FINAL REPORT

LONG-RANGE FACILITY PLAN
DAVID DOUGLAS SCHOOL DISTRICT
PORTLAND, OREGON

26 April 2016
Project 2013920.00
<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executive Summary</td>
</tr>
<tr>
<td>2. Regulatory Requirements: ORS 195.110</td>
</tr>
<tr>
<td>3. Vision, Goals &amp; Needs</td>
</tr>
<tr>
<td>4. Modern Learning Environments</td>
</tr>
<tr>
<td>5. Educational Programs</td>
</tr>
<tr>
<td>6. Existing Facility Condition</td>
</tr>
<tr>
<td>7. Enrollment Forecast &amp; Capacity</td>
</tr>
<tr>
<td>8. Policy &amp; Capital Financing Options</td>
</tr>
<tr>
<td>9. Plan Options</td>
</tr>
</tbody>
</table>
1. EXECUTIVE SUMMARY
INTRODUCTION AND PROCESS

PURPOSE
In January 2014, David Douglas School District (DDSD) began its Long-Range Facilities Planning effort, and retained Mahlum Architects to assist with preparation of the plan. The purpose of the plan is to evaluate the adequacy of existing educational facilities, plan for future capital improvements to those facilities and address how student populations will be accommodated over the next 10 to 20 years.

This Long-Range Facility Plan reflects the synthesis of three primary elements, including the Educational Program, Enrollment and Capacity and Facility Condition, and also addresses requirements of ORS 195.110, School Facility Plan for Large School Districts.

PROCESS
An Advisory Committee was established, which included representation from the David Douglas School Board, members of the community, DDSD staff and the City of Portland Bureau of Planning and Sustainability. The Advisory Committee provided a community voice for the planning process. Their role was to represent the interests of the overall community, consider the long-term facility needs of the District, develop and give feedback and recommendations on plan options.

The Advisory Committee met six times over the course of six months, with each meeting focused on a separate topic, including:
- Visioning, Goals and Needs
- Educational Program
- Existing Conditions
- Demographics and Growth
- Initial Recommendations
- Final Recommendations

Advisory Committee Members
- John Bier, DDSD
- Cheryl Bland, DDSD
- Richard Bursch
- David Callaway, DDSD
- Mike Centoni
- Ted Condon
- Kris Dennis
- Mike Ewald
- Bob Glascock, City of Portland
- Don Grotting, DDSD
- Trevor Hopper
- Diane Kinkade
- Patt Komar, DDSD
- John May, DDSD
- Dan McCue, DDSD
- Stacie Moncrief, DDSD
- Elizabeth Quiroz
- Julie Reed, DDSD
- Ken Richardson, DDSD
- Kyle Riggs
- Mike Weinberger, DDSD
- Marie Wolfe, DDSD

Subsequent to Advisory Committee meetings, a separate Steering Committee convened to further discuss the long-range plan proposal. Along with several members of the Advisory Committee, this group
included representation from the City of Portland, Portland Parks and Recreation and the Portland Development Commission.

**Steering Committee Members**
:: Don Grotting, DDSD
:: Ken Richardson, DDSD
:: Patt Komar, DDSD
:: David Callaway, DDSD
:: Bob Glascock, City of Portland Bureau of Planning and Sustainability
:: Deborah Stein, City of Portland Bureau of Planning and Sustainability
:: Frieda Christopher, Community Member
:: Cheryl Scarcelli, Board Member
:: Trang Lam, City of Portland Bureau of Parks and Recreation
:: Leila Aman, Portland Development Commission

**Facilitation Team**
:: Diane Shiner, Principal in Charge
:: LeRoy Landers, Planning Principal
:: Gregg Stewart, Facility Assessment
:: Jennifer Lubin, Documentation

**VISION, GOALS AND NEEDS**

**STRATEGIC VISION**
The Long-Range Facility Plan is informed by the District’s broader strategic aims, including:

**Goal 1: High-achieving students**
David Douglas School District students will meet the high academic standards adopted by the District and state.

**Goal 2: An involved community**
David Douglas staff, students, parents and community will be active partners in promoting effective communication and continuous school improvement.

**Goal 3: A competent and effective staff**
David Douglas will maintain a qualified staff and provide opportunities to enhance their knowledge and skills to improve student performance.

**GOALS, FACTS, AND NEEDS**
In early February, the Long-Range Facility Planning Advisory Committee held its first meeting, which functioned as a Visioning Session.

The committee brainstormed ideas and was given the opportunity to prioritize goals and needs by voting. Accommodating increasing enrollment quickly emerged as the leading goal for the planning effort. Goals that received more than one vote are included below.

:: Plan for growth now (land / property)—9 votes
:: Provide learning opportunities that mirror industry (today and tomorrow); cyber security, health, technology, etc.—4 votes
:: Prepare students to have the skills to be successful post-graduation—3 votes
:: Determine how big is too big—2 votes
:: Provide equitable facilities throughout the district—2 votes
:: Classrooms to support class size—2 votes
:: Energy efficient; zone spaces for after-hours use—2 votes
:: Serve special education students better districtwide (South Powellhurst does not support special education programs well)—2 votes
MODERN LEARNING ENVIRONMENTS

During the initial Advisory Committee meeting, the planning team distributed a white paper and conducted an exploration of modern learning environments. This discussion focused on characteristics of the 21st century learner, and types of spaces that support new approaches to teaching and learning.

The intention of this discussion was to remind the Advisory Committee that the Long-Range Facility Plan should consider, and ideally address, changing needs for educational program delivery and how District facilities might support these requirements.

EDUCATIONAL PROGRAMS

Subsequent to the modern learning environments exploration, educational programs were prepared for the elementary, middle, and high school levels, as well as for district administration. Educational programs addressed goals, instructional delivery, functional space needs, and design criteria, and were informed by conversations with respective constituents.

EXISTING CONDITIONS

The David Douglas School District is comprised of nine elementary schools, three middle schools, one comprehensive high school and an alternative high school with 188 students.

The majority of District buildings were constructed between 1952 and 1966. Two of the newest facilities are Ron Russell Middle School, constructed in 2005, and Fir Ridge Alternative High School, constructed in 2003.

As is typically the case with many buildings exceeding 50 years of age, nearly all DDSD facilities are in need of maintenance and modernization.

The David Douglas Facilities Department provided Mahlum with a current list of deferred maintenance needs and associated estimates of probable construction cost. Districtwide, approximately $20 million (in 2015 construction cost dollars) of immediate critical maintenance need has been identified by the District, with the greatest need existing at David Douglas High School, Mill Park Elementary, and Cherry Park Elementary.

Construction cost projections for critical maintenance do not represent the amount of capital required for full modernization of existing facilities. Based on an assessment of existing conditions, conducted as part of this long-range facility plan, it is likely that construction costs associated with full modernization of existing facilities would likely exceed $200 million (in 2015 construction cost dollars).

If left unaddressed, maintenance needs will only worsen with time, eventually having the potential to impact the ongoing operations of several schools.
ENROLLMENT PROJECTIONS

Of all the facility needs identified in this long-range facility plan, increasing enrollment may represent the greatest concern.

Between 1999 and 2010, enrollment in the David Douglas School District increased by 36 percent. The City of Portland’s Comprehensive Plan has facilitated development of affordable housing within District boundaries. These developments have significantly contributed to increasing enrollment over the last 20 years. In addition, property tax incentives and exemptions associated with this type of development and other Urban Renewal Area developments have contributed to a temporary reduction of the tax base within District boundaries.

DDSD’s historical pattern of growth is projected to continue over the next 20 years. Based on a 2014-2015 report completed by Portland State University’s Population Research Center, elementary school enrollment in the year 2023 is projected to exceed total District capacity (based on 30 students per classroom) by approximately 690 students. Calculations using 25 students per classroom, a number commonly used for long-range facility planning purposes, indicate that by 2023, districtwide capacity at the elementary level will be exceeded by approximately 1,405 students.

By 2033, projections (based on 30 students per classroom) indicate that elementary enrollment will exceed districtwide capacity by approximately 1,269 students, or equal to the enrollment of two new elementary schools. Calculations assuming 25 students per classroom indicate that by 2033 over-enrollment will be approximately 1,984 students, or more than the capacity of three new 600-student elementary schools.

Middle school enrollment (based on an average class size of 30 students), is projected to exceed districtwide capacity by approximately 226 students by 2023 and 416 students by 2033.

Based on an average of 30 students per classroom, David Douglas High School will have over-enrollment of approximately 1,100 students by 2023 and approximately 1,450 students by 2033. This level of over-enrollment is similar to the target maximum capacity for many comprehensive high schools within our region.

Cumulatively, at all grade levels, projections indicate a 20-year increase of approximately 2,900 students throughout the David Douglas School District.

Finally, it should be noted that PSU’s enrollment forecasts have, in the past, been exceeded from time to time. Should this occur, over-enrollment figures will surpass those used as a basis for this long-range plan.
PLAN OPTIONS

The Advisory Committee began a study of plan options by discussing the potential impact of a “do nothing” approach and also by exploring other non-capital approaches for management of facility condition and enrollment increases.

Non-capital approaches, and their implication to district facilities and operations, are detailed in the Plan Options section of this report.

In general, the Advisory Committee recognized that implementation of these non-capital strategies could, to varying degrees, have significant negative impact on district students, families and staff.

The Committee also acknowledged that while some non-capital alternatives might provide additional general classroom seating, these approaches would not increase the capacity of specialized instructional spaces and shared support areas such as gymnasiums, kitchens, cafeteria / commons and administration.

Finally, it was recognized that non-capital plan approaches will not address ongoing maintenance and repair issues.

While condition assessments indicate that facilities have been well maintained by district staff, the age of many of these facilities also suggests that an inability to modernize, or in some cases replace them, will increase the likelihood of systems failure in the future.

After careful consideration, the Advisory Committee concluded that some level of capital improvement would be required to adequately address needs associated with existing facility conditions and enrollment growth. Subsequent to completion of Advisory Committee meetings, the District reconvened its Steering Committee to further discuss and develop a plan proposal that reflected key goals established by the Advisory Committee.

The following outline represents the proposed capital improvement plan. This plan identifies what is, in the Steering Committees opinion, minimal capital required to address the most critical District needs as they relate to facilities.

Resources have been broken into several broad allocation categories: property purchase, new schools and maintenance of existing facilities. These allocation categories have been further organized by grade level to clarify proposed expenditures as they relate to specific areas of need.

Costs indicated are in 2015 dollars and should be escalated to determine future probable costs. Costs listed are full project costs.
## Plan Proposal

<table>
<thead>
<tr>
<th>Investment</th>
<th>Amount</th>
<th>Purpose</th>
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<tbody>
<tr>
<td><strong>Elementary Level Investment:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>:: Purchase two new elementary sites (8-10 acres each)</td>
<td>$10,000,000</td>
<td>Accommodate enrollment increase</td>
</tr>
<tr>
<td>:: Construct two new elementary schools (600 capacity each)</td>
<td>$80,000,000</td>
<td>Accommodate enrollment increase</td>
</tr>
<tr>
<td>:: 10 year critical maintenance of existing elementary schools</td>
<td>$11,000,000</td>
<td>Maintain operation, protect investment, health / safety</td>
</tr>
<tr>
<td>Subtotal (elementary school investment)</td>
<td>$101,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Middle School Level Investment:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>:: Purchase property for future middle school (Acquire 15-20 acres)</td>
<td>$10,000,000</td>
<td>Reserved for future enrollment increase*</td>
</tr>
<tr>
<td>:: 10 year critical maintenance of existing middle schools</td>
<td>$3,000,000</td>
<td>Maintain operation, protect investment, health / safety</td>
</tr>
<tr>
<td>Subtotal (middle school investment)</td>
<td>$13,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>High School Level Investment:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>:: 10 year critical maintenance of existing buildings</td>
<td>$11,000,000</td>
<td>Maintain operation, protect investment, health / safety</td>
</tr>
<tr>
<td>Subtotal (high school investment)</td>
<td>$11,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Administrative Support Facilities Investment:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>:: Administrative site purchase</td>
<td>$5,000,000</td>
<td>Allows on-site expansion of administrative space</td>
</tr>
<tr>
<td>Subtotal (administrative support facility investment)</td>
<td>$5,000,000</td>
<td></td>
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<tr>
<td><strong>Athletics / Community Investment:</strong></td>
<td></td>
<td></td>
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<tr>
<td>:: Replace worn out turf, supplement insufficient lighting at baseball fields</td>
<td>$4,000,000</td>
<td>Maintain operation, safety, expanded use</td>
</tr>
<tr>
<td>Subtotal athletic / community investment</td>
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</tr>
<tr>
<td>Bond cost allowance: assume +/- 1.5% (to be verified)</td>
<td>$2,000,000</td>
<td></td>
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<tr>
<td><strong>Total Plan Proposal</strong></td>
<td><strong>$136,000,000</strong></td>
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* Consider additional property purchase for potential conversion of a future middle school into a second high school.
PLAN PROPOSAL NOTES

ELEMENTARY SCHOOL
The construction of two new elementary schools is a central component of the 2016 plan proposal for several reasons:

1) A straight line projection indicates an overage of approximately 1,000 students in 12 years. This near-term enrollment increase, combined with the potential for future need at the middle school level (possibly addressed by a future bond) suggest that it may be prudent to include two new elementary schools in a proposed 2017 bond.

Based on current projects, addition of two 600-student capacity elementary schools would still result in a districtwide over-enrollment of approximately 69 students at the elementary level in 2032. Given that enrollment projections represent a mid-range estimate, it is also possible that they may be eclipsed by actual enrollment increases.

2) Assuming all existing elementary schools remain open (operational costs allowing), the construction of two new elementary schools offers a temporary reduction in class size districtwide. It also offers one boundary shift in the near to mid-term future – thereby minimizing disruption.

3) If operational budget limitations do not allow all existing schools and the two new elementary schools to remain open, the worst existing school can be temporarily closed until enrollment demands its use, thereby allowing a higher number of students the benefit of a modern learning environment.

In addition, the improved operational efficiency of the new facilities would likely offer energy cost reductions. Eventually, the old school could be reopened as a “relief valve” when over-enrollment demanded it. This option would likely require two boundary shifts.

4) Any school constructed as part of an earlier bond should be less costly. Theoretically this is due to a smaller percentage of material and labor cost escalation and also the current cost of borrowing capital, as interest rates are at historic lows.

MIDDLE SCHOOL
The purchase of property for a future middle school has been included in the plan proposal for several reasons:

1) Over-enrollment at the middle school level will at some point become an issue.

2) Preparing for future growth was identified as the highest priority for the Advisory Committee.

