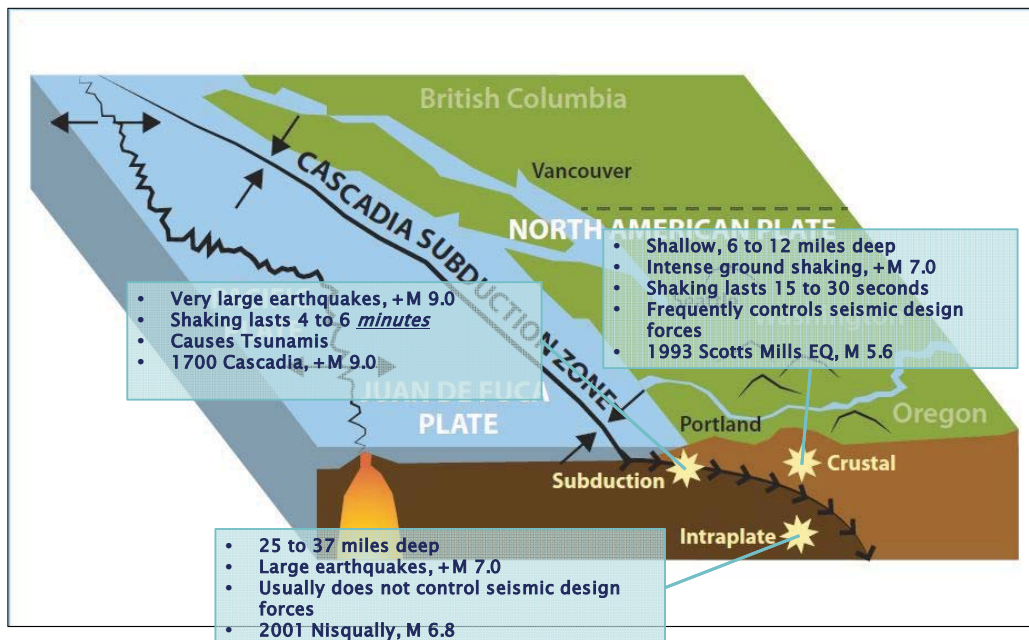
Geotechnical Considerations

- *Causes of Earthquakes in Portland*
- *Types of Earthquakes in Portland*
- *Expected Intensities of Ground Shaking*

