

BEAVERTON SCHOOL DISTRICT FACILITY PLAN 2010



June, 2010

Acknowledgements

Beaverton School District School Board

Karen Cunningham	Zone 1
Tom Quillin	Zone 2
Mary VanderWeele	Zone 3
Sarah Smith	Zone 4
LeeAnn Larsen	Zone 5
Jeff Hicks	Zone 6
Lisa Shultz	Zone 7

Beaverton School District Administration

Jerome Colonna	Superintendent
Bud Moore	Deputy Superintendent, Operations & Support Services

Beaverton School District extends a special thanks to the Long Range Facility Plan Advisory Committee (LRFPAC) members for their contributions to this plan.

Long Range Facility Plan Advisory Committee (LRFPAC) Members

Jonae Armstrong	Manager, Washington Square Mall Westside Economic Alliance Board Member
Hal Bergsma	Tualatin Hills Park & Recreation District
Diana Callaway	High School Local School Committee Member
Andree Hertz	Elementary Local School Committee Member
Ali Kavarianian	Beaverton Neighborhood Association Committee Rep
Steve Kelley	Washington County Dept of Land Use and Transportation Planning Division
Mike Leopold	Middle Local School Committee Member
Don Mazziotti	City of Beaverton Community Development Dept
Doug Miller	City of Hillsboro Planning Department
Michael Monnier	Nike, Inc.
Chris Nestlerode	Washington County Citizen Participation Organization Rep
Ernie Platt	Home Builders Association of Metropolitan Portland
Tom Quillin	School Board Member

Acknowledgements

Steve Sparks	City of Beaverton Community Development Dept
Lori Stole	School District Sustainability Committee
Doug Miller	City of Hillsboro Planning Department
Gerry Uba	Metro Planning Department

Long Range Facility Plan Advisory Committee (LRFPAC) Members Beaverton School District Staff

Chris Bick, Vice Principal, Sunset High School	High School Principal
Barry Deal	Special Education Staff, Facilitator
Jennifer Garland	Demographer
Ginny Hansmann, Principal, Hiteon Elementary School	Elementary School Principal
John Hartsock	Construction Project Manager
Leslie Imes	Construction Project Manager
Annie Lee, Whitford Middle School	Physical Education Teacher
Brenda Lewis	Regional Administrator
Carl Mead	Regional Administrator
Bud Moore	Deputy Superintendent, Operations & Support Services
Jim Owens	Facilities Development Administrator
Aaron Persons, Vice Principal, Five Oaks Middle School	Middle School Principal
Dick Steinbrugge	Executive Administrator, Facilities
Maureen Wheeler	Public Communication Officer

Beaverton School District Facility Plan prepared by:

Frank Angelo	Angelo Planning Group
Shayna Rehberg	Angelo Planning Group

Beaverton School District

2010 Facility Plan Update

Table of Contents

EXECUTIVE SUMMARY	ES-1
--------------------------------	-------------

CHAPTER 1 - FACILITY PLAN PURPOSE AND PROCESS

Purpose 1	
School Facility Planning Process.....	2

CHAPTER 2 - POLICY CONTEXT

ORS 195.110 amendments (2007)	4
Construction Excise Tax (2007)	4
Physical Education Requirements / HB 3141 (2007)	5
Urban and Rural Reserves (2010).....	5

CHAPTER 3 - UPDATE OF FACILITY PLAN ELEMENTS

Projected Enrollment	6
Areas of Anticipated Growth	7
Committee Discussion and Recommendation	11
School Capacity Formula.....	12
Analysis of Capacity Models	13
Additional Capacity Considerations	14
Committee Discussion and Recommendation	19
Existing Conditions and Needed Improvements.....	19
Ancillary Facility Needs	21
Committee Discussion and Recommendation	22
Desirable Sites	23
Committee Discussion and Recommendation	25
Efficient Use of School Sites and Alternatives to New Construction	26
Efficient Use of School Sites	26
Alternatives to New Construction.....	29
Committee Discussion and Recommendation	30
Land Needs and Determination of Adequate Supply	31
Special Program Needs.....	35
Options Programs.....	35
Special Education.....	36
Full-Day Kindergarten.....	37
English as a Second Language.....	37
Physical Education Requirements.....	37
School Facility Needs	38
Committee Discussion and Recommendation	39
Financing Tools for Capital Programs	41
Committee Discussion and Recommendation	42

BEAVERTON SCHOOL DISTRICT
2010 FACILITY PLAN UPDATE
TABLE OF CONTENTS - CONTINUED

LIST OF FIGURES

Figure 1	Buildable Land in Beaverton	8
Figure 2.	Buildable Vacant Land in Washington Count	9
Figure 3	Potential Infill Land in Washington County	10
Figure 4	Existing Beaverton School District Criteria for Determining School Capacity	14
Figure 5	Map of Permanent and Total Available School Capacity by School Level (Elementary School)	16
Figure 6	Map of Permanent and Total Available School Capacity by School Level (Middle School)	17
Figure 7	Map of Permanent and Total Available School Capacity by School Level (High School).....	18
Figure 8	Barnes Elementary School	27
Figure 9	Hiteon Elementary School	28

LIST OF TABLES

Table 1	Estimated 2025 Physical Education Additional Facility Needs	5
Table 2	Enrollment Projections, 2009-2010 – 2025-2026, for Beaverton School District, Medium Growth Scenario.....	11
Table 3	Summary of District Facility and Real Property Assets	20
Table 4	Portables in Beaverton School District, September 2009	29
Table 5	Facility and Land Needs for Beaverton School District	32
Table 6	Estimated Projected Comprehensive and Options School Enrollments	36
Table 7	Actual 2009-2010 and Projected 2025 SCSE Needs	36
Table 8	2009-2010 ESL Classroom Needs	37
Table 9	Anticipated 2025 Physical Education Needs	38
Table 10	Estimated 2025 Capacity Needs by Program and Deficit by School Level	38
Table 11	Estimated 2025 Capacity Deficit and Facility Needs by School Level ..	39

APPENDICES

APPENDIX A – ORS 195.110

APPENDIX B – ISSUE PAPERS

Issue Paper #1	ORS 195.110 Background	B-1
Issue Paper #2	2002 Facility Plan Summary.....	B-8
Issue Paper #3	Student Enrollment Forecasts	B-12
Issue Paper #3A	Student Enrollment Forecasts (Continued from January 13 th LRFPAC Meeting)	B-18
Issue Paper #4	School Capacity Formula.....	B-19
Issue Paper #4A	Existing School Capacities	B-24
Issue Paper #4B	Additional Capacity Considerations	B-33
Issue Paper #5	Existing Facilities Conditions Assessment	B-38

BEAVERTON SCHOOL DISTRICT
2010 FACILITY PLAN UPDATE
TABLE OF CONTENTS - CONTINUED

Issue Paper #6	Ancillary Facility Needs	B-47
Issue Paper #7	School Site Characteristics	B-49
Issue Paper #7A	(Revised for Meeting #5): School Site Characteristics – LRFAC Summary Draft Recommendation Regarding School Site Guidelines	B-53
Issue Paper #8	Special Program Considerations	B-57
Issue Paper #9	Efficient Use of School Sites	B-64
Issue Paper #10	Alternatives to Construction	B-71
Issue Paper #11	Financing for Capital Programs	B-74
Issue Paper #12	Land Needs for the Facility Plan	B-78
	LRFAC Committee Recommendations and Actions Summary-to-Date	B-83

APPENDIX C – PORTLAND STATE UNIVERSITY POPULATION RESEARCH CENTER
BEAVERTON SCHOOL DISTRICT POPULATION AND ENROLLMENT
FORECASTS, 2009-10 to 2025-26

APPENDIX D – FACILITY INVENTORY SHEETS

Elementary Schools (including K-8)	D-1
Middle Schools	D-34
High Schools	D-42
Options Schools	D-50
Support Facilities.	D-56

EXECUTIVE SUMMARY

The Beaverton School District School, in accordance with the statute that guides school facility planning (ORS 195.110), adopted a School Facility Plan in 2002. This Plan provided the District with information on future enrollment forecasts, school facility needs and land needs. The Plan was subsequently adopted by both the City of Beaverton and Washington County as a part of their respective Comprehensive Land Use Plans.

Since then, the District has been able to provide new school facilities and renovations to existing facilities to accommodate much of the significant growth in student enrollment. The Oregon Legislature in 2007 amended ORS 195.110, to provide additional direction to school districts as they prepare and update school facility plans.

The District decided to update the 2002 Facility Plan, incorporating recent facility improvements, address new facility and enrollment information and maintain compliance with the requirements of ORS 195.110. A School Board resolution approved convening a Long Range Facility Plan Advisory Committee (LRFPAC) to work with District staff in preparing the 2010 Plan update.

The LRFPAC was comprised of a wide range of stakeholders representing parent, community and business groups in addition to local jurisdictions and District staff. The role of the LRFPAC was to advise the District in addressing the following objectives:

1. Compliance with the requirements of ORS 195.110;
2. Support and comply with jurisdiction comprehensive land use plans;
3. Review District standards for facility and site characteristics;
4. Meet the educational requirements of the District while supporting and aligning with local and regional growth management strategies;
5. Estimate the needs for future school capacity and land; and
6. Develop a 2010 Facility Plan Recommendation for School Board consideration and action.

The following table summarizes the recommendations prepared by the LRFPAC. A more thorough discussion of each issue and recommendation is provided in the 2010 Facility Plan document. Issue papers specific to the topics identified in the table below were discussed at LRFPAC meetings and are provided in Appendix B of the facility plan.

EXECUTIVE SUMMARY

Table ES-1. LRFPAC Recommendations

Recommendation #	LRFPAC Recommendation	Reference in Facility Plan
Recommendation #1: 2025 Student Enrollment Forecast	Accept the 2025 Medium Enrollment Forecast prepared by the Portland State University Center for Population Research as the enrollment forecast to be used in estimating the facility and land needs for the 2025 Long Range Facility Plan.	Chapter 3, Projected Enrollment, pp. 6-12
Recommendation #2: School Capacity Formula	<p>Continue to use the currently adopted Beaverton School District model (adopted with the 2002 Facility Plan) for calculating total school capacity.</p> <p>The Committee also supports that the District continue to use the following tools to mitigate for schools that are at or over capacity:</p> <ol style="list-style-type: none"> 1. Potential student transfers between schools (e.g. open enrollment); 2. Potential addition of portable classrooms; and 3. Potential reallocation of enrollment through school boundary adjustments. 	Chapter 3, School Capacity Formula, pp. 12-19
Recommendation #3: District Building Condition Assessment	<p>Accept the findings of the Building Conditions Assessment, which indicated a need for \$93 million in repairs, renovations and physical improvements to existing buildings by 2025.</p> <p>The Committee supports District staff's recommendation that the physical facility renovations and improvements to existing facilities be programmed in three five-year phases, in conjunction with new capacity construction bond programs, as follows:</p> <p style="text-align: center;">2010 – 2015: \$36.8 million 2016 – 2020: \$41.8 million 2021 – 2025: \$14.4 million.</p>	Chapter 3, Existing Conditions and Needed Improvements, pp. 19-23
Recommendation #4: 2025 Ancillary Facility Needs	Conduct a comprehensive ancillary facility assessment, particularly to establish and address a connection between student enrollment growth and the corresponding need for ancillary facilities. The	Chapter 3, Existing Conditions and Needed Improvements,

EXECUTIVE SUMMARY

Recommendation #	LRFAC Recommendation	Reference in Facility Plan
	assessment should be conducted prior to developing projects for the next bond program, by 2012.	pp. 21-22
Recommendation #5: Facility Replacement vs. Renovation Guideline	Adopt a deficiency-to-replacement cost ratio range of 30-50% as a rule-of-thumb and guideline for when the District should start to seriously evaluate replacement of a facility.	Chapter 3, Existing Conditions and Needed Improvements, pp. 22
Recommendation #6: School Site Size and Characteristics	<p>Affirm support for the 2002 School Site Characteristics as guidelines and not absolute site standards that cannot be modified during the site selection process. The 2002 site features that are identified at each level are appropriate and include features the Committee believes District residents expect to be available to schools.</p> <p>The Committee recommends that the District continue to study ways to make efficient use of school sites and build on smaller sites; that it keep current on emerging guidelines and practices of other organizations; that it work with local jurisdictions on solutions to development code barriers to making more efficient and creative use of sites.</p> <p>The Committee recommends that a design workshop be held for school sites early enough before or during the bond development process to allow for innovative approaches to facility and site design. The workshops should address the following:</p> <ul style="list-style-type: none"> ▪ Research on new school construction models on small sites; ▪ Alternative ways to meet school-related and/or recreational activities on-site, off-site or in other programmatic ways; ▪ The results of the site-by-site assessment (Recommendation #7) of its existing school facilities and sites to determine the optimal capacity of each existing site; ▪ Opportunities for joint partnerships with local agencies (including THPRD, libraries, non-profits, etc.) to maximize the use of school sites and facilities; and 	Chapter 3, Desirable Sites, pp. 23-26

EXECUTIVE SUMMARY

Recommendation #	LRFPAC Recommendation	Reference in Facility Plan
	<ul style="list-style-type: none">Alternative site-specific school designs / configurations developed in the design workshop with architects, urban designers, planners, and community representatives.	
Recommendation #7: Site-by-Site Capacity Analysis	<p>Conduct a site-by-site assessment of existing school facilities and sites to estimate the optimal capacity of each site. This would help determine if expanding existing facilities is feasible and may defer the need for the construction of new school facilities.</p> <p>The site-by-site analysis should be conducted prior to the District convening a School Construction Bond Program Committee, by 2012.</p>	Chapter 3, Efficient Use of School Sites, pp. 26-31
Recommendation #8: Educational Improvement Needs Related to Facility Improvements	<p>When the District adds student capacity (permanent or with portables) to an existing facility, it must consider the impact of that added capacity on the adequacy of existing core facilities (e.g. cafeteria, kitchen, auditorium, library, restrooms, etc.).</p> <p>The Committee recommends that the District conduct a study to determine what facility improvements need to be made to enhance and equalize educational programs throughout the district. The study should result in a plan specifying detailed tasks to implement the identified improvements.</p> <p>They ask that the core facility guidelines and educational capital improvements study be done by 2012.</p>	Chapter 3, Existing Conditions and Needed Improvements, pp. 19-23

EXECUTIVE SUMMARY

Recommendation #	LRFPAC Recommendation	Reference in Facility Plan
Recommendation #9: Special Program Considerations	<p>Continue to assess the implications of future Physical Education requirements for schools, and prepare a plan on complying with HB 3141, which requires at least 150 minutes of weekly physical activity for students in grades K-5 and 225 minutes for students in grades 6-8, effective 2017. The plan should include the following elements:</p> <ul style="list-style-type: none"> ▪ A detailed description of each existing campus' physical education facilities. ▪ A determination of whether each campus' facilities will meet the needs of 2017 student enrollment. ▪ If facilities are inadequate to meet campus needs, identify the additional facilities that will be required to meet standards. ▪ Approximate cost of additional facility requirements. <p>This plan should be completed by 2014.</p>	Chapter 3, Special Program Needs, pp. 35-40
Recommendation #10: Efficient Use of School Sites	<p>Continue with and expand upon existing practices to make efficient use of school sites, including portable classrooms, multi-story buildings, shared uses, shared parking, and maximized use of a site (e.g. smaller Options schools and sites, building out an existing site), as presented in Issue Paper #9.</p>	Chapter 3, Efficient Use of School Sites, pp. 26-31
Recommendation #11: Alternatives to New Construction	<p>The Committee agrees with District staff findings regarding program changes such as year-round and double-shift schedules, portables, and public/private partnerships as alternatives to new construction.</p> <p>Of these alternatives, portable classrooms are the most viable, public/private partnerships may be used on a limited basis, and program changes are not recommended.</p>	Chapter 3, Alternatives to New Construction, pp. 29-31
Recommendation #12: Financing Tools for Capital Facilities	<p>The Committee supports the continued use of financing tools that the District currently relies upon for capital funding. The financing tools include the following:</p>	Chapter 3, Financing Tools for Capital Programs,

EXECUTIVE SUMMARY

Recommendation #	LRFPAC Recommendation	Reference in Facility Plan
	<ul style="list-style-type: none"> ▪ Bonds ▪ Construction Excise Tax ▪ Local Option Levy ▪ Donations ▪ Grants <p>The Committee recommends that a consistent debt level be maintained. Based on BSD levy rate projections, 2015 and 2019 are years when rates are projected to significantly drop and, thus, offer opportunities for proposing new bonds in order to maintain a consistent debt level for taxpayers.</p> <p>It is recommended that the District explore lease/sales for facilities needs as an option when the District cannot otherwise economically raise capital.</p>	pp. 41-42
Recommendation #13: Number of New School Facilities Needed	<p>Concur with the staff's estimates of enrollment capacity deficiencies and the number of facilities needed by 2025, if capacity needs are assumed to be entirely addressed by new facilities. The number of new school facilities that are estimated to be needed by 2025 varies according to whether new Options schools are built.</p> <ul style="list-style-type: none"> ▪ Elementary schools: 3 new schools needed. ▪ Middle schools: 1 new school needed. ▪ High schools: 2 new schools needed if no Options schools are built, 1 new school needed if Options schools are built. ▪ Options schools: 2 new schools or no new schools if 2 new high schools are built. ▪ Ancillary facilities: As determined by the study requested in Recommendation #4. 	Chapter 3, Land Needs and Determination of Adequate Supply, pp. 31-41
Recommendation #14: Number of New School Sites Needed	<p>Concur with staff estimates of the number of new school sites and amount of land needed to accommodate enrollment growth through 2025, and general location of the site needs. It also concurs with the caveats that the findings for the number of sites and the amount of land needed assume that all needs will be met through new sites and do not account for the implications of P.E. requirements, effective in</p>	Chapter 3, Land Needs and Determination of Adequate Supply, pp. 31-41

EXECUTIVE SUMMARY

Recommendation #	LRFPAC Recommendation	Reference in Facility Plan
	<p>2017. Further study is required to determine the potential implications of the P.E. requirements.</p> <ul style="list-style-type: none">▪ Elementary schools: 1 new school needed in Central or South District, 7-10 acres.▪ Middle schools: No additional sites needed.▪ High schools: Up to 2 new schools needed, one in North District and one in South District, 35-40 acres or 70-80 acres.▪ Options schools: Up to 2 new school sites needed, location and site sizes to be determined.	

Chapter 1 – Facility Plan Purpose and Process

Purpose

Pursuant to ORS 195.110(8)(b), a school district facility plan must be regularly updated. However, statutory requirements are not the only reason for updating the long-range facility plan for Beaverton School District (BSD or “the District”). The District successfully passed a construction bond for \$195 million in 2006, and projects programmed using that funding are coming to a close. Since adoption of the 2002 Facility Plan, amendments have been made to ORS 195.110. (See Appendix A for the most current version of ORS 195.110.) Combined with continued growth in student enrollment in the district, it is an appropriate time to revisit and update the recommendations and assumptions included in the 2002 Facility Plan.

The following topics and tasks were identified at the outset of the update:

- Update and validate student enrollment projections by age group. Since projections were prepared for the 2002 Facility Plan, significant expansions to the Urban Growth Boundary (UGB) in the North Bethany and Bull Mountain areas were approved. Additionally, infill and redevelopment is being encouraged in established areas of the district.
- Projects funded by the 2006 bond have provided additional capacity in District schools. The additional capacity needs to be factored into the assessment of future capacity and need for schools and sites.
- One of the amendments to ORS 195.110 allows for the District to influence decisions on residential development applications when objective criteria to determine whether adequate capacity exists have been adopted by the District and local jurisdictions. The criteria or capacity formula included in the 2002 Facility Plan should be re-evaluated given time since the last plan and instructional and program changes that have been instituted and have had an impact on school capacity.
- Document current methods of assessing facility condition, and update the facilities conditions report. Clarify the relationship between conditions assessments, major maintenance or renovation needs, and capital programming that can spring from the facility plan. Explore whether it is more cost-effective rebuilding on an existing site or building new on a new site.
- Determine whether instructional changes or special programs will impact school facility needs. Special programs include special education, full-day kindergarten, Options programs, and physical education, which may place new or different demands on school facilities by 2025.

Beaverton School District 2010 Facilities Plan Update

- The update should consider District support facilities such as transportation services, maintenance facilities, and administration service centers. Their condition should be assessed and needs through 2025 should be estimated.

These recommendations will also be incorporated into the comprehensive plans of the City of Beaverton and Washington County and will become a part of the land use planning process in both jurisdictions.



School Facility Planning Process

Given the decision to update the BSD Long Range Facility Plan, the Long Range Facility Plan Advisory Committee (LRFPAC) was convened. The Committee was comprised of representatives from local jurisdictions, Tualatin Hills Parks and Recreation District (THPRD), local businesses, neighborhood organizations, other civic organizations, and District staff. The role and purpose of the group was established as follows:

- Assist District in complying with requirements of ORS 195.110.
- Meet the educational requirements of the District while supporting and aligning facility improvements with local and regional growth management strategies.
- Estimate needs for future school capacity improvements and land needs.
- Develop a 2010 Facility Plan Recommendation for School Board consideration and action.

The LRFPAC met six times between January 2010 and June 2010. Roles, protocols, decision-making process, access to materials were discussed at the first meeting. A page on the District's website was dedicated to the Committee and the planning process.

During the first and subsequent meetings, the Committee reviewed, discussed, and, as needed, reached agreements on elements of ORS 195.110 including enrollment projections; a methodology for determining school capacity; existing facilities conditions and maintenance needs; school site characteristics; the estimated future need for schools, sites, and land; options for efficient use of facilities and school sites; and financing strategies. The meetings culminated in the recommendations presented in this plan. **Note:** *The recommendations presented in Chapter 3 are not always numbered sequentially. This reflects the difference*

Beaverton School District 2010 Facilities Plan Update

between the order in which some of the topics were discussed in meetings and the order of topics in this plan.

The topics and ORS 195.110 elements addressed during the meetings were introduced to the LRFPAC primarily through a series of issue papers. The full set of issue papers that was prepared for this process is included in this plan as Appendix B, and is referred to throughout this plan. Before the Committee meetings began, the District had arranged or performed work on enrollment projections, the school capacity formula, and building conditions assessment. The LRFPAC and meetings served to validate this work.

Once this 2010 update of the 2002 Facility Plan is completed and reviewed by the Committee, the plan will be forwarded to the School Board for its consideration and approval. Following Board adoption, the 2010 Long Range Facility Plan must work its way through local adoption processes for the City of Beaverton and Washington County. Jurisdictions with more than 10% of the population of the school district must adopt the plan as an element of their Comprehensive Plans, pursuant to ORS 195.110.

(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.

Representatives from the City of Beaverton and Washington County actively participated in the LRFPAC, and this is anticipated to facilitate a smoother adoption process for those two jurisdictions. The City of Hillsboro was also represented on the Committee. However, Hillsboro will not have to formally adopt the plan as the Hillsboro population level within the Beaverton School District does not meet the 10% threshold for adoption.

Chapter 2 – Regulatory Context

Much of the regulatory context addressed in the 2002 Facility Plan (Chapter 3) – policies and rules from City and County Comprehensive Plans and Development Codes and Metro Regional Framework Plan and Urban Growth Management Functional Plan – remains unchanged since 2002.

Since 2002, however, there have been some changes to the regulatory environment including amendments to ORS 195.110, passage of the new statewide Construction Excise Tax and physical education requirements, and adoption of regional Urban and Rural Reserves.

ORS 195.110 Amendments (2007)

Minimum plan elements required by previous version of ORS 195.110 were not changed. Amendments to ORS 195.110, passed in 2007 in Senate Bill (SB) 336, were comprised primarily of the following changes:

1. Changed the definition of districts subject to facility planning requirements from “high growth school districts” to “large school districts.”
2. Defined “large school districts” as districts with an enrollment of 2,500 students or more.
3. Added more requirements for school facility planning coordination between the District and affected City or County in large school districts.
4. Extended the minimum planning period from five years to 10 years.
5. Allowed District Boards to adopt capacity criteria that must then be adopted by the affected local jurisdiction and used in evaluating development.
6. Allowed the denial of residential development applications because of insufficient school capacity based upon adopted capacity criteria. (However, school capacity still may not be used to establish a building moratorium.)

Construction Excise Tax (2007)

The 2007 State Legislature passed Senate Bill 1036 allowing school districts to impose a Construction Excise Tax (CET) on new construction or an increase in floor area in an existing structure.

Beaverton School District is collecting \$1 per square foot of new residential construction and 50¢ per square foot of new non-residential construction that can be used for land acquisition, construction, renovation or improvement of school facilities, costs to purchase and install

equipment, furnishings, and other capital, and architectural, engineering, legal or similar costs related to capital improvements.

However, the CET in its current form is expected to fund only a small fraction of the total cost of new construction or major renovation. It is estimated to fund less than 25% of capital construction needs.

Physical Education Requirements (2007)

As presented in Issue Paper #8 (Appendix B), statewide physical education provisions passed by the Oregon Legislature in 2007 (House Bill 3141) will require a minimum of 150 minutes of physical activity for elementary school students and 225 minutes for middle school students. The requirements go into effect July 1, 2017. A BSD report to the School Board (Beaverton School District Wellness Policy EFA: Annual Report to the School Board 2008-2009) evaluated existing facilities and existing enrollments for compliance with the new requirements, and estimated additional facilities that would be required to meet the new physical education requirement (Table 1).

Table 1. Estimated 2025 Physical Education Additional Facility Needs

School Level	Covered Play Area	Multi-Purpose Room	Gymnasium
Elementary Schools	3	8	14
Middle Schools	1	4	7
Total	4	12	21

Urban and Rural Reserves (2010)

Metro made a final recommendation on Urban and Rural Reserves in the region in 2010. Adopted Urban Reserve Areas (URAs) are the most relevant to the facility plan for the potential additional student enrollment the areas may generate in the district by 2025.

Development of the URAs in the vicinity of North Bethany and Cooper Mountain will most directly affect Beaverton School District. There is also a URA of 2,300 acres in South Hillsboro that will mainly affect Hillsboro School District and will secondarily affect Beaverton School District. However, these areas are all Urban Reserves, meaning they have not yet been incorporated into the regional Urban Growth Boundary (UGB) or had the necessary planning completed as will be required once they are brought into the UGB. So their development is still many years away and possibly will not occur within the time horizon of this plan, or by 2025.

Chapter 3 – Update of Facility Plan Elements

***Note:** The recommendations presented at the end of each following chapter section are not always numbered sequentially. This reflects the difference between the order in which some of the topics were discussed in meetings and the order of topics in this plan.*

Projected Enrollment

ORS 195.110 (5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(A) Population projections by school age group.

Additionally, 195.110(9)(a) states that a District “shall 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...”, making an important connection between student enrollment projections and estimated facility needs.

The District uses annual projections, developed by the District Demographer, to determine school staffing and available school capacity on a yearly basis, and multi-year forecasts, developed by the Portland State University (PSU) Population Research Center (PRC), in determining long-term facility needs. The 2002 Facility Plan projected long-term enrollment in order to estimate facility needs to 2020. Enrollment projections were made to 2025 in preparing the 2010 Facility Plan. These projections are presented in the 2008 report prepared by the PSU PRC (Appendix C).

The PSU PRC typically provides projections based on low, medium, and high growth scenarios. The medium growth scenario has historically been considered the “most likely” scenario because the underlying assumptions for fertility, housing, and migration rates in the medium growth scenario have resulted in forecasts that have most closely approximated District actual enrollments since PRC began preparing projections for the District 18 years ago.

The PSU PRC uses cohort survival methodology, but also incorporates the components of population fertility rates, city and regional population, housing and household characteristics, mortality rates, city and regional planning efforts, and employment data. Results for low, medium, and high growth scenarios using this methodology were presented to the LRFPAC in Issue Paper #3 (Appendix B) at Meeting #1.