3) Property acquisition will continue to become more difficult and expensive over time.

It is recommended that the District and its community consider purchasing a middle school site that is large enough to allow possible conversion of a future middle school into a second comprehensive high school. While the Advisory Committee felt that establishing a maximum target enrollment for the high school level is not necessary, opinions regarding this may change over the life of the District.

Providing for this level of long-term plan flexibility would require acquisition of 25-40 acres, rather than 15-20 acres. It was further suggested that the District might partner with another agency, such as the Department of Parks and Recreation, to offer a long-term lease of the additional land until such time its use for a high school was desired by the community.

HIGH SCHOOL
The Advisory Committee held the opinion that the high school level of instruction does not require a maximum target capacity. This suggests that within the foreseeable future, comprehensive high school programming will be limited to the current David Douglas High School campus.

With this in mind, maintenance, replacement and/or additions to existing facilities on this campus will be the primary challenge, particularly from a phasing standpoint.

While limits regarding total enrollment are currently not a concern for either the Advisory Committee or the District, it should be noted that over-enrollment at the high school level will present challenges, both from the standpoint of general classroom capacity and specialized/support capacity (kitchen, cafeteria, administration, gymnasium, electives, etc). Current enrollment projections suggest a possible over-enrollment of 1,100 by 2023 and 1,450 by 2033.

If funds are not provided to address over-enrollment prior to 2033, alternate approaches should be explored. One such approach might involve partnership with other institutions, such as Clackamas Community College.
In this example, seniors might take courses (possibly joint credit courses) using college facilities, thereby reducing over-enrollment and potentially facilitating matriculation to post-secondary education.

It is also recommended that a site specific analysis of the high school be done to explore various long-term plan scenarios for the campus. Options could include: 1) the impact of partnerships such as that with a community college, 2) alternatives involving off-site programs – technical / career education center or other program configurations, 3) phased expansion / replacement of facilities on site (single site scenario).

**TRANSPORTATION / FACILITIES**

The purchase of an additional property for administrative use, most likely by the Facilities Department or other district administrative services, would allow Transportation exclusive use of the facility currently shared by Transportation, Facilities, Nutrition Services and Alternative Education departments. This is recommended for several reasons:

1) Increasing enrollment throughout the district will require a greater number of buses. These will necessitate a larger site for storage and maintenance.

2) The current Transportation / Facilities site is ideally located near the center of the district and is large enough to accommodate growing transportation needs, assuming the Facilities Department is relocated.

3) Property acquisition will continue to become more difficult and expensive over time.
2. REGULATORY REQUIREMENTS: ORS 195.110
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) 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 under 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) 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) 10-year capital improvement plans.
   (g) Site acquisition schedules and programs.
   (h) 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]
3. VISION, GOALS & NEEDS
DISTRICT STRATEGIC PLAN

The Long-Range Facility Plan is informed by, and is created to support, the District’s broader strategic aims. Core goals of this strategic plan are:

GOAL 1: HIGH-ACHIEVING STUDENTS
David Douglas School District students will meet the high academic standards adopted by the district and state. The district has established graduation requirements that are among the highest in the state. Student progress is monitored and reported beginning at kindergarten.

GOAL 2: AN INVOLVED COMMUNITY
David Douglas staff, students, parents and community will be active partners in promoting effective communication and continuous school improvement.

The District recognizes that consistent communication and ongoing community involvement create a better understanding of the school improvement process, which then leads to higher academic standards for all students. This includes promoting safety at all of our sites.

GOAL 3: A COMPETENT AND EFFECTIVE STAFF
David Douglas will maintain a qualified staff and provide opportunities to enhance their knowledge and skills to improve student performance.

The district recognizes that providing staff with continuing professional development opportunities to increase their skills and performance will lead to higher student achievement.

GOALS, FACTS, NEEDS

In early February 2014, the Advisory Committee held its first meeting, which functioned as a Visioning Session.

After reviewing a presentation regarding schools that thrive and elements of the 21st century school, the committee subsequently identified a set of goals, needs, and facts that would inform the planning process.

After brainstorming ideas, the committee was given the opportunity to prioritize these goals and needs. The results and preferences are as follows.

Planning for increased enrollment quickly emerged as the Advisory Committee’s leading goal for the planning effort.
GOALS
:: Plan for growth now (land/property)—9 votes
:: Provide learning opportunities that mirror industry (today and tomorrow); cyber security, health, technology, etc.—4 votes
:: Prepare students to have the skills to be successful post-graduation—3 votes
:: Determine how big is too big?—2 votes
:: Provide equitable facilities throughout the district—2 votes
:: Classrooms to support class size—2 votes
:: Energy efficient; zone spaces for after-hours use—2 votes
:: Serve special education students better districtwide; South Powellhurst does not support special education programs well—2 votes
:: Provide a facility where students walk/bike safely—1 vote
:: New-comer center at the district level—1 vote
:: District and Parks partnership—1 vote
:: Increase capacity at the elementary school level—1 vote
:: Support multi-cultural population. Culture of respect—1 vote
:: Life cycle cost; payback based on the value of the system—1 vote
:: No Portables (only short term)—1 vote
:: Elementary schools no bigger than 500 students; core support functions are not big enough—1 vote
:: Repair / replace aging facilities; this is a must for the plan because systems are past their useful life—1 vote
:: Work in conjunction with the city for shared use / outdoor learning with parks department—1 vote
:: Consolidate with neighbors; is the district sustainable for the long-term?
:: Plan for the demographics and socio-economics of the evolving community
:: Support adult education
:: Consider all the issues associated with the “old bones” when deciding renovation versus new
:: Neighborhood schools at the elementary level (limit bussing distance)
:: Support service growth with population growth (i.e. bus, administrative, etc.)
:: Efficient and functional size (overall school size); multistory, school-within-a-school model
Utilize natural light and energy efficiency

School as an emergency shelter for the community

Sustain loyalty to the District; community oriented; consider the identity of David Douglas

Community partners: parks, multiple non-profits, Portland Adventist, MHCC

Support multi-use, flexible spaces

More capacity for transportation (buses)

More turf fields for year-round

NEEDS

Provide for social service space in schools (food pantry, clothing pantry, clinic)—2 votes

Alice Ott: not meeting the educational needs of students, is it past its useful life?

Staff training and meeting space

Outdoor learning space

FACTS

District owns the Deardorf property—1 vote

Classroom density is too high; building population is too high—1 vote

There is no land in the district to build—1 vote

Transportation infrastructure is a critical part of the plan—1 vote

Multnomah tax rates are high

Bond passed in 2012 (passed due to a retired bond, keeping the rates the same or lower; next retired bond is in 2021)

District is a good steward of the community’s dollars

State task force is looking at other funding options for schools

DDHS is a homeland security triage site

Gilbert Heights is an emergency communications site
4. MODERN LEARNING ENVIRONMENTS
MODERN LEARNING ENVIRONMENTS
The first session of the Long-Range Facility Plan Advisory Committee included an investigation of the qualities that comprise 21st century learning environments, as a way to catalyze discussion during the visioning and goal setting session. The Long-Range Facility Plan aims to identify, address, and develop a plan to accommodate changes in educational program delivery and related facility requirements.

UNDERSTANDING THE 21ST CENTURY STUDENT
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 formats.

This new knowledge has given rise to new approaches towards more effective teaching and learning: such as hands-on project-based learning, student-managed learning, small group work, independent research and presentation.

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 multilingual. 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.

ELEMENTS OF 21ST CENTURY LEARNING ENVIRONMENTS
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). Three elements that define the 21st Century School include Learning Happening Everywhere, Partnerships, and Adapting and Reusing Existing Facilities.

Learning Happens Everywhere
Learning is no longer confined to the classroom, but happens everywhere. Spaces are needed to support a wide range of learning styles, and can take a variety of forms depending on the school's social and cultural context, students’ ages and abilities, educational philosophies, curriculum, and pedagogy. These spaces are:
Flexible—Contemporary learning requires larger spaces that can be divided into smaller, more intimate spaces to support small student groups.

Connected—Learning spaces should provide both indoor and outdoor connections.

Collaborative—Collaborative spaces are often located outside of the classroom, and promote small group learning without disruption of other class activity.

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.

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.

Multipurpose Spaces—Spaces can sometimes be 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.

Shared Spaces—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.

Technology Rich—In today’s hyper-connected world, technology should be embedded where possible to support learning.

Partnerships
In a time of diminishing resources, partnerships can be a great way to augment school programs and provide educational continuity before and after school. Partnerships may take many forms: aligned services and programs; creating new learning opportunities; sharing facilities; and leveraging resources.

A growing number of projects are also financed creatively through partnerships with public and private organizations. Partnerships leverage connections with other community resources, such as public libraries or nearby colleges or universities, and connect students to the globe through distance learning and online resources. Partnerships facilitate rich and meaningful learning experience for students beyond the classroom and create the environment in which they can thrive academically and socially.
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. 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.

DESIGN TRENDS

Environmental Responsibility
Teachers and students perform best in facilities that meet their needs. Facilities must be well ventilated and comfortable and free of hazards and irritants, while also minimizing energy and resource use. School buildings can be designed to 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 and building technologies.

There is increasing national concern about the buildings and spaces in which students learn, and how these might affect both health and achievement. Air quality, acoustics, daylight and use of materials are all important considerations.

Learning for All
Some types of learning environments that affect how school facilities are built include:

Early Learning—The first few years of a child’s life lay the foundation for cognitive functioning, as well as behavioral, social and physical health. Demand for early learning (preschool, Head Start, etc.) programs is increasing. More space is needed to accommodate this increasing demand. Facilities for early learning require self-contained space for learning, napping, eating, toileting and playing.

Universal Design—There are more than six million students with disabilities in public schools across America. The vast majority have moderate impairments that are often not visible or easily diagnosed. Children with disabilities include those with learning, speech, 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 goes beyond Americans with Disabilities Act (ADA) compliance by addressing these obstacles as ordinary, not special. Universal Design addresses the physical environment and Universal Design for Learning addresses the curriculum, incorporating three principles of flexibility: multiple methods of presentation, multiple options for participation and multiple means of expression.
English Language Learners (ELL)—Demand for programs for ELL continues to increase. Breakout rooms are needed to accommodate ELL curriculum. ELL programs also require classrooms that encourage small group interaction and provide for individualized testing, and which also have storage requirements for multilingual materials.

Physical Education (PE)—While PE curriculum in recent years has been reduced, due to focusing limited funds on the core educational program, more emphasis is now being placed on school districts to provide this important activity. New Oregon legislation (2007 ORS 329.496) requires a minimum number of minutes per week of physical education for students in kindergarten through eighth grade. All Oregon school districts will be required to fulfill the requirements of this legislation, which takes effect in the 2017-18 school year.

Oregon schools today typically provide fewer minutes per week than those stipulated by the new law. An increase in the amount of PE instruction time and facilities to support this curriculum may be needed, requiring more or different physical activity spaces.

Wraparound Services—Supporting the whole child means providing on-site before- and after-school programs for students and their families, health centers, teen parent child care, and other services based on each school community’s needs.
5. EDUCATIONAL PROGRAMS
Building upon ideas explored during the Visioning Session and associated discussion of modern learning environments, Mahlum worked with the District to identify specific programmatic needs for elementary, middle and high school levels, as well as for District Administration.

**ELEMMENARY SCHOOL**

**GOALS**

**Program Description**

:: The elementary schools house PK-5 grades. All grades will be full-day programs.

:: School sizes range from 430-693 students. Ideally all elementary schools would be the same size and accommodate 550 students. This ideal capacity is being identified, since a number of District staff believe that infrastructure required to manage more than 550 students is a tipping point (in terms of support areas, management, bus loading and parent drop off, PE space). Note, however, that at the time of this report the maximum capacity was increased above the “ideal” to 600, due to capacity issues districtwide.

:: Elementary schools are community use facilities and are used before school and into the evening. The most commonly used spaces are: gymnasium, cafeteria, library and computer labs.

:: Special education is an inclusion model with pull-out programs to support students. Some elementary schools will house self-contained programs for medically fragile and behavioral academic programs.

:: All elementary schools are designated Schoolwide Title I.

:: ELL services are inclusion.

**Guiding Principles**

:: Each elementary school should support cultural diversity. This should be supported by providing family engagement space in the facility, providing multicultural programs and courses, and incorporating design elements on the interior and exterior that reflect the diversity of students.

:: The elementary schools serve as a community resource / hub. Schools provide outreach programs to serve families and students, services to support healthy community and space to support community classes or activities.

:: All buildings should be energy efficient, durable, and easy to maintain. Buildings should be designed to be 75-100 year buildings.

:: Every school building and site should be a safe place for students and staff. Safety includes: limited access points to the schools, central office located to monitor the school entry, video surveillance, ability to monitor the site, and infrastructure to support all modes of transportation.
Development Objectives

:: There should be equity at each elementary school.
:: Buildings should be flexible to provide for changing programmatic needs over time.
:: Building should be technology rich, with adequate lab space for testing and wireless capability throughout the building. Technology infrastructure and bandwidth should support full-school wireless use. Spaces to include mounted projectors, yet be flexible for evolving systems. There needs to be an adequate number of power outlets and wireless bandwidth.
:: Provide social service space at each elementary school. Programs to include health screening, dental screening, hearing, and meeting space for DHS (counseling).
:: Provide appropriate space for itinerate support specialists.
:: Flexibility to group students in a variety of configurations.
:: Shared learning space adjacent to classroom clusters. This could also function as a lab space.

Environmental Stewardship

:: Provide energy efficient facilities that are durable and easy to maintain.
:: Each school should have appropriate lighting, daylighting, high air quality, high water quality.
:: Building systems should be cost effective to operate, with systems located in a place that is easy to maintain.
:: There should be the ability to monitor building systems from a centralized district location.
:: Conservation measures should be practical and have a payback period of 5-10 years.

INSTRUCTIONAL DELIVERY

Technology and Instructional Delivery

:: The goal is to maximize the time for instruction in the course of a day. The more time students are required to travel distances or teachers to set up equipment the less time is available for instruction.
:: Teachers typically “own” their own classroom, although the district has “walk to programs” across grade levels for language and reading.
:: Buildings are used year-round with before and after school programs.
:: Most elementary schools now do not have a pre-kindergarten program. This will require the addition of classrooms to accommodate the students and ideally would have corresponding expansion of support spaces.
:: Testing: there is a small window of time for the testing to occur. Testing format and number of times may change in the future. Testing can dominate the computer lab and limit access to the lab for instruction.

:: Mobile computer labs are used for instruction in the classroom. Fixed computer labs are still necessary for testing and for ease of use.