Causes of Earthquakes



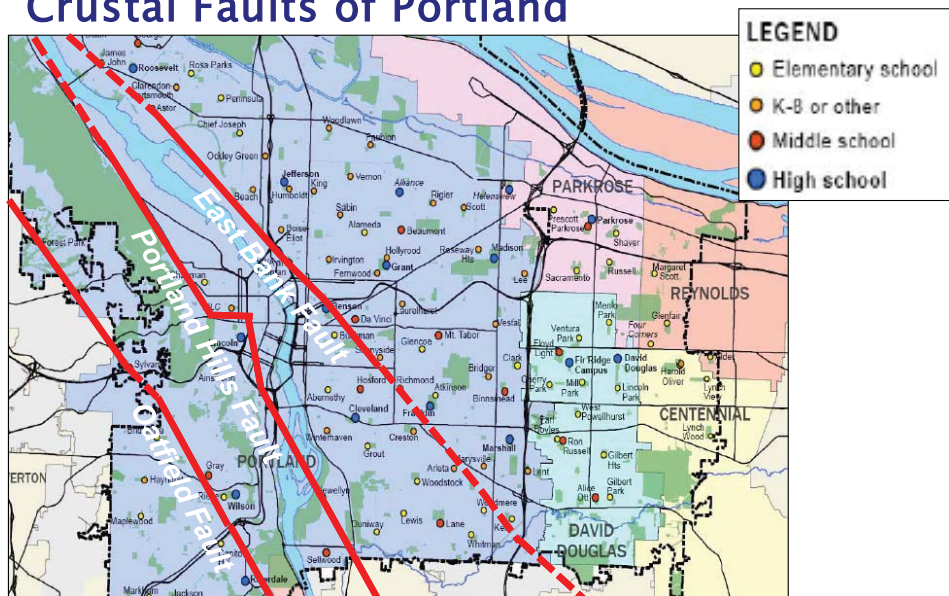
Types of Earthquakes



Types of Earthquakes



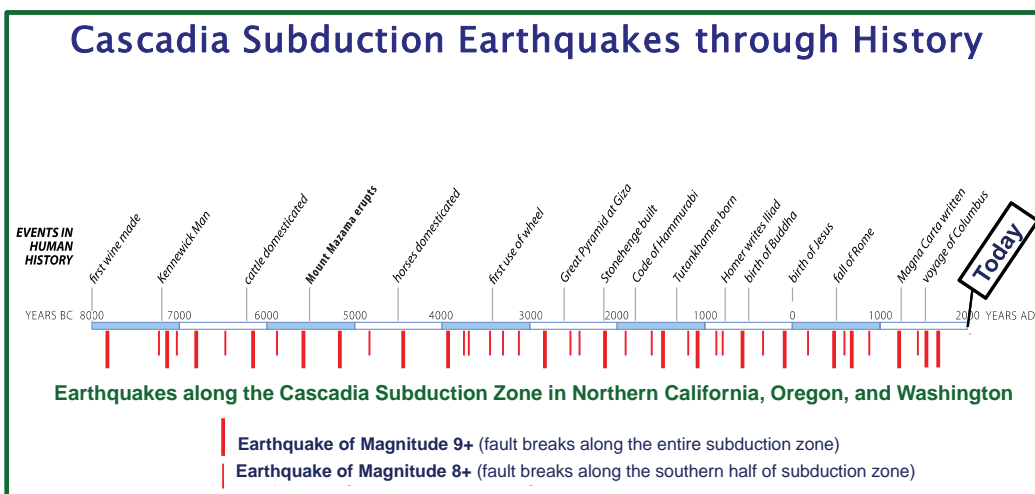
Crustal Faults of Portland



Frequency of CSZ Earthquakes



Cascadia Subduction Earthquakes through History



Average recurrence interval = 500 years

Geotechnical Earthquake Hazards



- Liquefaction
- Tsunami
- Fault Rupture
- Landslides



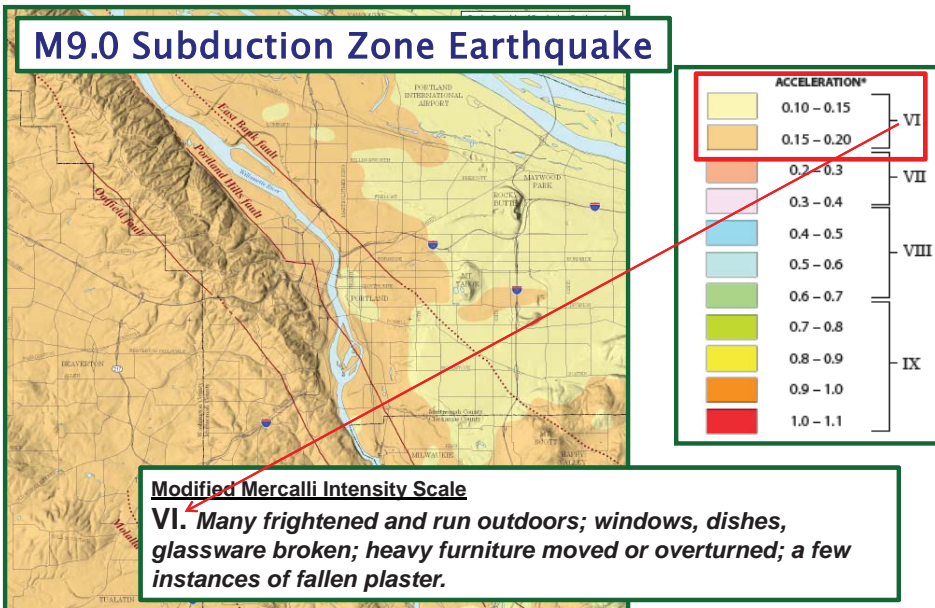
- Intense Ground Shaking

Conditions that Control the Intensity of Ground Shaking

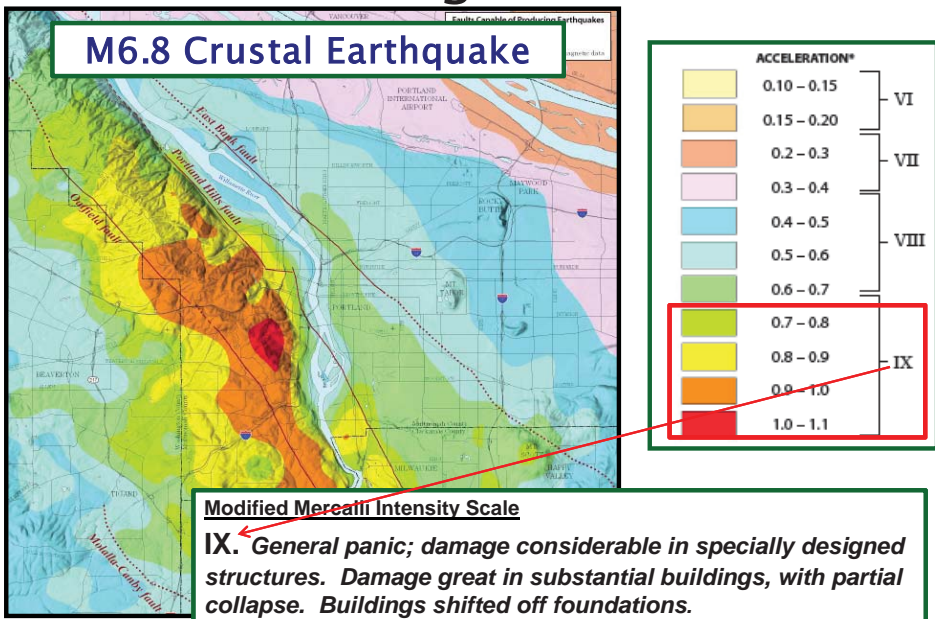


- Magnitude of Earthquake
- Duration of Earthquake
- Distance from Epicenter
- Direction of Fault Rupture
- Soil and Rock conditions

Expected Intensity of Ground Shaking



Expected Intensity of Ground Shaking



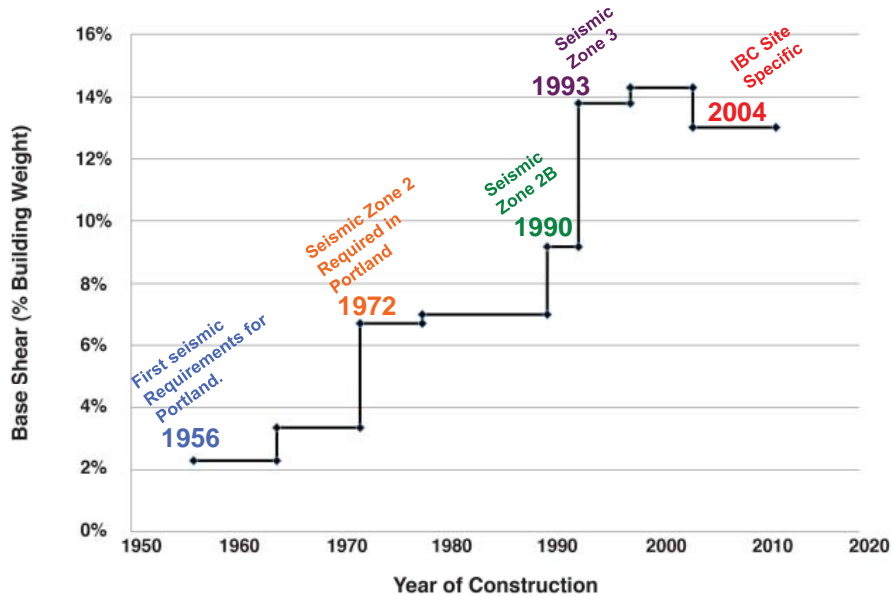
Earthquakes + Schools



Structural Considerations

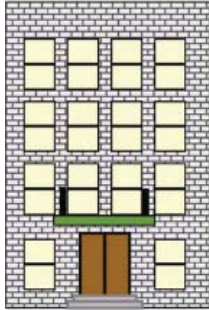
- *Progression of Seismic Design & Codes*
- *Expected Performance Criteria of New Schools*
- *Age of PPS Schools*
- *Types of Structures in PPS Portfolio & Associated Risks*
- *Non-structural Risks*

Seismic Code Progression



Base shears are calculated for an Occupancy Category III low-rise shear wall building located in Portland, Oregon. In addition to a dramatic increase in seismic forces, ductility requirements for buildings have become much more stringent in recent years.