Areas of Anticipated Growth

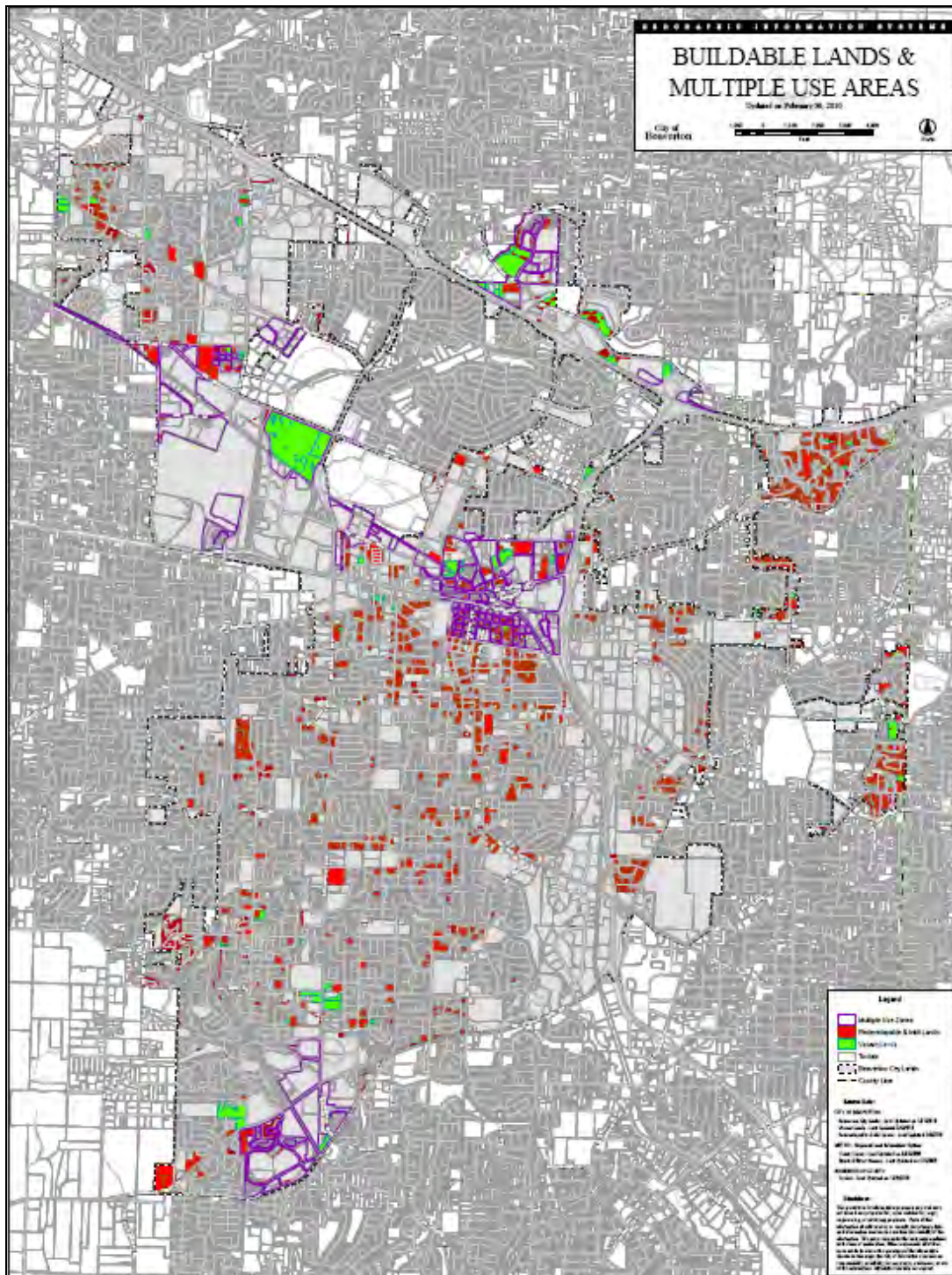
Representatives from the City of Beaverton and Washington County presented information about the areas that are expected to grow in the city and the county over the next 10-20 years at Meeting #2. Urban reserves have been designated in the north and south of Beaverton School District – in the North Bethany and Cooper Mountain areas – which are intended for urbanization in the next 50 years, but it is possible that these areas will not substantially develop in the next 10-20 years.

Otherwise, sets of larger buildable parcels – or land that is not environmentally or otherwise constrained – were identified inside the district in the city of Beaverton. (See Figure 1.)

1. *Along Murray Boulevard, in the Sexton Mountain attendance area:* The land could accommodate about 50-60 units.
2. *Central Beaverton in Downtown and along the light rail (LRT) line:* A lot of infill is possible and being encouraged here.
3. *Former Teufel nursery site in the north:* BSD owns 17 acres in this area. The City of Beaverton considers this area and the Central Beaverton area to be the two most likely areas to develop and redevelop in the facility plan time horizon.
4. *Nike site:* There are about 100 acres of vacant land owned by Nike in west/northwestern Beaverton. There are no known plans for the site, but there could be some residential component to development given its proximity to the LRT line and its mixed use zoning, which allows housing as well as other employment (office and commercial) uses.
5. *Driving range site:* At densities of 30-40 units/acre, the site could support about 150 housing units.
6. *Site in the Barnes Road/Peterkort area:* It is estimated that this area could develop roughly 1,800 units, making it some of the likeliest and most significant development potential in the city, along with Central Beaverton and the former nursery site.

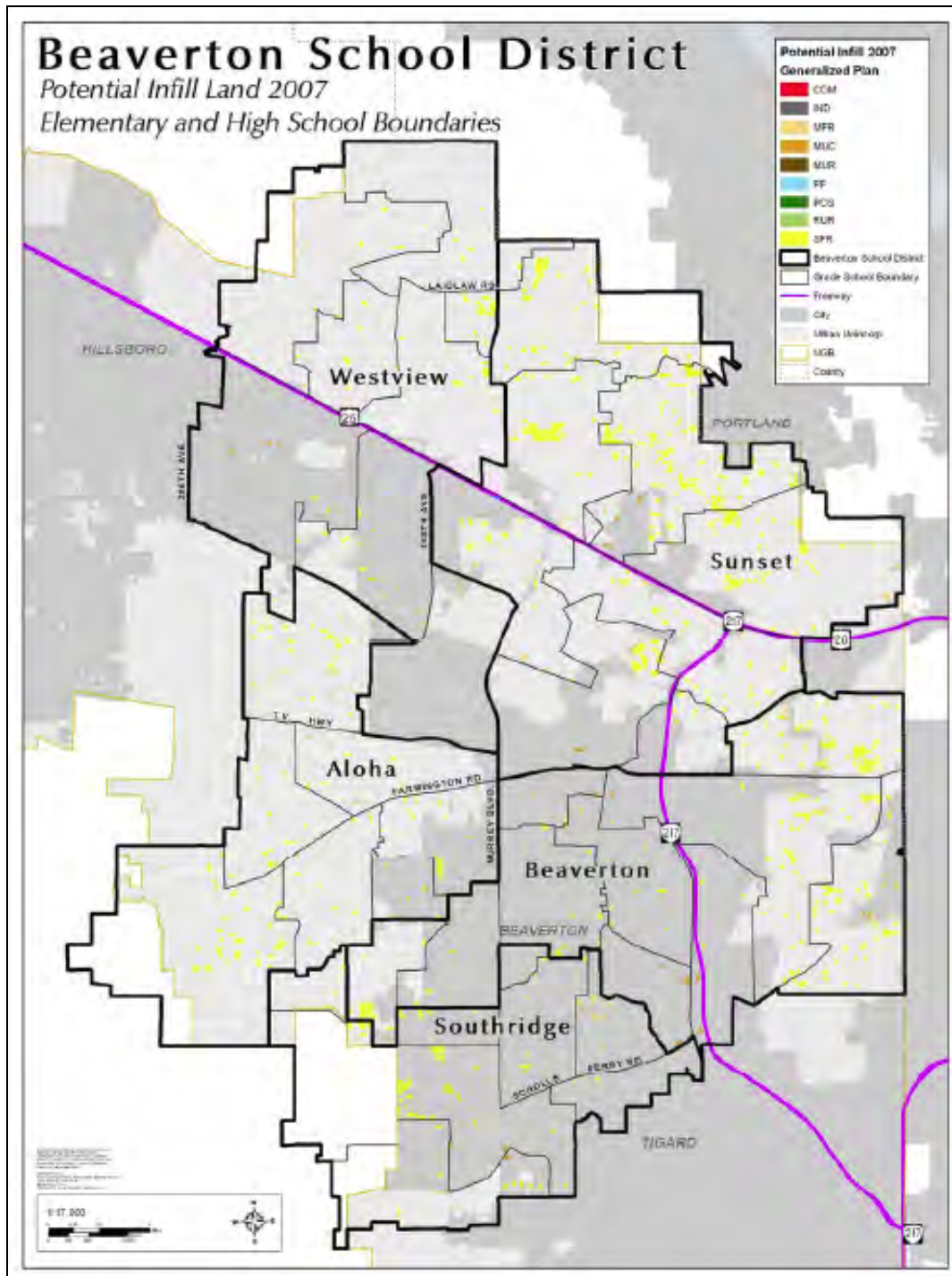
Washington County is planned to accommodate 25% of the region's future housing. While there may be "greenfield" development that eventually occurs in the North Bethany and Cooper Mountain areas, a significant portion of the anticipated growth is expected to be accommodated through infill and redevelopment. The North Bethany area was originally expected to support 5,000-8,000 new units. Recent estimates for the North Bethany area indicate that a range of 3,000-4,000 new residential units will be more likely. The Aloha area is anticipated to have the greatest impact on housing in terms of infill and redevelopment. See Figures 2 and 3 for maps of potential developable area in Washington County.

Figure 1. Buildable Land in Beaverton



Source: City of Beaverton

Figure 3. Potential Infill Land in Washington County



Source: Washington County

Beaverton School District 2010 Facilities Plan Update

Committee Discussion and Recommendation

Table 2 (PSU PRC Report, Table 11, Appendix C) shows projected enrollment through 2025 based on the medium growth scenario.

Table 2. Enrollment Projections, 2009-2010 – 2025-2026, for Beaverton School District, Medium Growth Scenario

Table 11 Beaverton School District Middle Range Enrollment Forecasts, 2009-10 to 2025-26								
Grade	Historic		Forecast					
	2007-08	2008-09	2009-10	2010-11	2015-16	2020-21	2025-26	
K	2,607	2,775	2,715	2,675	2,912	3,091	3,246	
1	2,936	2,886	3,010	2,982	3,190	3,387	3,559	
2	2,957	2,873	2,891	3,019	3,153	3,358	3,537	
3	2,867	2,935	2,878	2,900	3,102	3,337	3,519	
4	2,856	2,849	2,939	2,886	3,049	3,320	3,501	
5	2,733	2,833	2,853	2,946	3,014	3,294	3,477	
6	2,748	2,785	2,865	2,888	3,091	3,298	3,484	
7	2,757	2,749	2,789	2,872	3,126	3,257	3,455	
8	2,820	2,714	2,753	2,797	3,001	3,201	3,433	
9	2,817	2,836	2,800	2,845	3,080	3,244	3,521	
10	2,750	2,760	2,812	2,782	3,120	3,180	3,462	
11	2,865	2,618	2,681	2,737	2,946	3,139	3,333	
12	2,674	2,587	2,498	2,560	2,787	3,021	3,133	
Total¹	36,387	36,200	36,484	36,889	39,571	42,127	44,660	
<i>Annual change²</i>		-187 -0.5%	284 0.8%	405 1.1%	536 1.4%	511 1.3%	507 1.2%	
K-5	16,956	17,151	17,286	17,408	18,420	19,787	20,839	
6-8	8,325	8,248	8,407	8,557	9,218	9,756	10,372	
9-12	11,106	10,801	10,791	10,924	11,933	12,584	13,449	

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

From 36,484 students in 2009-2010 to 44,660 students estimated in 2025-2026 represents an increase of almost 8,200 students, or a 22.4% increase in student enrollment over this period.

Recommendation #1: 2025 Student Enrollment Forecast

The LRFAC recommended accepting District staff's recommendation to use the 2025 enrollment forecast based on the medium growth scenario for school facility planning purposes.

School Capacity Formula

ORS 195.110 (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.

(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.

School capacity and methods used to estimate capacity were discussed as part of Issue Papers #4, #4A, and #4B (Appendix B) at Meetings #2 and #3. The District works closely with the Cities of Beaverton, Hillsboro, Portland, and Tigard, and Washington and Multnomah Counties to monitor residential development that may impact school facilities. As an essential service provider for Washington County, the Beaverton School District is responsible for issuing a Statement of Service Availability for all residential development within its attendance boundaries.

In order to evaluate impacts to school facilities, school districts must have ways of estimating the capacity of schools to accommodate students. There are various methods used by other districts inside and outside of Oregon, including:

Beaverton School District 2010 Facilities Plan Update

- A core capacity model with capacity determined by building code or educational specifications;
- A model which multiplies the number of teaching stations by the number of student stations by a predefined utilization factor; and
- A number of students per classroom ratio model.

Additional consideration, such as different capacity needs for special education purposes, also factor into methods for determining school capacity.

The current Beaverton School District capacity model that was adopted as part of the 2002 Facility Plan is based upon total building gross square footage, less the area used for special programs, divided by a square footage per student factor. Attachment A of Issue Paper #4 (Appendix B) provides further detail about the formula.

Analysis of School Capacity Models

In anticipation of the 2010 Facility Plan Update, a committee of District staff reviewed a variety of school capacity models with the intention of either validating the current method or suggesting modifications to the method. The District dismissed most models due to lack of objectivity, degree of complexity, and a failure to account for special program space. The analysis involved testing two capacity models (number of classrooms and amount of instructional space) using data from ten BSD schools. Several drawbacks to these two models were found:

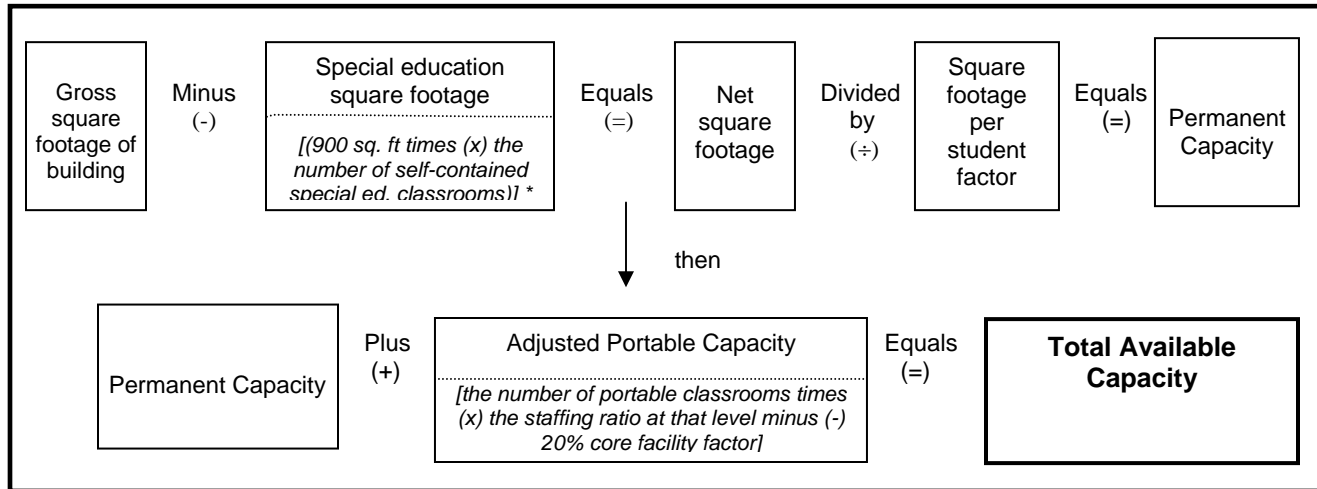
- Both appeared to significantly overestimate building capacity.
- Variability in classroom sizes made use of a uniform approach difficult.
- They would require extensive customization for each building.
- The definitions of “classroom” and “instructional space” were problematic and variable over time.
- Neither model accounted for core building limitations (cafeteria, gym, etc.).

The full committee report is available at:

http://www.beaverton.k12.or.us/pdf/facil/facil_Capacity%20for%20FacPlan%20Update%20FINAL.pdf.

The District committee determined that the capacity models reviewed did not represent an improvement over the existing model, and the Board concurred in Fall 2009. The LRFPAC recommended the continued use of the existing capacity formula at Meeting #3.

Figure 4. Existing Beaverton School District Criteria for Determining School Capacity



Source: *Beaverton School District Facility Plan, May 2002*

* *ELL & Head Start space is also deducted*

Additional Capacity Considerations

Space utilization percentages calculated using the adopted capacity methodology indicate the severity of capacity and utilization issues and the schools experiencing these issues. However, a high percentage of space utilization at a school (e.g. a school that is approaching or exceeding its permanent or total available capacity) does not automatically translate into a need to build a new school or a recommendation for denial of proposed residential development in the area. As presented in Issue Paper #4B (Appendix B) at Meeting #2, the District will continue to initiate discussions with local jurisdictions about the following possible ways of responding to crowded schools:

- **Open enrollment** – Open enrollment is primarily a practice that offers students a choice about what school they attend. However, it only allows transfers to a school outside of their attendance area that has available capacity. In this secondary way it serves as a potential strategy for alleviating crowding at schools from which students are transferring.

The District provides a list of schools offering open enrollment each winter, for enrollment the following fall. A student attending a school on open enrollment is guaranteed enrollment at that school for the duration of his or her time at that school

level. If a school that has been offering open enrollment were to reach a significant level of space utilization, the District would likely terminate open enrollment at that school to relieve overcrowding.

- Portables – As clearly shown in the maps in Figures 5-7, portables provide significant additional capacity. Where there are no site conditions prohibiting their use (e.g. campus size, environmental constraints, or local zoning and development standards), they are a flexible means of responding to capacity needs.
- Boundary adjustments – Boundary adjustments can be very emotionally charged and contentious. However, they do not require capital investments. Boundary adjustments can shift students from crowded schools to others with more capacity. These efforts typically require extensive work with the community, and must be planned a significant amount of time prior to the implementation date.
- Addition/expansion – Expanding existing building space to provide additional capacity is an option when capital construction monies are available. It costs more than providing portables and requires confidence that the growth and enrollment levels at schools in that area will be increased or sustained.
- New construction – Construction of new schools is the most costly of these options, as it requires the purchase of land. However, when demand is high and sustained, and enrollment projections support the investment, a new school offers a high quality teaching and learning environment, and can address significant space utilization issues.



A determination that a school is reaching a significant level of utilization based on the school capacity formula can serve as the beginning of a conversation with local jurisdictions regarding a proposed residential development application. The District can discuss potential solutions to the issue with the jurisdictions and evaluate options such as those described above before requesting that a development application be denied.

Figure 5. Map of Permanent and Total Available School Capacity by School Level (Elementary School)

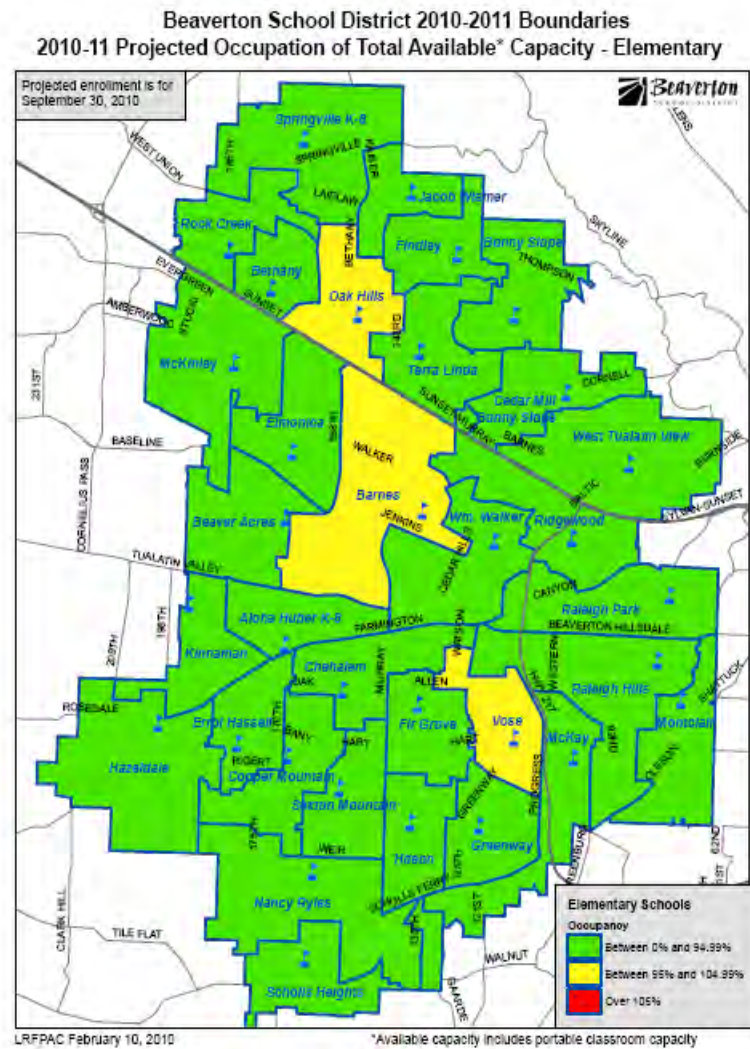
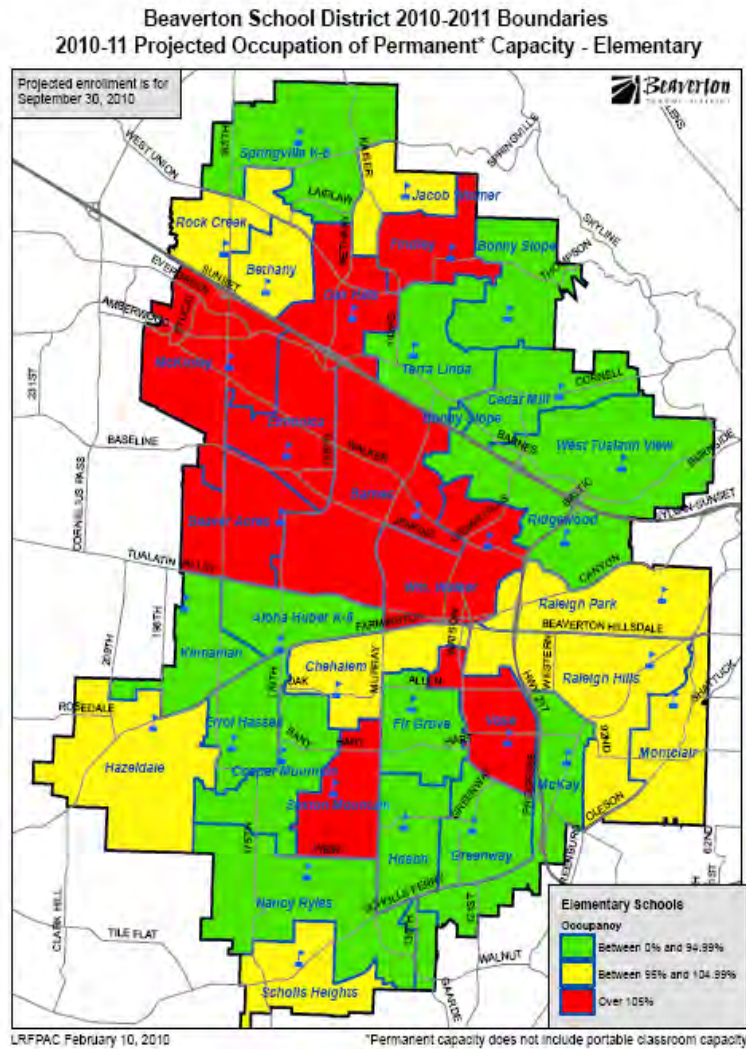


Figure 6. Map of Permanent and Total Available School Capacity by School Level (Middle School)

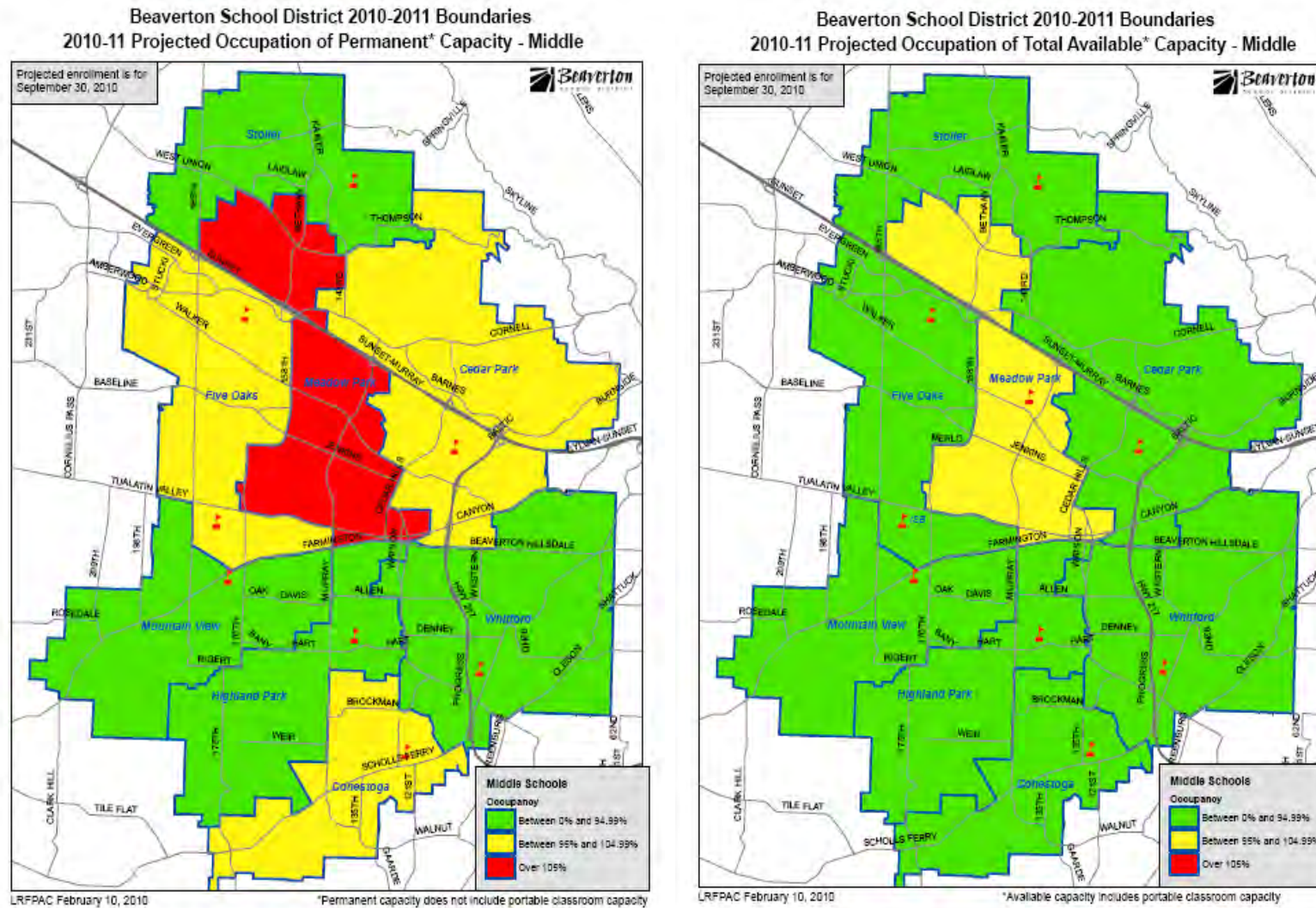
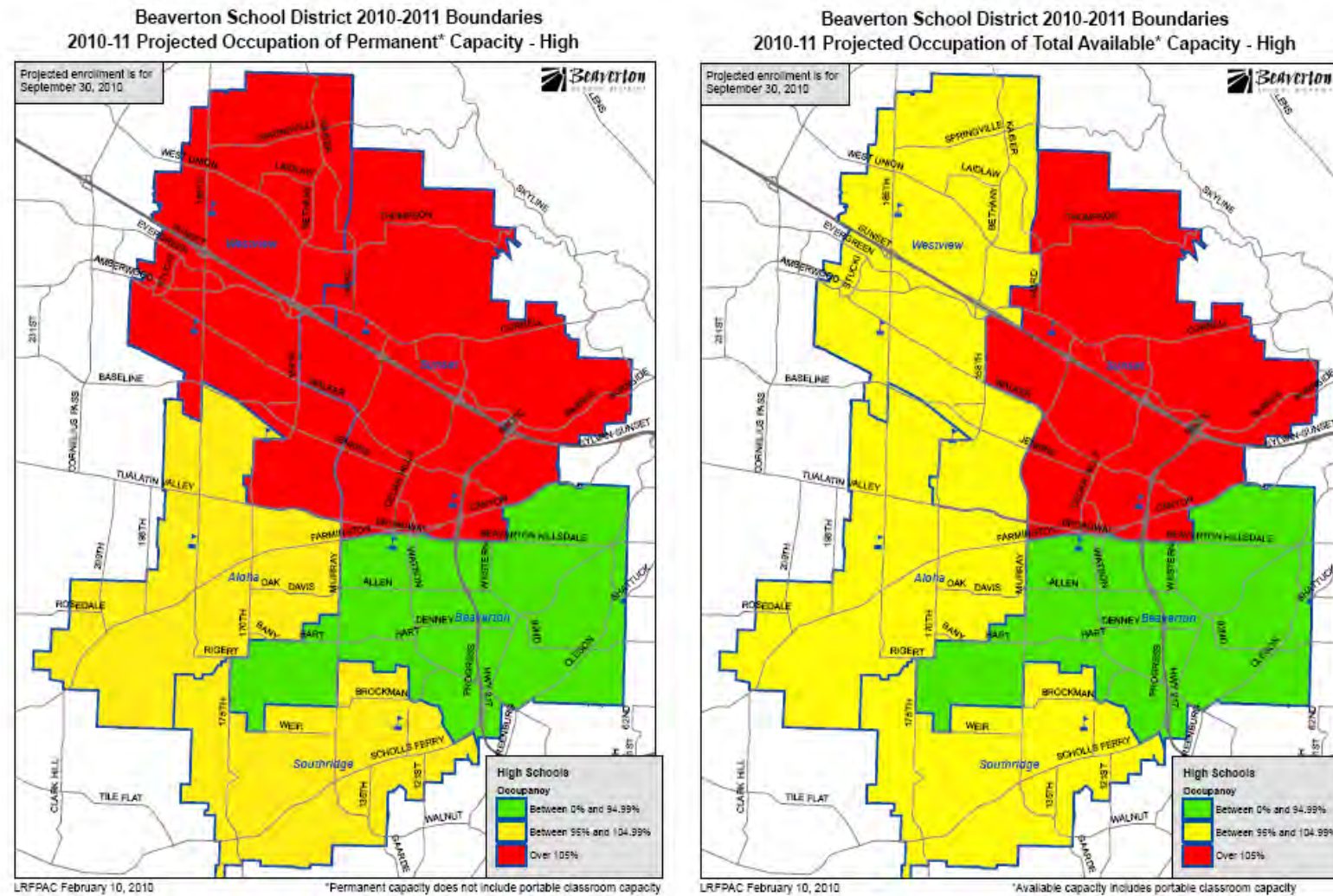


Figure 7. Map of Permanent and Total Available School Capacity by School Level (High School)



Committee Discussion and Recommendation

Recommendation #2: School Capacity Formula

The LRFPAC recommends continuing to use the currently adopted Beaverton School District model (adopted with the 2002 Facility Plan) for calculating total school capacity, and supports that the District continue using transfers, open enrollment, attendance boundary adjustments, portable classrooms, permanent school building additions and expansion, and new schools as ways to respond to schools that are at or over capacity.