:: Music is an important program. Choral, band. Music is offered on an A-B-C schedule, 2-3 times per week. There is a dedicated music teacher in each school and a stage provided for performance.

:: Each school has its own curriculum materials; however, music curriculum kits travel from school to school throughout the year. They are centrally stored at the district.

:: Teachers collaborate on projects together.

:: Every school has an Educational Resource Center with instructional assistants. This space is sometimes shared with the speech and language pathologist, or other visiting specialists.

:: LDS (language development specialist) typically works with students in the classroom.

:: SAS (Student Achievement Specialist) works in the classroom teaming or co-teaching. May need space outside the classroom to work with behavioral students.

:: Other specialists in the schools include: mental health, vision screening, health screening, and counseling.

:: For special program such as: SLPA, SLPB (structure learning for behavior), and life skills; all students travel to a centralized location.

:: Music has traveling keyboards

:: Partnerships with educational specialists in the schools: SUN, Young audiences for art.

:: There is a food pantry at most elementary schools. Community based organizations stock and hand out food. The distribution centers also have clothing.

:: There is a library with instructional assistants. Teachers typically bring their full class to the library. There should be the ability to have two classes in the library with a variety of seating and computer stations.

:: Cafeteria—the larger the better for special events. Seating for half the student population.

:: Technology support in the building via the lab assistant in the computer lab.

:: Central technology team that supports the school. All repairs happen off-site.

:: Staff development courses occur in the school buildings.

:: Most elementary schools have courtyards.

:: Pre-school programs require a separate fenced play area. Rooms need hand washing nearby and toilets either in the room or close-by.

:: Two gyms (or PE space) would be ideal, depending on the size of the school. Breakfast and lunch periods run so long that the cafeteria cannot practically function as a PE space.

:: Evening lighting around the buildings for safe access.

**Future Trends**

:: Push towards year round school.

:: Possibility of more lab space and project based learning. Spaces to support instruction of art, science and shop.

:: More technology in the buildings. Integrated into all instructional spaces. Ability to adapt the space to the changing equipment. Ceiling projection and interactive white boards. Mobile computer tablets.

:: More project-based work. Ability to support small group work and collaboration.

:: All elementary schools will be SUN schools.

:: How will the schools be used over the summer? Ideally planned for year-round use and have air conditioning.

:: Whole systems learning. Space should be provided that is flexible for kids: shops, gardening.

:: Shared use with the Parks department. Can the schools with smaller sites expand into this property?

:: Biggest issue is anticipating the demographics and growth for the schools. Who will be walking through the door and how best to meet the social and emotional needs of those students.

:: Community based schools to provide space for therapy, counseling, DSHS. This will require more small group space and adequate size front office.
**FUNCTIONAL AND SPACE NEEDS**

**Student and Staff Flow**

:: Classes begin at 9:00 AM and run until 3:15 PM. Buses leave at 3:25. The building opens at 8:30.

:: Schools function through the evening for after school programs. Storage space is required for these programs.

:: A / B / C schedule. A is PE, B is Library / Computer, C is Music.

:: Storage for lots of materials, including math manipulatives and leveled readers.

:: Collaboration: ability to do group work in a shared learning space.

:: The typical school day: Doors open at 8:30. Students arrive and go for breakfast in the cafeteria. Students go to classrooms at 8:45. Class begins with 90 minutes of reading, 30 minutes for reading intervention, 30 minute language block, 45 minute writing, 60 minute math block, 30-45 minutes of either (social, studies, science, health), 40 minute lunch / recess, 40 minute specialized instruction (PE / Music, Library / Music). School ends at 3:15 PM. Teachers generally use 3:00-3:15 to clean up and line up for buses.

:: Typically students arrive on bus or by car. District buses within the guidelines of the department of transportation.

:: SLPA/B students arrive at the same time as the general population but leave earlier than the general population.

:: Food preparation happens at a central kitchen and then is transported to the school. Kitchens are typically prep kitchens.

:: There are four to five lunch periods. 200 students per lunch period is the ideal, for proper traffic flow and the ability to monitor the students.

:: Handwashing station near the cafeteria and playground.

**Key Space Calculations**

:: Target school capacity of 550. This number was subsequently increased to 600 students per school.

:: Class size targets: Preschool and kindergarten class size target is 20 students. First through fifth grade class size target is 30 students.

:: Ratio of one counselor per 400 students.

:: There is a need for a second PE instructional space when the student population reaches approximately 540 students.

**DESIGN CRITERIA**

**Space Program for each Elementary School**

:: (15) General classrooms in clusters of four or five rooms.

:: (3) Preschool classrooms. Storage space for trikes and outdoor equipment.

:: (3) Kindergarten classrooms.
(4) A shared learning area for each classroom cluster.
(6) Teacher collaboration spaces.
(1) Project room (art and science).
(2) Special education resource rooms with a shared sensory room at each school.
(2) Staff workrooms.
(2) Computer labs. One for testing and one instruction.
(1) Library with multiple computer stations. Seating for two classes.
Storage for books, copy supply room.
(1) Gym sized for community use. PE office, PE storage, SUN storage, community storage.
(1) Music room with instrument storage. Appropriate acoustical characteristics and sound isolation from adjacent spaces.
(1) Cafeteria with seating for 220 students.
(1) Prep kitchen.
(1) Stage, large enough for a class. Located off the cafeteria or gym.
(1) Building storage and custodial office.
(2) Custodial closets.
Staff and student toilets with visible hand wash area.
Administration area with space for: principal, vice-principal (ideally), secretary, records clerk, part-time health assistant, small meeting space, administration work room, parent volunteer room, staff room, staff toilets.
Several small screening / testing / peer observation rooms to observe classrooms without disrupting the classroom.
Family resource hub should be larger and available for use during school hours and after school hours.
(1) Changing / shower facility for student use. Washer / dryer.
(1) LDS, SAS and school psychologist can share an office to collaborate and plan. Small group work of 6-8.
(1) Counseling room with space for small group work.
(1) ESL small group room.
(1) Clinic, health screening room.
(1) Speech room with space for small group work.
(1) Food pantry with freezer, refrigerator, and prep area.
(1) Clothing storage area.
Storage for social service programs.
Technology server room.
(1) Covered play area.
Hard play area.
Play field: shared use for community.
Parking for staff and visitors.
Bus drop-off area with stacking for eight buses.
Parent drop-off area (separate from buses, but located to maximize supervision).
Library audio-visual equipment.
(6) Mobile labs for use in individual classrooms.
Classrooms with ceiling-mounted projector, interactive white board, projection screen, black-out curtains, teachers work station, desks and chairs, sink, student cubbies, teacher storage cabinet.
Shared learning area with ceiling-mounted projector, interactive white board, projection screen, black-out curtains, sink, project storage, mobile computer lab storage. Tables and chairs.
ADA accessible play equipment.

Relationships
Ability to secure the building in different zones.
Gym located adjacent to a playground or field. Different play area zones with age appropriate equipment. Separate preschool play area.
Gym adjacent to covered play area.
Administration at the front door.
Ability to segregate the building for after-hours use. Controlled entry through administration. Provide doors between instructional space and community space. Access community space throughout the day without access to the classrooms.

Character and Image
Reflective of multi-cultural neighborhoods.

Special Equipment
Bleachers in the gym.
Music: band, choir, drums, keyboard, risers, piano.
MIDDLE SCHOOL

GOALS

Program Description
:: The middle schools house grades 6-8.
:: School sizes range from 700-900 students.
:: The middle schools also serve as a community resource and are used year-round, all day. Facilities that are most frequently used by the community include: gymnasium, cafeteria, library, computer labs, and fields.
:: Middle schools have a full athletic program: basketball, volleyball, track, football, soccer, wrestling, baseball and softball.
:: Middle schools provide opportunity for students to explore different programs and career opportunities. Specialized spaces for electives are an important part of the program.
:: Conform to Oregon’s 40-40-20 vision for education. Students at the Middle School level should begin to think about the transition to higher levels of education and career.
:: Summer foods and summer school programs. Support these programs while having a safe environment.

Development Objectives
:: Emphasis on security. No one should be able to enter the building without going through administration.
:: Provide for safe parent pick-up and bus drop off at all sites.
:: Provide equity between older and newer schools.
:: Programs and spaces to support career exploration. There should be as many specialized programs and spaces as possible.
:: Provide an age appropriate environment.
:: All middle schools should have the same standardized programs offered, to help support student mobility.
:: There should be a diversity of programs including: FACS (food and consumer science), CAD/Media (robotics, computer graphics), wood shop (workstations, tools, manufacturing, mechanical engineering, Art (with computer art programs).
:: The type of programs offered will be determined in the future, plan for three larger project based spaces.
:: All schools should be designed with community gardens that also serve as a learning garden. Produce is given away to the food pantries.
:: Buildings should be technology rich, with adequate lab space for testing and wireless capability throughout the building. The technology infrastructure and bandwidth should support full-school wireless use.
:: Provide appropriate space for itinerate support specialists.
:: Flexibility to group students in a variety of configurations.
:: Shared learning space adjacent to classroom clusters. This could also function as a lab space.

Guiding Principles
:: Each middle school should provide an equitable and effective learning environment that supports academic achievement. Learning environments should be flexible, to accommodate changes in instructional delivery, programs and technology in the future.
:: Each middle school should reflect its cultural diversity and embrace student diversity.
:: The middle schools should serve as a community resource/hub. Schools provide outreach programs to serve families and students, services to support healthy communities and space to support community classes and activities.
:: All buildings should be energy efficient, durable and easy to maintain. Building should be designed to be 75-100 year buildings.
:: Every building and site should be a safe place for students and staff. Safety includes: limited access points to the schools, central office located to monitor the school entry, video surveillance, ability to monitor the site and infrastructure to support all modes of transportation.

Environmental Stewardship
:: Provide energy efficient facilities that are durable and easy to maintain.
:: Each school should have appropriate lighting, daylighting, high air quality, high water quality.
:: Building systems should be cost effective to operate, with systems located in a place that is easy to maintain.
:: There should be the ability to monitor building systems from a centralized district location.
:: Conservation measures should be practical and have a payback period of 5-10 years.
INSTRUCTIONAL DELIVERY
Technology and Instructional Delivery

:: Teachers typically “own” their own classroom.
:: Buildings are used year round with before and after school programs.
:: The middle school day starts at 8:00 AM and students are out of school at 3:00 PM. Schools operate on a block schedule with 84 minute periods. Some classes are taken every day (such as math).
:: Drama and music programs are strong in the district. Provide a drama elective and a performance venue in the school. Drama elective in one or two schools.
:: Central tech team that supports the school. All repairs happen off-site.
:: Staff development courses occur in the school buildings.
:: Elective classes are taught all day long.
:: There is heavy use of the facilities after hours, especially the gyms.

Future Trends
:: There will be greater career exploration for students in the future. Careers around the use of technology will be more prevalent.
:: More hands-on activities for students.
:: Assessments will be proficiency based versus seat time based.
:: Students will be expected to do more presentations and performances.
:: More technology in the buildings. Integrated into all instructional spaces. Ability to adapt the space to the changing equipment. Ceiling projection and interactive white boards. Mobile computer tablets.
:: More project-based work. Ability to support small group work and collaboration.
:: More testing will be done via mobile labs. It works better to split the students up. Not try to test 40 students at one time.

FUNCTIONAL AND SPACE NEEDS
Student and Staff Flow
:: The middle schools are closed campus.
:: Food preparation happens at a central kitchen and then is transported to the school. Kitchens are typically prep kitchens.
:: Three lunch periods a day with the ability to seat half the student population in the cafeteria for special events.

Key Space Calculations
:: Ideally all middle schools would be the same size and accommodate a target capacity of 900 students.
:: Class size target of 30-35 students for general instruction.
:: 80% students are free and reduced lunch.
:: Cafeteria with seating for 300 students.

DESIGN CRITERIA
Space Program
:: (24) General classrooms.
:: (6) Shared teacher office areas.
:: (6) Science rooms with shared prep area.
:: (3) Special education classrooms.
:: (6) Shared learning area for each classroom cluster.
:: (3) Computer labs, one for each grade level.
:: (2) Staff workrooms.
:: (1) Library/media room with workroom and seating for two classes.
:: (2) Gyms sized for community use.
:: (2) Locker rooms, (2) PE offices, PE storage, Community storage.
:: (1) Fitness room.
:: (1) Band / Orchestra room with instrument storage and shared practice rooms.
:: (1) Choir room.
:: (1) Drama room.
:: (3) Specialized exploratory rooms (programs such as art, wood shop, robotics, family and consumer science, etc.).
:: (1) student commons area (Ron Russell MS has a nice commons area).
:: (1) Cafeteria with seating for 300 students.
:: (1) Stage (combined with drama).
:: Chair storage.
:: (1) Student store.
:: Administration area with space for: Reception, Principal, Vice-Principal, two secretaries, records clerk, health assistant, small meeting space, administration work room, in-school suspension, family resource room, parent volunteer room, staff lounge, staff toilets.

:: (2) Itinerant offices.
:: Guidance center.
:: Clinic / health screening room.
:: Storage for social service programs.
:: Technology server room and office.
:: Building storage and custodial office.
:: Covered play.
:: Hard play area, outdoor basketball court.
:: Fields: softball, baseball, soccer.

**Special Equipment**

:: (2) Artificial turf fields for year-round use.
:: Bleachers in gym.
:: Choir: keyboard, risers, piano.
:: Band / Orchestra: instrument storage area, sink for instrument cleaning, appropriate acoustical treatment.
:: Library with ceiling mounted projector, interactive white board, projection screen, black out curtains, teachers work station, desks & chairs, sink, teacher storage cabinet.
:: Student lockers. Half-size locker for each student.
:: Shared learning area with ceiling mounted projector, interactive white board, projection screen, black out curtains, sink, project storage, mobile computer lab storage.
:: Tables and chairs.

**Relationships**

:: Buildings zoned for after-hours use, with the ability to access areas of the building without compromising the security of the full building.
:: Administration at the front door with the ability to monitor parent and bus drop-off.
:: Classrooms clustered with 4-5 classrooms around a shared learning area. The shared learning area must be visible from all classrooms in the cluster.

**Character and Image**

:: Reflective of multi-cultural neighborhoods.
:: Durable and long-lasting.

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**HIGH SCHOOL**

**GOALS**

**Program Description**

:: The North and South David Douglas High School houses grades 9-12 and provides a comprehensive high school program. The North part of the campus is more academically focused; The South campus provides more professional technical programs. The campus also includes a performing arts center and a pool.

:: Separate buildings at the high school provide more of a community college feeling.