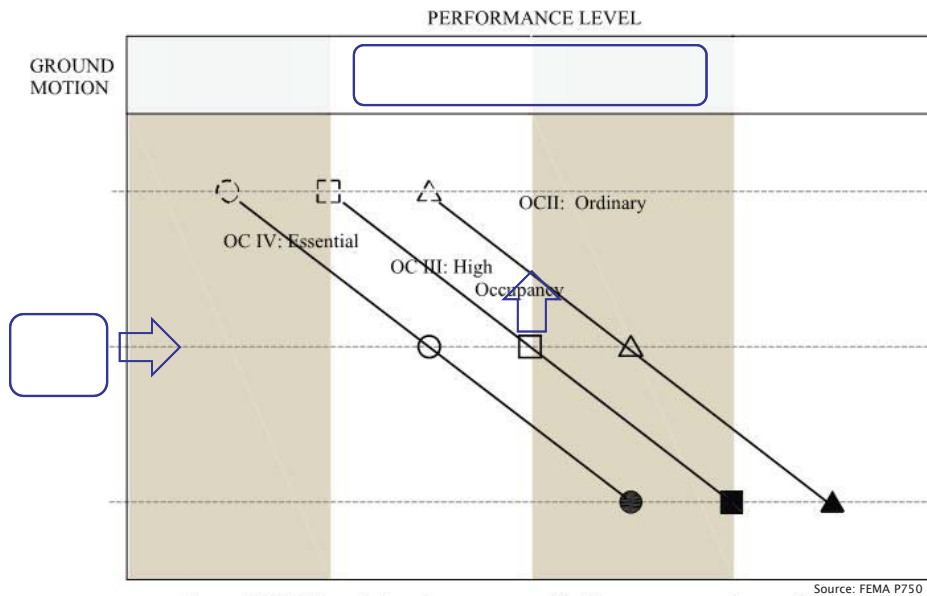
What Are Today's Standards?



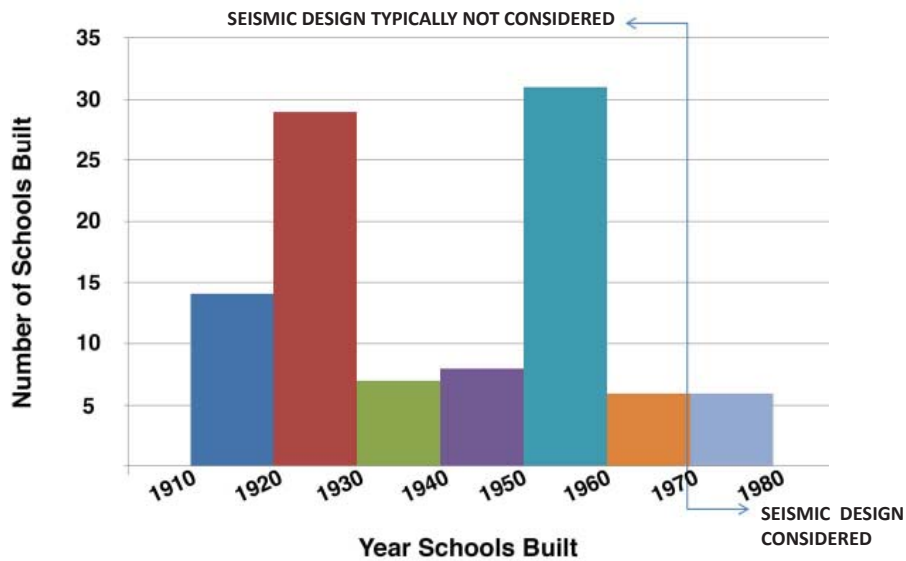
Operational

“Earthquake Proof” =
Myth

What Are Today's Standards?



Ages of PPS Schools



Types of PPS Building Structures



- Most buildings in PPS inventory predate the consideration of seismic loads and our understanding of their behavior during major earthquakes.
- Most buildings in PPS inventory are of materials and/or construction that have proven to perform poorly during large earthquakes.
- As a result, there is a significant risk to life safety.

Types of PPS Building Structures

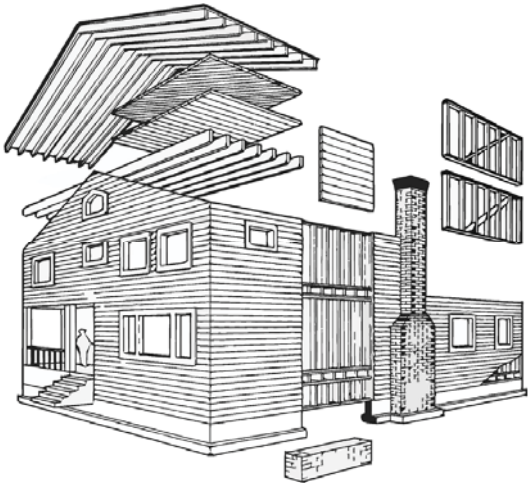
SEISMIC RISK	BUILDING TYPE
VERY HIGH	UNREINFORCED MASONRY (URM)
HIGH	LIGHTLY REINFORCED CONCRETE
MODERATE	WOOD
MODERATE	STEEL / CONCRETE

In general, for existing structures...

Types of PPS Building Structures

Wood Framed Buildings

- Wood studs, floor joists, roof joists and sheathing.
- Exterior walls are typically structural, they resist gravity and lateral loads.
- Relatively light and flexible.
- Generally good performers during earthquakes.
- Heavy appendages like veneer and chimneys require special anchorage considerations.