Committee discussion raised concerns that the capacity formula results may not show the impact of a school's student capacity on core facilities (e.g. cafeteria, kitchen, auditorium, library, restrooms) is exceeded when portable or permanent classrooms are added to schools.

Recommendation #8: Educational Improvement Needs Related to Facility Improvements

The Committee strongly recommends that the District consider and assess the impact of that added capacity on the adequacy of existing core facilities and include modifications to these core facilities when needed.

Existing Conditions and Needed Improvements

ORS 195.110 (5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

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

The Beaverton School District is the third largest school district in Oregon in 2009-2010. The District maintains and operates a total building area and acreage of about **5.2 million square feet** and **808 acres**, easily making the District one of the largest property managers in Washington County. The District facility and real property assets are summarized in Table 3. A comprehensive inventory of these facilities is provided in Appendix D.

Table 3. Summary of District Facility and Real Property Assets

Type	Number of Schools/Sites	Number of Sites	Building Area (sq ft)*	Land Area (ac)
Elementary	33	-	2,127,926	313
Middle	8	-	1,047,546	184
High	5	-	1,390,912	171
Options Schools **	5	-	421,840	49
Ancillary Facilities	-	8	184,558	38
Other Properties	-	4	-	53
Totals	51	-	5.2 million	808

* Includes portable classrooms and offices

** Includes Capital Center building

Pursuant to ORS 195.110 and its own needs, the District conducts regular facility assessments. As described in Issue Paper #5 (Appendix B), BSD Maintenance Services Department completed an updated assessment of its facilities in Summer 2009 after testing the assessment methods on a pilot project of 10 buildings in Summer 2008. The assessment addresses the physical conditions of existing facilities and does not address new capacity or modernization requirements.

Existing building exterior, building interior, building systems, and grounds for each District facility and site were evaluated and rated using a scoring system. The scoring system was designed to allow prioritization of the required work based on the severity of deficiencies that were found. Construction cost estimating software was used to develop estimated costs to correct each deficiency identified in the assessment, which include estimated soft costs (planning, engineering, design, permits, etc.), a contingency, and an inflationary factor.

The scoring and cost data was entered into a Maintenance Services database where project and funding schedules can be developed based upon priority and estimated costs. This database is constantly updated as work is accomplished and facility condition information is updated based upon reinspections conducted every three years.

The Building Conditions Assessment (BCS) process found that \$93 million in renovations and improvements to existing buildings will be needed by 2025. This work would address material and physical needs and is in addition to requirements to support capacity expansion

Beaverton School District 2010 Facilities Plan Update

or alterations to support changes in academic program needs. Staff recommended that the physical facility renovations and improvements be programmed in three five-year phases in conjunction with new capacity construction bond programs, as follows.

2010 – 2015: \$36.8 million

2016 – 2020: \$41.8 million

2021 – 2025: \$14.4 million

Ancillary Facility Needs

The District's ancillary facilities are included in the Building Conditions Assessment. Existing ancillary facilities that provide support to schools in the district include the following:

- Central Administration Offices – Merlo Road Administration Building and adjacent portable buildings. Support functions: Superintendent and Deputy Superintendent's staffs for Teaching & Learning and Operations and Support Services, Regional Administrators, Instruction, Facilities staff, Business Services, Public Safety, Information Technology, Human Resources, Risk Management and Community Involvement.
- Nutrition Services Administration & Meals Services – Building at the International School of Beaverton (ISB) campus. Support functions: Staff associated with nutrition services programs.
- Special Education Administration (SPED) – Building at ISB campus. Support functions: Staff associated with SPED programs.
- Transportation – Transportation Support Center (TSC), Allen Street, 5th Street North & South. Support functions: Transportation staff to operate and maintain bus operations.
- Maintenance – Merlo/SW 170th Maintenance Yard. Support functions: Maintenance and central office custodial staff.
- Warehousing – Capital Center, TSC, 5th Street North & South. Support functions: No staff are currently supported in warehousing facilities.



However, as addressed in Issue Paper # 6 and discussed in Meeting #3, there is not a capacity formula to estimate the sufficiency of ancillary facilities like there is for schools in the district. For now, District staff use informal, qualitative means to assess adequacy currently and in the future. This qualitative assessment has concluded that existing ancillary facilities will not be able to adequately serve schools in 2025.

Committee Discussion and Recommendation

Recommendation #3: District Building Condition Assessment

The LRFPAC accepts the findings of the Building Conditions Assessment, and supports District staff's recommendation that the physical facility renovations and improvements be programmed in three five-year phases as shown above.

Recommendation #4: 2025 Ancillary Facility Needs

The LRFPAC recommends that a comprehensive ancillary facility assessment be conducted by the District. In particular, the District should address and establish a connection between student enrollment growth and the corresponding need for ancillary facilities. The assessment should be conducted prior to developing projects for the next bond program, by 2013.

Recommendation #5: Develop Facility Replacement vs. Renovation Guideline

Further, the Committee recommends that the District adopt a deficiency-to-replacement cost ratio range of 30-50% as a rule-of-thumb and guideline for when the District should begin to seriously evaluate replacement of a facility.

The Committee initially reached consensus about a 50% guideline. However, staff suggested that the guideline be modified to a range of 30-50%. Facilities in the district are maintained at a level at which the cost to address deficiencies rarely reaches 50%. Thus, there are cases in which facilities that should be evaluated for the cost-effectiveness of continued maintenance, expansion, and renovation, have not reached the 50% threshold.

Staff will also explore partnerships to help secure or fund ancillary facilities for the District.

The Committee and staff also recognized that school design and functional elements can significantly affect the implementation of educational program requirements. There was strong support for a planning process that will determine physical improvements necessary at existing schools to meet educational program requirements.

Recommendation #8: Educational Improvement Needs Related to Facility Improvements

The Committee recommends that the District conduct a study to determine what facility improvements need to be made to enhance and equalize educational programs throughout the District. The study should result in a plan specifying detailed tasks to implement the identified improvements.

Desirable Sites

ORS 195.110 (5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(B) Identification by the city or county and by the large school district of desirable school sites.

The District adopted guidelines for desirable school site characteristics as part of its 2002 Facility Plan. These guidelines were a product of a two-day design workshop in which architects and members of the Facility Plan Advisory Committee, local school committees, local and regional planning agencies, and District staff participated. The workshop explored site sizes, features of a school site, community expectations, and ways to make more efficient use of sites in providing for these features and expectations.

During and following the 2002 design workshop, the Facility Plan Advisory Committee acknowledged that suitable land for school facilities was scarce and that the District would need to be flexible about identifying potential sites. Part of this flexibility was demonstrated in establishing a desired *range* of site sizes per school level instead of more strictly adhering to the traditional size criteria. As noted in Issue Paper #7 for the 2010 update, however, site sizes may need to account for existing site conditions, especially those that render part of the site unbuildable (e.g. steep slopes, wetlands, dedications to local jurisdictions). Site sizes may also need to accommodate arrangements with other agencies, such as Tualatin Hills Parks and Recreation District (THPRD), regarding joint uses of a site.

In addition to site sizes, participants in the workshop helped establish what *features* and amenities that they felt should be a part of each school as well as the target enrollment for

Beaverton School District 2010 Facilities Plan Update

each level of school. The following school site characteristics represent consensus reached during the workshop and were the topic of LRFPAC discussions for the 2010 update.

Elementary Schools

Site Size (general range)	7 to 10 acres
Site Features	Covered Play Area – 2 basketball courts Soft Play Area with play equipment Soccer field size grass area Room for 3 double portables (6 classrooms)
Typical Target Enrollment (new construction)	725 students (*Elementary schools may range from 400 to 1,100 students)

Middle Schools

Site Size (general range)	15 to 20 acres
Site Features	Covered Play Area – 4 basketball courts Soccer Field(s) Football Field(s) 4 - 6 tennis courts Baseball Field(s) Softball Field(s) Room for 6 – 8 portables (12 – 16 classrooms)
Typical Target Enrollment (new construction)	1,100 students

High School

Site Size (general range)	35 to 40 acres
Site Features	Football Stadium Track & Field with bleachers 2+ Baseball Fields, one with bleachers and concessions 2+ Softball Fields, one with bleachers and concessions 4 – 6 outdoor basketball courts Football practice area Marching band practice area 8 – 12 tennis courts Batting cages (softball and baseball) Field house & concessions 2+ soccer fields Room for 6 – 10 portables (12 – 20 classrooms)
Typical Target Enrollment (new construction)	2,200 students

Similar guidelines are not proposed for Options schools. Options programs are currently offered at the middle school and high school levels in Beaverton School District. Generally, individual Options programs tend to have fewer students than traditional programs at the same grade level. This allows flexibility in siting the programs. Siting possibilities include offering Options programs in existing schools, in stand-alone schools but in smaller buildings on smaller sites, or in leased buildings.



Committee Discussion and Recommendation

There was considerable discussion about the nature – and changing nature – of land supply, land costs, educational programming needs, and community expectations related to school site characteristics. The recurring message from the Committee was encouraging flexibility and innovation in how sites are selected, designed, and expanded or renovated upon. The thoughtful Committee recommendations reflect discussions of Issue Paper #7 and supplemental paper Issue Paper #7A on site characteristics.

Recommendation #6: School Site Size and Characteristics

The Committee supports the 2002 School Site Characteristics as guidelines and not absolute site standards that cannot be modified during the site selection process. The 2002 site features that are identified at each school level are appropriate and include features that the Committee believes District residents expect at schools.

The Committee recommends that the District continue to study ways to make more efficient use of school sites and build on smaller sites; that it keep current on emerging guidelines and practices of other organizations; and that it work with local jurisdictions on development code barriers to making more efficient and creative use of sites.

The Committee strongly recommends that a design workshop be held for school sites as they are included in a bond development program. The workshops should address the following:

- **Research on new school construction methods / models on small sites;**

- **Alternative ways to meet school-related and/or recreational activities on-site, off-site or in other programmatic ways;**
- **The results of the site-by-site assessment of its existing school facilities and sites to determine the optimal capacity of each existing site;**
- **Opportunities for joint partnerships with local agencies (including THPRD, libraries, non-profits, etc.) to maximize the use of school sites and facilities; and**
- **Alternative site-specific school designs / configurations developed in the design workshop with architects, urban designers, planners, and community representatives.**

The idea of jointly reviewing and applying school site guidelines and jointly searching for and acquiring sites was a recurring idea during Meetings #3, #4, and #5. Improvement in these joint efforts was requested by representatives of the City of Beaverton, Tualatin Hills Parks and Recreation District (THPRD), and BSD during these meetings.

Efficient Use of School Sites and Alternatives to New Construction

ORS 195.110 (5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(E) An analysis of:

- (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.*

Issue Papers #9 and #10 discussed at LRFPAC Meetings #4 and #5 addressed efficient use of sites and alternatives to construction.

Efficient Use of School Sites

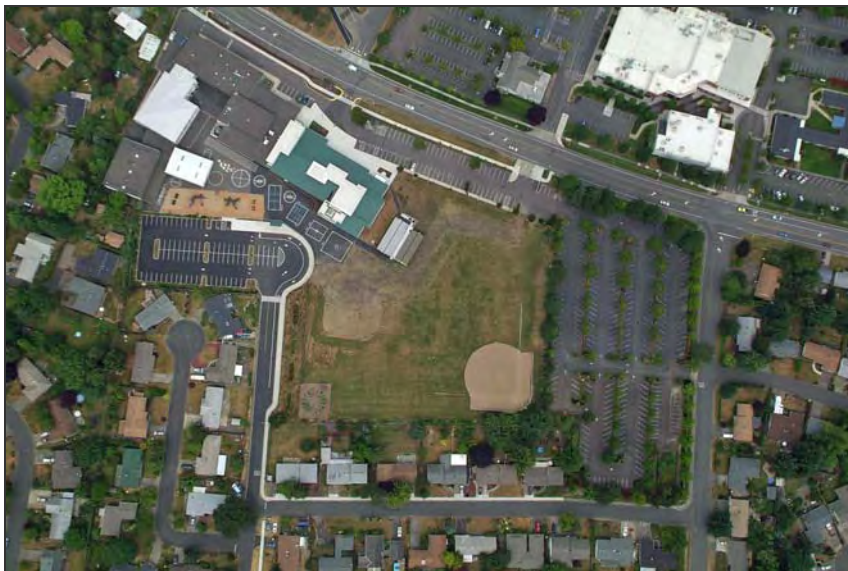
Efficiency measures that the District uses and could expand upon include the following:

- **Portable classrooms** – Portables are a relatively affordable and flexible method for responding to fluctuations in school enrollment and increasing efficient use of a school site. The use of portables needs to be balanced with other needs and constraints of a

school site, including environmental conditions, large site features such as parking and play areas/fields, development code use and setback regulations, emergency access, and core facilities, particularly the lack of restrooms in portables.

- Multi-story buildings – Multi-story buildings are typically more expensive to construct than single-story buildings. However, rising land costs have made multi-story construction and operation in the district increasingly cost-effective and multi-story buildings can provide significantly more student capacity using the same footprint as a single-story building. All recent construction in the District has been multi-story including Aloha Huber Park School (K-8) that was built in 2006, Bonny Slope Elementary School that was constructed in 2008, and Springville School (K-8) that was constructed in 2009.
- Shared use – The District already enjoys a healthy partnership for parks, sports facilities, and trails with THPRD. Other shared use partnerships that the District has and can enter into and develop include those with the City of Beaverton and other educational and community service providers. There are also opportunities for District schools to share sites with other District functions and facilities. This includes schools and school programs that share buildings on a site or have their own buildings but share the site itself. A related form of schools sharing sites is the K-8 format, which effectively combines two schools – an elementary school and a middle school. The District now has three K-8 schools.

Figure 8. Barnes Elementary School



Source: Beaverton School District

- Shared parking and parking districts – Parking typically accounts for 5-10% of a school site. A school district in Boise, Idaho has been experimenting with measures for reducing

the need for parking including transit and bicycling incentives and shared parking arrangements. Barnes Elementary School in the Beaverton School District does have a parking agreement with the Foursquare Church adjacent to its site. Figure 8 shows the location of the shared parking area (immediately to the east of the ball fields). Additional agreements like these could be pursued in the future where opportunities exist to reduce land needs (and costs).

- School site size, expansion, and conversion – Clearly one way to make more efficient use of land is to use less of it, and to make school sites smaller. While site size guidelines may be adopted for schools, these are understood to be flexible and non-traditional schools like Options schools usually have fewer students, unique programming, and can also be very flexible with site sizes and features. Non-educational uses on sites such as parking and play or open spaces may also be reduced but should only be reduced if strong transportation options exist and physical education and other outside needs can otherwise be addressed.

Efficient use of a site can also be increased by expanding uses on a site rather than acquiring new land. Hiteon Elementary School (Figure 9) in BSD provides an example of a school that has expanded and basically built out its site. A series of diagrams in Appendix E depicts the build-out of the site. On the other end of the spectrum, Rock Creek Elementary School's site could potentially accommodate both an elementary school and middle school. Alternately, the site could be converted to a middle school site if there were a need for additional middle school capacity in this portion of the district.

Figure 9. Hiteon Elementary School



Source: Beaverton School District

Alternatives to New School Construction

Schedule changes, the use of portable classrooms, and public/private partnerships were evaluated as alternatives to building new schools.

- Program changes – A single-track year-round schedule, multi-track year-round schedule, and double-shift schedule were evaluated as part of the 2002 Facility Plan for viability and desirability in potentially increasing school capacity. However, only the multi-track schedule and double-shift schedules could technically make more capacity available (from one-quarter to one-half of the school's capacity). Students would need to be transported to another location for classes when schools with multi-track year-round schedules need major maintenance or renovation work done. Double-shift schedules make it difficult to coordinate after-school and extracurricular activities.
- Portables – Portable classrooms offer solutions both for making more efficient use of a school site and providing a substitute to constructing new permanent buildings. Portables offer flexibility in responding to changes in enrollment and cost less than permanent buildings to purchase and operate. Table 4 shows the number of portable classrooms that were in use in the district in September 2009, and the corresponding student capacity that these portables provide.

Table 4. Portables in Beaverton School District, September 2009

	Number of Portable Classrooms	Student Capacity
Elementary Schools	116	2,204
Middle Schools	35	735
High Schools	39	897
Options	22	506
Total	212	4,342

Portables tend to lack some of the architectural quality and special features or amenities that permanent classrooms have, particularly core facilities like restrooms, and some schools have significantly more portables than other schools. These differences may make a difference in student performance. However, the District has not found conclusive evidence linking more portables to lower student achievement.

- Public/private partnerships – The District may be able to use public/private partnerships on a limited basis for special programs, Options programs, small programs, and temporary situations. The local educational service district currently operates two academies in a Beaverton area office park. Portland Public Schools is arranging to lease

ground floor space in a condominium building for K-2 classes to relieve overcrowding at the area's single traditional elementary school. This space will not have a library, gymnasium, or cafeteria, which is not unusual for alternative programs or private schools but is unusual for traditional schools. The school will have to make alternate arrangements for these services.

Committee Discussion and Recommendations

These topics heavily overlapped with discussions about school site characteristics and the amount of needed land for future growth.

Recommendation #10: Efficient Use of School Sites, and Recommendation #11: Alternatives to New Construction

The LRFPAC recommends that the District continue with and expand upon existing practices to make efficient use of school sites and minimize the need for new construction, including using portable classrooms, constructing multi-story buildings, sharing uses, sharing parking, and expanding upon, building out, or converting uses on a site.

Since portables are a measure used for both making efficient use of the site and avoiding new construction, some Committee members felt that portables should be more closely studied in the future. Perhaps guidelines and policies should be established about when portable classrooms become, in essence, permanent classrooms and when portable buildings should be replaced with permanent buildings.

The LRFPAC believes that the District has a valuable asset in its existing school facilities and sites. Committee members feel that these sites may be able to be used more efficiently and effectively to address future student enrollment growth.

Recommendation #7: Site-by-Site Capacity Analysis

In order to explore maximum efficient use, the Committee recommends that the District conduct a site-by-site assessment of its existing school facilities and sites to estimate the optimal capacity of each site before the next bond program.

This would help determine if expanding existing facilities is feasible and may defer the need for the construction of new school facilities. The Committee understands that this analysis is an intensive effort, and does not expect that it could be completed this year for inclusion in the 2025 plan. However, the site-by-site analysis should be conducted prior to the District convening a School Construction Bond Program Committee.

Committee members expect existing practices in making efficient use of site and implementing alternatives to new construction to be enhanced by findings from the recommended site-by-site capacity analyses, site-specific design workshops, by market pressures of a limited supply of large sites, and by the move toward infill and redevelopment.

Land Needs and Determination of Adequate Supply

ORS 195.110 (5)(b) Based on the elements described in paragraph (a) of this subsection and applicable laws and rules, the school facility plan must also include an analysis of the land required for the 10-year period covered by the plan

Estimates of sites and land needed to accommodate enrollment growth through 2025 were reported in Issue Paper #12 and discussed at LRFPAC Meeting #5. The estimated need was based on enrollment projections and the amount of school facility capacity needed to accommodate the projections through 2025. This need was compared to the number and location of sites already owned by the District to yield a net site need through 2025. The net site need was translated to estimated amounts of needed land using site size ranges agreed upon during discussion about school site characteristics.

General locations where sites and land would be needed were estimated using information regarding buildable land and expected growth provided by the City of Beaverton and Washington County. Earlier analysis about schools nearing or exceeding capacity also helped identify these general locations of need.

With the exception of physical education requirements that may increase facility and land needs (discussed below), these estimates of needed sites and land constitute the upper limit of what will be needed through 2025. It is understood that the Committee has discussed and recommended other means of potentially increasing capacity such as more efficient use of school sites, site-by-site capacity analyses, building expansions, use of portable classrooms, attendance boundary adjustments, and findings from design workshops.



Table 5 presents a summary of the estimated number of school sites, acres of land, and general locations needed for enrollment growth through 2025. The estimates vary according to the number of Options schools that are provided and whether the existing number of portable classrooms are retained or removed.

Beaverton School District 2010 Facilities Plan Update

Table 5. Facility and Land Needs for Beaverton School District

School Level	2020 Facility Needs (2002 Plan)	Capacity Supply Activity 2002 - 2010	2025 Facility Needs (2010 Plan)	New Sites Needed (With Portables)*	Amount of Land Needed (With Portables)	New Sites Needed (Without Portables)**	Amount of Land Needed (Without Portables)	Location
Elementary School (K-8)	11	<ul style="list-style-type: none"> Built 3 new elementary schools (including two K-8 schools) Expanded capacity at 5 elementary schools by a total of approx. 100,000 sf Bought 2 elementary school sites in the North Bethany area Acquired 14.9 acres adjacent to Westview 	3	1	7-10 acres	3	21-30 acres	<ul style="list-style-type: none"> District owns 3 school sites in north District (north of Sunset Highway) Need 1 elementary school site central or south District for anticipated growth by 2025
Middle School (6-8)	4	<ul style="list-style-type: none"> No new middle schools built (two K – 8 schools built) Built 2 Options schools Acquired Teufel site 	1	0	0	0 OR 1	0 OR 15-20 acres	<ul style="list-style-type: none"> District owns 1 middle school site in north District (Teufel) No additional middle school sites needed by 2025

Beaverton School District 2010 Facilities Plan Update

School Level	2020 Facility Needs (2002 Plan)	Capacity Supply Activity 2002 - 2010	2025 Facility Needs (2010 Plan)	New Sites Needed (With Portables)*	Amount of Land Needed (With Portables)	New Sites Needed (Without Portables)**	Amount of Land Needed (Without Portables)	Location
High School (9-12)	1	<ul style="list-style-type: none"> No new high schools built Built 2 Options schools Expanded capacity at 3 high schools by a total of 74,615 sf Added 16 classrooms at 2 high schools within existing space 	1 OR 2	1 OR 2	35-40 acres OR 70-80 acres	1 OR 2	35-40 acres OR 70-80 acres	<ul style="list-style-type: none"> District does not own vacant high school sites Potential need for up two high school sites, one in north and one in south District for anticipated growth by 2025
Options School (6-12)	1	<ul style="list-style-type: none"> Built 2 Options schools 	2 OR 0	2 OR 0	To be determined	2 OR 0	To be determined	<ul style="list-style-type: none"> District owns a site at NW 174th/Westview To be determined
TOTAL	17		7 OR 6	4 OR 3	42-50 acres + sites for 2 Options schools OR 77-90 acres (no new sites for Options schools) + ancillary facility sites	6	56-70 acres + sites for 2 Options schools OR 106-130 acres (no new sites for Options schools) + ancillary facility sites	

Beaverton School District 2010 Facilities Plan Update

Note: # OR # signifies the number of schools needed depending on whether Options schools are built. In the sequence, the first number represents the number of schools needed if 2 Options schools are provided and the second number represents the number of schools if Options schools are not provided.

* **“With portables”** – This is the estimate of the number of new sites needed given existing total capacity, which includes portable classrooms currently in use in the district.

** **“Without portables”** – This is the estimate of the number of new sites needed given existing permanent capacity, which excludes portable classrooms currently in use in the district and use of them in the planning horizon.

This estimate of needed sites and land does not account for ancillary facility needs. As identified earlier, there has not been a systematic way of assessing ancillary facility adequacy or scaling future ancillary facility needs to growth in enrollment. The LRFPAC has urged for this kind of assessment to be done prior to developing projects for the next bond program.

Special Program Needs

Facility needs of special programs were addressed in Issue Paper #8 and LRFPAC Meeting #4. The District currently provides such special program services as Options schools and programs, Special Education, English as a Second Language, Head Start, Early Intervention, Full-Day Kindergarten, and Pre-Kindergarten.

While most of the students in special programs are captured in enrollment projections and some special program facility needs should be captured in the District's school capacity formula, some special programs, particularly physical education and full-day kindergarten and recently adopted requirements, may significantly increase the facility needs for District special programs. The following is a series of tables providing data on other special program projections and needs estimated by the District.

Options Programs

Currently, the space available in District Options schools and programs does not meet the demand by students. For example, only about 25% of all



students applying to ACMA for the 2010-2011 school year will be able to attend because of school space limitations. We expect the demand for Options schools and programs to be maintained at levels similar to the present. Table 6 shows the projected enrollment for stand-alone Options schools and comprehensive schools in 2025. If new Options facilities are not provided, this enrollment should be allocated to comprehensive middle and high schools.

Table 6. Estimated Projected Comprehensive and Options School Enrollments

	2025 Total Students*	2025 Approximate Comprehensive School Students	2025 Approximate Stand-Alone Options School Students**
Middle School	10,372	9,024	1,348
High School	13,449	11,566	1,883

*Does not include students attending Alternative Programs or Early College

**Stand-alone Options schools are ISB, ACMA, HSS, and Merlo Station

Special Education

About 11% of BSD students qualify for some type of special education services. Out of this 11%, in 2009-10 about 2.0% of elementary and 2.8% of middle and high school students needed the services of self-contained special education (SCSE) classrooms. These percentages have remained fairly constant for a number of years, and are projected to remain so. Every school reserves at least one classroom for Special Educations purposes: a Resource Room. Some schools provide additional specific SCSE services, such as programs for learning and other significant disabilities. As new schools are constructed, specific SCSE needs are incorporated into building design. SCSE classrooms are not counted in the BSD capacity model as a part of a school's total available capacity.

Students in these programs are not included in PSU's forecasted enrollments but have been incorporated into projected classroom needs (see Table 7). These projections do not attempt to account for potential changes to SCSE enrollment resulting from changes to Special Education legislation or changes to individual Special Education programs within the District.

Table 7. Actual 2009-2010 and Projected 2025 SCSE Needs

Level	PSU 2025 Student Forecast	2009-2010 SCSE Enrollment	2009-2010 SCSE Classrooms	Projected 2025 SCSE Enrollment	Projected 2025 SCSE Needs (Classrooms)	Projected 2025 SCSE Needs (Sq. Ft.)
Elementary	20,839	355	71	417	83	75,020
Middle	10,372	240	42	290	51	45,741
High	13,449	306	28	377	34	31,012
Total	44,660	901	141	1,084	170	152,642

Full-Day Kindergarten

Full-day kindergarten is currently offered at 15 BSD elementary schools, but is not mandated by state or federal law. There is potential in the future for a legislative mandate of full-day programs, likely within the next 5 years. If the program were to be mandated, BSD would see a large increase in classroom needs. There are 33 full-day, 56 morning kindergarten, and 43 afternoon kindergarten classrooms in use for the 2009-2010 school year. With a mandate to offer a full day program, BSD would need an additional 50 classrooms just to meet current kindergarten needs, for a total of 89 full-day kindergarten classrooms. In order to meet the needs of the 2025 school year, an additional 82 classrooms would be needed.

English as a Second Language

The English as a Second Language (ESL) program is mandated by federal law, and requires dedicated classrooms in every BSD school. In 2009-2010, a total of 83 BSD classrooms were used specifically for ESL purposes, to serve approximately 5,420 students. Using 900 square feet as an average classroom size, Table 8 shows the 2009-2010 BSD capacity used for ESL purposes. Like classrooms used for SCSE programs, ESL classrooms are not counted as part of total building capacity. District-wide, students needing ESL services are anticipated to increase by an additional 15% by 2025.

Table 8. 2009-2010 ESL Classroom Needs

School Level	Total 2009-2010 Capacity (square feet)	2009-2010 ESL Enrollment	Classrooms Dedicated to ELL Purposes	Square Footage Dedicated to ELL	ELL Percentage of Total Capacity
Elementary*	2,012,047	3,847	43	38,700	1.9%
Middle**	1,016,538	804	22	19,800	1.9%
High***	1,315,673	692	14	12,600	1.0%
Options****	247,888	90	4	3,600	1.5%
Total	4,592,146	5,433	83	74,700	6.3%

*Elementary enrollment and capacity include 6-8 graders at Aloha Huber and Raleigh Hills K-8

**Middle enrollment does not include students 6-8 graders at K-8 schools, ISB, ACMA, or HSS

***High enrollment only includes students enrolled at comprehensive high schools

****Options school enrollment includes middle and high students at ACMA, HSS, ISB, and Merlo Station

Physical Education Requirements

In 2007, the Oregon Legislature enacted House Bill 3141, which calls for a minimum of 150 minutes of weekly physical activity for each student in grades K-5 and 225 minutes

Beaverton School District 2010 Facilities Plan Update

for students in grades 6-8, effective July 1, 2017. A BSD report to the school board (Beaverton School District Wellness Policy EFA: Annual Report to the School Board 2008-2009) evaluated the adequacy of existing facilities with existing enrollments (2008-2009 school year) to comply with HB 3141. Estimates of facilities needed in 2025 were derived from this data and are shown in Table 9.