:: Fir Ridge is an alternative high school that provides instruction to students that need a different high school structure. Class sizes are smaller and more structured. Terms are shorter. The schools focus, in addition to academics, is providing social, emotional and psychological support for the students.

**Guiding Principles**

:: The high school should provide an effective learning environment that supports academic achievement. Learning environments should be flexible, to accommodate changes in instructional delivery, programs and technology in the future.

:: The high school should reflect its cultural diversity and embrace student diversity.

:: The high school should serve as a community resource/hub. Schools provide outreach programs to serve families and students, services to support healthy communities and space to support community classes and activities.
:: All buildings should be energy efficient, durable and easy to maintain. Building should be designed to be 75-100 year buildings.

:: Every building and site should be a safe place for students and staff. Safety includes: limited access points to the schools, central office located to monitor the school entry, video surveillance, ability to monitor the site and infrastructure to support all modes of transportation.

Development Objectives
:: Provide for future growth at the high school level—explore options regarding size of facility and other ways to accommodate growth in the student population.

:: There should be a short term and a long term plan. The District needs options to accommodate population jumps.

:: Improve campus safety. Multiple buildings and entries on campus complicate security for staff and students.

:: The high school facilities should be flexible to accommodate changing programmatic needs over time.

:: All schools should be designed with community gardens that also serve as a learning garden. Produce is given away to the food pantries.

:: Buildings should be technology rich, with adequate lab space for testing and wireless capability throughout the building. The technology infrastructure and bandwidth should support full-school wireless use.

:: Flexibility to group students in a variety of configurations.

:: Shared learning space adjacent to classroom clusters. This could also function as a lab space.

:: Avoid housing students in portable buildings; however, provide a location for two portables if changing population demands it in the short-term.

:: There are multiple partners that collaborate with David Douglas High School, for example: Mount Hood CC., PCC, other universities. Partnership is important to the program and the goal would be to expand them. Create places and ways to support these connect. Provide vehicles, more video conferencing, support space on campus, a satellite campus.

:: All schools should be designed with community gardens that also serve as a learning garden. Produce is given away to the food pantries.

:: Technology and Instructional Delivery

:: David Douglas High School provides a wide range of specialized programs including: wood shop, auto shop, fine arts, jewelry and performing arts.

:: Teachers typically “own” their own classroom.

:: The north / south high school is not a “school-within-a-school” model. At one point in time, one building housed grades 9 & 10 and the other housed grades 11 & 12. All grades are now mixed.

:: There is a teen parent program.

:: There is some online instruction provided and students can access materials this way. There is still a lot of “stand and deliver” instruction happening.

:: Classes are crowded now. Support infrastructure (dining, library, and auditorium) is reaching its capacity.

:: Special education—More kids in wheelchairs in the general instruction. There are typically 200-280 students that may need some form of special accommodation. Currently there is only one self-contained classroom but in the past as many as four classrooms have been in use.

:: Special Education—for the most part, medically or behaviorally challenged high school students are in private alternative programs and not on campus at the high school level.

:: Security and safety. Anyone can walk in to the campus. Building should be much better connected. There are pros and cons to the campus layout. Lock-up and lock-down are very difficult.
:: Early employee testing is done online. Most professional development is face-to-face work.

:: Professional development occurs in the boardroom or in rented space. The size of groups meeting range from 50 to 80 people. Programs topics include: curriculum, evaluation, textbook adoptions, community meetings, teacher staff meetings and district meetings.

:: Students appreciate diversity and the size of the high school and the ability to take a variety of electives.

:: Board focus—make the facilities accessible to the community at different times.

:: There is an outdoor program—this is outsourced.

:: Tennis courts and stadium are used for community.

:: Some students drive to school. Parking availability is tight, space is not restricted. There is public transportation. Students also bus in, the district has its own fleet.

:: College possibilities. Identifies juniors that would be first generation college students. Helps them gain access to higher education and stays with them until they complete their degree. This is an equal opportunity programs. Increase AP classes.

:: The alternative high school has waiting lists for students to enter. The facility is too small to service all the students that need it. If the high school was not so big, it might be able to keep some students at the high school.

:: Another 500 students on the high school campus might be a tipping point (that indicates a second high school should be created).

:: Class size is a bigger issue than the high school size. Other areas of the school are taxed by the size of the student population. There are two lunches now. The gym seats 3000 now for assembly, and cannot handle more students. There is no common space for students other than the cafeteria.

Future Trends

:: To provide instruction and programs to support the workforce of the future. This may mean exploring different career options such as electronics, robotics, and metal shop with CAD/CAM.

:: Technology will continue to impact the classroom. More technology capable classrooms and more places for wireless access will be required.

:: An increase of project based learning space and more hands-on lab classrooms will be required.

:: Transparency—space to view instruction and allow other instructors to view each other.

:: More collaboration space for teachers. Designated teacher work space in office suites and shared classrooms. This would also increase the utilization of the classroom.

:: Ideally, special education outside placements could be brought back to the campus. Consider a wing that is separate or more secure. This could be a school within a school. These students are medically or behaviorally challenged.

:: In the future, more material will be covered on-line and students will discuss and do small group work in the classroom.

:: When students enter high school they should begin to consider how they will transition to post-secondary life: Community College, University, and Career. Everything should be about year 13 for students.

:: Pro Tech-Hospitality / tourism, manufacturing (CNC), health and human services, satellites or storefront.

:: The issue with the campus is the lack of space for STEM programs in the future. There is a need for technical programs that incorporate electronics, CAD, robotics, greenhouse. The auto shop could be converted or torn down. Wiring with machinery Gas, diesel and other hybrid technology.

:: Could do a school within a school models. One school focused on academics, the other focused on career technical programs.

:: Could have smaller high school campuses, like Reynolds Environmental Learning Center. It would be more attractive if it was located on the high school campus.

functional and space needs

Student and Staff Flow

:: There is a block schedule with four periods every day. Students arrive at 7:30 AM and start class at 8:00 AM. There is a late start on Wednesday. The lunch period is half an hour. Passing time is nine minutes.

:: Every student has access to a locker but they don’t use them much anymore.

:: The high school is a closed campus.
There are three lunches served in two cafeterias. Several food carts are run by the district. Students decide which cafeteria they want to use for lunch. The food served is the same at each location. The cafeteria serves free breakfast for eligible students.

Students hang out in the halls, breezeways and library. Students are everywhere.

Teachers are in their classroom typically and meet/greet in the halls. There is staff room in both the north and south campus.

The school is organized by discipline and academy model. Language Arts, Social Studies, Math, Science (freshman and sophomore) with thematic units.

Some students enjoy the size of the high school.

**Key Space Calculations**

Student per classroom is 30-34 as an average. The ideal size is 30 students but with enough space to accommodate 40 students. Larger class sizes are the result of limited funding. Fluctuations in funding will yield class sizes ranging from 30-40.

Don’t want students in portables, but plan for a location for when they are required.

There are currently 3,049 students in DDHS.

There are 215 students at the Fir Ridge campus.

Gym is a teaching station. Class size of 60 takes up the full gym.

The pool building has eight general classrooms.

There is a social studies building.

The high school has had as many as 3,400 students at one point in time. This happened when the district office was not on campus.

**DESIGN CRITERIA**

**Space Program**

(145) General classrooms. There are enough in number for the current population. Some rooms are empty right now.

Science rooms. Enough right now.

(1) Life skills room with a sink.

(4) Computer labs.

(2) Music rooms.

(3) Industrial Arts rooms.

(2) Auto Shop.

(7) Modular classrooms.

(2) Varsity sized gyms.

(6) Locker rooms.

(1) Library.

(2) Kitchen.

(2) Cafeteria.

(3) Stage.

(1) Administration (principal, vice principal, secretaries, registrar, counseling, conference room).

(3) Specialist offices with space for small group work. (OT, PT, Speech)

(1) After school programs storage/office.

(2) Staff rooms.

(1) Commons area for students to hang-out.

(1) Flexible conference room space is required on campus to seat 60-80 people.

(1) Multipurpose room. Space for the dance team and cheerleaders to practice. There are so many after school sports that space is limited.

Community services--hub food pantry, medical screening, expanded social services for the community. Partnership with outside agencies. Hoteling space for these agencies.

Transition program for 18-21 special Ed students. They could co-locate on the high school campus. Need classroom, laundry, kitchen, and apartment/house.

Food and consumer science culinary program. This is a hospitality program where culinary classes are taught with a restaurant to serve meals. This program was cut due to funding limitations. Ideally the district would bring this program back in the future.

Preschool in the high school.

**Special Equipment**

High school has a greenhouse. Has been an integral part of the program.

A few toilet rooms with space for changing in the school.

Tennis courts.

1-2 additional turf fields.

Stadium.

Wireless access throughout the campus.
Relationships

:: Consider collaboration hubs for single disciplines (i.e. science, social studies, etc.). This has advantages and disadvantages.

:: North Powellhurst Facility —now a hodgepodge of space. This area was the High School office and classrooms.

Character and Image

:: There are strong traditions at the high school. There are photo displays of past student body presidents and Rose Festival princesses.

:: The high school in many ways is what defines the community. The pool is a source of pride in the community. Many good athletes have come out of David Douglas. The music program has won state and national recognition.

:: Multicultural—pride with the diverse community. Flags from each country in the cafeteria.

:: All families welcomes at community events. Reach out to cultural groups, faith based group to get them involved. Signage in multiple languages.

:: When the bell rings, people are in class: Quiet, professional, comfortable, respectful, structured environment.

Districtwide Facilities

Goals

Program Description

:: Other district functions including: early childhood, district administration, itinerant staff.

Development Objectives

:: Provide for future growth—explore options regarding size of facilities and other ways to accommodate growth in the operations.

:: There should be a short-term and a long term plan. The District needs options to accommodate population jumps.

:: Improve campus safety. Multiple buildings and entries on campus complicate security for staff and students.

:: Buildings should be technology rich, with adequate lab space for testing and wireless capability throughout the building. The technology infrastructure and bandwidth should support full-school wireless use.

Environmental Stewardship

:: Provide energy efficient facilities that are durable and easy to maintain.

:: Each building should have appropriate lighting, daylighting, high air quality, high water quality.

:: Building systems should be cost effective to operate, with systems located in a place that is easy to maintain.

:: There should be the ability to monitor building systems from a centralize district location.

:: Conservation measures should be practical and have a logical payback period depending on the life of the system.

Instructional Delivery

Technology and Instructional Delivery

:: Early employee testing is done online. Most professional development is face to face work.

:: Professional development occurs in the boardroom or rented church space. The size of groups meeting range from 50 to 80 people. Programs topics include: curriculum, evaluation, textbook adoptions, community meetings, teacher staff meetings, district meetings.

:: Board focus--make the facilities accessible to the community at different times.

Future Trends

:: Ideally, special education outside placements could be brought back to the campus. Consider a wing that is separate or more secure. This could be a school within a school. These students are medically or behaviorally challenged.

Functional and Space Needs

Key Space Calculations

:: The high school has had as many as 3,400 students at one point in time. This happened when the district office was not on campus.

Design Criteria

Special Equipment

:: Wireless access throughout the campus.

Relationships

:: North Powellhurst Facility —now a hodgepodge of space. This area was the High School office and classrooms.
:: District Administration has grown along with the student population in the district. The department needs more space; and can’t house current functions adequately. It does not need to be on the high school campus. “Drive-up window for business”. The environment is not professional in appearance. Technology folks are scattered across the district, ideally they would be centralized.

:: First priority—is capacity at the elementary school level. Schools are now at capacity and are growing at 3% each year. The issue is imminent. What is the near term approach to this issue and what is the long term plan. Some thoughts—should there be a Kindergarten center? Relocating Menlo Park self-contained special education to Gilbert Park would buy some time. Overall school infrastructure is an issue: commons, PE space, toilets, administration, bus and parent drop-off.

:: Consider artificial turf at the middle schools. This would provide more PE space and be more functional for the school year-round.

:: Early childhood programs. There is space for 150-160 itinerant staff housed in leased space (4-year lease). This space functions as their home base, staff travel from their cubicle workspace to homes and other locations. The district has a contract for Multnomah County. Ideally these staff would be housed somewhere in the district. This could be co-located with the district office or not.

:: There is an evaluation center that has a staff of 20 people. They should be with early childhood staff. These employees are Itinerants traveling to each school. They do all the evaluations for school age students. OT/PT is part of the 20 staff.

Character and Image

:: Multicultural—pride with the diverse community.

:: All families welcomes at community events. Reach out to cultural groups, faith based group to get them involved. Signage in multiple languages.

:: There is a David Douglas video that explains who he was (a botanist). Every student learns who David Douglas was and his significance to the community.
NUMERIC PROGRAM UPDATE

The David Douglas School District worked with Mahum to create updated numeric programs of space that identify ideal target square footages for elementary, middle and high school levels.

These numeric programs are intended for use by the District as it plans for development of future schools. The programs may also serve as benchmarks against which the square footage of existing schools with similar capacities can be compared.

The specific program spaces and associated square footage allocations are intended only as reference points for subsequent discussion. Spatial allocations shown in these programs may require modification pending capital availability and / or further clarification of those programs served.

At the elementary level of instruction, an ideal target capacity of 500 students was initially discussed. As pressures associated with increased enrollment became clear to the Advisory Committee, the target capacity for elementary schools was increased to 600 students.

While a +/- 540-student capacity represents the point at which a second PE, gymnasium, space may be warranted, numeric programs for both 600- and 700-student capacities incorporate a single 6,000 square foot gymnasium.

It is also important to note that the program for a 600-student elementary results in 132 square feet per student. All current elementary schools fall short of this allocation, ranging between a high of 126 square feet per student and a low of 86 square feet per student.

For comparison purposes at the high school level, a numeric program associated with a 1,500-student capacity was developed. Currently the actual capacity of David Douglas High School is more than double this capacity. No maximum target capacity for the high school was established during Advisory Committee meetings.
6. EXISTING FACILITY CONDITION
CONTEXT

The David Douglas School District is comprised of nine elementary schools, three middle schools, and two high schools including an alternative high school with 188 students.

Collectively, the DDSD educates approximately 10,700 students. All but five schools are located north of Powell Boulevard. School locations are identified on the accompanying map.