Types of PPS Building Structures

Wood Framed Buildings



Credit: J. Dewey



Credit: J. Bhr

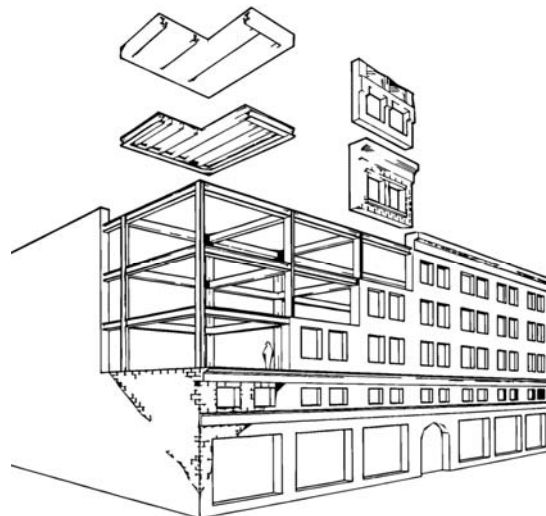


Credit: Deseret News

Types of PPS Building Structures

Non-Ductile Reinforced Concrete Buildings

- Reinforced concrete roof and floors.
- Exterior walls are typically concrete or masonry infill.
- Heavy and rigid.
- **Very poor performers during earthquakes.**
- **Inadequate steel reinforcing bars to hold things together after initial damage.**
- Today's building codes require a lot of strategically placed reinforcing.



Types of PPS Building Structures

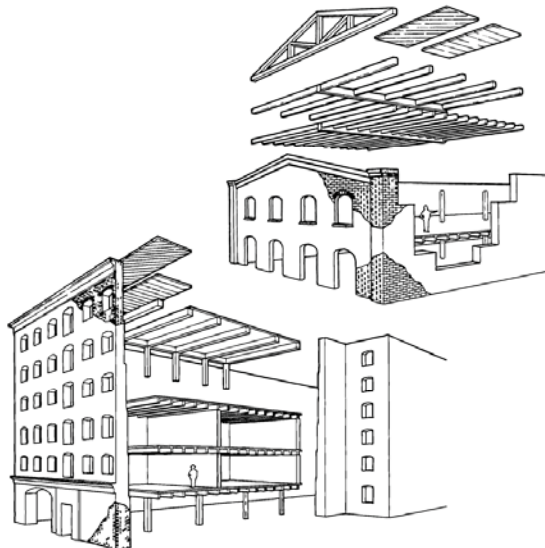
Non-Ductile Reinforced Concrete Buildings



Types of PPS Building Structures

Unreinforced Masonry Buildings

- Wood studs, floor joists, roof joists and sheathing.
- Exterior walls are thick, heavy masonry without steel reinforcing bars.
- Heavy and rigid.
- **Very poor performers during earthquakes.**
- **Connection between floors/roofs and exterior walls/parapets require special considerations.**
- **Not allowed in today's building codes**



Types of PPS Building Structures

Unreinforced Masonry Buildings



Non-Structural Risks



Earthquakes + Schools



Where We've Been and Where We Should Go

- *Process of Seismic Evaluation thru Retrofit*
- *1995 Bond Work*
- *What Has Happened Since 1995 Bond Work*
- *What Still Needs to be Done*

The Evaluation and Retrofit Process



1995 Bond Work



- *FEMA 178 evaluations completed on all schools.*
- *Introduced concept of Hazard Index (HI) score.*
- *\$47M spent on seismic improvements.*
 - *Partial seismic retrofit measures were undertaken on 53 schools and 2 facilities to the degree that funding allowed*
 - *focus was on measures that would allow “safe exiting”.*
 - *These measures were targeted to address “safe exiting” deficiencies found in the FEMA 178 evaluations.*
 - *“Safe Exiting” does not equate to Collapse Prevention or Life Safety.*

1995 Bond Work



Since 1995 Bond Work



2001:

- *ORS 455.400 is signed into law in 2001. Requires Life Safety performance of K-12 schools by 2032 subject to available funding.*
- *PPS Board adopts Board Policy 8.80.012-P, which sets overall building collapse prevention and safe exiting as priorities for seismic retrofit given limited funding.*
- *PPS updates HI scores to reflect seismic retrofit work done to-date.*

Since 1995 Bond Work



2002:

- *Oregon Constitution amended to allow State to lend credit via state bonds for seismic retrofits of public education buildings. Approximately \$900M currently authorized, but only about \$19M has been approved and released to date for K-12 schools statewide.*

2005:

- *Senate Bill 2 requires seismic needs assessment of all K-12 schools in State. Spurs DOGAMI to complete FEMA 154 reports on K-12 schools.*
- *PPS updates risk ranking of schools, building off prior HI scores.*

Since 1995 Bond Work



2009:

- *PPS completes partial seismic upgrades at 8 schools during re-roofing. Work is confined to parapet bracing, roof diaphragm strengthening, and strengthening of connections between roof diaphragms and exterior walls.*
- *PPS completes a seismic study that develops conceptual ASCE 41 retrofit designs on 12 representative school buildings using Life Safety criteria.*
 - *Cost estimates were completed and results extrapolated to all 85 PPS schools. \$423M vs. \$206M need.*
 - *Facilities Condition Index updated accordingly.*

Since 1995 Bond Work



2011:

- *House Resolution 3 (HR-3) passes in State Legislative Assembly, mandating that OSSPAC develop a statewide Resilience Plan for a major (M 9.0+) CSZ event.*

2012:

- *Senate Bill 1566 (SB 1566) passes in Legislative Assembly. Requires that a “seismic risk category” be published on every school’s annual performance report card and be available to the public.*

What Still Needs to be Done?



To Achieve Collapse Prevention or Life Safety Criteria:

- *Add adequate lateral load resisting elements like braced frames and shear walls.*
- *Continue diaphragm strengthening (roof and floor), continue parapet and chimney removal/bracing, continue diaphragm-to-wall connection strengthening (roof and floor).*
- *Brace non-structural elements.*

What Still Needs to be Done?