Table 9. Anticipated 2025 Physical Education Needs

Type of Additional Facilities Needed			
Level	Covered Play Area	Multi-Purpose Room	Gymnasium
Elementary	3	8	14
Middle	1	4	7

School Facility Needs

Based on existing school facility capacity, anticipated needs for Special Education programs, ESL, Head Start, full-day kindergarten, and district-wide enrollment projections, an overall capacity deficit is expected by 2025. New physical education requirements, effective in 2017, may significantly increase this deficit. The estimated deficit (by number of students) is presented in Table 10. If new school facilities were assumed to address this deficit, then the number of new facilities shown in Table 11 would be needed.

Table 10. Estimated 2025 Capacity Needs by Program and Deficit by School Level

	Total Space (sq.ft.)	Projected Student Space Needs* (sq.ft.)	Projected SpEd Capacity Needs (sq.ft.)	Projected Additional Full-Day KG Needs (sq.ft.)	Projected ESL Capacity Needs (sq.ft.)	Projected Head Start Capacity Needs (sq.ft.)	Capacity Surplus or Deficit (sq.ft.)	Capacity Surplus or Deficit (Students)
Elementary**	2,232,447	2,152,936	74,700	73,800	45,900	9,000	-123,889	-1,239
Middle**	1,110,618	1,059,023	45,000	N/A	24,300	N/A	-17,705	-138
High	1,422,833	1,632,242	30,600	N/A	16,200	N/A	-256,209	-1,817
Options	319,234	532,660	N/A	N/A	4,500	N/A	-217,926	-1,546
Total	5,085,132	5,376,861	150,300	73,800	90,900	9,000	-615,729	-4,740

*Does not include students in SCSE programs

**Space needs for students in 6-8 programs at Raleigh Hills, Aloha Huber, and Springville are counted in the elementary section

Table 11. Estimated 2025 Capacity Deficit and Facility Needs by School Level

	Total Space (sq.ft.)	2025 Projected Capacity Deficit (sq.ft.)	2025 Projected Capacity Deficit (Students)	2025 Projected Capacity Deficit (Number of Schools)	Additional PE Facilities Needed by 2025: Gymnasiums	Additional PE Facilities Needed by 2025: Multi- Purpose Rooms	Additional PE Facilities Needed by 2025: Covered Play Areas
Elementary**	2,115,767	-263,909	-2,639	-3(-3)**	17+	11+	5+
Middle**	1,047,545	-93,737	-732 (-1389)	-1(-1)***	8+	5+	2+
High	1,330,116	-356,066	-2525 (-3401)	-1(-2)***	N/A	N/A	N/A
Options	316,296	-216,364	-1534 (0)	-2 (0)***	N/A	N/A	N/A
Total	4,809,725	-930,076	-7430	-7(-6)***	25+	16+	7+

*Does not include students in BGE programs

**Space needs for students in 6-8 programs at Raleigh Hills, Aloha Huber, and Springville are counted in the elementary section

***If 2 new Options schools are not created by 2025, the middle and high school students deficits can be allocated accordingly

+The total number of physical education facilities needed by 2025 is not known at this time. Further study is needed to determine the actual usage potential of existing PE facilities, and whether these facilities can meet PE needs of existing BGD schools using both current and future enrollments

Committee Discussion and Recommendation

The number of schools needed by 2025, as well as the number of sites and associated amount of land has been estimated during this 2010 Facility Plan update process. Nevertheless, the Committee acknowledges that further study of this topic will be needed before school construction bond planning can take place. Part of that future study entails completing the Committee's earlier recommendation that site-by-site assessments of existing school facilities and sites be done to determine the optimal capacity of each site and the ability to expand on existing sites before building new school facilities.

The LRFAC also understands that there are facility needs associated with Special Education, ESL, full-day kindergarten, physical education, and Options programs, as presented in Issue Paper #8 (Appendix B), and that more study will need to be done in order to more accurately estimate the needs through 2025.

Recommendation #9: Special Program Considerations

The Committee recommends that the District continue to assess the implications of future PE requirements for schools, and prepare a plan on complying with the requirements. This plan should be completed by 2014, and should include the following elements:

- **A detailed description of each existing campus' physical education facilities.**
- **A determination of whether each campus' facilities will meet the needs of 2017 student enrollment.**

- **If facilities are inadequate to meet campus needs, the additional facilities that will be required to meet standards.**
- **Approximate cost of additional facility requirements.**

Recommendation #13: Number of New School Facilities Needed

Given the caveat that site-by-site assessments and further study of the facility implications of physical education requirements still need to be conducted, the LRFPAC concurs with the staff's estimates of enrollment capacity deficiencies and the number of schools needed by 2025.

- **Elementary schools: 3 new schools needed.**
- **Middle schools: 1 new school needed.**
- **High schools: 2 new schools needed if no Options schools are built, 1 new school needed if Options schools are built.**
- **Options schools: 2 new schools or no new schools if 2 new high schools are built.**

The number of new facilities that are estimated to be needed by 2025 will vary according to whether new Options schools are built.

Recommendation #14: Number of New School Sites Needed

Similarly, the LRFPAC concurs with staff estimates of the amount of new school sites and land needed through 2025, and general location of the site needs, given that implications of physical education requirements will need further study, and that these numbers basically represent the upper limit of the amount of new sites and land needed due to design, efficiency, and market measures and pressures that help the District make more efficient use of its sites.

- **Elementary schools: 1 new school site needed in Central or South District, 7-10 acres.**
- **Middle schools: No additional sites needed.**
- **High schools: Up to 2 new school sites needed, one in North District and one in South District, 35-40 acres or 70-80 acres.**

- **Options schools: Up to 2 new school sites needed, location and site sizes to be determined.**

Financing Tools to For Capital Programs

ORS 195.110 (5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

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

Financing for Capital Programs was addressed in Issue Paper #11 and discussed at LRFPAC Meeting #5. The District's Chief Financial Officer presented the array of financing tools currently at the District's disposal.

- General Obligation Bonds (GO Bonds) – Municipal debt in the form of a voter-approved property tax levy. GO Bonds have funded most of the District's capital projects and construction, including land acquisition, new school construction, and major renovation and improvements.
- Construction Excise Tax (CET) – The CET was passed by the 2007 State Legislature (SB 1036) allowing school districts to impose a CET on new structures and expansions. The District can collect \$1 per square foot of new residential construction and 50¢ per square foot of new non-residential construction that can be used for capital projects and construction.



- Full Faith and Credit Obligation Bonds (FFCO) - Similar to the GO Bond, the District can issue a municipal debt security by authorization from the School Board. The debt is repaid using resources other than a tax levy.
- Certificate of Participation Bond (COP) – Like a GO bond, a COP is a loan from investors to the District. Unlike GO bonds, however, COP's are not backed by the full faith and credit of the District.
- Build America Bonds (BAB) – Build America Bonds are a taxable municipal bond created under the federal American Recovery and Reinvestment Act (ARRA) of 2009

that offer special tax credits and subsidies for either the bond holder or the bond issuer.

- Qualified Zone Academy Bonds (QZAB's) - QZAB's are non-interest-bearing bonds, and the borrowing school district pays the principal back in 15 years. QZAB's are part of an annual federal program that is appropriated by Congress, administered by the Oregon Department of Education, and available only to schools where 35 percent or more of students are eligible for free or reduced-price school meals.
- Local Option Levy (LOL) – The Measure 50 property tax limit (1997) is usually less than the Measure 5 tax limit (1990), and the difference is generally referred to as the tax “gap.” The 1997 Legislature approved school use of the gap for a voter approved local option property tax. Districts may use a LOL for operating and capital expenditure.
- Miscellaneous donations and grants.

The District is currently significantly below its maximum allowable level of indebtedness. However, the real maximum level of indebtedness is the one for which the District can get voter approval.

Committee Discussion and Recommendation

The District’s Chief Financial Officer advised that optimally new bonds are issued when old bonds or other debts are being retired. Issue Paper #11 presents levy rate projections for District taxpayers and there are rate drops from \$2.11 per \$1,000 of assessed value to \$1.40 projected in 2015, and to \$.68 in 2019 if no new debt is issued.

Recommendation #12: Financing Tools for Capital Facilities

As recommended by staff, the LRFPAC agrees that a consistent debt level should be maintained. Based on BSD levy rate projections, 2015 and 2019 are years when rates are projected to significantly drop and, thus, offer opportunities for proposing/passing new bonds in order to maintain a consistent debt level for taxpayers.

It is also recommended that the District explore lease/sales as an option when the District cannot otherwise economically raise capital. Its feasibility for District purposes should be further studied.

Appendix A

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)(a) of this section do not apply to a city or a county that contains less than 10 percent of the total population of the large school district.

(4) The large school district shall select a representative to meet and confer with a representative of the city or county, as described in subsection (2)(b) of this section, to accomplish the planning required by ORS 195.020 and shall notify the city or county of the selected representative. The city or county shall provide the facilities and set the time for the planning activities. The representatives shall meet at least twice each year, unless all representatives agree in writing to another schedule, and make a written summary of issues discussed and proposed actions.

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

(A) Population projections by school age group.

(B) Identification by the city or county and by the large school district of desirable school sites.

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

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

(E) An analysis of:

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

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

(F) Ten-year capital improvement plans.

(G) Site acquisition schedules and programs.

(b) Based on the elements described in paragraph (a) of this subsection and applicable laws and rules, the school facility plan must also include an analysis of the land required for the 10-year period covered by the plan that is suitable, as a permitted or conditional use, for school facilities inside the urban growth boundary.

(6) If a large school district determines that there is an inadequate supply of suitable land for school facilities for the 10-year period covered by the school facility plan, the city or county, or both, and the large school district shall cooperate in identifying land for school facilities and take necessary actions, including, but not limited to, adopting appropriate zoning, aggregating existing lots or parcels in separate ownership, adding one or more sites designated for school facilities to an urban growth boundary, or petitioning a metropolitan service district to add one or more sites designated for school facilities to an urban growth boundary pursuant to applicable law.

(7) The school facility plan shall provide for the integration of existing city or county land dedication requirements with the needs of the large school district.

(8) The large school district shall:

(a) Identify in the school facility plan school facility needs based on population growth projections and land use designations contained in the city or county comprehensive plan; and

(b) Update the school facility plan during periodic review or more frequently by mutual agreement between the large school district and the affected city or county.

(9)(a) In the school facility plan, the district school board of a large school district may adopt objective criteria to be used by an affected city or county to determine whether adequate capacity exists to accommodate projected development. Before the adoption of the criteria, the large school district shall confer with the affected cities and counties and agree, to the extent possible, on the appropriate criteria. After a large school district formally adopts criteria for the capacity of school facilities, an affected city or county shall accept those criteria as its own for purposes of evaluating applications for a comprehensive plan amendment or for a residential land use regulation amendment.

(b) A city or county shall provide notice to an affected large school district when considering a plan or land use regulation amendment that significantly impacts school capacity. If the large school district requests, the city or county shall implement a coordinated process with the district to identify potential school sites and facilities to address the projected impacts.

(10) A school district that is not a large school district may adopt a school facility plan as described in this section in consultation with an affected city or county.

(11) The capacity of a school facility is not the basis for a development moratorium under ORS 197.505 to 197.540.

(12) This section does not confer any power to a school district to declare a building moratorium.

(13) A city or county may deny an application for residential development based on a lack of school capacity if:

(a) The issue is raised by the school district;

(b) The lack of school capacity is based on a school facility plan formally adopted under this section; and

(c) The city or county has considered options to address school capacity. [1993 c.550 §2; 1995 c.508 §1; 2001 c.876 §1; 2007 c.579 §1]

Appendix B

Issue Papers

Issue Paper #1: ORS 195.110 Background	B-1
Issue Paper #2: 2002 Facility Plan Summary	B-8
Issue Paper #3: Student Enrollment Forecasts	B-12
Issue Paper #3A: Student Enrollment Forecasts (Continued from January 13 th LRFPAC Meeting)	B-18
Issue Paper #4: School Capacity Formula	B-19
Issue Paper #4A: Existing School Capacities	B-24
Issue Paper #4B: Additional Capacity Considerations	B-33
Issue Paper #5: Existing Facilities Conditions Assessment.....	B-38
Issue Paper #6: Ancillary Facility Needs.....	B-47
Issue Paper #7: School Site Characteristics	B-49
Issue Paper #7A (Revised for Meeting #5): School Site Characteristics – LRFPAC Summary Draft Recommendation Regarding School Site Guidelines	B-53
Issue Paper #8: Special Program Considerations	B-57
Issue Paper #9: Efficient Use of School Sites.....	B-64
Issue Paper #10: Alternatives to Construction	B-71
Issue Paper #11: Financing for Capital Programs.....	B-74
Issue Paper #12: Land Needs for the Facility Plan	B-78
LRFPAC Committee Recommendations and Actions Summary-to-Date	B-83

Issue Paper #1: ORS 195.110 Background

1. *Elements of ORS 195.110*

Oregon Revised Statutes (ORS) 195.110 is the state law that requires school district facility plans. Originally enacted in 1993, the law underwent amendments in 2001 and in 2007. (See **Attachment A** for the most recent version of the statute.) As the statute stands today, “large” school districts (those with more than 2,500 students) must complete a long-term facility plan. Cities and/or counties that contain more than 10% of the population of a large school district must then adopt the facility plan as an element of their comprehensive plans. Pursuant to ORS 195.110(5), the plan must address the following topics for at least a **10-year period**:

- Population projections by school age group.
- School facility plan school facility needs based on population growth projections and land use designations contained in the city or county comprehensive plan.
- Identification by the city or county and by the large school district of desirable school sites.
- Descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district.
- Financial plans to meet school facility needs, including an analysis of available tools to ensure facility needs are met.
- An analysis of alternatives to new school construction and major renovation.
- An analysis of measures to increase the efficient use of school sites including, but not limited to, multiple-story buildings and multipurpose use of sites.
- Ten-year capital improvement plans.
- Site acquisition schedules and programs.
- Objective criteria to be used by an affected city or county to determine whether adequate capacity exists to accommodate projected development.

The amount of land needed for facilities is based on enrollment projections, capacity of existing facilities, and site criteria such as the amenities and sizes for sites by

school level. The analysis of suitable land must first examine land within the urban growth boundary (UGB). If there is an inadequate supply of suitable land within the UGB, pursuant to ORS 195.110(6), the District and the City or County must collaborate to identify suitable land using techniques such as, but not limited to, the following:

- Change zoning for parcels;
- Assemble existing lots or parcels in separate ownership; or
- Amend the UGB – or petition a metropolitan service district to amend the UGB – to include adequate suitable land.

ORS 195.110(9)(a) allows the objective methods that the District uses for determining school capacity to be adopted by the District Board. Once adopted by the District the City and County must use them in determining whether there is sufficient capacity for projected or proposed development. While these criteria cannot be used to enact a building moratorium, a jurisdiction may deny an application for a residential development based on insufficient school capacity. ORS 195.110(13) permits the City or County to deny the application if:

- The school facility plan from which the capacity criteria was drawn has been formally adopted;
- The issue of insufficient school capacity was raised by the District; and
- The City or County has explored options to address school capacity.

2. How the District Previously Complied

Beaverton School District prepared its first facility plan in 1994 to meet the original ORS 195.110 requirements and then updated it in 2002. For that period, the District was subject to facility planning requirements because it qualified as a "high growth school district." At that time, ORS 195.110 defined high growth districts as those that had an enrollment of over 5,000 students and had an increase in student enrollment of six percent or more during the three most recent school years. The Beaverton School District qualified on both accounts.

The Beaverton School District School Facility Plan, May 2002 was prepared through a collaborative effort with community, business, parent and District representatives. This plan fulfilled the requirements of ORS 195.110. This plan was also accepted as an element of the Washington County and City of Beaverton Comprehensives Plans. The 2002 Beaverton School District Facility Plan addressed each required plan topic separately in the document. Since 2002, the Oregon Legislature has amended ORS 195.110. During this same period, the District also completed a significant expansion of its facilities to accommodate student enrollment growth. These facility expansions

were consistent with and implemented recommendations found in the 2002 Facility Plan.

Pursuant to ORS 195.110(8)(b), the plan must be updated either during Periodic Review for the relevant jurisdictions or more frequently if agreed upon by the District and the jurisdictions. The relevant jurisdictions (Washington County and Beaverton) are not currently in Periodic Review as mandated by the Department of Land Conservation and Development (DLCD). However, District staff believes that it is time to update the 2002 Facility Plan to address amendments to ORS 195.110, to update technical information on the District's school facilities, to validate the facility planning and need assumptions contained in the 2002 Facility Plan, and incorporate new student enrollment forecasts prepared by the Portland State University Population Research Center.

3. How It Applies to the 2010 Facility Plan Update

The 2007 amendments to ORS 195.110 were comprised primarily of the changes described below. The previous minimum required plan elements, however, were not changed. The 2007 amendments:

1. Changed the definition of districts subject to facility planning requirements from "high growth school districts" to "large school districts."
2. Added more requirements for school facility planning coordination between the District and affected City or County in large school districts.
3. Extended the minimum planning period from five years to 10 years.
4. Allowed District Boards to adopt capacity criteria that must then be adopted by the affected local jurisdiction and used in evaluating development.
5. Allowed the denial of residential development applications because of insufficient school capacity based upon adopted capacity criteria. (However, school capacity still may not be used to establish a building moratorium.)

These amendments are primarily associated with the topics of school enrollment, facility conditions, and facility capacity, which encompass a significant portion of the work to be accomplished with the 2010 Facility Plan update.

■ School Enrollment

Beaverton School District easily qualifies as a "large" school district according to the current statute. The intent of the plan update is to revisit the student enrollment projections and extend them from 2020 to at least 2025. Since the projections for the 2002 Facility Plan were prepared, the

UGB in Washington County has been significantly expanded in the North Bethany and Bull Mountain areas. The updated enrollment forecasts should capture these areas as well as expected growth in established areas.

- **Facility Conditions**

A number of questions can be asked and answered about facility conditions and assessments: How does the District's assessment of current facilities feed into long-range planning? What are the current methods of assessing facility condition and should additional criteria be developed to review existing facilities? Is it cost effective or even possible given programming needs to consider replacing existing facilities on existing sites through demolition and rebuilding rather than finding new property? The District has undertaken an extensive assessment of the physical conditions of its facilities and this assessment can be incorporated into the update.

- **Facility Capacity**

School facility capacity criteria, once formally adopted as part of the facility plan, become required plan and development application criteria for the affected local jurisdictions as well. The 2002 plan included a detailed capacity methodology. In the light of instructional and other program changes, it was agreed that the methodology should be reviewed and either validated or modified.

New schools have been built with funding from the approved 2006 bond measure. How this additional capacity affects previously determined future needs should be examined.

The District has been instituting instructional and/or curriculum changes. It needs to be reviewed whether changes such as shifting special education and physical education needs, full-day kindergarten, K-8 programs, or evolving Options programs generate additional facility needs. The potential for sustainable building practices and site amenities should also be reviewed in terms of additional site and facility needs.

Ancillary or support facilities can be overlooked as part of the school "facility" inventory. No new ancillary facility needs were found as part of the 2002 plan, but this should be revisited.

4. Conclusion

The current Beaverton School District Facility Plan was adopted in 2002. District staff believes that it is timely to update the 2002 Facility Plan to incorporate school construction that has occurred since 2002, recent amendments to ORS 195.110 and

new information on facility conditions and enrollment and development patterns within the District's boundary. While District staff views this planning effort as an update to the 2002 Facility Plan there are issues and data that were not considered in 2002 which will need to be addressed by this update. It is, therefore, appropriate to revisit the 2002 Facility Plan information base and policy assumptions to develop the 2010 Facility to both comply with ORS 195.110 and to reflect the current policy direction of the School District as it relates to future school facility needs.

Attachment A: 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)(a) of this section do not apply to a city or a county that contains less than 10 percent of the total population of the large school district.

(4) The large school district shall select a representative to meet and confer with a representative of the city or county, as described in subsection (2)(b) of this section, to accomplish the planning required by ORS 195.020 and shall notify the city or county of the selected representative. The city or county shall provide the facilities and set the time for the planning activities. The representatives shall meet at least twice each year, unless all representatives agree in writing to another schedule, and make a written summary of issues discussed and proposed actions.

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

(A) Population projections by school age group.

(B) Identification by the city or county and by the large school district of desirable school sites.

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

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

(E) An analysis of:

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

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

(F) Ten-year capital improvement plans.

(G) Site acquisition schedules and programs.

(b) Based on the elements described in paragraph (a) of this subsection and applicable laws and rules, the school facility plan must also include an analysis of the land required for the 10-year period covered by the plan that is suitable, as a permitted or conditional use, for school facilities inside the urban growth boundary.

(6) If a large school district determines that there is an inadequate supply of suitable land for school facilities for the 10-year period covered by the school facility plan, the city or county, or both, and the large school district shall cooperate in identifying land for school facilities and take necessary actions, including, but not limited to, adopting appropriate zoning, aggregating existing lots or parcels in

separate ownership, adding one or more sites designated for school facilities to an urban growth boundary, or petitioning a metropolitan service district to add one or more sites designated for school facilities to an urban growth boundary pursuant to applicable law.

(7) The school facility plan shall provide for the integration of existing city or county land dedication requirements with the needs of the large school district.

(8) The large school district shall:

(a) Identify in the school facility plan school facility needs based on population growth projections and land use designations contained in the city or county comprehensive plan; and

(b) Update the school facility plan during periodic review or more frequently by mutual agreement between the large school district and the affected city or county.

(9)(a) In the school facility plan, the district school board of a large school district may adopt objective criteria to be used by an affected city or county to determine whether adequate capacity exists to accommodate projected development. Before the adoption of the criteria, the large school district shall confer with the affected cities and counties and agree, to the extent possible, on the appropriate criteria. After a large school district formally adopts criteria for the capacity of school facilities, an affected city or county shall accept those criteria as its own for purposes of evaluating applications for a comprehensive plan amendment or for a residential land use regulation amendment.

(b) A city or county shall provide notice to an affected large school district when considering a plan or land use regulation amendment that significantly impacts school capacity. If the large school district requests, the city or county shall implement a coordinated process with the district to identify potential school sites and facilities to address the projected impacts.

(10) A school district that is not a large school district may adopt a school facility plan as described in this section in consultation with an affected city or county.

(11) The capacity of a school facility is not the basis for a development moratorium under ORS 197.505 to 197.540.

(12) This section does not confer any power to a school district to declare a building moratorium.

(13) A city or county may deny an application for residential development based on a lack of school capacity if:

(a) The issue is raised by the school district;

(b) The lack of school capacity is based on a school facility plan formally adopted under this section; and

(c) The city or county has considered options to address school capacity. [1993 c.550 §2; 1995 c.508 §1; 2001 c.876 §1; 2007 c.579 §1]

Note: Section 3, chapter 579, Oregon Laws 2007, provides:

Sec. 3. A school district that is a large school district as defined in ORS 195.110 on the effective date of this 2007 Act [January 1, 2008] shall complete a school facility plan within two years after the effective date of this 2007 Act. [2007 c.579 §3]

Issue Paper #2: 2002 Facility Plan Summary

1. *Major Points of the 2002 Facility Plan*

In order to meet the facility needs of a steadily growing student population and meet the requirements of ORS 195.110, the District convened a Facilities Plan Committee (FPC) in November 2001. Members of the Committee were appointed from a wide range of community interests and provided insight throughout the facility planning effort. During 2002 the Facility Plan Committee met on six occasions to review information on demographics, existing facilities, anticipated facility needs, land requirements, options for more efficient use of facilities and school sites, financial plans, and how the District's plans fit in with local and regional growth management strategies. The Committee's discussions led to the recommendations included in the 2002 Beaverton School District Facility Plan.

The findings and recommendations in the 2002 Facility Plan included:

- Enrollment growth will continue to make the Beaverton School District a high growth district under the statutory definition. The enrollment forecast for 2007 is 38,020 students. By 2020, the District's enrollment is projected to reach 49,430 students.
- By 2020, the District will need eleven (11) new elementary schools, four (4) new middle schools, one (1) comprehensive high school and additional options or magnet schools at the middle and high school levels.
- The total land needs for new facilities through 2020 is 187 to 250 acres of additional land.
- The capital expansion and renovation needs of the District, when adjusted for inflation average over \$50 million per year through 2020.
- Fourteen percent (14%) of the District's facilities are currently in poor condition, 24% in fair condition and 62% are in good, very good or excellent condition.
- The average age of District buildings is nearly 40 years. The oldest buildings are nearly 90 years old.
- The District's target site sizes for new schools, 10 acres for elementary, 20 for middle and 40 for high schools, remain valid and reasonable targets. Given the constrained land supply, recognition is given that we may have to accept 7 to 10 acres for elementary, 15 to 20 acres for middle schools and 35 to 40 acres for high schools. The District's target site sizes for new schools were adjusted to allow for a range of sizes per school level:

- 7 to 10 acres for elementary schools
 - 15 to 20 acres for middle schools
 - 35 to 40 acres for high schools.
- The District should continue to participate in partnerships for facilities such as those existing with the city of Beaverton, Tualatin Hills Parks and Recreation District and Tualatin Valley Community Access Television.
 - The District should continue its effort to work with the planning jurisdictions to improve the Comprehensive Plans and Land Development Codes to better accommodate District needs and anticipate continuing facility renovation and new school construction.
 - The District should work with the Legislature and community to ensure adequate, stable and predictable funding for the operations of its school facilities.
 - The District should work with the Legislature and community to develop additional options for funding capital expansion and renovation needs.
 - The District should begin analysis of the need for a capital bond measure in time for voter consideration in the November 2004 election.
 - The District's periodic facility plan update process and Long-Range Facility Planning Committee should continue to involve a broad representation of community interests and perspectives.

A copy of the 2002 Facility Plan can be viewed on the District's facility plan website: <http://www.beaverton.k12.or.us/home/departments/facilities/long-range-planning-and-development/2010-long-range-facilities-planning-advisory-committee/>.

2. How the District has used the 2002 Facility Plan

Facility Improvements

The 2002 Facility Plan recommended the construction of eleven (11) new elementary schools, four (4) new middle schools and one (1) comprehensive high school by 2020. These additional facility needs were based on the enrollment projections and capacity and site criteria recommendations included in the 2002 Facility Plan. This number of needed facilities plus the site criteria and five-year capital improvement plan that were adopted as part of the 2002 Facility Plan informed the \$195 million construction bond measure that District voters approved in November 2006. The bond measure led to the construction of two new schools, Bonny Slope Elementary School and Springville K-8 School as well as significant classroom / facility expansions at a number of schools throughout the District. The 2006 Bond will ultimately provide funding for over 100 other educational and

physical facility improvement projects throughout the District. A link for the list of the 2006 bond projects can be found at the District's website at:

<http://www.beaverton.k12.or.us/home/departments/facilities/long-range-planning-and-development/2010-long-range-facilities-planning-advisory-committee/>.

Coordination

Following adoption of the 2002 Facility Plan by the Beaverton School District Board, the document was incorporated into the Comprehensive Plans of Washington County and City of Beaverton as an element to their respective public facilities plans. Since 2002, District staff has monitored development activity in the local jurisdictions within the District's boundary and has provided comments relating to school capacity when requested. The local jurisdiction must notify the District when considering an amendment to a plan or land use regulation that significantly impacts schools according to adopted capacity criteria.

District staff has also used the 2002 Facility Plan to proactively participate in land use planning efforts such as the North Bethany Concept Plan to insure that school sites are considered during the land use planning process.

The 2007 amendments to ORS 195.110 added two more substantive requirements for coordination between school districts and local jurisdictions:

- The affected local jurisdiction(s) must meet with the large school district, or a district representative, twice yearly (or at other agreed upon frequencies) to address facility planning.
- Given adopted capacity criteria, inadequate school capacity can be the grounds for a local jurisdiction to deny a residential development application, but inadequate capacity still is not grounds for enacting a building moratorium.

This 2010 Facility Plan update will address these two new requirements for coordination and describe how this coordination will occur over time.

3. Relation to Future Bond Program

As noted, the 2002 Facility Plan was used as the foundation for developing the project recommendations for the successful 2006 school construction bond program. Determining the project list and costs for the 2006 bond was the responsibility of the District's School Bond Committee that was convened in 2005 / 2006. Forming a bond measure committee and program is a separate effort from updating the facility plan, but they are related. Primarily they are related in that the facility plan identifies the capital needs for the district over the at least next 10 years. Taking a 10-year view, including preparation of a 10-year capital improvement program (CIP), is

required for facility planning by ORS 195.110. The 2007 amendments to the statute changed this from a five-year horizon.

For now, the District has considered convening a bond committee and developing a bond program within the next five years. The 2010 update of the facility plan will still be current and relevant to this work. It will identify what new facilities will be needed from 2010 to 2025, as well as what needs there are at existing facilities for that same period.