KEY

- ELEMENTARY SCHOOL
- MIDDLE SCHOOL
- HIGH SCHOOL
- OTHER
- ADMINISTRATION BUILDING
BUILDING ASSESSMENTS

Building assessments measure the relative condition of schools and provide a framework to identify, compare and prioritize school building needs. The planning team assessed all school buildings within the District, and evaluated them according to the following five key areas:

- Primary structure, including foundation system, column/exterior wall system, floor system and roof system
- Secondary structure, including interior walls and partitions, ceiling systems, window and door systems, and casework
- Service systems, including ventilation and cooling, heating, plumbing, and electrical
- Safety systems
- ADA systems

BUILDING RATING

Buildings were given a weighted numeric score for each key assessment area, based on their visible condition. These scores were totalled to determine the building’s overall assessment rating. Building ratings range from 0 to 100 points and fall into the following categories:

- 95-100 points: Satisfactory to excellent condition
- 75-94 points: Remodeling D (minor modernization of less than 25% of building replacement cost)
- 55-74 points: Remodeling C (modernization of 25-50% of building replacement cost)
- 35-54 points: Remodeling B (major modernization of 50-75% of building replacement cost)
- 0-34 points: Remodeling A or Replacement (full modernization / candidate for replacement with 75- over 100% of building replacement cost)

BUILDING AGE AND CONDITION SUMMARY

The majority of buildings were constructed between 1952 and 1966, with the Ron Russell Middle School (2005), DDHS New Classroom Building (2007) and DDHS Pool (2014) constructed most recently.

According to assessment ratings, eight structures currently fall into the category of needing modernization, with an additional eight structures requiring minor modernization.

It can be expected that the condition of these buildings, and their associated assessment ratings, will only worsen with time.

While overall assessment scores are generally good, due largely to ongoing maintenance conducted by District staff, it should be noted that several facilities exhibit specific systemic conditions that warrant concern, including outgoing issues associated with water quality.

The following photographs illustrate conditions found at many facilities across the District.
LEFT:
Exterior Wall - Gilbert Heights Elementary

LEFT:
Exterior Wall - Lincoln Park Elementary

LEFT:
Walled over Windows - Cherry Park Elementary
RIGHT:
Exterior Soffit - West Powellhurst Elementary

RIGHT:
Exterior Wall - Gilbert Heights Elementary

RIGHT:
Exterior Wall - Lincoln Park Elementary
LEFT:
Floor Tile - Mill Park Elementary

LEFT:
Drinking Fountain - Ventura Park Elementary

LEFT:
Stage - West Powellhurst Elementary
RIGHT:
Classroom - DDHS

RIGHT:
Exterior Wall - DDHS

RIGHT:
Ceiling - DDHS
The David Douglas School District Facilities Department provided a list of critical deferred maintenance items, which was then categorized into the following five areas of concern: catastrophic, health / life safety, protect capital investment and ADA. The catastrophic category projects cost associated with those items that, if left unaddressed, could result in temporary closure of a facility. Health / life safety includes items such as water quality, air quality and fire protection. Protection of capital investment typically includes items associated with exterior building envelopes, although this is not exclusively the case, and the ADA category addresses issues associated with accessibility of facilities.

Approximately $20.4 million (in 2015 project cost dollars) of critical maintenance is outstanding for buildings throughout the District. Nearly half of total critical maintenance need is associated with David Douglas High School’s South and North Campus structures, Mill Park Elementary, and Cherry Park Elementary.

For purposes of this report, estimates of probably cost were escalated using a rate of 4% to the midpoint of 2020. This results in an approximate project cost of $25 million for this work.

It should be noted that the projected costs for critical maintenance do not reflect either those costs associated with total deferred maintenance or costs associated with full modernization of facilities.

The items identified on this list represent what District staff considers minimal maintenance required by current facilities. The cost for this maintenance is, however, above what is allowed within the current annual operating budget for the District.
FUTURE REPAIR COSTS

SUMMARY

For reference purposes, an estimate of probable cost was calculated for modernization of all elementary, middle and high school facilities. These costs reflect work associated with repair of District facilities to a satisfactory building condition.

Probable costs were calculated using facility assessment scores, which are intended to illustrate the cost to modernize a facility as a percentage of its replacement cost. A high and low range of construction costs per square foot were then applied to the square footages represented by the assessment scores.

The low end of this construction cost range (reflected by the bar chart shown above) assumes a cost of $245 per square foot (2015 construction dollars). The high end of the range assumes a construction cost of $300 per square foot (in 2015 construction dollars).

Using this range, the total construction cost associated with modernization of existing facilities within the District would likely be between $175 million and $215 million (in 2015 construction dollars).

Soft costs (project cost multipliers) vary from project type to project type and also from school district to school district. For purposes of this report, a multiplier of 1.35 was used to estimate probable project cost, excluding off site improvements and land purchases. Using this multiplier, the resulting project costs would likely be between $236 million and $290 million.

When escalated to the year 2020, the assumed midpoint of a potential capital construction bond measure, and using an assumed escalation rate of 4% per year, the resulting 2020 project cost for modernization of existing District facilities would likely fall between $285 million and $352 million.
SITE ADAPTABILITY
As part of the existing conditions assessment, each site was evaluated with regard to its ability to accommodate on-site replacement, additions to existing or potential co-location with another school. These site assessments represent a preliminary opinion, and incorporate many assumptions. Final determination regarding a particular site's suitability for future adaptation should be done on a case-by-case basis.

The following three categories were evaluated at each location, and are documented on the accompanying matrix:

:: Ability to maintain operations and replace structures on site
:: Add onto the existing structure
:: Co-locate facilities

REPLACEMENT ON EXISTING SITES
The assessment identified a limited number of sites that might accommodate replacement of an existing facility while maintaining ongoing operations of the existing facility.

In the event replacement of an existing facility is desired, a detailed assessment of the specific site should be undertaken to determine the acceptability of a replacement configuration limited by this type of site restriction.

It is suggested that an alternate approach involving the construction of “swing space” may yield preferable site configurations for replacement facilities. For some sites, this will be the only approach that will accommodate replacement of existing facilities on their site.

This “swing space” approach may be achieved through timely construction of new school facilities, on new sites (to accommodate growth). Construction of these facilities must be phased such that they accommodate both an increment of districtwide growth, while also housing the enrollment of the school being replaced. Once the existing school has been replaced, enrollment would be redistributed between the two new schools.

INCREASING CAPACITY
A significantly larger number of sites would likely allow an expansion of existing classroom facilities or the addition of modular classrooms as means to accommodate increased enrollment.

While this approach may be used to increase the seating capacity of a given school, there are several associated factors that should be considered.
Increased seating capacity places strain on both support and specialized instructional space. Consequently, these spaces should also be adjusted to reflect the new capacity of the school. Spaces that are impacted typically include food service/cafeteria, gymnasium and administration areas. It is important to note, however, that these spaces are commonly located in different areas of a school, making their expansion more costly.

Finally, it is important to consider the age and condition of an existing facility prior to making additions. It may, in some cases, be inappropriate to increase the capacity of a existing school with a new addition if the original building, itself, should in ten or 20 years be replaced due to poor condition.

Mahlum also met with District staff at the yet undeveloped “Deardorf” property, to assess its viability as a school site. During this visit, several observed conditions brought this site’s appropriateness for school use into question.

It was noted that sanitary sewer utilities were currently not available on site and that a significant distance would be required for hook-up. This condition will add significant cost to any project proposed for the site.

Relatively severe topographic change was also noted, with the site having an estimated elevation change of more than sixty feet across its width. This topography would likely restrict the use of much of the site. At minimum, site work associated with manipulation of topography would add significant expense to any development.

Vehicular access to the site, particularly for bus traffic, would likely be very difficult. Currently, the two lane road providing access to the site is narrow and will likely require the addition of a turn lane. The addition of a turning lane will be quite expensive due to surrounding topography. The portion of the road adjacent to the site also has a “blind corner” which could pose safety issues. Finally, the turning radius required for bus access on and off the property would require significant manipulation of the site.

While it would certainly be possible to use the Deardorf site for a school, the cost premium to do so would be significant. For this reason, it is recommended that the District reconsider the appropriateness of the Deardorf site as a location for a future school.

**INDIVIDUAL BUILDING PROFILES**

The following pages document key building data and assessment findings for each school throughout the District.
CHERRY PARK ELEMENTARY

BUILDING AGE: 1954

SIZE: 59,558 SF

SITE AREA: 11.73 ACRES

BUILDING CONDITION SCORE: 71.9
   - Primary Structure - 31.6
   - Secondary Structure - 7.7
   - Service Systems - 23.1
   - Safety Systems - 5.0
   - ADA Systems - 4.5

TOTAL FUTURE REPAIR COSTS: $5.9M

CRITICAL MAINTENANCE: $1.3M

RECENT EXPENDITURES: $1.26M

SITE OPTIONS:
   - Replace on-site / maintain operations - Maybe
   - Ability to expand with additions - Maybe
   - Co-locate - No
EARL BOYLES ELEMENTARY

BUILDING AGE: 1956
SIZE: 52,254 SF
SITE AREA: 6.45 ACRES

BUILDING CONDITION SCORE: 83.0
:: Primary Structure - 36.0
:: Secondary Structure - 10.7
:: Service Systems - 27.1
:: Safety Systems - 5.0
:: ADA Systems - 4.2

TOTAL FUTURE REPAIR COSTS: $3.5M
CRITICAL MAINTENANCE: $100,000
RECENT EXPENDITURES: $4.49M

SITE OPTIONS:
:: Replace on-site / maintain operations - No
:: Ability to expand with additions - Maybe
:: Co-locate - No
GILBERT HEIGHTS ELEMENTARY

BUILDING AGE: 1958

SIZE: 71,357 SF

SITE AREA: 7.16 ACRES

BUILDING CONDITION SCORE: 75.0

:: Primary Structure - 32.4
:: Secondary Structure - 8.3
:: Service Systems - 25.5
:: Safety Systems - 4.3
:: ADA Systems - 4.5

TOTAL FUTURE REPAIR COSTS: $5.2M

CRITICAL MAINTENANCE: $0.32M

RECENT EXPENDITURES: $4.31M

SITE OPTIONS:
:: Replace on-site / maintain operations - No
:: Ability to expand with additions - No
:: Co-locate - No
GILBERT PARK ELEMENTARY

BUILDING AGE: 1954
SIZE: 58,883 SF
SITE AREA: 5.87 ACRES
BUILDING CONDITION SCORE: 77.9
:: Primary Structure - 33.4
:: Secondary Structure - 9.1
:: Service Systems - 26.3
:: Safety Systems - 4.3
:: ADA Systems - 4.8

TOTAL FUTURE REPAIR COSTS: $4.6M
CRITICAL MAINTENANCE: $0.41M
RECENT EXPENDITURES: $1.96M

SITE OPTIONS:
:: Replace on-site / maintain operations - No
:: Ability to expand with additions - No
:: Co-locate - No
LINCOLN PARK ELEMENTARY

BUILDING AGE: 1961

SIZE: 60,430 SF

SITE AREA: 8.12 ACRES

BUILDING CONDITION SCORE: 72.5

:: Primary Structure - 32.0
:: Secondary Structure - 8.4
:: Service Systems - 24.0
:: Safety Systems - 4.3
:: ADA Systems - 3.8

TOTAL FUTURE REPAIR COSTS: $5.7M

CRITICAL MAINTENANCE: $0.54M

RECENT EXPENDITURES: $2.12M

SITE OPTIONS:

:: Replace on-site / maintain operations - Maybe
:: Ability to expand with additions - Maybe
:: Co-locate - No
MENLO PARK ELEMENTARY

BUILDING AGE: 1952
SIZE: 76,451 SF
SITE AREA: 10.39 ACRES

BUILDING CONDITION SCORE: 74.7
:: Primary Structure - 35.9
:: Secondary Structure - 9.3
:: Service Systems - 22.5
:: Safety Systems - 3.0
:: ADA Systems - 4.0

TOTAL FUTURE REPAIR COSTS: $5.3M
CRITICAL MAINTENANCE: $0.68M
RECENT EXPENDITURES: $2.99M

SITE OPTIONS:
:: Replace on-site / maintain operations - Yes
:: Ability to expand with additions - Yes
:: Co-locate - Yes
MILL PARK ELEMENTARY

BUILDING AGE: 1961
SIZE: 67,451 SF
SITE AREA: 9.76 ACRES

BUILDING CONDITION SCORE: 72.5

- Primary Structure - 32.1
- Secondary Structure - 8.1
- Service Systems - 24.0
- Safety Systems - 3.8
- ADA Systems - 4.5

TOTAL FUTURE REPAIR COSTS: $5.9M

CRITICAL MAINTENANCE: $1.57M

RECENT EXPENDITURES: $1.89M

SITE OPTIONS:

- Replace on-site / maintain operations - Yes
- Ability to expand with additions - Maybe
- Co-locate - Maybe
VENTURA PARK ELEMENTARY

BUILDING AGE: 1952
SIZE: 59,441 SF
SITE AREA: 9.35 ACRES

BUILDING CONDITION SCORE: 76.3
:: Primary Structure - 30.0
:: Secondary Structure - 8.3
:: Service Systems - 29.0
:: Safety Systems - 4.5
:: ADA Systems - 4.5

TOTAL FUTURE REPAIR COSTS: $4.4M

CRITICAL MAINTENANCE: $0.57M

RECENT EXPENDITURES: $3.08M

SITE OPTIONS:
:: Replace on-site / maintain operations - No
:: Ability to expand with additions - Maybe
:: Co-locate - No
WEST POWELLHURST ELEMENTARY

BUILDING AGE: 1955

SIZE: 48,963 SF

SITE AREA: 5.07 ACRES

BUILDING CONDITION SCORE: 81.2
  :: Primary Structure - 35.4
  :: Secondary Structure - 9.3
  :: Service Systems - 27.8
  :: Safety Systems - 4.5
  :: ADA Systems - 4.2

TOTAL FUTURE REPAIR COSTS: $3.9M

CRITICAL MAINTENANCE: $0.64M

RECENT EXPENDITURES: $3.46M

SITE OPTIONS:
  :: Replace on-site / maintain operations - Maybe
  :: Ability to expand with additions - No
  :: Co-locate - No
ALICE OTT MIDDLE SCHOOL

BUILDING AGE: 1937
SIZE: 81,860 SF
SITE AREA: 9.86 ACRES
BUILDING CONDITION SCORE: 69.3
- Primary Structure - 32.5
- Secondary Structure - 6.5
- Service Systems - 21.9
- Safety Systems - 4.5
- ADA Systems - 3.9

TOTAL FUTURE REPAIR COSTS: $9.1M
CRITICAL MAINTENANCE: $0.85M
RECENT EXPENDITURES: $4.25M
SITE OPTIONS:
- Replace on-site / maintain operations - Maybe
- Ability to expand with additions - Maybe
- Co-locate - No
FLOYD LIGHT MIDDLE SCHOOL