Other Considerations:

- *City of Portland Building Code mandates some seismic strengthening to URM buildings if re-roofed or if project costs exceed certain triggers.*
- *City of Portland Building Code may require some seismic strengthening where modifications compromise existing structure.*
- *Phased retrofit approach to build off of work completed to date is a viable strategy, but requires careful consideration to minimize impacts of re-mobilization and downstream disruption.*

What Still Needs to be Done?



Other Considerations:

- *Remodel work associated with seismic retrofit may trigger other Fire and Life Safety, ADA, and/or site improvements.*
- *How do seismic improvements impact historic fabric, if applicable?*
- *Consider strategic opportunities – incorporating modern learning environments, MEP upgrades, ADA improvements as part of a seismic retrofit will result in savings.*

What Still Needs to be Done?



Other Considerations:

- *Consider retrofitting or replacing certain components of some schools (e.g. gymnasiums) to meet an Immediate Occupancy performance criteria and serve as neighborhood emergency shelters.*

- The group will utilize the “green”, “yellow” and “red” cards at the next meeting to indicate levels of agreement. Green=fully support, Yellow=indicates support with reservations, Red=cannot support. The group will utilize this tool to determine where further discussion is required to define the plan.

The group discussed and provided feedback on a list of items including:

Funding

- Capital expenditure is required to accomplish the long range plan.
- Capital expenditure should be Strategic (full renovation/modernization/replacement), with some targeted expenditure for the worst facility problems.
- Full renovation is prioritized (provided there is a need).
- On amount (for bond request), go for as much as possible (\$500M is probably at the upper end of what will be possible for an 8-10 year cycle).
- Leverage partnerships to increase the scope of what can be provided and benefits for the community and schools.
- Avoid investment of capital resources in buildings that are going to be closed (in the short term due to enrollment shift, boundary changes, transfers, etc.).
- Focus on optimal use (capacity) of buildings first (once buildings are fully renovated/modernized/ replaced) before investing money in other buildings.

School Utilization

- Transfer elimination and boundary adjustments should be the first strategies implemented to balance enrollment.
- A robust program size should be a goal.

Building Condition

- FCI should serve as one metric to determine the priority for full renovation/modernization or replacement.
- Creating a modern learning environment is important, however, it should be coupled with the need for full renovation/modernization or replacement.
- The ten year plan should provide accessibility to all school floors and provide toilet facilities as a minimum for every school facility in operation.
- Poorly constructed buildings should be replaced rather than fully renovated.

SCENARIOS TO REVIEW AT NEXT MEETING

- Consider prioritizing buildings with the highest seismic FCI. Fix the worst buildings in the ten year plan.
- Consider prioritizing buildings with a combined historic significance and high seismic FCI.
- Consider prioritizing buildings /sites that can achieve a higher capacity and sites might accommodate combined programs. Consider (3 grades per class) as adequate capacity.
- Consider spending the money required to be “safe”. Then do “Strategic” approach.

OTHER DISCUSSION, WITHOUT FULL CONSENSUS

- How long should it take to fully renovate/repair/replace PPS Schools? There was some discussion around 40 years. There was some discussion around what could be accomplished spending \$100M/year.

GENERAL DISCUSSION

- There was some discussion regarding the desired capacity for school sites. What should be the targeted capacity?
- It is important to consider socio-economic factors with school size.

REQUESTS FOR ADDITIONAL INFORMATION

- What are the costs for bidding a project? There is an advantage to doing larger and fewer projects.
- What are the assets/partnerships/resources that can be leveraged?
- Proposal that ongoing replacement and maintenance costs be shared by partners.
- Is a modern learning environment is more important for students at different grade levels?
- What is our current capacity? Concern about the Preventive Maintenance Index and operating costs.

NANCY HAMILTON'S INTRODUCTION

Declarative Statements

- Building for a known specific program capacity makes sense.
- Capital bonds are necessary for this work to proceed and be completed.
- Strategic use of funds to replace/modernize facilities along with some portion of funds for other immediate infrastructure needs.
- The public needs to weigh in on the LRFP.

PUBLIC COMMENTS

1. Bob Clark: Parent, SE Resident, concerned about location of Lincoln High School inside urban renewal district and the impact of capital bond measure. Also concerned about potential relocation due to site restrictions of inner city campus.
2. Mike Roach: Thank you to the LRFP committee members for their hard work!
3. Steve Pinger: PPS parent, trying to understand the comfort level of committee members with giving direction to PPS board when the issue of optimal enrollment size and relevance of middle schools is still unresolved within PPS.

Response to #3: Nancy Hamilton: Committee will not issue recommendations in regard to relevance of K-5 or K-8 schools and will not make any recommendations in regard to educational program. However, the committee will evaluate scenarios in regard to total number of schools within PPS.

4. Multiple members of public voiced concern about lack of clarification about what kind of programs were supported with last capital bond since some investments included improvements to existing middle schools.

COMMON THEMES DEVELOPED DURING PAST MEETINGS

- There is a desire to express a **bold vision** for the master plan and especially the first phase of the master plan. Something that can inspire the public to rally behind the district.
- The **first phase of the master plan is critical** in building public trust and to demonstrate that PPS can do the work successfully. It is needed to build credibility.
- There may be merit in having the **first bond be a smaller size**, with larger bond campaigns following once success is proven.
- A **strategic approach** that fully renovates/replaces schools should be where the bulk of the money goes in each campaign.
- Some money must be spent to **fix the worst facility needs**. This needs to occur in each phase. These would include seismic, accessibility, fire systems, and leaks.
- **Partnerships** should be pursued to leverage money and be bold and innovative in the community.
- **High school focus** has merit for a number of reasons: minimize students having to live through several construction projects, touch a large percentage of the student population.
- Endeavor to **significantly re-build/fully renovate** the portfolio over a 30-40 year timeframe.
- There is skepticism that all facilities will be required to meet the population demand.