The District's annual Building Conditions Assessment (BCA) will provide estimated costs for the observed and projected needs of existing facilities. As required by ORS 195.110(5), a financial plan must be part of the facility plan covering all facility needs. The financial plan can rely on the BCA for estimated costs for existing facility needs, but the BCA does not provide assessments or cost estimates for facility modernization or new construction. Cost estimates will need to be determined for these needs and be combined with the BCA cost estimates for the 2010 Facility Plan financial plan. A future bond committee and bond program will be able to draw cost information from the financial plan.

4. Conclusion

The 2002 Facility Plan complied with all the statutory requirements of the time. It presented enrollment projections for a continually growing district, established facility capacity and site criteria, assessed existing facility conditions, and estimated the need for many new elementary schools as well as several other school facilities, equating to about 200 acres of needed land, through 2020.

Since completing the 2002 plan, the UGB has been locally expanded, a bond measure was passed for the District in 2006, enrollment has continued to grow, and the statute governing facility planning – ORS 195.110 – was amended. In light of all this, the facility plan is being updated with a focus on updating enrollment projections, re-assessing facility conditions, reviewing existing school facility capacity criteria, and updating estimates of projected facility and land needs given updated enrollment projections, any changes to capacity or site criteria, new capacity that has come online, changing instructional and program needs, and conditions of ancillary facilities that support school operations. The 2010 update is intended to continue with and build upon these purposes.

Issue Paper #3: Student Enrollment Forecasts

1. Background

As mandated by ORS 195.110(6)(a)(A), school facility plans must include "population projections by school age group." Further, 195.110(9)(a) states that a district "shall 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...". As such, student enrollment forecasts comprise an important component of the Facility Plan.

Projecting future enrollments is critical when determining whether new school facilities need to be constructed. There are many decisions that need to be made when planning new facilities – where and the time frame in which facilities will be needed and how large they should be are but a few. If projected enrollments do not indicate a need for new or remodeled facilities, the significant costs of construction can be avoided. The Beaverton School District uses two types of enrollment projections to help determine short and long term District facility needs as noted below.

2. Why this is Relevant to the Facility Plan

Enrollment projections are used to determine whether the District will need to construct or purchase additional facilities for students within a given time frame. ORS 195.110 provides that if a (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 (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."

Therefore, determining and reporting projected enrollments are a critical element of ORS 195.110 and the Beaverton School District's Facility Plan.

3. Beaverton School District Enrollment Projections

The Beaverton School District uses two types of enrollment projections: short-term (annual) projections, developed by the District Demographer for use in determining school staffing and capacity available to a school on a yearly basis, and long-term (multi-year) forecasts, developed by the Portland State University Population Research Center and used for determining long-term facility needs.

Annual Projections

Annual projections are developed to help plan school staffing, program staffing, class sizes, and potential boundary adjustments. The District develops annual enrollment projections for grades 1-12 using three types of information: cohort survival history, current and projected housing development, and overall economic picture. Cohort survival is a commonly used demographic technique that looks at the number of students in a given grade or series of grades (called a “cohort”), and determines how many of those students will move up to the next grade or school level. Cohort survival in a given area is affected by in- and out-migration of families in response to economic climate, the type of housing available (i.e., single family units vs. multiple family units), and general mobility of the population. Because there are no previous years’ “cohorts” to compare classes with, kindergarten projections are generated using birth rates and BSD “capture” rates of eligible births in Washington County.

The Beaverton School District works closely with local cities and counties to monitor residential development that may bring new children into its boundaries. The District evaluates the student impact of the residential development proposals with regard to available capacity of its schools, current enrollment, and projected student impact of approved, though not yet constructed, dwelling units. The number of students projected from a development is obtained using student generation factors, which are determined by counting the number of students generated by similar previous developments.

While the past two years showed an extremely small gain and a small enrollment loss to BSD, respectively, in 2009-2010 the District added over 500 students, and preliminary BSD enrollment projections for 2010 indicate light growth at all school levels, with a total projected enrollment increase of 320 (about 0.8% growth).

Long-Range Projections

The purpose of long-range enrollment forecasting is to track long term population and enrollment trends in the district, with an eye towards planning for eventual District facility needs. The Portland State University Population Center has provided 6 sets of long-term projections for BSD over the past 18 years. The most recent series of projections was completed in November 2008, and provides low, medium, and high growth scenarios through 2025. The medium growth scenario is considered the “most likely” scenario because the underlying assumptions relative to fertility, housing, and migration rates in PSU’s medium scenario data model have resulted in forecasts that have most closely approximated District actual enrollments over a period of years.

PSU uses cohort survival methodology, but also incorporates the components of population fertility rates, city and regional populations, housing and household characteristics, mortality rates, city and regional planning efforts, and employment data. Staff recommends that the Long Range Facilities Planning Committee use the medium 2025 enrollment forecast for its school facility planning purposes. Figure 1 (Table 11 from the PSU report) gives the medium-range breakdown of projected enrollment through 2025 from the 2008 report.

Figure 1

Table 11 Beaverton School District <u>Middle Range Enrollment Forecasts, 2009-10 to 2025-26</u>								
	Historic		Forecast					
Grade	2007-08	2008-09	2009-10	2010-11	2015-16	2020-21	2025-26	
K	2,607	2,775	2,715	2,675	2,912	3,091	3,246	
1	2,936	2,886	3,010	2,982	3,190	3,387	3,559	
2	2,957	2,873	2,891	3,019	3,153	3,358	3,537	
3	2,867	2,935	2,878	2,900	3,102	3,337	3,519	
4	2,856	2,849	2,939	2,886	3,049	3,320	3,501	
5	2,733	2,833	2,853	2,946	3,014	3,294	3,477	
6	2,748	2,785	2,865	2,888	3,091	3,298	3,484	
7	2,757	2,749	2,789	2,872	3,126	3,257	3,455	
8	2,820	2,714	2,753	2,797	3,001	3,201	3,433	
9	2,817	2,836	2,800	2,845	3,080	3,244	3,521	
10	2,750	2,760	2,812	2,782	3,120	3,180	3,462	
11	2,865	2,618	2,681	2,737	2,946	3,139	3,333	
12	2,674	2,587	2,498	2,560	2,787	3,021	3,133	
Total¹	36,387	36,200	36,484	36,889	39,571	42,127	44,660	
Annual change²								
		-187	284	405	536	511	507	
		-0.5%	0.8%	1.1%	1.4%	1.3%	1.2%	
K-5	16,956	17,151	17,286	17,408	18,420	19,787	20,839	
6-8	8,325	8,248	8,407	8,557	9,218	9,756	10,372	
9-12	11,106	10,801	10,791	10,924	11,933	12,584	13,449	

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

The previous long-term middle range enrollment forecast provided by PSU (completed in June 2005) had projected a 2025 total enrollment of 48,348, with annual growth of about 620 (actual annual growth for 2005 – 2009 was about 412). This indicates that even though BSD enrollment is still projected to increase over time, growth is slowing within the District.

Enrollment growth under PSU's 2008 low and high scenarios average (Figures 2 and 3) about 150 and 800 students annually, or total enrollment of 40,007 and 49,629 respectively under these two scenarios. The middle range scenario averages about 500 students annually, with a total projected 2025 enrollment of 44,660.

Below is the address for the facility plan website where there is a link to the complete Beaverton School District Population and Enrollment Forecasts, 2009-10 to 2025-2026, prepared by the Portland State University Population Research Center (November 2008). This report contains extensive information on historical and forecasted enrollment trends within the District.

<http://www.beaverton.k12.or.us/home/departments/facilities/long-range-planning-and-development/2010-long-range-facilities-planning-advisory-committee/>

Figure 2

Table 10 Beaverton School District Low Range Enrollment Forecasts, 2009-10 to 2025-26								
Grade	Historic		Forecast					
	2007-08	2008-09	2009-10	2010-11	2015-16	2020-21	2025-26	
K	2,607	2,775	2,645	2,604	2,746	2,809	2,839	
1	2,936	2,886	2,994	2,886	3,021	3,090	3,124	
2	2,957	2,873	2,888	2,997	3,002	3,076	3,118	
3	2,867	2,935	2,875	2,891	2,995	3,067	3,113	
4	2,856	2,849	2,937	2,877	2,972	3,062	3,109	
5	2,733	2,833	2,850	2,939	2,865	3,052	3,102	
6	2,748	2,785	2,862	2,880	2,935	3,069	3,121	
7	2,757	2,749	2,786	2,864	3,046	3,047	3,108	
8	2,820	2,714	2,750	2,788	2,938	3,039	3,101	
9	2,817	2,836	2,797	2,836	3,016	3,108	3,192	
10	2,750	2,760	2,810	2,773	3,057	2,972	3,154	
11	2,865	2,618	2,679	2,729	2,884	2,930	3,048	
12	2,674	2,587	2,492	2,550	2,729	2,892	2,878	
Total¹	36,387	36,200	36,365	36,614	38,206	39,213	40,007	
Annual change²		-187	165	249	318	201	159	
		-0.5%	0.5%	0.7%	0.9%	0.5%	0.4%	
K-5	16,956	17,151	17,189	17,194	17,601	18,156	18,405	
6-8	8,325	8,248	8,398	8,532	8,919	9,155	9,330	
9-12	11,106	10,801	10,778	10,888	11,686	11,902	12,272	

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

Figure 3

<p align="center">Table 12 Beaverton School District High Range Enrollment Forecasts, 2009-10 to 2025-26</p>										
Historic			Forecast							
Grade	2007-08	2008-09	2009-10	2010-11		2015-16		2020-21		2025-26
K	2,607	2,775	2,776	2,739		3,075		3,384		3,683
1	2,936	2,886	3,018	3,069		3,359		3,692		4,026
2	2,957	2,873	2,894	3,034		3,307		3,645		3,987
3	2,867	2,935	2,881	2,909		3,212		3,607		3,953
4	2,856	2,849	2,942	2,895		3,124		3,576		3,917
5	2,733	2,833	2,856	2,956		3,159		3,543		3,876
6	2,748	2,785	2,868	2,899		3,244		3,537		3,869
7	2,757	2,749	2,792	2,883		3,207		3,481		3,821
8	2,820	2,714	2,756	2,806		3,075		3,380		3,784
9	2,817	2,836	2,803	2,854		3,155		3,388		3,867
10	2,750	2,760	2,815	2,791		3,195		3,398		3,797
11	2,865	2,618	2,684	2,746		3,016		3,356		3,643
12	2,674	2,587	2,504	2,570		2,853		3,154		3,406
Total¹	36,387	36,200	36,589	37,151		40,981		45,141		49,629
<i>Annual change²</i>		-187 -0.5%	389 1.1%	562 1.5%		766 2.0%		832 1.9%		898 1.9%

K-5	16,956	17,151	17,367	17,602		19,236		21,447		23,442
6-8	8,325	8,248	8,416	8,588		9,526		10,398		11,474
9-12	11,106	10,801	10,806	10,961		12,219		13,296		14,713

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

4. Conclusion

It is recommended that the Beaverton School District use the middle range student enrollment forecast provided by the PSU Population Research Center to plan for long-term facility needs. This forecast estimates the following enrollment:

- 2009 - 2010 36,484 students
- 2015 - 2016 39,571 students
- 2020 - 2021 42,127 students
- 2025 - 2026 44,660 students.

This represents an increase of almost 8,200 students between the 2009-2010 school year and the 2025-2026 school year, or a 22.4% increase in student enrollment over this period.

Issue Paper #3A: Student Enrollment Forecasts (Continued from January 13th LRFPAC meeting)

1. *Background*

At the January 13th Long Range Facility Plan Advisory Committee meeting, discussion about student enrollment forecasts led to a number of outstanding questions. The Committee requested additional information before making a final recommendation about what 2025 enrollment forecast(s) should be used in the 2010 Facility Plan. Accordingly, the District has made arrangements for Charles Rynerson with the Portland State University Population Research Center to attend the February 10th Committee meeting to provide additional background on the topic of student enrollment forecasting in general and the Beaverton School District enrollment forecasts specifically.

Agenda Item #3 is devoted to this topic. The District has asked Charles to address the following issues:

- What is the rationale behind PSU's designation of the medium scenario as the "most likely" 2025 enrollment scenario? Information regarding historical student enrollment projections versus actual student enrollment will be presented.
- What is the methodology for arriving at the different scenarios?
- How do the forecasts account for new development occurring through infill as opposed to new development on vacant land?
- Are there implications for using a forecast range versus a single enrollment forecast?

Charles will provide information at the February 10th that can be included in your Briefing Books. It is important to emphasize that this discussion will address the question of **how much** student enrollment growth the District can expect – not the question of **where** the growth will occur.

The District will be seeking Committee acceptance of an enrollment forecast(s) to use in the 2010 Facility Plan. Following the January 13th LRFPAC meeting, District staff reviewed and considered the Committee's comments and concluded again that, for planning purposes, the medium forecast was the most appropriate enrollment forecast. Therefore, the staff continues recommend using use the middle range student enrollment forecast provided by the PSU Population Research Center for long-term facility planning needs. The medium forecast estimates the following enrollment over the next 15 years:

- 2015 - 2016 39,571 students
- 2020 - 2021 42,127 students
- 2025 - 2026 44,660 students.

Issue Paper #3B: City of Beaverton & Washington County Population Growth Expectations

1. *Background*

At the January 13th Long Range Facility Plan Advisory Committee meeting committee representatives from both the City of Beaverton and Washington County raised issues related to expectations for future growth patterns, the type of development anticipated to occur by 2025 and implications on school facility planning. This discussion occurred as a part of the presentation on Student Enrollment Forecasts. Following the meeting, District staff had an opportunity to discuss these items with Steve Sparks (City of Beaverton and Steve Kelley (Washington County) with an eye towards asking them to present more detailed information at the February 10th LRFPAC meeting.

Agenda Item #4 is a presentation from both Steve and Steve on their perspectives of future population growth patterns within their respective jurisdictions. We have asked them to provide information to the Committee that describes:

- Areas where they see the most opportunity for future residential growth;
- Where vacant land is available for future growth;
- Where Infill Development will likely occur; and
- Thoughts on the implications for school facility planning.

The material for their presentation was not available in time to include in the Committee packet one week in advance of your meeting. They will bring copies of their presentation materials to the February 10th meeting.

Issue Paper #4: School Capacity Formula

1. **Background**

School facility plans for large school districts (those containing 2,500 or more students) are mandated by ORS 195.110. There are three sections of ORS 195.110 that refer to or depend upon the determination of school capacity.

- A. ORS 195.110(9)(a) states that:
“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. ORS 195.110 (11) states:
“The capacity of a school facility is not the basis for a development moratorium under ORS 197.505 to 197.540.”
- C. ORS 195.110 (13) (a-c) states:
*“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.”*

The method(s) employed by a large school district to determine school capacity are, therefore, a critical element of an adopted School Facility Plan.

2. **Why this is Relevant to the Facility Plan**

The determination of school capacity is important for both short-term and long-term school facility planning. In the short term, the Beaverton School District works closely with the Cities of Beaverton, Hillsboro, Portland, and Tigard, and Washington and Multnomah Counties to monitor residential development that may impact school facilities. As an essential service provider for Washington County, the Beaverton School District is tasked with issuing a Statement of Service Availability for all residential development within its attendance

boundaries. The District evaluates the student impact of the residential development proposal with regard to available capacity of its schools, current enrollment, and projected student impact of approved, though not yet built, dwelling units. While, as noted in ORS 195.110, 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 formally adopted school facility plan, and c) the city or county has considered options to address school capacity, ORS 195.110 "...does not confer any power to a school district to declare a building moratorium." The cumulative impact of the rapid residential development that has occurred for the past decade has imparted challenges on the District as a service provider to provide necessary capacity for the education of its students.

In the long-term, school facility plans include forecasts of future facility capacity requirements. For large Districts such as Beaverton, this analysis usually translates into future new construction needs – either through expansion of existing facilities or construction of new facilities. One of the necessary inputs to this work is an estimate of the student capacity of existing school buildings. This same factor is important in the scoping of future new capacity construction projects.

3. *Beaverton School District Current Formula*

There are numerous methods employed by other districts, both within and outside Oregon, to calculate school capacity. These include:

- A core capacity model with capacity determined by building code or educational specifications;
- A model which multiplies the number of teaching stations by the number of student stations by a predefined utilization factor; and
- A number of students per classroom ratio model.

Other items such as provisions for treating capacity used for special education purposes differently than regular classes and physical education space also factor into methods for determining school capacity.

The current Beaverton School District model (adopted with the 2002 Facility Plan) for calculating available capacity is based upon total building gross square footage, minus space used for specialized programs, divided by a square footage per student factor. Attachment A provides the formula and further details.

4. *Analysis of School Capacity Models by the Committee*

In anticipation of the 2010 School Facility Plan update, a Beaverton School District Committee reviewed a multitude of school capacity models to either validate the current method or suggest modifications to the method. District staff undertook an extensive review of the current method of determining school

capacity to determine whether a different method might better serve the District. A committee composed of staff from teaching and learning, facilities, plus one principal from each school level, studied a variety of capacity methods used by other districts and tested the application of selected alternatives on 10 Beaverton School District schools. Most models were rejected for District use due to lack of objectivity, degree of complexity, and a failure to account for special programs such as Special Education, Head Start, and ESL. One model was selected, “Number of Classrooms”, for further investigation and testing using Beaverton school data. The key findings of this review are noted below:

- Approaches reviewed are listed on the table at Attachment B. Schools used for testing alternative models were 3 elementary schools, 3 middle schools, and 4 high schools. Based upon the pros and cons of each of these approaches, two approaches were selected for testing:
 - Number of Classrooms approach
 - Square footage of building area defined to be “Instructional Space”
- Exploring each of these alternatives led to the discovery of a number of drawbacks with these methods including :
 - Number of Classroom approach
 - Seemed to significantly overstate capacities
 - Variability in classroom sizes made use of a uniform approach difficult
 - Definition of a classroom was problematic and variable over time
 - Did not account for core building limitations (cafeteria, gym, etc.)
 - Neglected the value of common breakout spaces in hallways
 - Instructional Space approach
 - Seemed to significantly overstate capacities
 - Would require extensive customization for each building.

4. Conclusion

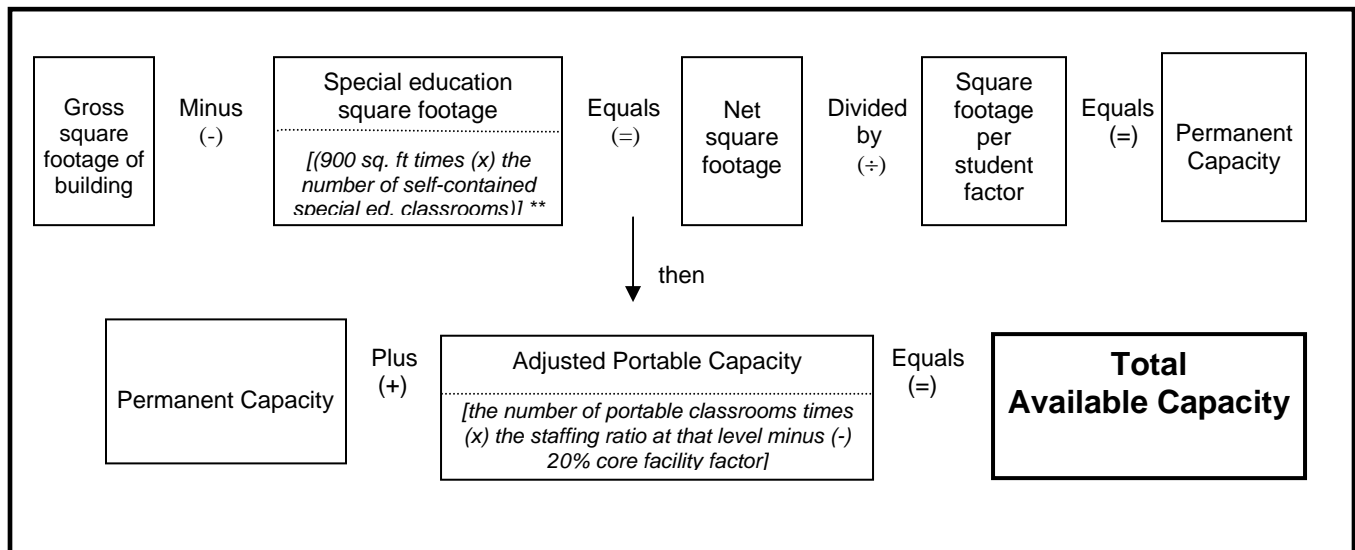
The most likely replacements for the Beaverton model, the Number of Classrooms model and Instructional Space model, significantly overestimated capacity. There was no easy way to address this problem in the formulae without extensive customization of the model, which was deemed impractical and might compromise the objectivity criterion in the statute. Based on the significant investigation into these two methods, the District Committee determined that they did not represent an improvement over the existing Beaverton model. The full committee report is available at:

http://www.beaverton.k12.or.us/pdf/facil/facil_Capacity%20for%20FacPlan%20Uodate%20FINAL.pdf

Staff reviewed the Committee's recommendation that the District continue to use the existing Beaverton model to determine school capacity with the School Board in Fall 2009. The School Board supported this approach.

Attachment A

Beaverton School District Current Objective Criteria for Determining School Capacity *



* Source: Beaverton School District Facility Plan, May 2002

** ELL & Head Start space is also deducted

Square Footage per Student Factors:

Elementary: 100 SF/student
 Middle: 128 SF/student
 High: 141 SF/student
 ACMA: 200 SF/student

Adjusted Portable Capacities:

Elementary: 19 students per classroom
 Middle: 21 students per classroom
 High: 23 students per classroom

Attachment B

Table 1. Capacity Calculation Methodologies			
Method	Description	Pros	Cons
Beaverton	(Total SF - Special Use CRs) / (SF per Student Factor), plus # students per portable	<ul style="list-style-type: none"> Current method Objective Easy to calculate Deducts space used for special programs Partly accounts for core limitations 	<ul style="list-style-type: none"> Not well-accepted by Principals Does not subtract unusable square footage (building layout efficiency issue) Does not account for core facility limitations (library, cafeteria, gym) as portables are added Not curriculum-driven Masks grade-level granularity space impacts
Number of Classrooms	Students Per Classroom Factor	<ul style="list-style-type: none"> Objective Could account for differences between elementary, MS, HS Easy to calculate Could account for (deduct) special program rooms 	<ul style="list-style-type: none"> Does not account for program / curriculum issues Requires common definition of what a classroom is Does not account for differences in classroom size between older and newer facilities Does not consider core building limitations
Core Capacity	Determined by building code or educational specifications	<ul style="list-style-type: none"> Objective Illuminates core building limitations 	<ul style="list-style-type: none"> Adding portables would not increase capacity Most people not familiar with code or spec requirements More difficult to calculate Restricts District flexibility to respond to overcrowding
Number of Teachers	Students per teacher ratio	<ul style="list-style-type: none"> Objective Easy to calculate 	<ul style="list-style-type: none"> Does not account for special programs Difficult to maintain consistency Changes frequently & far faster than building physical changes can be made undermining method's credibility Difficult to keep capacity data current Requires definition of "teacher" (vs. aide, coach, etc.)
Support Facilities	# of restrooms, field & playground space, parking spaces, etc.	<ul style="list-style-type: none"> Illuminates support facilities limitations 	<ul style="list-style-type: none"> No connection to curriculum Restricts District flexibility to respond to overcrowding Difficult to calculate
Funding	Determined by resources to fund school operation		<ul style="list-style-type: none"> Unpredictable Lots of available \$\$ could overcrowd schools Confusing
Wyoming	# Teaching Stations x # Student Stations x Defined Utilization Percentage	<ul style="list-style-type: none"> Objective 	<ul style="list-style-type: none"> No connection to curriculum / programs Doesn't account for special programs Complicated Does not consider core building limitations Requires definition of "teaching station" and "student station"
Chicago Design Capacity	# Students/classroom, varies with classroom size	<ul style="list-style-type: none"> Objective Predictable Easy to calculate Differs by school level 	<ul style="list-style-type: none"> Does not consider core building limitations Does not account for program / curriculum issues Requires common definition of what a classroom is Does not account for differences in classroom size between older and newer facilities Difficult to calculate
Phoenix, AZ	SF - Special Uses - 0.1 Corridor Factor / min adequate SF per student + design SF per student / 2		<ul style="list-style-type: none"> Very confusing, difficult to calculate Unclear how to determine minimum adequate SF Difficult to explain to laypersons Different formulae for HS and MS
Salem/Keizer, OR	ES = (regular CRs grades 1-5 x staffing ratio) + (# KG session x staffing ratio) + (12 students/SpEd CR) MS and HS = (all regular classrooms x staffing ratio) + (12 students per special needs, band and choir room)	<ul style="list-style-type: none"> Fairly predictable, assuming staffing ratios remain constant Compensates for special program uses 	<ul style="list-style-type: none"> Requires common definition of "regular classroom" Different formulae for elementary, middle & high More complicated formula Does not address portables
North Clackamas, OR	Practical capacity = # reg CRs x avg # students per CR Maximum capacity adds 2-3 students more per classroom than in practical capacity formula	<ul style="list-style-type: none"> Fairly predictable, assuming staffing ratios remain constant Gives absolute upper limit 	<ul style="list-style-type: none"> Requires common definitions of "regular classroom", "average number of students per classroom" Does not address portables Does not compensate for special program uses

Issue Paper #4A: Existing School Capacities

1. *Background*

The following provides information on enrollment capacity for elementary, middle and high schools throughout the District. District staff forecasted enrollment for the 2010/2011 school year and has compared that to existing school capacity at each level in the following manner:

- Projected Occupancy based on Permanent Capacity. Permanent capacity does not include portable classrooms.
- Project Occupancy based total Available Capacity. Available capacity does include portable classrooms.

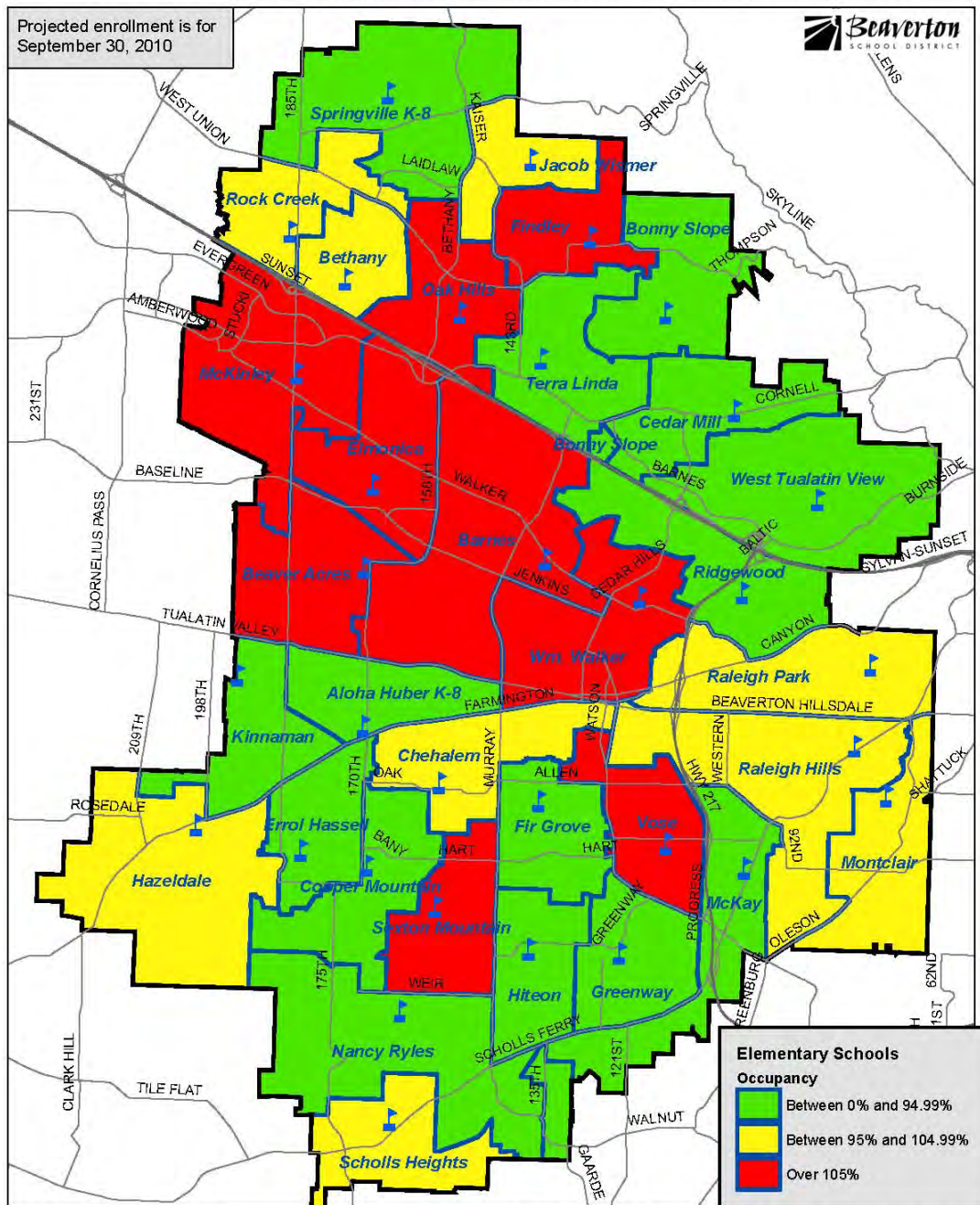
The figures and tables that follow illustrate where the District expects school occupancy under both Permanent and Available capacity conditions to be:

- Between 0% - 94.99% of occupancy
- Between 95% - 104.99% of occupancy
- Over 105% of occupancy

The impact of portables as a method to address school capacity can be clearly seen on the figures. As the tables at the end note, there are 190 portable classrooms in place at all levels throughout the District providing capacity for 3,836 students.