BUILDING AGE: 1966
SIZE: 97,639 SF
SITE AREA: 20.76 ACRES

BUILDING CONDITION SCORE: 83.2
- Primary Structure - 34.9
- Secondary Structure - 9.8
- Service Systems - 29.5
- Safety Systems - 5.0
- ADA Systems - 4.0

TOTAL FUTURE REPAIR COSTS: $5.4M
CRITICAL MAINTENANCE: $0.8M
RECENT EXPENDITURES: $2.73M

SITE OPTIONS:
- Replace on-site / maintain operations - Yes
- Ability to expand with additions - Yes
- Co-locate - No
RON RUSSELL MIDDLE SCHOOL

BUILDING AGE: 2005

SIZE: 105,961 SF

SITE AREA: 8.76 ACRES

BUILDING CONDITION SCORE: 90.6

- Primary Structure - 36.1
- Secondary Structure - 11.3
- Service Systems - 33.2
- Safety Systems - 5.0
- ADA Systems - 5.0

TOTAL FUTURE REPAIR COSTS: $2.8M

CRITICAL MAINTENANCE: NA

RECENT EXPENDITURES: $0.56M

SITE OPTIONS:

- Replace on-site / maintain operations - No
- Ability to expand with additions - No
- Co-locate - No
DDHS - NORTH CAMPUS

BUILDING AGE: 1954

SIZE: 181,871 SF

SITE AREA: 46.99 ACRES
(includes all DDHS buildings)

BUILDING CONDITION SCORE: 71.6
:: Primary Structure - 31.5
:: Secondary Structure - 8.4
:: Service Systems - 23.5
:: Safety Systems - 4.5
:: ADA Systems - 3.7

TOTAL FUTURE REPAIR COSTS: $15.7M

CRITICAL MAINTENANCE: $1.95M
DDHS - NORTH CAMPUS
SCIENCE ADDITION

BUILDING AGE: 2003

SITE AREA: 46.99 ACRES
(includes all DDHS buildings)

SITE AREA: 46.99 ACRES
(includes all DDHS buildings)

BUILDING CONDITION SCORE: :: 95.3
:: Primary Structure - 39.7
:: Secondary Structure - 11.5
:: Service Systems - 34.1
:: Safety Systems - 5
:: ADA Systems - 5

TOTAL FUTURE REPAIR COSTS:
$0.3M

CRITICAL MAINTENANCE: NA
DDHS - NORTH CAMPUS
NEW CLASSROOM BUILDING

BUILDING AGE: 2007
SIZE: 30,000 SF
SITE AREA: 46.99 ACRES
(includes all DDHS buildings)

BUILDING CONDITION SCORE: 95.7
:: Primary Structure - 39.9
:: Secondary Structure - 11.6
:: Service Systems - 34.2
:: Safety Systems - 5.0
:: ADA Systems - 5.0

TOTAL FUTURE REPAIR COSTS: $0.3M
CRITICAL MAINTENANCE: $100,000

DDHS - PERFORMING ARTS CENTER

BUILDING AGE: 1979/2003
SIZE: 28,292 SF
SITE AREA: 46.99 ACRES
(includes all DDHS buildings)

BUILDING CONDITION SCORE: 92.4
:: Primary Structure - 37.4
:: Secondary Structure - 11.7
:: Service Systems - 33.3
:: Safety Systems - 5
:: ADA Systems - 5

TOTAL FUTURE REPAIR COSTS: $0.6M
CRITICAL MAINTENANCE: $79,000
DDHS - SOUTH CAMPUS

BUILDING AGE: 1954/1965

SIZE: 115,304 SF

SITE AREA: 46.99 ACRES
(includes all DDHS buildings)

BUILDING CONDITION SCORE: 65.7

:: Primary Structure - 27.7
:: Secondary Structure - 7.6
:: Service Systems - 21.6
:: Safety Systems - 4.8
:: ADA Systems - 4.0

TOTAL FUTURE REPAIR COSTS: $10.6M

CRITICAL MAINTENANCE: $4.2M
DDHS - EAST CAMPUS (NORTH POWELLHURST)

BUILDING AGE:
1949 / 1958 / 1961

SIZE: 37,029 SF

SITE AREA: 6.36 ACRES

BUILDING CONDITION SCORE: 67.6
:: Primary Structure - 27.2
:: Secondary Structure - 7.4
:: Service Systems - 24.8
:: Safety Systems - 4.1
:: ADA Systems - 4.1

TOTAL FUTURE REPAIR COSTS:
$3.1M

CRITICAL MAINTENANCE:
$0.4M
7. ENROLLMENT FORECAST & CAPACITY
BACKGROUND

Enrollment forecasts underpin the recommended facilities program, and are provided by Portland State University's Population Research Center (PRC). The report provided by the PRC provides both a historical tracking of District enrollment and updated projections through 2034.

Two forecasting models were explored in the PRC report, a Cohort Model and a Housing Model. The Cohort Model, and detail it provides, have been used as the basis for this report. Enrollment projections are presented in five year increments and may be found on the chart above.

For calculated capacities of each school, it was assumed that all kindergarten classes would maintain a class size of 20 students, while grades one through 12 would maintain a class size of 30 students.

If the more common assumption of 25 students per classroom at grades one through five were used, calculated district capacity at the elementary level would be substantially lower than that indicated by the tables found in this section.

As various types of facility related need were studied by the Advisory Committee, those associated with increasing enrollment quickly rose as the highest area of concern.

ENROLLMENT HISTORY

Over the last five year period, from 2008-09 to 2013-14, K-5 enrollment increased by five percent, or 216 students, while enrollment for grades 6-8 has remained relatively constant, decreasing by one percent, or 13 students over that same time frame. Enrollments for grades 9-12 have increased by six percent, or 172 students.

Between 1999 and 2010, enrollment in the David Douglas School District increased by 36 percent. Based on PRC’s report, DDSD’s historical pattern of growth is projected to continue over the next 20 years.

ELEMENTARY FORECASTS

Cohort Model projections indicate that between now and 2023-24, elementary enrollment will increase by approximately 698 students, or about 14 percent.

This means that by 2023-24, districtwide capacity at the elementary level will be exceeded by more than the capacity of a new 600-student elementary school.

By 2033-34, enrollment at the elementary level will increase by approximately 1,286 students, or about 26 percent. This number will exceed the total district capacity by more than two new 600-student elementary schools.

Using the Housing Model, elementary enrollment is projected to increase by approximately 1,777 students, or about 35 percent. This increase exceeds current district capacity by nearly three 600-student elementary schools.
**SECTION 7 | ENROLLMENT FORECAST & CAPACITY**

**MIDDLE SCHOOL FORECASTS**

Cohort Model projections for middle school enrollment will increase between now and 2023-24 by approximately 428 students, or about 18 percent. This will exceed existing district capacity by approximately 142 students.

By 2033-34, the increase will be approximately 702 students, or about 29 percent. This will exceed existing district capacity by 416 students, or approximately 46 percent of the middle school target enrollment.

Using the Housing Model, enrollment is projected to increase by approximately 805 students, or about 33 percent. This would exceed current district capacity by 519 students, or approximately 58 percent of the middle school target enrollment.

**HIGH SCHOOL FORECASTS**

Cohort Model projections for David Douglas High School indicate an enrollment increase of approximately 589 students by 2023-24, or about 16 percent. This means that enrollment will exceed the existing capacity of David Douglas High School by approximately 878 students.

By 2033-34, enrollment will increase by approximately 935 students, or about 29 percent. The total enrollment of David Douglas High School in 2033-34 is projected to be 4,209 students, or approximately 1,449 students over capacity.

Using the Housing Model, the high school’s total enrollment is projected to be approximately 4,228, or approximately 1,518 students over capacity.

As of the writing of this report, the District has purchased a property for use as a new location for District offices. The current office facilities will then be made available for use by David Douglas High School. This will increase the seating capacity of general classroom use, but will not significantly increase support or specialized instructional space.

**ELEMENTARY SCHOOLS ENROLLMENT CAPACITY UTILIZATION**

<table>
<thead>
<tr>
<th>School</th>
<th>Enrollment</th>
<th>Capacity</th>
<th>Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherry Park</td>
<td>473</td>
<td>500</td>
<td>95%</td>
</tr>
<tr>
<td>Earl Boyles</td>
<td>448</td>
<td>490</td>
<td>91%</td>
</tr>
<tr>
<td>Gilbert Heights</td>
<td>661</td>
<td>620</td>
<td>107%</td>
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<tr>
<td>Gilbert Park</td>
<td>683</td>
<td>680</td>
<td>100%</td>
</tr>
<tr>
<td>Lincoln Park</td>
<td>646</td>
<td>620</td>
<td>104%</td>
</tr>
<tr>
<td>Mill Park</td>
<td>611</td>
<td>560</td>
<td>109%</td>
</tr>
<tr>
<td>Menlo Park</td>
<td>528</td>
<td>534</td>
<td>99%</td>
</tr>
<tr>
<td>Ventura Park</td>
<td>507</td>
<td>530</td>
<td>96%</td>
</tr>
<tr>
<td>West Powellhurst</td>
<td>479</td>
<td>480</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5036</strong></td>
<td><strong>5014</strong></td>
<td></td>
</tr>
</tbody>
</table>

**MIDDLE SCHOOLS ENROLLMENT CAPACITY UTILIZATION**

<table>
<thead>
<tr>
<th>School</th>
<th>Enrollment</th>
<th>Capacity</th>
<th>Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice Ott</td>
<td>742</td>
<td>840</td>
<td>88%</td>
</tr>
<tr>
<td>Floyd Light</td>
<td>803</td>
<td>940</td>
<td>85%</td>
</tr>
<tr>
<td>Ron Russell</td>
<td>879</td>
<td>930</td>
<td>95%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2424</strong></td>
<td><strong>2710</strong></td>
<td></td>
</tr>
</tbody>
</table>

**HIGH SCHOOLS ENROLLMENT CAPACITY UTILIZATION**

<table>
<thead>
<tr>
<th>School</th>
<th>Enrollment</th>
<th>Capacity</th>
<th>Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDHS</td>
<td>3049</td>
<td>2760</td>
<td>110%</td>
</tr>
</tbody>
</table>
**ELEMENTARY**

- Total Capacity: 5,014
- Enrollment 2013-14: 5,006
- Enrollment 2023-24: 5,704
- Enrollment 2033-34: 6,283

**MIDDLE SCHOOL**

- Total Capacity: 2,710
- Enrollment 2013-14: 2,424
- Enrollment 2023-24: 2,936
- Enrollment 2033-34: 3,126

**HIGH SCHOOL**

- Total Capacity: 2,760
- Enrollment 2013-14: 3,275
- Enrollment 2023-24: 3,864
- Enrollment 2033-34: 4,209

Note: numbers indicate 2033-34 enrollment exceeding capacity.

**Capacity**  **2013-14**  **2023-24**  **2033-34**  **Target Capacity Ceiling**
ZONING MODIFICATION

The City of Portland is currently exploring the possibility of modifying its Comprehensive Plan and the type of development currently allowed within existing zoning designations. The result of this effort, if adopted, would likely slow the rate of enrollment increase and reduce projected enrollment.

With regard to this, the Population Research Center conducted a preliminary analysis of the potential impact associated with proposed changes. This assessment indicates that by 2023-24, the proposed changes could reduce elementary level enrollment increases by approximately 232 students, leaving 458 more students than the current districtwide elementary capacity.

By 2033-34, zoning modifications could result in a reduction of approximately 215 students at the elementary level, still exceeding the current district capacity by nearly 1,100 students.
Using the Housing Model, existing capacity at the elementary level would still be exceeded by more than 1,500 students.

While zoning modifications will not solve over-enrollment issues, they may serve as one component of a multi-faceted approach.

**School Size Targets**

Generally, the size and configuration of a school building reflects the educational models in place at the time of its construction.

As teaching pedagogies evolve, school sizes and configurations may, or may not, support current teaching methods. In addition, school districts commonly establish enrollment “floor” and “ceiling” criteria to further ensure that their facilities support learning, align with their mission, allow robust programming and operate efficiently.

The intention of an enrollment “floor” is to establish the minimum size of a school within the context of a robust programmatic offering and efficient fiscal operation. This parameter typically comes into play when districts contain schools with low enrollment.

The intention of an enrollment “ceiling” is to establish the maximum size of a school, with the intention of creating a supportive and appropriately scaled learning environment.

Enrollment “ceiling” parameters are sometimes exceeded when either operational funding or capital construction resources are inadequate.

School enrollment targets and grade configurations may vary through the years, as educational program models and funding levels change. The Advisory Committee established the following enrollment targets for the DDSD Long-Range Facilities Plan:

- K-5 Elementary School – 600 students
- 6-8 Middle School – 900 students
- 9-12 High School – 3,000+ students

School targets ideally reflect both district and community values regarding supportive learning environments. As such, these targets serve as core criteria used for long-range planning, providing insight into where additions and/or renovations may be appropriate, and in the planning of new schools.

It is important to recognize that enrollment parameters may change over time, pending new education research, community opinion and many other factors. A successful long-range facility plan should anticipate the potential impact of such change and, where possible, strategically prepare for it.

**Elementary School**

Initially, elementary school target enrollment was identified as a maximum capacity of 500 students. As discussions considering enrollment increases and capital funding progressed, the Advisory Committee quickly realized that this capacity limitation would be too low to accommodate projected enrollment.
over time, particularly with regard to concerns about community support for capital construction.

Due to limitations associated with capital resources and perceived community resistance to a potential bond measure, the maximum capacity for elementary schools was subsequently increased to 550 students, then increased again to 600 students.

A target enrollment of 600 students throughout all nine elementary schools would yield an overall capacity of 5,400 students, which would be sufficient to accommodate enrollment projections to 2018-19.

However, with the actual capacity of six existing elementary schools well below the target capacity of 600 students, the total elementary capacity of the District is actually closer to 5,014 students.

Of the six schools with actual capacities below 600 students, several have site configurations that may allow additions. The ability to increase the capacities of these schools would need to be explored, in detail, on a case-by-case basis.

Four schools, including Mill Park, which has an actual capacity of 560 students, already surpass the target enrollment of 600 students. The enrollment of these schools: Gilbert Heights, Gilbert Park, Lincoln Park, and Mill Park, currently exceeds their actual capacities.

**MIDDLE SCHOOL**

The enrollment target for middle schools throughout the DDSD was set at 900 students per school. All three middle schools currently have enrollment levels below the target, and two of the three schools (Floyd Light and Ron Russell) have the physical capacities to accommodate 900 students.

Based on current enrollment projections, over-enrollment at the middle school level does not appear to present a significant problem within the first 10-year horizon of this planning effort. As the District approaches the second 10-year horizon, 2033-34, projections indicate the potential need of a new middle school to address growth.