ISSUES TO RESOLVE

- How aggressive vs. conservative to be in the first bond?
- What is the story to be told?
- Involve students in the planning process.
- How do we arrive at— program size consolidate/school size – capacity?
 - :: Be aware of socio- economic factors when looking at schools
 - :: Impact of limited budgets
- What can we save with partnerships? What is realistic?
 - :: Earned income opportunities
 - :: Property with high equity (e.g. Washington- Monroe, Blanchard)
 - :: Look at high schools – open 24/7
 - :: Creates community investment
 - :: Are savings really as much as the vision (promises)?
- Clarify the relationship between this work and bond development.

GROUP SCENARIOS: PROS AND CONS

Group 1

- It is important to do the work faster rather than slower. Ideally accomplish in 3 phases over 24 years.
- Focus on full renovation/replacement.
- Provide some money for safety issues.
- Be innovative through: mixed use, partnerships, be brave, engage the community.
- Provide a geographic mix for the work to be accomplished.
- Be mindful of higher need communities.
- Do the FTS (facilities that suck) first.
- Want effectively all new schools in 24 years.

Group 2

- Fix the high schools first.
- Address ADA, egress and safety issues also.
- Build larger schools/sites to consolidate: improve resource use and provide robust programs.
- Priority 17 schools—FCI or higher done by phase 3
- Consider co-location.
- Provided two scenarios. One with less than \$399M in first phase (less than the largest bond ever passed in the state), another with tax impact around the \$1.80/1,000 or \$640M level.

Group 3

- Best use of the money is to focus on fully renovate/replace. Rough split of dollars sought to be 75% fully renovate and 25% fixing worst life safety issues.
- Spread the work over all grade levels.
- Merit in seeking less money in the first phase and building public confidence.

- Provided two scenarios. One with tax impact around the \$1.80/1,000 or \$640M level, another at .less than \$440M in first phase
- Desire for a strong “story” such as “All KG in a new school by high school” or first step provides seismic safety for 20% of the kids.

Group 4

- Fully renovate/replace three high schools first.
- Subsequent campaigns to fully renovate/replace remaining portfolio.
- May not need full building stock in the future.
- Spend money on providing warm/safe/dry and protecting capital investment
- Work on building shells first (walls and roof).

MEETING ADJOURNED AT 8.30PM

meeting on the 16th focused on the plan options. April 17th reviewed the guiding principles and recommendations. The meeting on April 19th refined the goal statements. Each meeting was well attended (10-12 members of the committee) and was a strong testimony to the dedication of the committee to develop a plan that is relevant and reflective of the committee's thoughts.

REPORT OVERVIEW

Diane walked the group through the report contents. The committee received an electronic draft version of the Long Range Facility Plan on April 20th. The document continues to evolve. The copy the committee received on April 24th contains some modifications. The group will continue to see edits and changes as PPS continues to refine the document to best reflect the thoughts of the committee. Sections on the Executive Summary, Portland Public Schools' Strategy and Plan Options still were discussed by the committee. Committee members were called to submit additional comments on the plan to Bob by noon Friday the 27th.

GOALS AND GUIDING PRINCIPLES

Goals and Guiding Principles were read by committee members. The following changes were recommended. With these changes, the committee agreed to recommend the guiding principles contained in the draft document.

- Guiding Principle B-Embrace Sustainability:

The group agreed to change the last sentence of the guiding principle to read:

"In renovations of existing buildings and school grounds and in new construction, the District will aim to meet or exceed national and international sustainability benchmarks and to advance the state of the art in sustainability management for K-12 educational facilities."
- Guiding Principle D-Practice Inclusivity:

The group agreed to include the District Equity Policy in the appendix of the document. It also agreed to move the last sentence of the guiding principle to the first sentence of methodologies

"Prioritize work based on the district's current equity policy."
- Methodology, Guiding Principle D-Practice, Universal Access:

The group discussed changing the language not to limit full compliance with Universal Access and ADA. No clear decision was reached since some members felt that Goal 2, which applies to every future decision by the District, already included this language.

PLAN OPTIONS

Diane presented the four plan options that emerged after the sub-committee reviewed the characteristics and main distinguishing factors of the six scenarios developed during the small group work session in meeting 8. Committee members felt that the dollar-amounts shown in the charts would give the public the impression that the advisory group determined each amount based on deep study of supporting data instead of the big picture approach that was actually applied to allocations. The group also expressed concern that the dollar-amounts will be taken literally, and out of context focusing the public attention away from the

distinguishing characteristics of each plan option. The advisory committee decided to remove the detailed charts from the LRF and include only the title, the strategy description and “pros and cons” section.

A vote was conducted to establish if the group felt one of the plan options yielded better results than others. Each advisory committee member had a 1st choice and 2nd choice vote. The table below shows the voting results:

PLAN OPTION	1 ST CHOICE	2 ND CHOICE
OPTION A	5	5
OPTION B	8	11
OPTION C	9	5
OPTION D	1	2

Another vote was conducted to establish if the advisory committee would recommend targeting all PPS High schools in the first bond cycle. Nineteen members approved this approach.

RECOMMENDATIONS

- Individual committee members read out loud the LRF recommendations and voted by show of 18 green and 2 yellow cards to confirm the recommendations with the following changes:
- Define the term “bold” as applying to: Innovation, creativity, scope, inspiration, break with past.
- Change the 1st bullet to read: Create school facilities that support and enhance evidence based and emerging best practices in terms of school size and educational programs.
- Add a bullet: Upgrade gymnasiums at selected schools to act as emergency shelters.
- Change last bullet: Invest prudently in schools identified for future replacement.
- The sub-committee shall group all recommendations in three to four topic areas.

PUBLIC COMMENTS

1. Bob Clark: Plan Option B and D will result in a tax burden that seems too large to be acceptable to the public. Option C seems realistic and would show voters that PPS is financially prudent. It is a good to spread the investments over many smaller neighborhood schools because the schools act as community centers even for population without children attending PPS.
2. Glen Pak: 1. Stress partnerships. Use networking strategies to connect students, teachers, and businesses. PPS to become flexible in policies to receive funding. 2. Focus on improvements of buildings to free up money from operating funds. 3.

Improve High Schools first to create better education for students preparing to attend colleges, setting them up for a better chance in job market.