This topic will be discussed in Agenda Item #7 on February 10th.

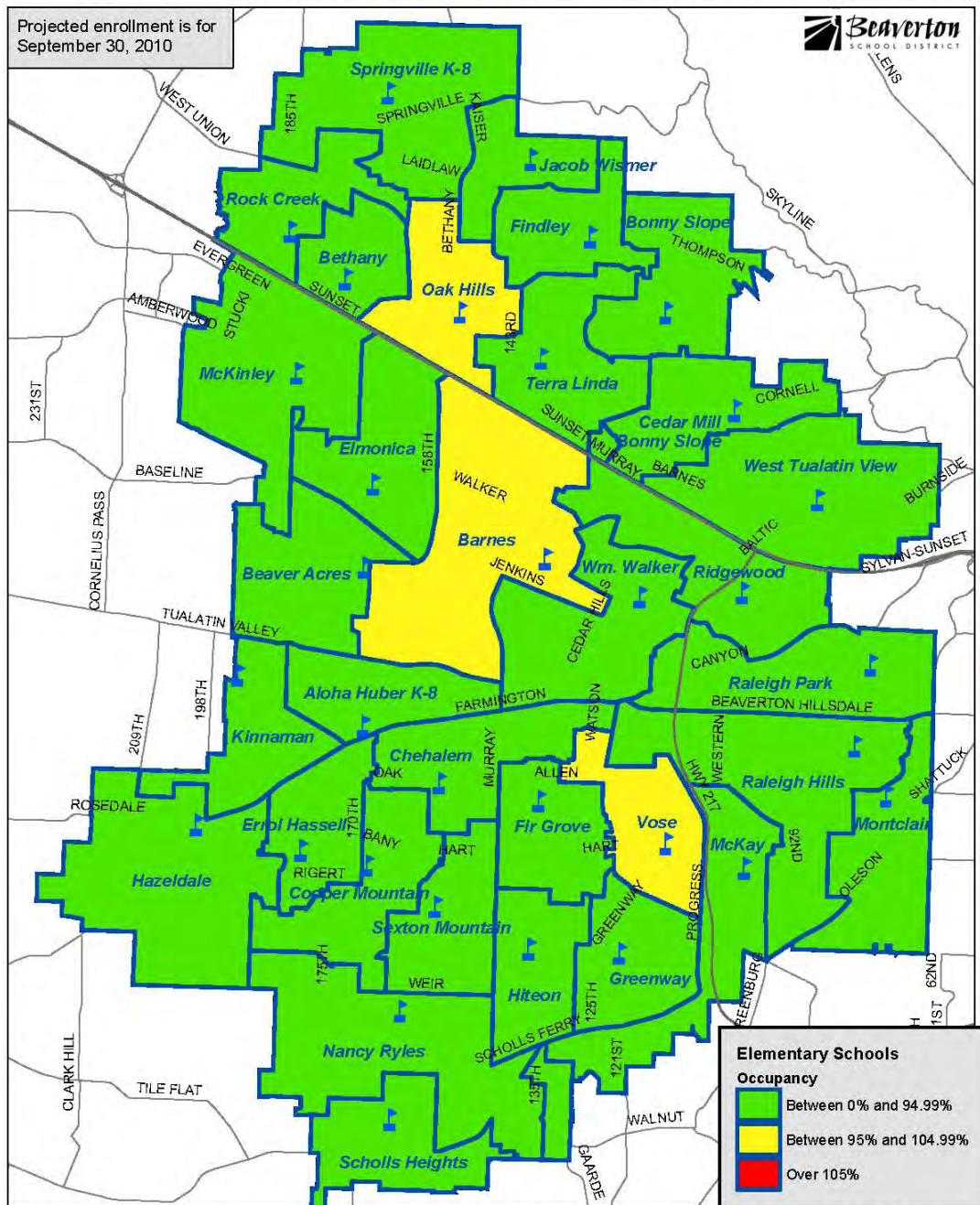
Beaverton School District 2010-2011 Boundaries 2010-11 Projected Occupation of Permanent* Capacity - Elementary



LRFPAC February 10, 2010

*Permanent capacity does not include portable classroom capacity

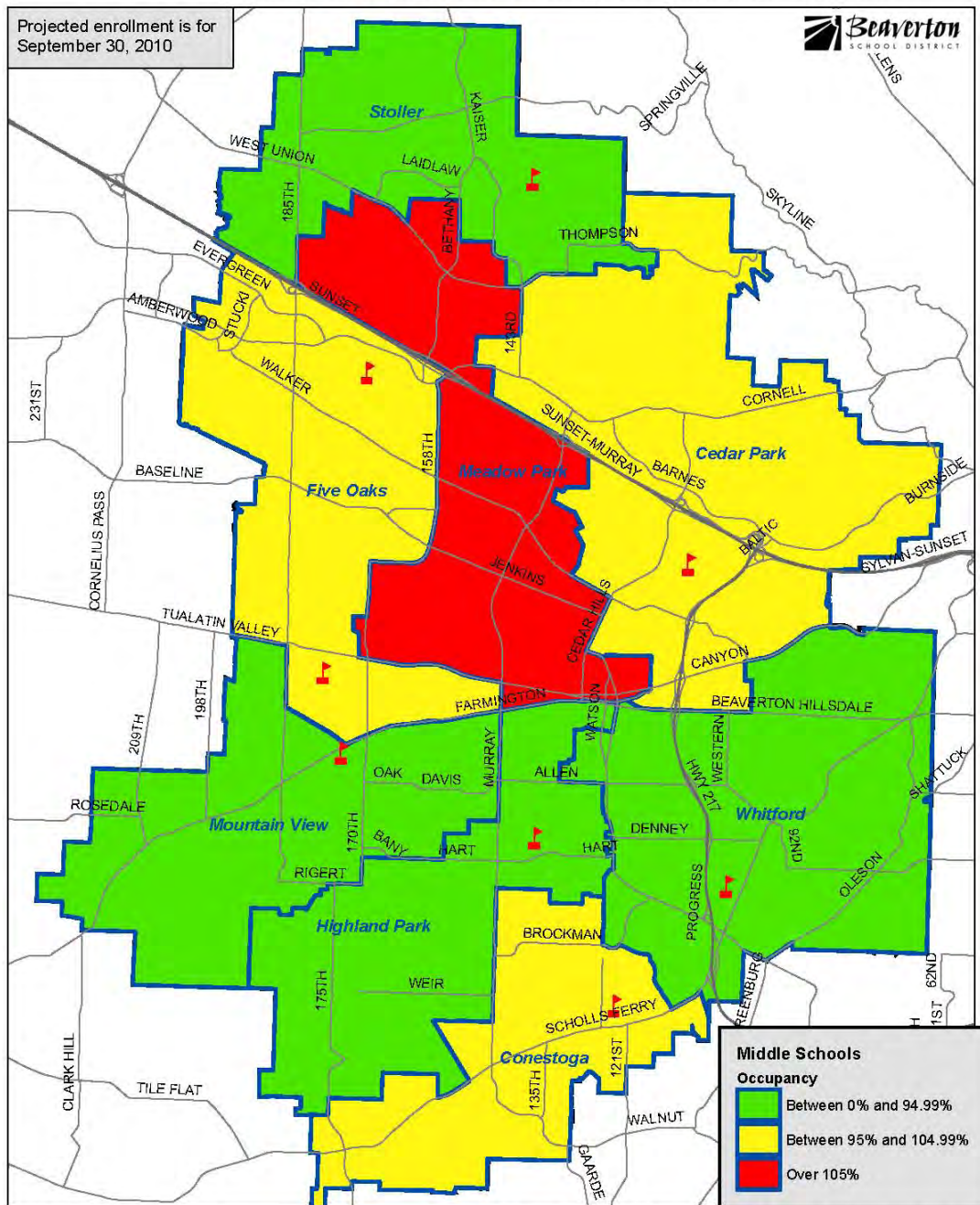
Beaverton School District 2010-2011 Boundaries 2010-11 Projected Occupation of Total Available* Capacity - Elementary



LRFPAC February 10, 2010

*Available capacity includes portable classroom capacity

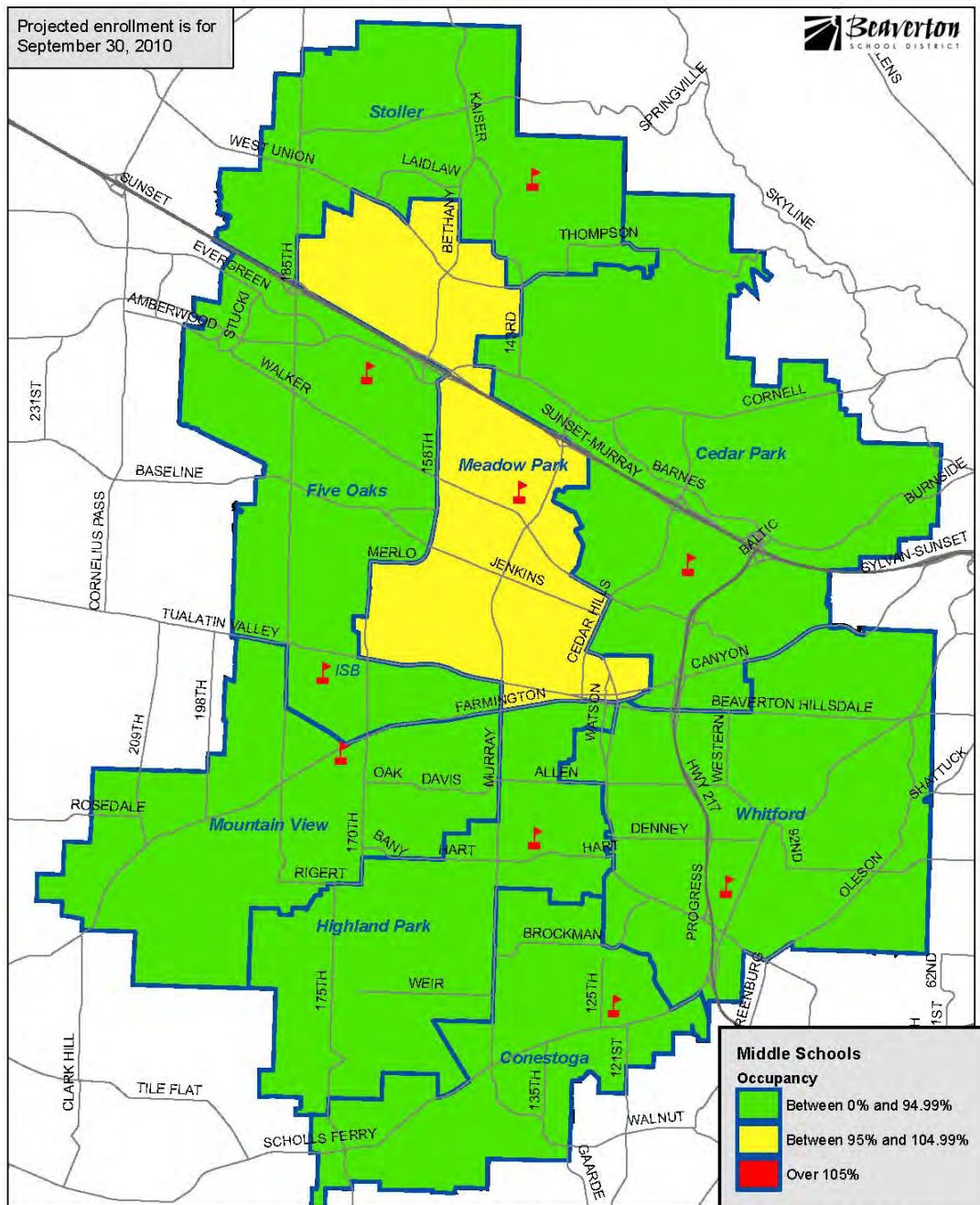
Beaverton School District 2010-2011 Boundaries **2010-11 Projected Occupation of Permanent* Capacity - Middle**



LRFPAC February 10, 2010

*Permanent capacity does not include portable classroom capacity

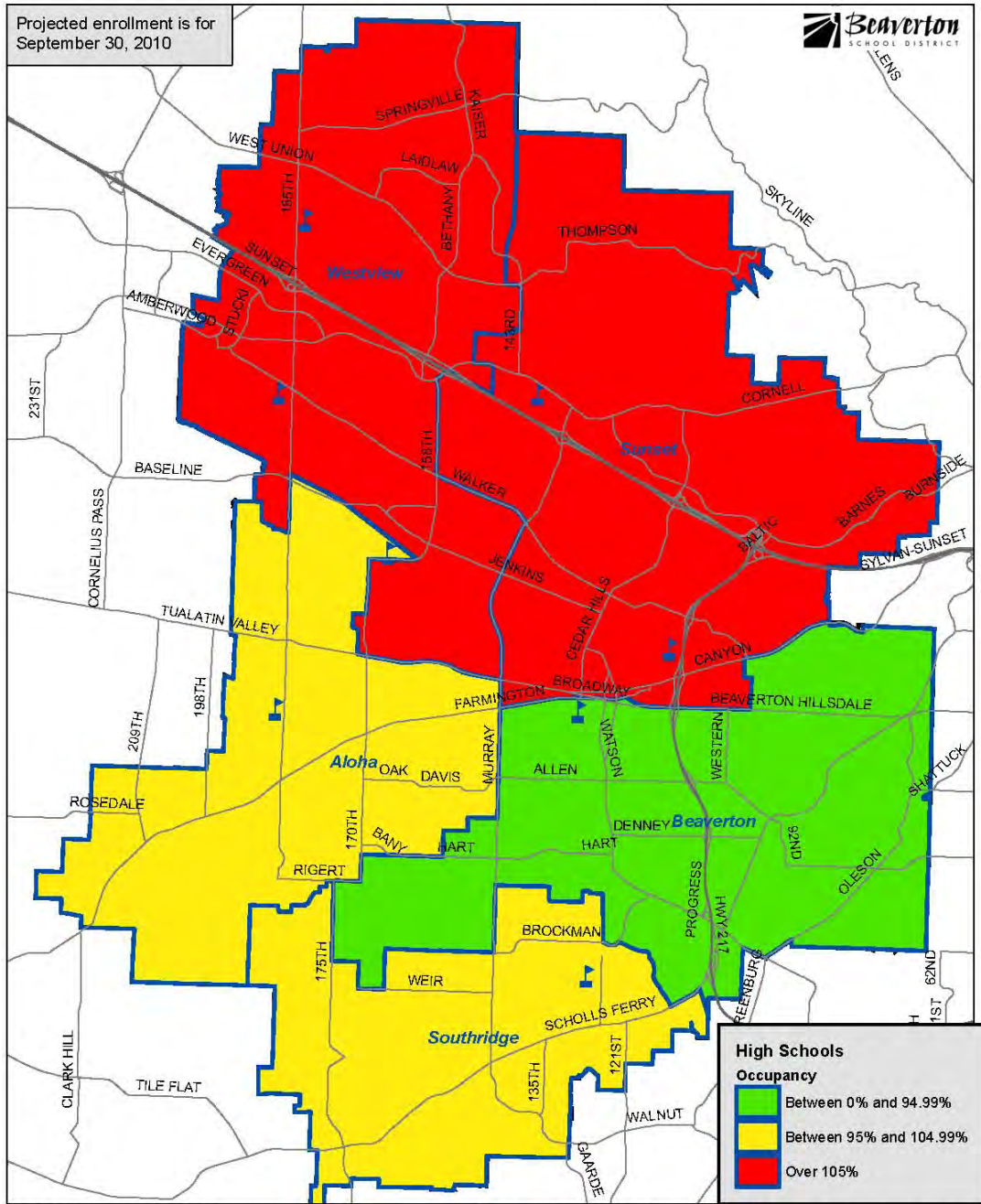
Beaverton School District 2010-2011 Boundaries **2010-11 Projected Occupation of Total Available* Capacity - Middle**



LRFPAC February 10, 2010

*Available capacity includes portable classroom capacity

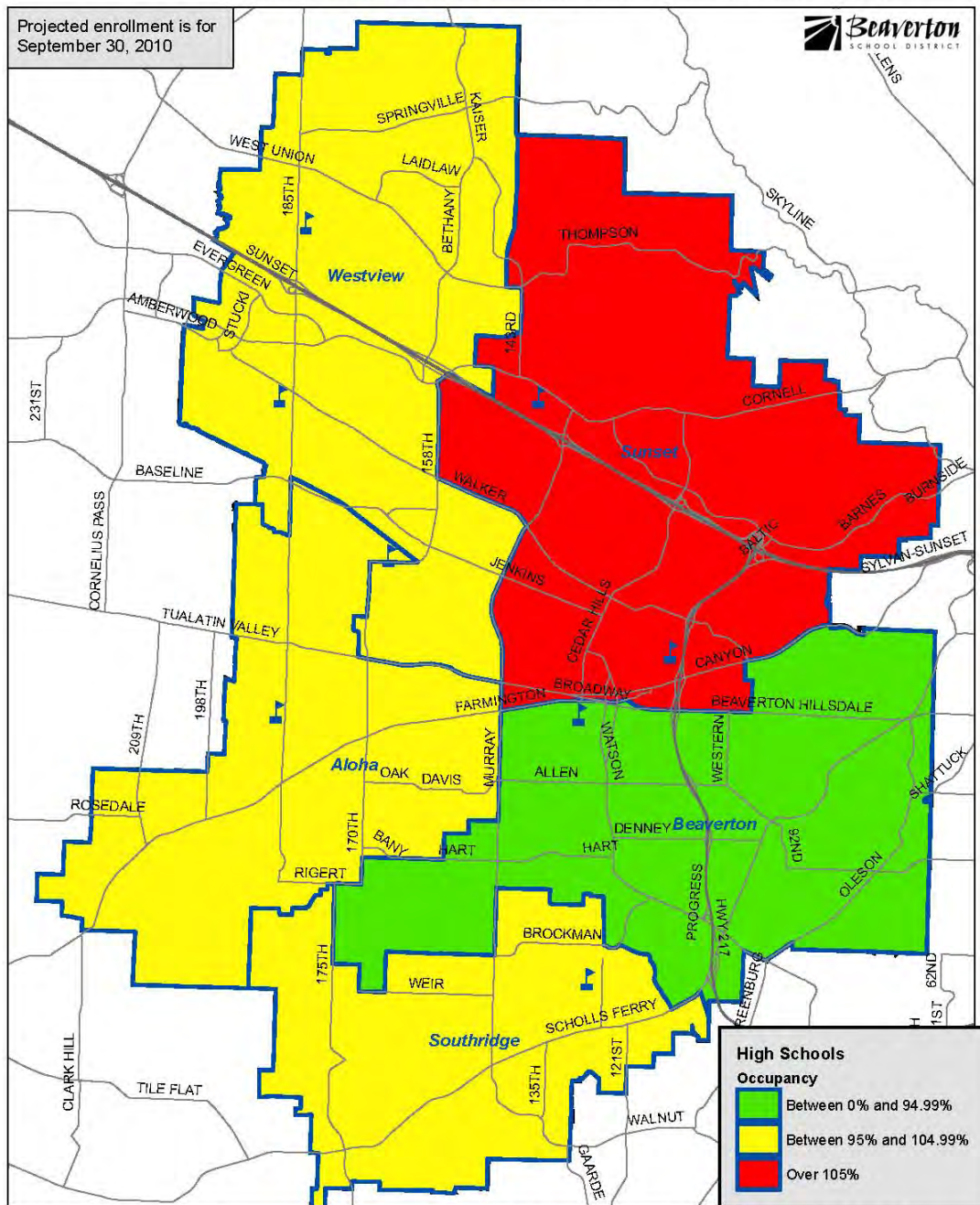
Beaverton School District 2010-2011 Boundaries
2010-11 Projected Occupation of Permanent* Capacity - High



LRFPAC February 10, 2010

*Permanent capacity does not include portable classroom capacity

Beaverton School District 2010-2011 Boundaries **2010-11 Projected Occupation of Total Available* Capacity - High**



LRFPAC February 10, 2010

*Available capacity includes portable classroom capacity

BEAVERTON SCHOOL DISTRICT

Projected Enrollment and Capacity Utilization

Elementary School	Projected Capacity 2010-2011					Projected Utilization 2010-2011			
	Perm. Capacity*	+	Adjusted Portable Capacity**	Number of Portable Classrooms	=	Available Capacity	Projected Enrollment for 09/2010*****	Projected Utilization of Permanent Capacity 09/2010	Projected Utilization of TOTAL Available Capacity 09/2010
Aloha Huber (K-8)****	1,042	+	0	0	=	1,042	955	91.7%	91.7%
Barnes	732	+	76	4	=	808	777	106.1%	96.2%
Beaver Acres	750	+	152	8	=	902	837	111.6%	92.8%
Bethany	481	+	57	3	=	538	494	102.7%	91.8%
Bonny Slope	768	+	0	0	=	768	477	62.1%	62.1%
Cedar Mill	366	+	19	1	=	385	242	66.1%	62.9%
Chehalem	498	+	76	4	=	574	495	99.4%	86.2%
Cooper Mt.	512	+	76	4	=	588	478	93.4%	81.3%
Elmonica	466	+	171	9	=	637	585	125.5%	91.8%
Errol Hassell	576	+	0	0	=	576	488	84.7%	84.7%
Findley	703	+	152	8	=	855	804	114.4%	94.0%
Fir Grove	555	+	38	2	=	593	454	81.8%	76.6%
Greenway	523	+	0	0	=	523	424	81.1%	81.1%
Hazeldale	477	+	95	5	=	572	475	99.6%	83.0%
Hiteon	736	+	0	0	=	736	624	84.8%	84.8%
Jacob Wismer	711	+	38	2	=	749	685	96.3%	91.5%
Kinnaman	763	+	38	2	=	801	526	68.9%	65.7%
McKay	415	+	0	0	=	415	379	91.3%	91.3%
McKinley	550	+	152	8	=	702	608	110.5%	86.6%
Montclair	367	+	19	1	=	386	352	95.9%	91.2%
Nancy Ryles	693	+	38	2	=	731	596	86.0%	81.5%
Oak Hills	463	+	152	8	=	615	605	130.7%	98.4%
Raleigh Hills (K-8)****	505	+	114	6	=	619	490	97.0%	79.2%
Raleigh Park	434	+	76	4	=	510	421	97.0%	82.5%
Ridgewood	470	+	38	2	=	508	372	79.1%	73.2%
Rock Creek	497	+	114	6	=	611	492	99.0%	80.5%
Scholls Heights	662	+	76	4	=	738	644	97.3%	87.3%
Sexton Mt.	628	+	114	6	=	742	673	107.2%	90.7%
Springville (K-6)****	836	+	0	0	=	836	611	73.1%	73.1%
Terra Linda	480	+	19	1	=	499	420	87.5%	84.2%
Vose	499	+	171	9	=	670	639	128.1%	95.4%
West TV	398	+	0	0	=	398	302	75.9%	75.9%
Wm. Walker	457	+	133	7	=	590	508	111.2%	86.1%
Elementary Total	19,013	+	2,204	116	=	21,217	17,932	94.3%	84.5%

* Per School Facility Plan approved by the Board on June 17, 2002. Capacity has been deducted for Self Contained Special Education, ESL, and Head Start programs.

** Per the School Facility Plan, portable capacity for elementary students is 19 students per classroom. Current portables may be reallocated.

*** Does not include students enrolled in Self Contained Special Education programs or out-of-District Special Education programs.

**** Aloha Huber, Raleigh Hills, and Springville enrollment totals include the middle school students at the school.

***** 2010-2011 proj. values include impacts from boundary changes (and anticipated grandfathering) to Hazeldale, Hiteon, Kinnaman, Nancy Ryles, Scholls Heights, and Sexton Mountain.

	Indicates a capacity utilization between 0% and 94.99%
	Indicates a capacity utilization between 95% and 104.99%
	Indicates a capacity utilization over 105%

BEAVERTON SCHOOL DISTRICT

Projected Enrollment and Capacity Utilization

	Projected Capacity 2010-2011					Projected Utilization 2010-2011			
	Perm. Capacity*	+	Adjusted Portable Capacity**	Number of Portable Classrooms	=	Available Capacity	Projected Enrollment for 09/2010	Projected Utilization of Permanent Capacity 09/2010	Projected Utilization of TOTAL Available Capacity 09/2010
Middle School									
Cedar Park	865	+	126	6	=	991	891	103.0%	89.9%
Conestoga	945	+	126	6	=	1,071	920	97.4%	85.9%
Five Oaks (& Rachel Carson)	1,047	+	189	9	=	1,236	1,058	101.1%	85.6%
Highland Park	871	+	126	6	=	997	811	93.1%	81.3%
Meadow Park (& Summa)	841	+	84	4	=	925	889	105.7%	96.1%
Mountain View	990	+	84	4	=	1,074	849	85.8%	79.1%
Stoller	1,067	+	0	0	=	1,067	990	92.8%	92.8%
Whitford (& Summa)	850	+	0	0	=	850	690	81.2%	81.2%
Middle School Total	7,476	+	735	35	=	8,211	7,098	94.9%	86.4%

* Per School Facility Plan approved by the Board on June 17, 2002. Capacity has been deducted for Self Contained Special Education, ESL, and Head Start programs.

** Per the School Facility Plan, portable capacity for middle school students is 21 students per classroom. Current portables may be reallocated.

High School	Projected Capacity 2010-2011						Projected Utilization 2010-2011		
	Perm. Capacity*	+	Adjusted Portable Capacity**	Number of Portable Classrooms	=	Available Capacity	Projected Enrollment for 09/2010	Projected Utilization of Permanent Capacity 09/2010	Projected Utilization of TOTAL Available Capacity 09/2010
Aloha	1,804	+	115	5	=	1,919	1,818	100.8%	94.7%
Beaverton	1,809	+	230	10	=	2,039	1,634	78.3%	78.3%
Southridge	1,771	+	0	0	=	1,771	1,781	100.6%	100.6%
Sunset	1,748	+	184	8	=	1,932	1,852	105.9%	105.9%
Westview	1,950	+	368	16	=	2,318	2,325	119.2%	100.3%
High School Total	9,082	+	897	39	=	9,979	9,410	100.5%	95.6%

* Per School Facility Plan approved by the Board on June 17, 2002. Capacity has been deducted for Self Contained Special Education, ESL, and Head Start programs.

** Per the School Facility Plan, portable capacity for high school students is 23 students per classroom. Current portables may be reallocated.

	Indicates a capacity utilization between 0% and 94.99%
	Indicates a capacity utilization between 95% and 104.99%
	Indicates a capacity utilization over 105%

Issue Paper #4B: Additional Capacity Considerations

The capacity formula that was adopted by Beaverton School District in the 2002 facility plan is the primary factor used in evaluating school capacity (see Issue Paper #4, presented at Meeting #2). The District prepares space utilization figures (student enrollment divided by school capacity) every month for all schools and reports them to the School Board. The maps in Attachment A illustrate the significant difference portables make to a school's total available capacity.

Space utilization percentages can be treated as the beginning of a conversation about capacity. These numbers act as a flag, indicating the location and severity of utilization issues. However, a high percentage of space utilization at one or more schools does not automatically indicate a need for construction of new school facilities or a recommendation for denial of proposed residential development in the area. The District will initiate discussions about the following possible ways of responding to crowded schools:

- **Open enrollment** – Open enrollment allows students to transfer to a school with available capacity outside of their attendance area. The District provides a list of schools offering open enrollment each winter, for enrollment the following fall. A student attending a school on open enrollment is guaranteed enrollment at that school for the duration of his or her time at that school level. If a school that has been offering open enrollment were to reach a significant level of space utilization, the District would likely terminate open enrollment at that school to relieve overcrowding.
- **Administrative transfers** – Administrative transfer allows a student to transfer to a school outside of their attendance area at any time during a school year. Transfer requests are reviewed by building administrators and approved or denied on a case-by-case basis, for one year only. An excessive number of administrative transfers to one building could result in space utilization issues for that building.
- **Portables** – As demonstrated by the attached maps, portables clearly provide significant additional capacity. Where there are no site conditions prohibiting their use (e.g. campus size, environmental constraints, or local zoning and development standards), they are a flexible means of responding to capacity needs.
- **Boundary adjustments** – Boundary adjustments can be very emotionally charged and contentious. However, they do not require capital investments. Boundary adjustments can shift students from crowded schools to others with more capacity. These efforts typically require

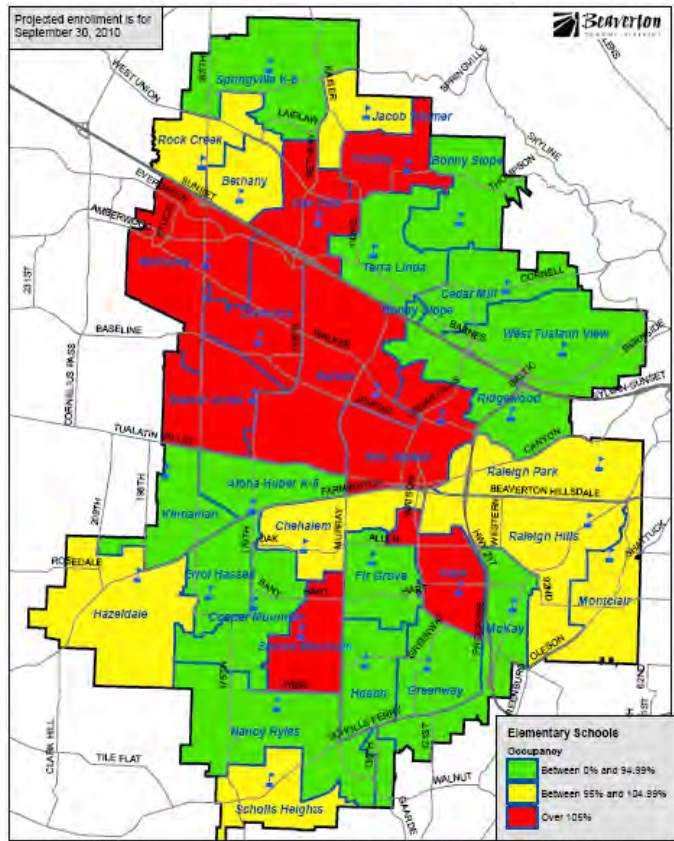
extensive work with the community, and must be planned a significant amount of time prior to the implementation date.