**HIGH SCHOOL**

The enrollment target for high school was initially tested at 1,500 students, however the Advisory Committee ultimately arrived at a capacity of 3,000+ students.

David Douglas High School’s current enrollment exceeds its physical capacity of 2760 seats, assuming 30 students per class, and falls within the general target capacity of 3,000+ students. David Douglas High School is currently the largest high school in Oregon.

The general opinion of the Advisory Committee was that a high school exceeding 3000 students was acceptable. Several committee members cited what are, in their opinion, potential benefits associated with maintaining a high school of this capacity.
8. POLICY & CAPITAL FINANCING OPTIONS
REGULATORY CONTEXT

UP-ZONING, DENSITY & URBAN RENEWAL AREA DEVELOPMENT
City of Portland up-zoning that was codified in the 1996 Comprehensive Plan quickly and dramatically impacted land use, encouraging higher density development and increasing the total number of households in the district—both of which contribute to the rising enrollment levels.

In addition, a number of developments have benefitted from tax relief measures used to incentivize development within District boundaries. The tax relief associated with these developments has resulted in a lower property tax base. This has put additional pressure on attempts to secure community support for capital construction bonds.

In light of these challenges, the Bureau of Planning and Sustainability is studying amendments to the Comprehensive Plan that could down-zone certain areas within the David Douglas School District. The intention would be to reduce allowable housing unit densities as a means to slow or reduce student enrollment within the District.

The “sunsetting” of tax relief measures for certain Urban Renewal Areas (URA) will result in an increased property tax base that will, in turn, improve rates associated with proposed bond measures.

CITY OF PORTLAND COMPREHENSIVE PLAN POLICY
In July 2015, the Planning and Sustainability Commission will adopt a recommended Comprehensive Plan and forward it to the Portland City Council. It reflects public input and PSC work sessions.

Three chapters of the draft recommended plan directly address school facilities. This draft was prepared by BPS staff, and is being reviewed by the PSC.

Chapter 1 recognizes school facility plans. It says, "School facility plans that were developed in consultation with the City, adopted by school districts serving the City, and that meet the requirements of ORS 195 are considered supporting documents to the Comprehensive Plan."

Chapter 8, Public Facilities and Services, includes Goal 8.K, School Facilities (see following page for details).

Chapter 10, Land Use Designations and Zoning, sets up the process for school district capacity to be considered in certain land use reviews. Where a school facility plan exists, future requests to change a base zone consistent with the land use designation (aka, zoning map amendments) will recognize school district capacity. BPS and DDSD have discussed how potential down-zoning with the new Comprehensive Plan would bring more properties into school capacity scrutiny. DDSD will provide school capacity letters on specific “up-zone.”
Goal 8.K: School Facilities
Public schools are honored places of learning, as well as multifunctional neighborhood anchors serving Portlanders of all ages, abilities, and cultures.

Public education is provided by Portland Public Schools and the David Douglas, Parkrose, Reynolds, Centennial, and Riverdale school districts, as well as public by colleges and universities. The City partners with school districts on school facility planning and siting. By encouraging school facilities to be multi-functional neighborhood anchors, designed and programmed to serve community members of all generations and abilities, these policies also help implement the concept of Portland as an age-friendly city.

Policy 8.107 School District Capacity
Consider the overall enrollment capacity of a school district – as defined in an adopted school facility plan that meets the requirements of Oregon Revised Statute 195 – as a factor in land use decisions that increase capacity for residential development.

Policy 8.108 Co-Location
Encourage public school districts, Multnomah County, the City of Portland, and other providers to co-locate facilities and programs in ways that optimize service provision and inter-generational and intercultural use.

Policy 8.109 Community Use
Encourage public use of public school grounds for community purposes while meeting educational and student safety needs and balancing impacts on surrounding neighborhoods.

Policy 8.110 Recreational Use
Encourage publicly-available recreational amenities (e.g. athletic fields, green spaces, community gardens, and playgrounds) on public school grounds for public recreational use, particularly in neighborhoods with limited access to parks.

Policy 8.111 Schools as Emergency Aid Centers
Encourage the use of seismically-safe school facilities as gathering and aid-distribution locations during natural disasters and other emergencies.

Policy 8.112 Facility Adaptability
Ensure that public schools may be upgraded to flexibly accommodate multiple community-serving uses and adapt to changes in educational approaches, technology, and student needs over time.

Policy 8.113 Leverage Public Investment
Encourage City infrastructure public facility investments that complement and leverage local public school districts’ major capital investments.

“The Portland Housing Bureau’s LTE tax abatement programs, while providing valuable housing for families priced out of many inner Portland neighborhoods, have (in combination with market forces encouraging higher density, lower income housing in certain neighborhoods) had the additional effect of concentrating low income families in certain neighborhoods and diverting tax revenue from school district budgets. In many cases, especially in North and East Portland, schools have seen an increase in low income students and students requiring special services, such as English Language Learning students, while at the same time experiencing foregone revenue associated with tax exemptions.”

(The Portland Plan, Public Schools Background Report, Revised June 2012)
**Policy 8.114 School Access**
Encourage public school districts to consider the ability of students to safely walk and bike to school when making decisions about the site locations and attendance boundaries of schools.

**Policy 8.115 Private Institutions**
Encourage collaboration with private schools and educational institutions to support community and recreational use of their facilities.

**Capital Financing Options**

**General Obligation Bonds and Operating Funds**
General obligation (GO) bonds are a familiar capital financing instrument for school districts. The debt associated with these bonds is paid from proceeds of property taxes and is typically structured over a 20 to 25 year period. Calculation for this tax is based on the Assessed Value (AV) of property.

In Portland, the AV grows by a statutory three percent maximum each year. This produces a relatively predictable basis. Bond measures are often timed to coincide with the “sunsetting” of previous bond debt. In this way, new bond debt may be proposed without increasing the annual rate to taxpayers.

It is important to understand that GO bonds are not used for district operations. Operations funding is associated with the “Permanent Rate,” a separate property tax levied by the State of Oregon and redistributed to districts throughout the state.
PARTNERSHIPS
Capital improvement partnerships provide vital opportunities for DDSD and should be further explored in the planning and construction of capital projects.

Partnerships must support DDSD’s vision and mission. Successful partnerships may include: foundation and grant funding; blending not-for-profit, private for-profit investors, and public dollars; as well as community fundraising to support educational and community development goals. Identifying successful capital funding partnerships is a thoughtful process and must benefit both the DDSD and any potential partner.

Collaborative real estate efforts may be possible. With regard to this, the David Douglas School District is currently exploring a potential partnership with the Portland Parks and Recreation Department.

OTHER SOURCES OF CAPITAL FUNDS
In addition to capital bonds, additional sources of capital funding include the Construction Excise Tax (CET), Cool Schools Funds (Senate Bill 1149) and other state grants. These funding sources are generally limited both in amount and in how they can be used. Many state funds are “matching,” and are intended to incentivise passing of local bond measures.

In Oregon, unlike California, Washington and Alaska, the state does not provide any support or additional funding for districts that approve capital bonds beyond these limited grants.

Similarly, the federal government does not have a regular program to provide capital funds for school districts; recent federal stimulus funds were a limited exception.

Finally, pending credit limitations, school districts can sometimes obtain borrowed capital outside bond levies. Funding obtained in this way is typically insufficient to meet broad facility needs.
**EXISTING BOND CONTEXT**

**2012 BOND**
In May of 2012, the community of David Douglas School District approved a general obligation bond with a yes vote of 65 percent. This $49.5 million bond would maintain the existing tax rate in the district and is designed to support repairs to school buildings, upgrade facilities, increase safety, and provide for the purchase of new textbooks and technology. This 20-year bond is set to expire in 2032.

**CURRENT BOND RATE**
Piper Jaffrey’s October 24th, 2015 analysis indicates that DDSD’s current levy rate is $1.77 per thousand, and is anticipated to drop to approximately $1.36 per thousand in 2021.

Using current interest rates, $0.21 per thousand translates into approximately $10 million in general obligation bonds.

It is important to note that, unlike many districts throughout the Portland metro area, the David Douglas School District has a relatively low property tax base. Consequently, the bond “yield rate” per student is also correspondingly low.

When comparing $2 per thousand assessed value yields across several nearby districts, David Douglas is low, both in terms of total bond dollar value and dollar value per student.

In short, due to DDSD reduced tax base, equivalent taxation rates translate into significantly less investment for the DDSD.

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![Image of a table comparing Metro Area Tax Levy, Districts, 2015 ADMw, Assessed Value, Permanent Rate, Local Option Rate, Bond Rate, Total Rate, District Rate.](image-url)
METRO RATE COMPARISON
When comparing overall tax rates directly associated with bonds for districts throughout the metro area, David Douglas is sixth lowest.

For overall levy rates, the DDSD falls in the lower 50 percent of metro districts.

CURRENT OBLIGATION & CAPACITY
As of October 24th, 2015, an analysis conducted by Piper Jaffray indicates that DDSD has outstanding general obligation bond debt totalling $65,797,481, with a current remaining debt capacity of $301,926,689.
BACKGROUND

Rising enrollment, the need to maintain and modernize existing facilities and a limiting tax base collectively highlight the compounding pressures facing David Douglas School District.

As part of the planning process, the Advisory Committee explored a number of options to address multiple areas of need. These options included alternatives that rely upon capital funding, as well as alternatives that do not rely upon a tax based funding source.

During the planning process, the Advisory Committee expressed concern regarding proposals that would significantly increase property tax rates within the community. Specifically, the Committee felt that a General Obligation bond resulting in a cumulative bond related tax rate exceeding $2 per thousand of assessed value may not be supported by the community.

Fiscal concerns expressed by the Advisory Committee resulted in prioritization of District need into two basic areas of concern. The first area of concern involves addressing over-enrollment within the District. The second area of concern involves providing minimum maintenance of existing facilities.

Due to the Advisory Committee’s assumptions regarding community support for capital funding, major modernization of existing facilities were not considered a realistic part of the 10-year facility plan.

Plan options were tested and developed over the course of two Advisory Committee meetings. Initial feedback from the first session highlighted the following feedback and direction:

Feedback

:: The reality of the situation is daunting
:: There is not enough money and taxes will be too high to meet the total identified need
:: Addressing growth is a high priority, followed by maintaining existing facilities
:: In favor of purchasing land early on

Direction

:: Consider alternative strategies, e.g. educational models
:: Test a bond related tax cap of $2 per $1,000 of assessed value to see what could be accomplished
:: Reassess potential bond amount if necessary
:: Maintain a rolling bond

IMPACT OF DOING NOTHING

The Advisory Committee first worked to understand the impact of not passing a capital construction bond.

This scenario would not accommodate growth or maintain existing facilities beyond what might be allowed within the District’s limited annual operating budget.
Because of this, failure to pass a capital construction bond may ultimately require implementation of alternative operational strategies. These alternate strategies are outlined in this section.

After reviewing projected need, the Advisory Committee understood that failing to pass a capital construction bond would have the following possible outcomes.

**ENROLLMENT**

:: Based on an assumed classroom capacity of 30 students in grades one through five, there is a projected elementary school shortage of 1,278 seats by 2033. This would require approximately 47 modular classrooms (paid for using operational funds) or a districtwide increase in class size from 27 to 35 students.

:: Based on an assumed classroom capacity of 30 students, there is a projected high school shortage of 1,207 seats by 2033. This would require approximately 40 modular classrooms (paid for using operational funds) or an increase in class size from 34 to 43 students.

:: Total shortage by 2033 of 2,901 seats, or approximately 101 modular classrooms.

**FACILITY CONDITION**

:: No health and life safety upgrades (seismic, water and air quality, on site circulation and safety)

:: Continuing deterioration of existing facilities; increased potential for catastrophic failure and / or school closure.

**ALTERNATIVE OPERATIONAL APPROACHES**

In the event the David Douglas community does not support a capital construction bond, there are a number of operational strategies the school district could consider to alleviate enrollment pressures. These options include:

**INTER-DISTRICT AGREEMENTS**

Inter-district agreements can involve either the merger of adjoining school districts, or the shifting of district boundary lines and associated enrollment, to leverage excess capacity within an adjacent district.

This approach was tested for the David Douglas School District, but preliminary findings determined that minimal excess capacity was currently available in adjacent districts.
GRADE RECONFIGURATION
Grade reconfiguration involves modifications to the grade structure in schools. Based on enrollment forecasts, this approach can help accommodate growth within specific cohorts.

There is no significant excess capacity found at any grade level within the David Douglas School District. Because of this, grade reconfiguration is not a viable approach to accommodate projected enrollment increases.

DOUBLE SHIFT AND YEAR-ROUND INSTRUCTION
Double shift schooling is an approach that extends instructional hours over a longer period of the day. This strategy increases the utilization of existing school facilities by having a larger number of students taught in either two separate, or partially overlapping, shifts within the same facility.

Year-round school further redistributes the student population over the course of the entire year. This operational model often includes shifts in scheduled hours over the course of a day.

Potential advantages of this approach include: helping districts address rising enrollment; managing, and possibly reducing costs associated with operation of a district; reducing construction of new schools and the cost associated with it.

Disadvantages of double shift schooling include a need to increase the number of teachers (however this should largely be offset by additional state funding associated with increased enrollment); greater wear and tear on existing facilities, inconvenience for district families and students and impacts on after school or extra-curricular programs.

ONLINE EDUCATION
Online education could be explored as a way to minimize the impact of enrollment growth at the high school level. Flipped classroom settings in which students listen to lectures online, but attend seminars or tutorial sessions in person on campus have proven to be successful models in both secondary and post-secondary environments. This approach is not recommended at the middle and elementary school levels.

INSTITUTIONAL PARTNERSHIPS
At certain grade levels, partnerships with other educational institutions may offer some relief from over enrollment.

At the high school level of instruction, both general classroom space and certain specialized programs might be accommodated through partnership with nearby community colleges.

This partnership would not only provide additional space, it may also offer opportunities for college credit courses.

MODULAR BUILDINGS
Modular classroom buildings offer an opportunity for more efficient use of school sites. These “temporary” structures can, under certain conditions, provide a substitute for construction of new permanent buildings.
Modular classroom buildings lack some of the architectural quality, special features or amenities of permanent classrooms. As freestanding structures, they also present security concerns for districts, particularly at elementary levels. It is also important to note that, while adding to a school’s enrollment, they do not expand existing common areas such as cafeterias, gymnasiums, media centers, administration and restrooms.

Funding for modular classrooms is typically taken from a school district’s operational budget. Because of this, reductions in other operational budget line items are often required, thereby putting additional stress on already stretched operational dollars.