THE VISION

Nancy Hamilton read a draft of the vision letter that will accompany the LRFP. The advisory committee expressed support with applause.

Nancy also asked which committee members would be interested to continue to meet in the next 3 – 4 weeks to develop a framework for implementation of some of the measures laid out in the LRFP. Ten members showed immediate interest, Nancy will email the group with more information at later date.

CLOSING REMARKLS

Carole Smith thanked all participants in the LRFP effort and is excited about the result. Next steps will include a 30 minute presentation of the main strategies of the LRFP to the PPS board, followed by a two week long review period of the LRFP and a final vote to adopt the plan on May 29th.

MEETING ADJOURNED AT 8:00PM

Oregon Revised Statutes (ORS)
Chapter 195 — Local Government Planning Coordination

2009 EDITION

195.110 School facility plan for large school districts. (1) As used in this section, “large school district” means a school district that has an enrollment of over 2,500 students based on certified enrollment numbers submitted to the Department of Education during the first quarter of each new school year.

(2) A city or county containing a large school district shall:

(a) Include as an element of its comprehensive plan a school facility plan prepared by the district in consultation with the affected city or county.

(b) Initiate planning activities with a school district to accomplish planning as required under ORS 195.020.

(3) The provisions of subsection (2)(a) of this section do not apply to a city or a county that contains less than 10 percent of the total population of the large school district.

(4) The large school district shall select a representative to meet and confer with a representative of the city or county, as described in subsection (2)(b) of this section, to accomplish the planning required by ORS 195.020 and shall notify the city or county of the selected representative. The city or county shall provide the facilities and set the time for the planning activities. The representatives shall meet at least twice each year, unless all representatives agree in writing to another schedule, and make a written summary of issues discussed and proposed actions.

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(A) Population projections by school age group.

(B) Identification by the city or county and by the large school district of desirable school sites.

(C) Descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district.

(D) Financial plans to meet school facility needs, including an analysis of available tools to ensure facility needs are met.

(E) An analysis of:

(i) The alternatives to new school construction and major renovation; and

(ii) Measures to increase the efficient use of school sites including, but not limited to, multiple-story buildings and multipurpose use of sites.

(F) Ten-year capital improvement plans.

(G) Site acquisition schedules and programs.

(b) Based on the elements described in paragraph (a) of this subsection and applicable laws and rules, the school facility plan must also include an analysis of the land required for the 10-year period covered by the plan that is suitable, as a permitted or conditional use, for school facilities inside the urban growth boundary.

(6) If a large school district determines that there is an inadequate supply of suitable land for school facilities for the 10-year period covered by the school facility plan, the city or county, or both, and the large school district shall cooperate in identifying land for school facilities and take necessary actions, including, but not limited to, adopting appropriate zoning, aggregating existing lots or parcels in separate ownership, adding one or more sites designated for school facilities to an urban growth boundary, or petitioning a metropolitan service district to add one or more sites designated for school facilities to an urban growth boundary pursuant to applicable law.

(7) The school facility plan shall provide for the integration of existing city or county land dedication requirements with the needs of the large school district.

(8) The large school district shall:

(a) Identify in the school facility plan school facility needs based on population growth projections and land use designations contained in the city or county comprehensive plan; and

(b) Update the school facility plan during periodic review or more frequently by mutual agreement between the large school district and the affected city or county.

(9)(a) In the school facility plan, the district school board of a large school district may adopt objective criteria to be used by an affected city or county to determine whether adequate capacity exists to accommodate projected development. Before the adoption of the criteria, the large school district shall confer with the affected cities and counties and agree, to the extent possible, on the appropriate criteria. After a large school district formally adopts criteria for the capacity of school facilities, an affected city or county shall accept those criteria as its own for purposes of evaluating applications for a comprehensive plan amendment or for a residential land use regulation amendment.

(b) A city or county shall provide notice to an affected large school district when considering a plan or land use regulation amendment that significantly impacts school capacity. If the large school district requests, the city or county shall implement a coordinated process with the district to identify potential school sites and facilities to address the projected impacts.

(10) A school district that is not a large school district may adopt a school facility plan as described in this section in consultation with an affected city or county.

(11) The capacity of a school facility is not the basis for a development moratorium under ORS 197.505 to 197.540.

(12) This section does not confer any power to a school district to declare a building moratorium.

(13) A city or county may deny an application for residential development based on a lack of school capacity if:

(a) The issue is raised by the school district;

(b) The lack of school capacity is based on a school facility plan formally adopted under this section; and

(c) The city or county has considered options to address school capacity. [1993 c.550 §2; 1995 c.508 §1; 2001 c.876 §1; 2007 c.579 §1]

Web Links

For additional background information visit:

<http://www.pps.k12.or.us/departments/facilities/6780.htm>



Portland Public Schools Racial Educational Equity Policy

Spring 2011

The Board of Education for Portland Public Schools is committed to the success of every student in each of our schools. The mission of Portland Public Schools is that by the end of elementary, middle, and high school, every student by name will meet or exceed academic standards and will be fully prepared to make productive life decisions. We believe that every student has the potential to achieve, and it is the responsibility of our school district to give each student the opportunity and support to meet his or her highest potential.

In light of this mission and our beliefs, Portland Public Schools' historic, persistent achievement gap between White students and students of color is unacceptable. While efforts have been made to address the inequities between White students and students of color, these efforts have been largely unsuccessful. Closing the achievement gap while raising achievement for all students is the top priority of the Board of Education, the Superintendent and all district staff. Race must cease to be a reliable predictor of student achievement and success.¹

In Portland Public Schools, for every year that we have data, White students have clearly outperformed Black, Hispanic and Native American students on state assessments in every subject at every grade level. White students consistently graduate at higher percentages than students of color, while students of color are disciplined far more frequently than White students. These disparities are unacceptable and are directly at odds with our belief that all students can achieve.

The responsibility for the disparities among our young people rests with adults, not the children. We are aware that student achievement data from school districts across the country reveal similar patterns, and that complex societal and historical factors contribute to the inequities our students face. Nonetheless, rather than perpetuating disparities, Portland Public Schools must address and overcome this inequity and institutional racism, providing all students with the support and opportunity to succeed.