- **Addition/expansion** – Expanding existing building space to provide additional capacity is an option when capital construction monies are available. It costs more than providing portables and requires confidence that the growth and enrollment levels at schools in that area will be increased or sustained.
- **New construction** – Construction of new schools is the most costly of these options, as it requires the purchase of land. However, when demand is high and sustained, and enrollment projections support the investment, a new school offers a high quality teaching and learning environment, and can address significant space utilization issues.

A determination that a school is reaching a significant level of space utilization based on the school capacity formula can serve as the beginning of a conversation with local jurisdictions regarding a proposed residential application. The District can discuss potential solutions to the issue with the jurisdictions and evaluate options such as those described above before requesting that a development application be denied.

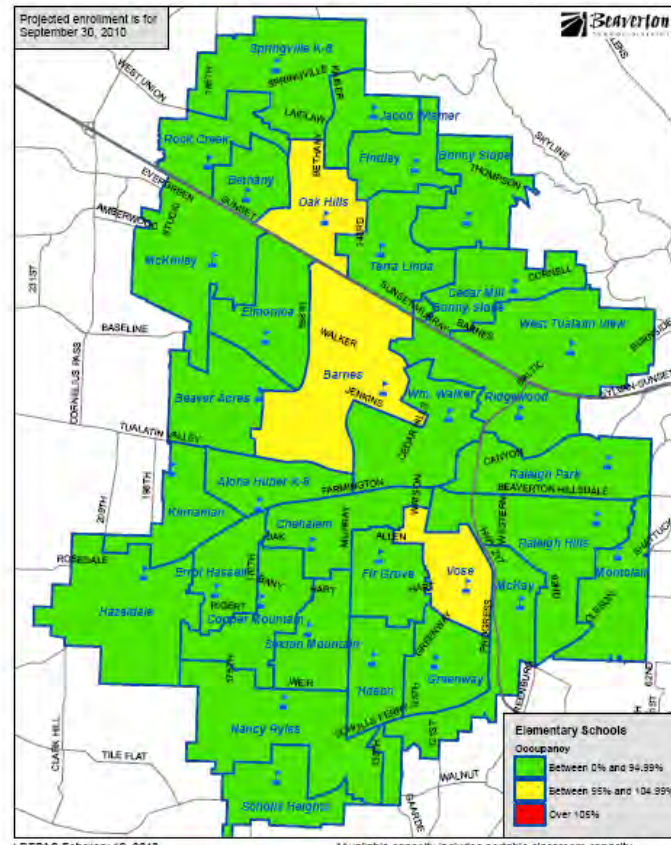
Attachment A: Maps of School Capacity

Beaverton School District 2010-2011 Boundaries
2010-11 Projected Occupation of Permanent* Capacity - Elementary



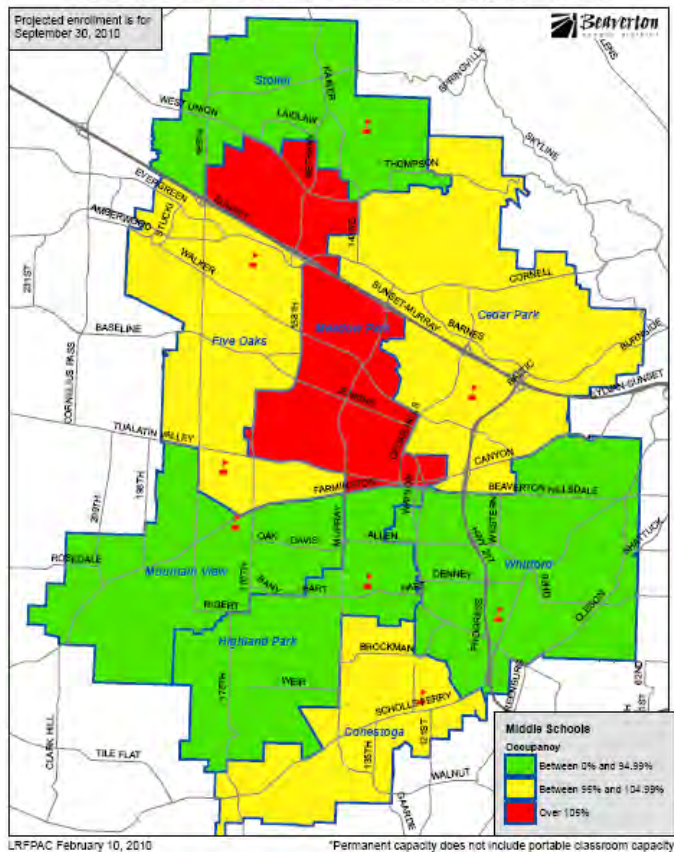
*Permanent capacity does not include portable classroom capacity

Beaverton School District 2010-2011 Boundaries
2010-11 Projected Occupation of Total Available* Capacity - Elementary

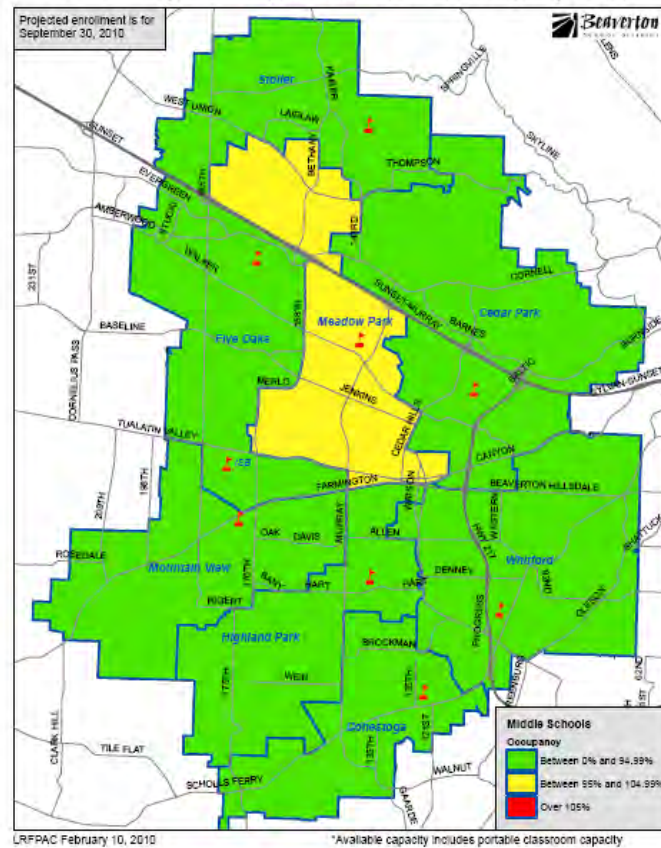


*Available capacity includes portable classroom capacity

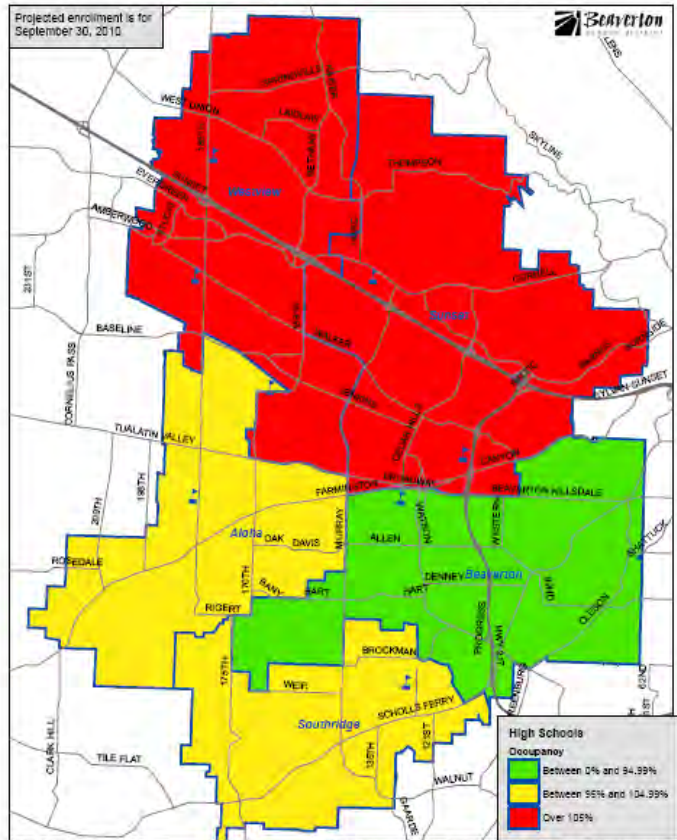
Beaverton School District 2010-2011 Boundaries
2010-11 Projected Occupation of Permanent* Capacity - Middle



Beaverton School District 2010-2011 Boundaries
2010-11 Projected Occupation of Total Available* Capacity - Middle

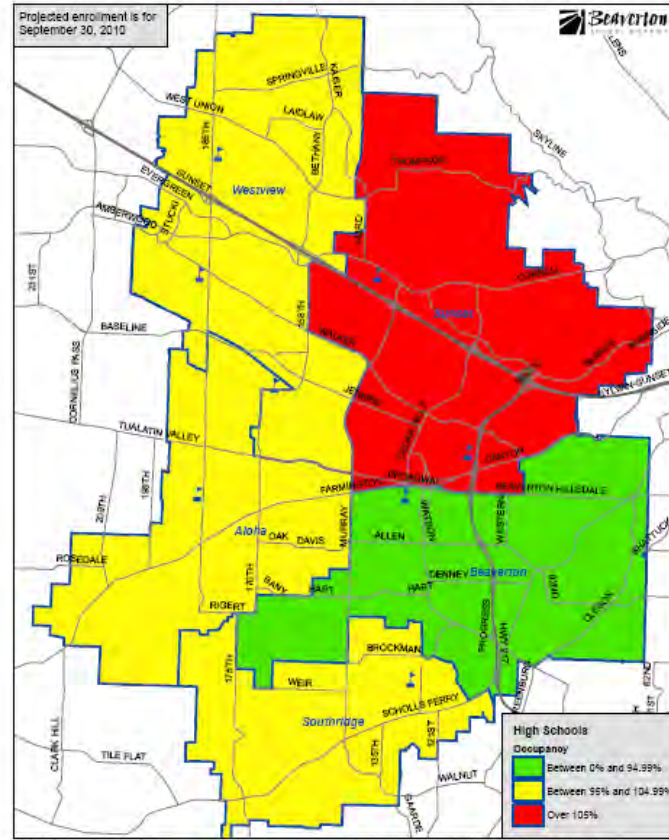


Beaverton School District 2010-2011 Boundaries
2010-11 Projected Occupation of Permanent* Capacity - High



*Permanent capacity does not include portable classroom capacity

Beaverton School District 2010-2011 Boundaries
2010-11 Projected Occupation of Total Available* Capacity - High



*Available capacity includes portable classroom capacity

Issue Paper #5: Existing Facilities Conditions Assessment

1. Background

ORS 195.110(5)(a)(D) requires that school districts include in their Facility Plan: *“Descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district.”* A new facility assessment prepared by the District is intended to provide the information mandated in this section of the statute.

The Beaverton School District is the third largest in Oregon in 2009-2010. The district maintains and operates a total building area and acreage of about **5.2 million square feet** and **808 acres**, making the District one of, if not the largest property managers in Washington County.

The District facility and real property assets are summarized below.

Type	Number of Schools	Number of Sites	Building Square Ft. *	Site Acres
Elementary	33	-	2,127,926	313
Middle	8	-	1,047,546	184
High	5	-	1,390,912	171
Options Schools **	5	-	421,840	49
Support Sites	-	8	184,558	38
Other Properties	-	4	-	53
Totals	51	-	5.2 Million	808

* Includes portable classrooms and offices

** Includes Capital Center building

2. How the District assesses and tracks condition

In response to the ORS mandate, Beaverton School District Maintenance Services Department formulated a plan for assessing the physical condition of all District facilities. The District consulted with other school districts and met with vendors and consultants and concluded that an in-house assessment approach would be effective and economical. In July of 2008, Maintenance Services conducted assessments of 10 buildings as part of a pilot process to determine the most efficient way to document facility conditions. During the pilot process Maintenance Services developed the

evaluation forms and utilized the software currently employed for managing maintenance work orders to document the condition of all District facilities. Once the process was refined, three teams finished assessments of all remaining District buildings during the summer of 2009. The assessment focused on the physical conditions of existing facilities and did not address new capacity or modernization requirements.

Each District facility was inspected and the physical condition was documented by staff. The building assessments consisted of a comprehensive evaluation of the existing building exterior, building interior, building systems, and grounds for each District facility and site. Each of the building components was rated using a scoring system reflecting the significance of deficiencies that were found to exist. The system used was based on a scale of 0-100 with assigned condition descriptions as follows:

<u>Score</u>	<u>Descriptive</u>
0-25	= good
30-45	= fair
50-65	= poor
70-100	= very poor

The scoring system was designed to allow prioritization of the required work based on the severity of each deficiency. *RS Means, Construction Cost Estimating Software*, was the resource used to develop the estimated cost to correct each deficiency identified in the assessment. This data was entered into the Maintenance Department's "Megamation" database where funding schedules can be developed based upon priority and estimated costs. This database is constantly updated as work is accomplished and facility condition information is updated based upon triennial reinspections. The RS Means cost data was increased to include estimated soft costs (planning, engineering, design, permits, etc.), a contingency, and an inflationary factor.

3. Results of conditions assessment

Table A-1 in Attachment A contains a summary of the type of work needed and costs; a total of \$93 million in deficiencies has been documented. The requirements captured are only those beyond the scope of what can be addressed in annual general fund budgets for routine maintenance work. Supplemental funding, such as construction bonds, is needed to address these deficiencies. Based upon the analysis of the severity of the deficiencies, the work has been organized into three funding phases, each five years apart. Table A-2 displays the same data by school or support facility and contrasts these costs with the estimated replacement value of each building. Overall, Beaverton School District facilities are considered to be in reasonably good condition, but 41 facilities (74%, including ancillary sites) are over 20 years old and will need various renovations in the future as documented in the building condition assessment. Continued investments in these assets are necessary as they age.

4. *Limitations of this analysis*

This assessment was conducted to identify specific physical deficiencies in District facilities that should be addressed in order to extend the life of existing assets. It does not estimate increased school capacity needs such as additional classrooms or buildings necessary to meet growing enrollment demands, nor does it address facility alterations or expansions needed to support changes in educational programs or teaching approaches. Similarly, the assessment does not consider the current functional adequacy or future expansion requirements of support facilities such as bus storage and maintenance or administrative support services such as information technology or office space.

5. *Implications for students and teachers*

According to the 21st Century School Fund, there has been a steady increase of research on the impact of public school facilities on educational achievement. This research continues to point to a small but steadily positive relationship between the quality of a public schools facility and a range of academic and community outcomes. Attachment B is a bibliography of research reports from the past several years that include very brief summaries of the studies' results. Based upon this growing body of evidence, there is ample reason to believe that quality school facilities make a positive contribution to student achievement.

6. *Conclusion*

Detailed inspections of all District schools and support facilities have established that \$93 million in renovations and improvements to existing buildings will be needed by 2025. This work would address material and physical needs and is in addition to requirements to support capacity expansion or alterations to support changes in academic program needs. It is recommended that the physical facility renovations and improvements be accomplished in three five-year phases in conjunction with new capacity construction bond programs.

Attachment A - Results of Conditions Assessment

Table A-1 Summary of Deficiencies by Building Element

Annual Rate of Inflation:	2.1%
Soft Cost:	35%
Contingency:	10%

Project Funding Budget Details

		Year 2015 Requirements	Year 2020 Requirements	Year 2025 Requirements
B20	(EXTERIOR CLOSURE)	\$3,089,546	\$3,551,713	\$8,122,069
B30	(ROOFING)	\$9,874,252	\$2,579,630	\$1,812,425
C10	(HALLWAY)	\$291,443	\$930,379	\$433,414
C11	(CAFETERIA)	\$147,390	\$204,870	\$180,856
C12	(KITCHEN)	\$128,798	\$378,606	\$79,275
C13	(OFFICES)	\$0	\$212,593	\$0
C14	(STUDENT RESTROOMS)	\$873,517	\$6,364,016	\$0
C15	(STAFF RESTROOMS)	\$66,343	\$560,033	\$0
C16	(LOCKER ROOMS)	\$0	\$32,948	\$0
D10	(CLASSROOMS)	\$1,270,885	\$1,383,418	\$955,167
D13	(ART/WORK SHOPS)	\$0	\$0	\$82,842
D14	(AUDITORIUMS)	\$0	\$441,213	\$0
D15	(AUXILLARY GYM)	\$53,706	\$100,898	\$133,257
D16	(MAIN GYM)	\$111,693	\$542,438	\$225,897
D17	(STAGE)	\$75,048	\$53,291	\$0
E10	(CONVEYING)	\$0	\$152,205	\$0
E20	(PLUMBING)	\$1,972,938	\$2,151,701	\$0
E30	(HVAC)	\$11,172,661	\$10,503,687	\$0
E40	(FIRE PROTECTION)	\$550,920	\$883,551	\$106,732
E50	(ELECTRICAL SERVICES)	\$4,532,083	\$6,400,939	\$1,490,042
E60	(GENERATORS)	\$53,834	\$119,457	\$0
F11	(ARTIFICIAL PLAYING FIELDS)	\$1,609,000	\$1,277,000	\$0
F12	(BASEBALL FIELD)	\$0	\$1,488,562	\$167,345
F13	(SOFTBALL FIELD)	\$0	\$0	\$41,836
F14	(TRACK)	\$0	\$0	\$611,564
F15	(TENNIS COURTS)	\$0	\$93,511	\$0
F20	(LANDSCAPING)	\$0	\$667,602	\$0
F30	(PARKING LOTS)	\$785,801	\$657,037	\$0
F31	(SIDEWALKS)	\$86,735	\$43,040	\$0
F40	(PLAY AREAS)	\$47,796	\$0	\$0
F41	(COVERED PLAY)	\$93,204	\$66,229	\$0
Totals		\$36,887,593	\$41,840,567	\$14,442,721

Table A-2 Summary of Deficiencies by Building with Replacement Costs

Facility	Physical Facility Deficiencies	Building Replacement Cost	Deficiencies vs. Replacement (%)
Elementary Schools			
Aloha Huber Park K-8	\$210,315	\$27,890,098	0.8%
Barnes	\$693,478	\$19,961,700	3.5%
Beaver Acres	\$2,247,800	\$20,910,341	10.7%
Bethany	\$1,551,417	\$13,127,119	11.8%
Bonny Slope	\$0	\$21,146,515	0.0%
Cedar Mill	\$1,216,704	\$10,797,465	11.3%
Chehalem	\$724,765	\$14,285,108	5.1%
Cooper Mountain	\$1,685,165	\$14,417,923	11.7%
Elmonica	\$1,217,670	\$13,429,569	9.1%
Errol Hassell	\$2,913,530	\$15,870,735	18.4%
Findley	\$199,916	\$18,949,676	1.1%
Fir Grove	\$1,340,434	\$15,955,158	8.4%
Greenway	\$943,684	\$14,462,633	6.5%
Hazeldale	\$1,968,047	\$13,491,900	14.6%
Hiteon	\$1,071,923	\$14,523,912	7.4%
Jacob Wismer	\$275,979	\$19,162,969	1.4%
Kinnaman	\$1,257,274	\$11,855,251	10.6%
McKay	\$3,990,556	\$12,817,568	31.1%
McKinley	\$1,005,681	\$12,169,010	8.3%
Montclair	\$617,108	\$10,132,338	6.1%
Nancy Ryles	\$1,372,846	\$18,704,297	7.3%
Oak Hills	\$3,154,813	\$13,121,070	24.0%
Raleigh Hills K-8	\$1,766,373	\$14,898,161	11.9%
Raleigh Park	\$1,437,591	\$11,878,658	12.1%
Ridgewood	\$1,879,417	\$14,217,517	13.2%
Rock Creek	\$1,983,550	\$13,545,815	14.6%
Scholls Heights	\$0	\$18,131,483	0.0%
Sexton Mountain	\$494,964	\$17,704,634	2.8%
Springville K-8	\$0	\$22,935,178	0.0%
Terra Linda	\$1,236,095	\$13,580,268	9.1%
Vose	\$3,048,422	\$13,834,326	22.0%
West TV	\$2,404,496	\$11,426,561	21.0%
William Walker	\$1,977,226	\$13,437,196	14.7%
Middle Schools			
Cedar Park	\$2,699,438	\$30,785,202	8.8%
Conestoga	\$4,074,703	\$33,711,077	12.1%
Five Oaks	\$920,166	\$37,619,257	2.4%
Highland Park	\$3,553,836	\$30,742,596	11.6%
Meadow Park	\$1,133,727	\$30,687,366	3.7%
Mountain View	\$1,902,180	\$35,226,746	5.4%

Stoller	\$1,576,788	\$37,816,244	4.2%
Whitford	\$2,640,462	\$30,761,006	8.6%

Table A-2 Summary of Deficiencies by Building with Replacement Costs (Cont.)

Facility	Physical Facility Deficiencies	Building Replacement Cost	Deficiencies vs. Replacement (%)
High Schools			
Aloha	\$2,546,240	\$68,558,051	3.7%
Beaverton + Merle Davies	\$5,839,832	\$84,507,686	6.9%
Southridge	\$1,411,899	\$67,346,410	2.1%
Sunset	\$3,682,973	\$66,730,201	5.5%
Westview	\$3,657,032	\$73,951,129	4.9%
Options Schools			
Arts & Communication Magnet Academy	\$2,112,504	\$21,494,727	9.8%
Health Sciences School (Capital Center)	\$1,793,385	\$49,770,383	3.6%
International School of Beaverton	\$1,354,944	\$19,878,855	6.8%
Merlo Station High School	\$1,495,112	\$13,478,750	11.1%
Terra Nova	\$949,860	\$3,103,400	30.6%
Support Facilities			
Administration Center	\$1,377,839	\$9,466,685	14.6%
Maintenance (Building Maint. Facilities)	\$411,711	\$7,634,364	5.4%
Nutrition Services Office – Aloha Annex	\$63,294	\$315,600	20.1%
Special Education Office – Aloha Annex	\$128,522	\$1,308,162	9.8%
Transportation – Allen Facility	\$496,760	\$2,571,877	19.3%
Transportation & Support Center	\$0	\$11,554,905	0.0%
Transportation – Fifth Street North	\$78,404	\$1,351,557	5.8%
Transportation – Fifth Street South	\$1,383,037	\$6,785,400	20.4%
Totals	\$93,171,887	\$1,289,929,788	7.3%

Note: Yellow highlighting indicates when the cost to address deficiencies exceeds 20% of the building replacement cost.

Attachment B – 21st Century School Fund Research Summary

Research on the Impact of School Facilities on Students and Teachers

A Summary of Studies Published Since 2000



**21st CENTURY
SCHOOL FUND** | IMPROVING URBAN PUBLIC
SCHOOL FACILITIES



There has been a slow but steady increase of research on the impact of public school facilities on educational achievement and community outcomes and of the rigor of the research. This summary of studies is part of a larger literature review conducted by the 21st Century School Fund with funding from the Charitable Trust of the Council on Educational Facility Planners International.

The review is designed as an update to the 2002 review "Do School Facilities Affect Academic Outcomes?" by Mark Schneider, originally commissioned by the 21st Century School Fund's Building Educational Success Together collaborative and then expanded by Dr. Schneider and published by the National Clearinghouse for Educational Facilities.

Recent research continues to point to a small but steadily positive relationship between the quality of a public school facility and a range of academic and community outcomes.

This study reviews the literature on:

- Facilities & academic outcomes
- School building systems
- School facility condition and community factors

This new review, available in October 2009 includes an extensive bibliography of research since 2002 and discusses the need for future school facility research.



1816 12th Street NW • Washington, DC 20009
Phone: 202.745.3745 • Email: info@21csf.org • Web: www.21csf.org

Photo Credits: All photos are finalists in the Through Your Lens Photo Contest organized by the 21st Century School Fund, Healthy Schools Campaign, and Critical Exposure - <http://www.throughyourlens.org> © 2009

Independent Variable Type	Independent Variable	Independent Variable Data Source	Dependent Variable	Sample	Results	Author(s)/ Year	Study Type
Condition	School condition rating, School age	Administrative data	Test scores (science/math/english)	Texas high schools (n=416)	4-9% difference between students in schools in worst/best condition ; 5-9% difference between students in oldest/newest schools; 4% difference in graduation rates between students in schools in worst/best condition and between students in oldest/newest schools	Blincoe 2008	Dissertation
	Number of unsatisfactory building systems (0 vs. 1+)	Administrative data	Test scores, attendance & suspension rates	Schools in New York's Duschess & Columbia counties (n=23)	higher suspension rates (2-9%), lower attendance rates in middle and high school (2-3%), lower test scores (~5%)	Boese & Shaw 2005	Working paper/Report
	School condition (in need of repair), % temporary space, custodians/sq ft, & sq ft/student	Administrative data	Student attendance and drop-out rates	Schools in Houston, TX (n=226)	The quality of school infrastructure has a significant effect on school attendance and drop-out rates. Students are less likely to attend schools in need of structural repair, schools that use temporary structures, and schools that have understaffed janitorial services.	Branham 2004	Peer-reviewed journal article
	Facility overall compliance rating	Administrative data	Test scores (CA API)	Schools in the LA Unified School District (n=509)	Changing from worst to best OCR leads on average to a 36 point increase in a school's API.	Buckley, Schneider & Shang 2004	Working paper/Report
	Facility condition grade	Teacher surveys	Teacher retention in coming year	K-12 Teachers in the DC Public Schools (n=835)	Approximately 5% more likely to stay in a building in "A" condition vs. "F" condition	Buckley, Schneider & Shang 2005	Peer-reviewed journal article
	School condition rating	Commonwealth Assessment of Physical Environment assessment completed by school principals	Test scores (percent passing middle school SOL exam)	Virginia middle schools (n=111)	Percentage of students passing SOLs was 2.2-3.9% higher in English, mathematics and science in standard buildings than it was in substandard buildings	Bullcock 2007	Dissertation
	Facility condition rating & condition of individual systems	Principal assessments	Impact of facilities on instruction	National sample of public school principals (n=1085)	Approximately one-third of schools indicated that there was at least one factor that interfered with their ability to deliver instruction to at least a moderate extent (32 percent with regard to permanent buildings, and 35 percent with regard to portable buildings). Across the 9 factors, 6-16% of schools reported that each factor interfered with instruction.	Chaney & Lewis 2007	Working paper/Report
	School building condition index	Administrative data	Test scores and attendance	Elementary schools in New York City (n=95)	In schools with poor facilities, students attended less days on average and therefore had lower grades in ELA and Math standardized tests. Attendance was found to be a full mediator for grades in ELA and a partial mediator for grades in Math.	Duran-Narucki 2008	Peer-reviewed journal article
	Classroom condition ratings	Teacher surveys	Teacher attitudes	Virginia teachers (n=165)	Teachers in schools in satisfactory conditions are significantly more likely to express positive attitudes about their classrooms than teachers in unsatisfactory buildings (across a wide range of indicators, but limited sample prevents causal inferences).	Earthman & Lemasters 2009	Working paper/Report
	School environment/ ambience	Student & principal surveys	Truancy, cigarette, alcohol, and marijuana use	National sample of 8th, 10th & 12th grade students plus school principals (n=70,884 students plus one principal/school in 655 schools)	Results based on multilevel logistic and linear regressions indicate that students are sensitive to schools' ambience and that the association of various aspects of the school's physical environment with students' problem behaviors is positive for all students and greater for 10th-grade students than for 8th- and 12th-grade students.	Kumar, O'Malley & Johnston 2008	Peer-reviewed journal article
	Facility condition rating & facility educational adequacy score	Administrative data	Test scores (WSAS reading & math)	K-12 schools in Milwaukee Public Schools (n=139)	Significant relationships for facility measures explained 10-15% of the differences in student test scores across schools after controlling for student demographics.	Lewis 2001	Working paper/Report
	Building quality score	Administrative data	Test scores (reading, math & writing)	Wyoming public schools (n=296)	No discernable relationship between test scores and building condition scores	Picus, Marion, Calvo & Glenn 2005	Peer-reviewed journal article
	Physical disorder measures	Student surveys	Measures of social disorder and collective efficacy	Schools serving 6-8 graders in a large mid-Atlantic urban school district (n=33)	Path analyses reveal a direct association between physical disorder and social disorder even when prior levels of collective efficacy are controlled. Further, there is evidence that the effects of physical disorder may be operating through increased fear and decreased collective efficacy to affect perceptions of threat/violence.	Plank, Bradshaw & Young 2009	Peer-reviewed journal article
	Six measures of facility condition	Administrative data	Test scores, attendance & teacher experience/turnover	Rural Texas high schools (n=72)	The condition of school facilities has a measurable effect over and above socioeconomic conditions on student achievement and teacher experience/turnover. Most significantly, for every 10% reduction in the percent of portable facility sf/student, test scores increased by 11 points and for every 10% increase in deferred maintenance, average test scores decreased by 0.61 points.	Sheets 2009	Dissertation
	Facility condition score & condition of individual systems	Principal assessments	Test score; Range of student, teacher, parent and community variables	South Carolina school principals (n=626)	There is a significant relationship between building condition and test scores. Additionally, at least 75% of principals indicated that the adequacy of the school facility impacted teacher attitudes, teacher recruitment and retention, student behavior, and parent and community attitudes and support.	Stevenson 2001	Working paper/Report
Condition & Design	School facility design & condition grades	Teacher surveys	Test scores and teacher health, attendance, and retention	Teachers in Chicago, IL & Washington, DC (n=688 & 1273 respectively)	Poor facilities affect the health and productivity (attendance) of teachers and make retention of teachers difficult (especially for schools with a condition grade of "C" or less). On the academic side, a shift from the best facilities to the worst decreases student test performance by ~3% (in DC this is for both math and reading, in Chicago for % of students performing at/above grade level).	Schneider 2003	Working paper/Report
Design	Eleven design variables	Researcher-completed assessment using the Design Assessment Scale for Elementary Schools	Test scores (reading, math & writing)	Schools in a large urban Texas school district (n=20)	Many positive correlations between building design variables and student achievement were reported	Hughes 2006	Dissertation
	Three school design elements (movement and circulation, day lighting, and views)	Researcher observation	Test scores (various CA tests at a range of grade levels)	Rural and suburban Georgia schools (n=71)	Significant effects were found between high scores on all three design elements and test score results	Tanner 2009	Peer-reviewed journal article
Capital Investment	Passage of a capital bond by the school district	Administrative data	Test scores (various CA tests at a range of grade levels)	California school districts (variable sample by type of analysis, maximum n=948)	Varying results - inconclusive or small positive results in early years, trending up to a peak of 1/6th of a school-level standard deviation six years after bond passage. (however point estimates fall back to zero after).	Cellini, Ferreira, & Rothstein 2008	Working paper/Report
	Total annual state K-12 capital outlay	Administrative data	Test scores (NAEP state averages)	US states (n=50)	Results would predict an increase in NAEP scores of .236 points per additional dollar/pupil invested in infrastructure (based on a .236 structural coefficient across three years of NAEP scores).	Crampton 2009	Peer-reviewed journal article

Issue Paper # 6: Ancillary Facility Needs

1. ***Background***

Like any business, the District has both core and support functions. It is not made up of schools (core) alone. While the impact of student growth is most visible in the schools, it also affects the District's support functions. District support functions are performed in "ancillary" facilities, which should be evaluated relative to adequacy to support core teaching and learning activities.