BUILDING MORATORIUM
Another way to quell growth is through a building moratorium that would limit new housing construction. According to state statute, a moratorium must be justified by a demonstration of need to prevent a shortage of public facilities. East Portland school districts could likely demonstrate such a shortage.

It is important to note, however, that a building moratorium is limited to 120 days, unless the district is demonstrating “reasonable progress to alleviate the problem giving rise to need for the moratorium.” Even then, “no extension may be more than a period of six months.”

In other words, a building moratorium is only intended as a temporary limit to growth. It is not a substitute for expanding capacity, or an avenue for addressing chronic space shortages.

CAPITAL APPROACHES
Similar to nearly every school district, the David Douglas School District will not be able to address all of its facility related need at one time. Conversely, doing nothing to address facility need will likely have, at some point in the future, catastrophic results.

With this in mind, several plan alternatives were explored over the course of Advisory Committee meetings. As discussions associated with capital plan proposals progressed, several Committee members held the opinion that a $2 limitation should be placed on the total tax levy associated with general obligation bonds. Their concern being that larger plan proposals would not be supported by the community.

After a facility plans limited by this level of capital funding were studied, it was agreed that a $2 limitation would be insufficient to meet even the most critical facility needs of the district. The following summarizes the impact of such a plan:

:: No pre-kindergarten (or at least limited)
:: Little or no improvement of existing facilities – no update to modern learning environments
:: No real cap of enrollment at any grade level
:: No improvements or additions to gymnasium / physical education, special education, food service, or administration
Overall Summary

- No Pre-kindergarten (or at least limited)
- Little or no improvement of existing facilities – no update to modern learning environments
- No real cap of enrollment at any grade level
- No improvements or additions to gymnasium/physical education, special education, food service, or administration.

Elementary School

Since one of the core areas of concern involves enrollment increases at the elementary level of instruction, this option focuses on growth in this area by adding 26 new classrooms in 2023, bringing DDSD’s total elementary school seat count to 5,734 seats.

This figure includes four new kindergarten classrooms, 20 classrooms for grades one through five, and two special education classrooms. Individual site studies must be conducted to determine their suitability for classroom additions.

No additional classrooms are added beyond 2023. The increased seat capacity accommodates all elementary school growth to 2023, which is projected to reach 5,704 students, and maintains the desired class sizes of 20 students for kindergarten and 30 students for grades one through five.

The increased elementary school seat capacity does not accommodate enrollment growth beyond 2023. By 2033, there will be a shortage of 558 middle school seats and class size will increase from 27 to 35 students over 20 years.

Deficiencies associated with existing conditions will be left largely unaddressed.

Middle School

With a $2 cap, no growth-related investments will be made at the middle school level; they will have to remain as is. As a result, there will be a shortage of 416 middle school seats and class size will increase from 27 to 35 students over 20 years.

Deficiencies associated with existing conditions will be left largely unaddressed.

High School

In this option, no investments will be made at the high school. As a result, there will be a shortage of 1,207 high school seats and class size will increase from 34 to 43 students over 20 years.

Total Impact

In total, this option generates an overall shortage of approximately 2,182 seats between 2014 and 2033.

Corresponding Costs and Bond Strategy

Total available capital for this option is approximately $35 million dollars. This would be allocated as follows:
Approximately $18 million for 26 elementary classrooms (allowance of $500 / square foot x 1,400 square feet per classroom, which includes circulation and some toilet increases).

$15 million for critical maintenance

$2 million for bond cost

$30 million total cost

No expansion of common spaces would be provided at those schools receiving increased capacity. This would place significant pressure on food service, administration and the District’s ability to meet forthcoming physical education requirements.

To generate $35 million in funds and maintain a cumulative and constant bond rate equal to $2 per thousand of assessed value, taxes would increase approximately $0.23 per thousand over current rates. The $35 million bond could be amortized over twenty years with a step-down occurring in 2033.

Several other facility plan proposals were explored, however, all significantly exceeded the $2 cumulative tax levy limitation.

**POST ADVISORY COMMITTEE WORK**

After completion of the Advisory Committee meetings, the District held a series of separate Steering Committee meetings.

The Steering Committee was comprised of several Advisory Committee members, representatives from District Administration, representatives from District Facilities, a member of the District School Board, representation from the Department of Parks and Recreation and also representation from the City of Portland Bureau of Planning and Sustainability.

**WORK WITH THE CITY OF PORTLAND BUREAU OF PLANNING AND SUSTAINABILITY**

During the course of Steering Committee meetings, representatives from the David Douglas School District worked closely with the City of Portland Bureau of Planning and Sustainability to identify potential properties that might be suitable for new schools within the district.

Assessment criteria for site selection included topography, accessibility, location relative to served populations, access to infrastructure and utilities, relationship to sensitive areas and wetlands, availability of the property, overall shape and size. Target sizes for school properties are:

- Elementary School - 7 to 10 acres
- Middle School - 15 to 20 acres
- High School - 30 to 40 acres
The District and City discussed options for developing multi-level urban schools to reduce the amount of acreage needed. The District and City are continuing to partner to discuss options for siting schools with this in mind.

District representatives also discussed proposed modifications to zoning and the City of Portland Comprehensive Plan. These modifications, if enacted, would impact the type of development allowed within certain parts of the District. The intent of the modifications would be to reduce housing density, thereby lessening the impact of enrollment growth within the District.

While preliminary projections provided by Portland State University’s Population Research Center indicate that proposed zoning modifications offer only modest reductions in enrollment, the Steering Committee held the general opinion that modification of the Comprehensive Plan would contribute as part of a multi-pronged approach to managing enrollment growth.

District representatives also discussed the impact of Urban Renewal Areas (URA) and property tax incentives on the tax base of the District. It was generally agreed that an increase in property tax based incentives, or an extension of existing incentives beyond current “sunset” time lines, would significantly impact both the District’s ability to obtain adequate funding for capital projects and its ability to accurately project and communicate the cost of future bond measures to its tax paying community.

It was proposed that the District and City of Portland draft a memorandum of understanding that would allow the District to confidently base its tax base projections on current URA “sunset” time lines. In other words, the City of Portland would agree that an extension of current URA incentives, beyond current “sunsets,” would not occur.

**WORK WITH THE CITY OF PORTLAND BUREAU OF PARKS AND RECREATION**

District representatives also worked with the City of Portland Bureau of Parks and Recreation to determine whether there may be opportunities for facility co-location or other partnerships.

Discussion focused on a property currently owned by the Bureau of Parks and Recreation. Mahlum produced several test fit diagrams as means to assess the current site’s suitability for either an elementary or middle school. Due to the non-rectilinear shape of the existing site, its suitability for school / park co-location would likely not be viable.

These site studies indicated, however, that if adjacent properties were acquired, the site would likely become a viable candidate for an elementary school and perhaps, depending on the number of adjacent properties acquired, a middle school.

While a final conclusion regarding the studied property was not made, it has been agreed that discussions regarding potential partnerships between the David Douglas School District and Bureau of Parks and Recreation should continue.
PROPOSED PLAN
The primary purpose of the Steering Committee meetings was to review the Advisory Committee’s proposal, establish whether or not the proposal was sufficient to address critical facility needs of the District and, if necessary, suggest an alternate proposal.

After review of the Advisory Committee’s $35 million plan proposal, the Steering Committee concluded that it would be insufficient to meet even the most minimal facility needs of the District.

The Steering Committee then agreed that an alternate plan proposal should be drafted, presented to the School Board and, pending Board approval, put before the community for consideration. The proposed plan identifies $136 million of capital improvement within the District.

Core objectives of the proposed plan are:

:: Purchase property required to address projected growth over the next 10 to 20 years.
:: Provide additional capacity at the elementary grade level to meet projected growth and control class size. Capacity would be added by constructing two new elementary schools.
:: Accommodate growing transportation needs by moving the departments sharing the transportation site to another location, making more space available for bus parking. This move will require purchase of another facility.
:: Provide funding for critical maintenance and repair of existing facilities. The intent of critical maintenance would be to avoid catastrophic system failure, protect the community’s current investment in school facilities, address health and life safety issues and improve accessibility. Items listed on the District’s 10-year critical maintenance list would serve as a basis for this work.
:: Provide minimal investment in athletic fields to replace worn turf and update lighting. The intent is to maintain operations, improve safety and expand usability.

The following is a summary of the proposed facility plan; identifying capital allocation, by instructional level and purpose within each level.

Costs indicated are in 2015 dollars and should be escalated to determine future probable costs. Costs listed are full project costs.
# Plan Proposal

**Elementary Level Investment:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>:: Purchase two new elementary sites (8-10 acres each)</td>
<td>$10,000,000</td>
<td>Accommodate enrollment increase</td>
</tr>
<tr>
<td>:: Construct two new elementary schools (600 capacity each)</td>
<td>$80,000,000</td>
<td>Accommodate enrollment increase</td>
</tr>
<tr>
<td>:: 10 year critical maintenance of existing elementary schools</td>
<td>$11,000,000</td>
<td>Maintain operation, protect investment, health / safety</td>
</tr>
</tbody>
</table>

Subtotal (elementary school investment) $101,000,000

**Middle School Level Investment:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>:: Purchase property for future middle school (Acquire 15-20 acres)</td>
<td>$10,000,000</td>
<td>Reserved for future enrollment increase*</td>
</tr>
<tr>
<td>:: 10 year critical maintenance of existing middle schools</td>
<td>$3,000,000</td>
<td>Maintain operation, protect investment, health / safety</td>
</tr>
</tbody>
</table>

Subtotal (middle school investment) $13,000,000

**High School Level Investment:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>:: 10 year critical maintenance of existing buildings</td>
<td>$11,000,000</td>
<td>Maintain operation, protect investment, health / safety</td>
</tr>
</tbody>
</table>

Subtotal (high school investment) $11,000,000

**Administrative Support Facilities Investment:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>:: Administrative site purchase</td>
<td>$5,000,000</td>
<td>Allows on-site expansion of administrative space</td>
</tr>
</tbody>
</table>

Subtotal (administrative support facility investment) $5,000,000

**Athletics / Community Investment:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>:: Replace worn out turf, supplement insufficient lighting at baseball fields</td>
<td>$4,000,000</td>
<td>Maintain operation, safety, expanded use</td>
</tr>
</tbody>
</table>

Subtotal athletic / community investment $4,000,000

Bond cost allowance: assume +/- 1.5% (to be verified) $2,000,000

**Total Plan Proposal** $136,000,000

* Consider additional property purchase for potential conversion of a future middle school into a second high school.
PLAN PROPOSAL NOTES

ELEMENTARY SCHOOL
The construction of two new elementary schools is a central component of the 2016 plan proposal for several reasons:

1) A straight line projection indicates an overage of approximately 1,000 students in 12 years. This near-term enrollment increase, combined with the potential for future need at the middle school level (possibly addressed by a future bond) suggest that it may be prudent to include two new elementary schools in a proposed 2016 bond.

Based on current projects, addition of two 600 capacity elementary schools would still result in a districtwide over-enrollment of approximately 69 students at the elementary level in 2032. Given enrollment projections represent a mid-range estimate, it is also possible that they may be eclipsed by actual enrollment increases.

2) Assuming all existing elementary schools remain open (operational costs allowing), the construction of two new elementary schools offers a temporary reduction in class size districtwide. It also offers one boundary shift in the near- to mid- term future, thereby minimizing disruption.

3) If operational budget limitations do not allow all existing schools and the two new elementary schools to remain open, the worst existing school can be temporarily closed until enrollment demands its use, thereby allowing a higher number of students the benefit of a modern learning environment.

In addition, the improved operational efficiency of the new facilities would likely offer energy cost reductions. Eventually, the old school could be re-opened as a “relief valve” when over enrollment demanded it. This option would likely require two boundary shifts.

4) Any school constructed as part of an earlier bond should be less costly. Theoretically, this is due to a smaller percentage of material and labor cost escalation, as well as the current cost of borrowing capital, as interest rates are at historic lows.

MIDDLE SCHOOL
The purchase of property for a future middle school has been included in the plan proposal for several reasons:

1) Over-enrollment at the middle school level will at some point become an issue.

2) Preparing for future growth was identified as the highest priority for the Advisory Committee.

3) Property acquisition will continue to become more difficult and expensive over time.

It is recommended that the District and its community consider purchasing a middle school site that is large enough to allow possible conversion of a future middle school into a second comprehensive high school. While the Advisory Committee felt that establishing a maximum target enrollment for the high school level is not necessary, opinions regarding this may change over the life of the District.

Providing for this level of long-term plan flexibility would require acquisition of 25-40 acres rather than 15-20 acres. It was further suggested that the District might partner with another agency, such as the Department of Parks and Recreation, to offer a long-term lease of the additional land until such time its use for a high school was desired by the community.

HIGH SCHOOL
The Advisory Committee held the opinion that the high school level of instruction does not require a maximum target capacity. This suggests that within the foreseeable future, comprehensive high school programming will be limited to the current David Douglas High School campus.

With this in mind, maintenance, replacement and / or additions to existing facilities on this campus will be the primary challenge, particularly from a phasing standpoint.

While limits regarding total enrollment are currently not a concern for either the Advisory Committee or the District, it should be noted that over-enrollment at the high school level will present challenges, both from the standpoint of general classroom capacity and specialized / support capacity (kitchen, cafeteria, administration, gymnasium, electives, etc). Current enrollment projections suggest a possible over-enrollment of 1,100 by 2023 and 1,450 by 2033.

If funds are not provided to address over-enrollment prior to 2033, alternate approaches should be explored. One such approach might involve partnership with other institutions, such as Clackamas Community College.
In this example, seniors might take courses (possibly joint credit courses) using college facilities, thereby reducing over-enrollment and potentially facilitating matriculation to post-secondary education.

It is also recommended that a site specific analysis of the high school be done to explore various long-term plan scenarios for the campus. Options could include: 1) the impact of partnerships such as that with a community college 2) alternatives involving off-site programs – technical/career education center or other program configurations 3) phased expansion / replacement of facilities on site (single site scenario).

**TRANSPORTATION/FACILITIES**

The purchase of an additional property for use as administrative space would allow the Transportation department to expand and have exclusive use of the current site shared with multiple District programs / departments. This is recommended for several reasons:

1) Increasing enrollment throughout the District will require a greater number of buses. These will necessitate a larger site for storage and maintenance.

2) The current Transportation /Facilities site is ideally located near the center of the district and is large enough to accommodate growing transportation needs, assuming the Facilities Department is relocated.

3) Property acquisition will continue to become more difficult and expensive over time.