¹ For the purposes of this policy, "race" is defined as "A social construct that artificially divides people into distinct groups based on characteristics such as physical appearance (particularly color), ancestral heritage, cultural affiliation, cultural history, ethnic classification, and the social, economic, and political needs of a society at a given period of time. Racial categories subsume ethnic groups." Maurianne Adams, Lee Anne Bell, and Pat Griffin, editors. *Teaching for Diversity and Social Justice: A Sourcebook*. (2007).

Portland Public Schools will significantly change its practices in order to achieve and maintain racial equity in education. Educational equity means raising the achievement of all students while (1) narrowing the gaps between the lowest and highest performing students and (2) eliminating the racial predictability and disproportionality of which student groups occupy the highest and lowest achievement categories.² The concept of educational equity goes beyond formal equality -- where all students are treated the same -- to fostering a barrier-free environment where all students, regardless of their race, have the opportunity to benefit equally. Educational equity benefits all students, and our entire community. Students of all races shall graduate from PPS ready to succeed in a racially and culturally diverse local, national and global community. To achieve educational equity, PPS will provide additional and differentiated resources to support the success of all students, including students of color.

In order to achieve racial equity for our students, the Board establishes the following goals:

- A. The District shall provide every student with equitable access to high quality and culturally relevant instruction, curriculum, support, facilities and other educational resources, even when this means differentiating resources to accomplish this goal.
- B. The District shall create multiple pathways to success in order to meet the needs of our diverse students, and shall actively encourage, support and expect high academic achievement for students from all racial groups.
- C. The District shall recruit, employ, support and retain racially and linguistically diverse and culturally competent administrative, instructional and support personnel, and shall provide professional development to strengthen employees' knowledge and skills for eliminating racial and ethnic disparities in achievement. Additionally, in alignment with the Oregon Minority Teacher Act, the District shall actively strive to have our teacher and administrator workforce reflect the diversity of our student body.
- D. The District shall remedy the practices, including assessment, that lead to the over-representation of students of color in areas such as special education and discipline, and the under-representation in programs such as talented and gifted and Advanced Placement.
- E. All staff and students shall be given the opportunity to understand racial identity, and the impact of their own racial identity on themselves and others.
- F. The District shall welcome and empower families, including underrepresented families of color (including those whose first language may not be English) as essential partners in their student's education, school planning and District decision-making. The District shall create welcoming environments that reflect and support the racial and ethnic diversity of the student population and community. In addition, the District will include other partners who have demonstrated culturally-specific expertise -- including government agencies, non-profit organizations, businesses, and the community in general -- in meeting our educational outcomes.

² Glenn Singleton and Curtis Linton *Courageous Conversations About Race*, p. 46 (2006)

The Board will hold the Superintendent and central and school leadership staff accountable for making measurable progress in meeting the goals. Every Portland Public Schools employee is responsible for the success and achievement of all students. The Board recognizes that these are long term goals that require significant work and resources to implement across all schools. As such, the Board directs the Superintendent to develop action plans with clear accountability and metrics, and including prioritizing staffing and budget allocations, which will result in measurable results on a yearly basis towards achieving the above goals. Such action plans shall identify specific staff leads on all key work, and include clear procedures for district schools and staff. The Superintendent will present the Board with a plan to implement goals A through F within three months of adoption of this policy. Thereafter, the Superintendent will report on progress towards these goals at least twice a year, and will provide the Board with updated action plans each year.

References: “The State of Black Oregon: (The Urban League of Portland 2009); “Communities of Color in Multnomah County: An Unsettling Report” (Coalition of Communities of Color/Portland State University 2010); The Economic Cost of the Achievement Gap (Chalkboard Project 2010); The Hispanic/White Achievement Gap in Oregon (Chalkboard Project 2009); A Deeper Look at the Black-White Achievement Gap in Multnomah County (Chalkboard Project 2009); ORS 342.433.

FACILITIES & ASSET MANAGEMENT BOARD POLICIES

[2.10.010-P Portland Public Schools Racial Educational Equity Policy](#)
[3.30.010-P Community Use of School Buildings and Facilities](#)
[3.30.011-AD Community Use of School Buildings and Facilities - Short Term Use](#)
[3.30.012-AD Community Use of School Buildings and Facilities - Shared Cost Agreements](#)
[3.30.020-P Limitations On Use Of Facilities and Grounds - All Groups or Individuals](#)
[3.30.030-P Limitation On Use Of Facilities And Grounds - \(Non-students\)](#)
[3.30.080-P Resource Conservation](#)
[3.30.082-P Environmentally Sustainable Business Practices](#)
[3.30.083-AD Integrated Pest Management Program](#)
[3.30.084-AD Elimination of Mercury](#)
[3.40.010-P Emergency Plans & Procedures](#)
[3.40.050-AD Storm Or Other Emergency Considerations - Preparations And Procedures](#)
[3.40.060-AD Fire Prevention](#)
[3.40.070-AD Fire Drills](#)
[3.40.071-AD Fire & Earthquake Drill Reports](#)
[3.40.080-AD Fire Procedures](#)
[3.40.090-AD Other Safety Practices](#)
[3.40.100-AD First Aid & Emergency Care](#)
[3.40.110-AD Use of Automatic External Defibrillators](#)
[5.10.110-P Occupational Safety and Health Program](#)
[5.10.111-AD Employee Safety Committee](#)
[8.70.040-P Disposition of Surplus Real Property](#)
[8.70.042-P Dedicated Reserve for Income from Disposition of Surplus Properties](#)
[8.70.043-AD Process for Disposing of Surplus Real Property](#)
[8.80.010-P High Performance Facility Design](#)
[8.80.015-P Capital Projects](#)

RESOLUTIONS:

[3986: 15 Criteria for Rebuilding & Renovation](#)
[3987: 5 Guiding Principles for Implementing 21st Century School Facilities Plan](#)
[4357: High School System Framework](#)
[4380: 26-121 Bond Referral to Ballot](#)