Ancillary facilities and the support functions housed by them are broadly framed as follows:

- a. Central Administration Offices – Merlo Road Administration Building and adjacent portable buildings. Support functions: Superintendent and Deputy Superintendent's staffs for Teaching & Learning and Operations and Support Services, Regional Administrators, Instruction, Facilities staff, Business Services, Public Safety, Information Technology, Human Resources, Risk Management and Community Involvement.
- b. Nutrition Services Administration & Meals Services – Building at the International School of Beaverton (ISB) campus. Support functions: Staff associated with nutrition services programs.
- c. Special Education Administration (SPED) – Building at ISB campus. Support functions: Staff associated with SPED programs.
- d. Transportation – Transportation Support Center (TSC), Allen Street, 5th Street North & South. Support functions: Transportation staff to operate and maintain bus operations
- e. Maintenance – Merlo/SW 170th Maintenance Yard. Support functions: Maintenance and central office custodial staff
- f. Warehousing – Capital Center, TSC, 5th Street North & South. Support functions: No staff are currently supported in warehousing facilities.

2. ***Why this is relevant to the facility plan***

District ancillary facilities were not specifically addressed in the 2002 Facility Plan. However, recommendation #3 stated that the "District should plan for its administrative office, maintenance, warehousing, food services, transportation and other ancillary facility needs and take steps to meet those needs along with its growing student enrollment".

3. ***Ancillary Planning considerations***

- a. Central Administration Office – Aging facility which is becoming increasingly difficult to maintain due to deteriorating building systems. No improvements were included in the 2006 capital improvement bond. In general the central office facilities are inadequate to support existing staff in two critical ways: (1) meeting space is insufficient to support staff

coordination meeting plus district wide gatherings of administrators, (etc.) nor the numerous large public meetings for groups such as the School Board and Budget Committee; and (2) the school district student enrollment and staff numbers have experienced significant growth in recent years and can no longer be housed in the existing central office building. In addition, various building system components (roofing, domestic water, etc.) require significant improvements. This will require further analysis as the District continues to grow.

- b. Nutrition Services Administration – The facility adjacent to ISB was inadequate for all uses and a portable building was recently added to the site to provide conference space and the Meal Program. Additional analysis will be required as the District grows.
- c. Special Education Administration – The facility houses the administrative staff for the Special Education programs and appears adequate to support current operations. The facility will require further analysis as the District grows.
- d. Transportation – District facilities are divided between a northern facility -TSC, central facilities – 5th Street North and 5th Street South, and a southern facility - Allen Street. Bus operations support is provided at each location. Bus maintenance is performed at TSC & Allen Street. Although no improvements were made as part of the 2006 capital improvement bond there was a major expansion of TSC using other funding. In general, with the addition of the expanded TSC, the transportation facilities are adequate to support current operations. The facilities will require further analysis as the District continues to grow.
- e. Maintenance – Immediately adjacent to the Central office, the maintenance compound houses central maintenance shop facilities including trade shops, print shop, couriers and open storage areas. In general the maintenance facilities are adequate to support current operations. This will require further analysis as the District continues to grow.
- f. Warehousing – Warehousing space is distributed across four facilities. Currently managed by District Business Services, various items are stored on a largely temporary basis. Staff is currently evaluating alternatives to more effectively support warehousing needs.

4. Conclusion

District staff evaluates ancillary facility conditions and maintains them as required. However, with expected District growth in terms of core facilities, further study and an aligned plan for the ancillary facilities will be needed.

Issue Paper #7: School Site Characteristics

1. *Site Characteristics from the 2002 Facility Plan*

In order to comply with ORS 195.110(7)(b), Identification of Desirable School Sites, Beaverton School District prepared a profile of desirable school site characteristics as part of its 2002 Facility Plan. The District held a two-day design workshop in which architects and members of the Facility Plan Advisory Committee, local school committees, local and regional planning agencies, and District staff participated. The workshop explored features of a school site, community expectations, and ways to make more efficient use of sites in providing for these features and expectations.

In terms of site sizes, schools have historically followed the guidelines below. These site sizes appear to reflect community values and expectations regarding the facilities and programs that district residents believe should be available on school property, such as recreational fields and playground space.

Elementary Schools	10 acres
Middle Schools	20 acres
High Schools	40 acres

Metro used similar site size assumptions in its 2002 Urban Growth Report Methodology during the last major evaluation of the region's Urban Growth Boundary (UGB).

Elementary Schools	750 students / 70 students per acre	=	11 acres
Middle Schools	1,200 students / 60 students per acre	=	20 acres
High Schools	2,200 students / 55 students per acre	=	40 acres

Despite short-term phenomena like the current economic downturn, Washington County has continued to grow. Sites that are 10 acres and larger have become very difficult to find. Sites that are large and available are often constrained by environmental features such as topography or wetlands, involve multiple landowners that would require aggregation of lots, and are expensive to purchase as land costs rise.

In addition to these constraints, there are zoning regulations that either prohibit or make it difficult to site schools in certain land use districts. Washington County and the City of Beaverton hold primary planning jurisdiction in Beaverton School District. Zoning regulations are designed to preserve opportunities for smaller lot and higher density development within the UGB, which is consistent with state, regional and local growth management policies. However, these regulations present challenges to the District by reducing the potential locations for future schools while providing higher density residential land that will generate additional student enrollment.

During and following the 2002 design workshop, the Facility Plan Advisory Committee acknowledged that suitable land for school facilities was scarce and that the District would need to be flexible about identifying potential sites. Part of this flexibility was demonstrated in establishing a desired *range* of site sizes per school level instead of more strictly adhering to the traditional size criteria. It is important to note, however, that site sizes may need to account for existing site conditions, especially those that render part of the site unbuildable (e.g. steep slopes, wetlands, dedications to local jurisdictions). Site sizes may also need to accommodate arrangements with other agencies, such as Tualatin Hills Parks and Recreation District (THPRD), regarding joint uses of a site.

In addition to site sizes, participants in the workshop helped establish what *features* and amenities that they felt should be a part of each school as well as the target enrollment for each level of school. The following school site characteristics are the results of the workshop discussions.

Elementary Schools

Site Size	7 to 10 acres
Site Features	Covered Play Area – 2 basketball courts Soft Play Area with play equipment Soccer field size grass area Room for 3 double portables (6 classrooms)
Typical Target Enrollment (new construction)	725 students (*Elementary schools may range from 400 to 1,100 students)

Middle Schools

Site Size	15 to 20 acres
Site Features	Covered Play Area – 4 basketball courts Soccer Field(s) Football Field(s) 4 - 6 tennis courts Baseball Field(s) Softball Field(s) Room for 6 – 8 portables (12 – 16 classrooms)
Typical Target Enrollment (new construction)	1,100 students

High School

Site Size	35 to 40 acres
Site Features	Football Stadium Track & Field with bleachers 2+ Baseball Fields, one with bleachers and concessions

	2+ Softball Fields, one with bleachers and concessions
	4 – 6 outdoor basketball courts
	Football practice area
	Marching band practice area
	8 –12 tennis courts
	Batting cages (softball and baseball)
	Field house & concessions
	2+ soccer fields
	Room for 6 – 10 portables (12 – 20 classrooms)
Typical Target Enrollment (new construction)	2,200 students

One set of additional considerations to make in finding desirable school sites are how site needs differ for Options programs. The needs of these programs are sometimes specialized and do not lend themselves to forming site characteristics guidelines as the District has done for traditional elementary, middle, and high schools. Yet it is still important to acknowledge the possibilities in offering Options programs. Options programs are currently offered at the middle school and high school levels only in Beaverton School District. Generally, individual Options programs tend to have fewer students than traditional programs at the same grade level. This allows flexibility in siting the programs. Siting possibilities include offering Options programs in existing schools, in stand-alone schools but in smaller buildings on smaller sites, or in leased buildings.

2. *Examples from Other School Districts*

Bend-La Pine School District's 2005 Sites and Facilities Study provides an example of other site characteristics and criteria that the Committee may want to consider in reviewing the criteria for the 2010 plan. The Bend-La Pine School District criteria below are divided into those that apply to all schools and those that apply to particular school levels.

All Schools

- Enrollment – Can accommodate high student densities
- Access – Good walking access and at least two vehicular access points
- Land and infrastructure – Generally flat topography and low cost for water, sewer, and sidewalk extensions
- Cost – Lower site acquisition cost
- Zoning – Allows schools

- Efficient and shared use – Shape of site promotes efficient use of the space and partnership potential with Bend Metro Parks and Recreation District.

Elementary Schools

- Size – 7 acres for small elementary school (300 students) and 15 acres for prototypical elementary school (600 students)
- Location – Few transportation-based barriers and hazards surrounding the school such as busy roads, canals, or railroads; sited in residential zones; adjacent to an existing or future park.

Middle Schools

- Size – 25 acres
- Access and location – Access to bicycle trails or bicycle lanes and sports fields.

High Schools

- Size – 40 acres
- Access/location – Access to major transportation facilities and near commercial and industrial park zones
- Shared use – Potential for co-developed sports facilities and community or performance centers
- Impacts – Site minimizes effect of field lights on surrounding properties.

3. Conclusion

The site characteristics from the 2002 Facility Plan should either be re-affirmed or modified as part of facility plan update. Modifications may be based, for instance, on other site considerations identified in this paper. They may also be based on trends or changes in the use of school sites that have developed since the 2002 plan or are anticipated in the next 15 years.

This discussion of school site characteristics will provide the basis for conversations about the efficient use of sites and alternatives to new construction, two other elements of a facility plan that are required by statute and that will be topics of upcoming meetings and issue papers.

Issue Paper #7A (Revised for Meeting #5):

School Site Characteristics – LRFPAC Summary Draft Recommendation Regarding School Site Guidelines

The LRFPAC has had considerable discussion on two specific Facility Plan topics: School Site Sizes and Efficient Use of School Sites. The topics are related and, depending on the discussion outcome, can significantly influence future school construction decisions. Committee members have expressed the general thought that the District consider a more flexible approach to future school sites (at all levels) with an eye towards constructing future schools on smaller sites. The sentiment of the Committee was that there may be more efficient ways to construct new school facilities that fully meet the educational program needs of the District on smaller sites and better fit with emerging community development patterns.

At the same time, Committee members recognized that the school site sizes suggested by the 2002 School Site Characteristics Guidelines (see Issue Paper #7) present a range of possible site sizes based on a projected level of student enrollment at each level and include site features (athletic fields, room for portables) that the Committee feels are important to the community.

The Committee suggested the following approach for a recommendation on school site sizes and steps to promote the efficient use of school sites in the 2010 Facility Plan:

1. The LRFPAC acknowledges the 2002 Facility Plan School Site sizes and characteristics and recognizes that they are intended to be guidelines and not absolute site standards that cannot be modified during the site selection process.
2. The 2002 site features that are identified at each level are appropriate and include features the Committee believes District residents expect at schools. Table 1 provides a summary of the site characteristics and the amount of area each feature would occupy at a high school.
3. The Committee recognizes that in 2010 land costs have increased from 2002, land availability is constrained as development occurs inside the Urban Growth Boundary, and land for new school sites is more difficult to obtain. Therefore, the District needs to consider other school site models as it looks to future sites to accommodate student enrollment growth.
4. The Committee notes that the recently constructed school facilities have all been two-stories and that multiple story construction is a model that should be followed in the future to use school sites more efficiently.
5. The Committee believes that the new school site model should include consideration of smaller sites that meet the educational requirements of the District. At the same time, the District needs to consider that moving towards smaller sites may require

more administration on a district-wide basis and meeting certain school-related and/or recreational activities off-site or in other programmatic ways. As well, smaller sites may not meet overall capacity needs and may be less cost-effective.

6. Because many school-site related needs result from local development codes, standards and requirements, the Committee believes that the District should work with local permitting agencies to review applicable Development and Zoning Code requirements related to school construction (e.g. parking requirements, landscape percentages, building height limitations, etc...) and evaluate opportunities to update these standards to allow for more flexibility and efficiency in how future school sites are designed.
7. The Committee believes that the District has a valuable asset in their existing school facilities and sites. These sites may be able to be used more efficiently and effectively to address future student enrollment growth. The Committee believes that the District should conduct a site-by-site assessment of its existing school facilities and sites to determine the optimal capacity of each site and determine if expanding existing facilities may defer the need for the construction of new school facilities.
8. The Committee accepts the 2002 School Site Characteristics Guidelines as the guidelines that will be included in the 2010 School Facility Plan but also recognizes that other general guidelines have emerged since the 2002 Plan (e.g. Leadership in Energy and Environmental Design (LEED) Neighborhood Development criteria). These updated guidelines have emphasized smaller site sizes for school. Table 2 (School Site Size Comparisons) provides a summary of the various sources of school site size formulas / ratios that were reviewed and considered by the Committee.

The Committee recommends that the District continue to research opportunities to construct new school facilities on smaller sites. Accordingly, the Committee believes that, as a part of any future school construction bond program, the District conduct a School Site Design Workshop on each specific site identified for new school construction or on existing sites where significant school expansion would occur. The objectives of each workshop would be to consider:

- Research on new school construction methods / models on small sites;
- Alternative ways to meet school-related and/or recreational activities on-site, off-site or in other programmatic ways;
- The results of the site-by-site assessment of its existing school facilities and sites to determine the optimal capacity of each existing site (see item #7 above);
- Opportunities for joint partnerships with local agencies (including THPRD, libraries, non-profits, etc.) to maximize the use of school sites and facilities; and
- Alternative site-specific school designs / configurations developed in the Design Workshop with architects, urban designers, planners, and community representatives.

Table 1: Typical High School Site Size Requirements

Feature	Approximate Area Requirements (acres)	Number ¹	Total Acreage	Comment
Football field & stadium - Includes track & field	4.7	1	4.7	Shared facility
Football practice field	1.5	1	1.5	120 yards x 60 yards
Marching band practice area	n/a	n/a	n/a	Information not available
Baseball field	3.7	2+	7.4	Assumed 2
Softball field	1.3	2+	2.6	Assumed 2
Outdoor basketball court	0.1	4-6	0.5	Assume average (5)
Soccer field	1.2	2+	2.4	Assumed 2
Tennis courts	0.16	8-12	1.6	Assumed average (10)
Double portable classroom buildings	0.07	6-10	0.6	Assumed average (8)
School building footprint (HS) - assume 2 story - approx. 280,000 – 300,000 SF	5.0	-	5.0	Westview HS & Beaverton HS are about this size
Vehicle Parking	300 sf / space	400 spaces	2.8	Assumed 400 parking spaces (may be low based on zoning requirements)
Net (“built”) site area			28.5	
Non-buildable area	7.2	20% of gross site area	7.2	Includes setbacks, internal circulation, and other undevelopable area
Total			35.7	

¹ From 2002 School Facility Plan School Site Characteristics

Table 2: School Site Size Comparisons

	2002 Facility Plan Guidelines		LEED		Metro	LEED w/ Metro Ratio		2002 Facility Plan # Students w/ Metro Ratio		2002 Facility Plan Acres w/ Metro Ratio	
	Acres	Students / School	Acres	Students / School	Students / Acre**	Acres	Students / School	Acres	Students / School	Acres	Students / School
ES	7-10	725	5	*	70	5	350	10	725	7-10	490-700
MS	15-20	1,100	10	*	55	10	550	20	1,100	15-20	825-1,100
HS	35-40	2,200	15	*	45	15	675	49	2,200	35-40	1,575-1,800

* No student / building LEED guideline provided. LEED criteria indicate:

- Schools combining grade levels from more than one category may use the grade level with the higher allowable acreage (i.e. K-8 = 10 acres).
- Facilities on the school site for which there is a formal joint-use agreement with another entity, such as athletic facilities, playgrounds, and multipurpose spaces in buildings, may be deducted from the total site area of the school (i.e. recreation space included in joint BSD / THPRD agreements may be deducted from the overall site size standard).

** Metro Urban Growth Report (2009)

	2002 Facility Plan Guidelines		
	Acres	Students / School	Students/ Acre
ES	7-10	725	104 – 73
MS	15-20	1,100	73 – 55
HS	35-40	2,200	63 – 55

Issue Paper #8: Special Program Considerations

1. Background

ORS 195.110(5)(a)(C) mandates that school facility plans must include "Descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district". Districts are also required to "...identify school facility needs based on population growth projections..." per ORS 195.110(9)(a). Special programs have an impact on District facilities and capacity. The District currently provides such special program services as Options schools and programs, Special Education, English as a Second Language, Head Start, Early Intervention, Full-Day Kindergarten, and Pre-Kindergarten.

2. Why this is Relevant to the Facility Plan

The Portland State University Population and Enrollment Report, completed in November, 2008, project an additional 8,200 students to BSD by 2025 (PSU "medium" range forecast; all projected enrollments in this issue paper were derived using the medium forecast). While this increase in itself poses the potential need for new or modified District facilities, BSD will also experience increases to its population of students in special programs. Additionally, federally-mandated requirements for Physical Education (2017) and recent full-day kindergarten legislation will significantly increase the need for District facility space.

3. Options Schools and Programs

The PSU Report forecast approximately 1,970 additional middle school and 2,630 additional high school students by 2025. Research conducted by the BSD Learning Options Strategic Planning Team in 2009 found that approximately 19% of BSD middle school students and 12% of high school students were enrolled in full-day learning options (for middle school these are Arts and Communication Magnet Academy (ACMA), Health and Sciences School (HSS), International School of Beaverton (ISB), Aloha Huber 6-8, Raleigh Hills 6-8, Summa, Rachel Carson, for high school they are ACMA, HSS, ISB, Merlo Station, Early College High School, Terra Nova). An additional 5% of high school students were enrolled in partial-day or alternative learning options.

BSD has four stand-alone Options schools: ACMA, HSS, ISB, and Merlo Station. PSU's projected 2025 student population forecasts can be allocated among school levels by using current school percentages of enrollment, removing stand-alone Options school populations and creating a fourth projected category (see Figure 1). HSS, which is housed in the Capital Center, a District-owned building, has been projected at its full build-out space and enrollment levels. Additional available Capital Center space has been added to Figure 5 in the Options category.

Figure 1. Estimated Projected Comprehensive and Options School Enrollments

	2025 Total Students*	2025 Estimated Comprehensive School Students	2025 Estimated Stand-Alone Options School Students**
Middle School	10,372	9,024	1,348
High School	13,449	11,566	1,883

*Does not include students attending Alternative Programs or Early College

**Stand-alone Options schools are ISB, ACMA, HSS, and Merlo Station

Currently, the space available in District Options schools and programs does not meet the demand by students. For example, only about 25% of all students applying to ACMA for the 2010-2011 school year will be able to attend because of school space limitations. We expect the demand for Options schools and programs to be maintained at levels similar to the present. Figure 5 shows the projected capacity deficit at the stand-alone Options school level in 2025. If new Options facilities are not provided, this deficit can be allocated to (comprehensive) middle and high school levels.

One factor with the potential to affect District high school facilities is the Early College program, in which 11th and 12th grade students attend community college classes in lieu of high school classes. This Options program targets students traditionally under-represented District-wide in Options programs: most would not be college bound without the Early College program. In the 2009-2010 school year, between 240 and 280 District students attended the program. As the program grows in breadth and popularity, it has the potential to remove a much larger number of students from comprehensive high schools, freeing up some high school facility space; however, it is unknown at this time what the maximum enrollment in the program will be.

4. Special Education

About 11% of BSD students qualify for some type of special education services. Out of this 11%, in 2009-10 about 2.0% of elementary and 2.8% of middle and high school students needed the services of self-contained special education (SCSE) classrooms. These percentages have remained fairly constant for a number of years, and are projected to remain so. Every school reserves at least one classroom for Special Education purposes: a Resource Room. Some schools provide additional specific SCSE services, such as programs for learning and other significant disabilities. As new schools are constructed, specific SCSE needs are incorporated into building design. SCSE classrooms are not counted in the BSD Capacity Model as a part of a school's total available capacity.

In September 2009, BSD had 901 students in SCSE programs. Students in these programs are not included in PSU's forecasted enrollments but have been incorporated into projected classroom needs (see Figure 2). These projections do not attempt to account for potential changes to SCSE enrollment resulting from changes to Special Education legislation or changes to individual Special Education programs within the District.

Figure 2. Actual 2009-2010 and Projected 2025 SCSE Needs

Level	PSU 2025 Student Forecast	Actual 2009- 2010 SCSE Enrollment	Actual 2009- 2010 SCSE Classrooms	Projected 2025 SCSE Enrollment	Projected 2025 SCSE Needs (Classrooms)	Projected 2025 SCSE Needs (Sq. Ft.)
Elementary	20,839	355	71	417	83	75,540
Middle	10,372	240	42	290	51	45,360
High	13,449	306	28	377	34	31,440
Total	44,660	901	141	1,084	170	152,340

5. Full-Day Kindergarten

Full-day kindergarten is currently offered at 15 BSD elementary schools, but is not mandated by state or federal law. Prior to the 2009-2010 school year, full-day kindergarten was only offered at three Title 1 schools; funding was provided by Title 1 (federal). In 2009, Senate Bill 44 was passed, allowing school districts with available space to offer an additional half-day of kindergarten, obtaining funding for the additional half-day by charging tuition to parents. Currently, BSD schools with available space are offering a full-day kindergarten program.

There is potential in the future for a legislative mandate of full-day programs, likely within the next 5 years. If the program were to be mandated, BSD would see a large increase in classroom needs. There are 33 full-day, 56 morning kindergarten, and 43 afternoon kindergarten classrooms in use for the 2009-2010 school year. With a mandate to offer a full day program, BSD would need an additional 50 classrooms just to meet current kindergarten needs, for a total of 89 full-day kindergarten classrooms. In order to meet the needs of the 2025 school year, an additional 82 classrooms would be needed. It is important to note that this figure of 82 (a combination of current deficit plus future needs) includes an estimate of the additional students who would be attracted to BSD kindergarten that would have otherwise attended private kindergarten were BSD not offering a full-day program. The 2025 PSU projected kindergarten total is 3,246. Given a full-day, fully funded kindergarten program, we anticipate the actual number of kindergarteners to be closer to the projected 2025 first grade total of 3,559. We have used 3,500 for simplicity.

6. English as a Second Language

The English as a Second Language (ESL) program is mandated by federal law, and requires dedicated classrooms in every BSD school. In 2009-2010, a total of 83 BSD classrooms were used specifically for ESL purposes, to serve approximately 5,420 students. Using 900 square feet as an average classroom size, 83 classrooms amount to approximately 74,700 square feet of dedicated facilities, or approximately 38,700 square feet of elementary, 19,800 square feet of middle, and 16,200 square feet of high school space (high school total includes the Options schools ISB, ACMA, Merlo Station, and HSS). Like classrooms used for SCSE programs, ESL classrooms are not counted as part of total building capacity. Figure 3 shows the 2009-2010 BSD capacity used for ESL purposes.

Figure 3. 2009-2010 ESL Classroom Needs

School Level	Total 2009-2010 Capacity (square feet)	2009-2010 ESL Enrollment	Classrooms Dedicated to ELL Purposes	Square Footage Dedicated to ELL	ELL Percentage of Total Capacity
Elementary*	2,012,047	3,847	43	38,700	1.9%
Middle**	1,016,538	804	22	19,800	1.9%
High***	1,315,673	692	14	12,600	1.0%
Options****	247,888	90	4	3,600	1.5%
Total	4,592,146	5,433	83	74,700	6.3%

*Elementary enrollment and capacity include 6-8 graders at Aloha Huber and Raleigh Hills K-8

**Middle enrollment does not include students 6-8 graders at K-8 schools, ISB, ACMA, or HSS

***High enrollment only includes students enrolled at comprehensive high schools

****Options school enrollment includes middle and high students at ACMA, HSS, ISB, and Merlo Station

Students using ESL services account for about 15% of the total BSD student enrollment. This figure has increased by 6% since 1999. The greatest change has been seen at the elementary level (an increase of 10% since 1999). We anticipate the need for ESL services to increase at a rate commensurate with history. Using a TREND function with MS Excel, we projected potential ESL service needs based on the past 10 years of enrollment. TREND application is a statistical technique to aid interpretation of data, fitting a straight line to data points using linear regression. District-wide, students needing ESL services are anticipated to increase by an additional 15% by 2025 (see Figure 5).

7. Physical Education Requirements

In 2007, the Oregon Legislature enacted House Bill 3141, which calls for a minimum of 150 minutes of weekly physical activity for each student in grades kindergarten through fifth, and 225 minutes for students in grades 6-8, effective July 1, 2017. A BSD report to the school board (Beaverton School District Wellness Policy EFA: Annual Report to the School Board 2008-2009) evaluated the adequacy of existing facilities with existing enrollments (2008-2009 school year) to comply with HB 3141. Staff extrapolated the data to 2025 enrollments, and determined that additional facilities would be required (see Figure 4) for the District to meet the new requirements. These figures assume construction of two new 750-student elementaries, one new 900-student K-8, and one new 1,200-student middle school (i.e., “additional facilities required” incorporate the new facilities, along with those that will still be needed after the new buildings are constructed).

Figure 4. Anticipated 2025 Physical Education Needs

Level	Type of Additional Facilities Required		
	Covered Play Area	Multi-Purpose	Gymnasium
Elementary	5	11	17
Middle School	2	5	8

8. Other Program Considerations

Early Intervention (Early Childhood Special Education)

The Early Intervention (EI) program offers special education and support services for children with developmental delays and disabilities, physical disabilities, and severe emotional disturbances from birth to school age. The program is operated by the NW Regional Education Service District. BSD is responsible for providing transport services to all pre-school aged children with disabilities living within its attendance boundaries. As such, BSD provides instruction space free of charge to NWRES D programs when possible to cut down on transportation expenses. In the 2009-2010 school year, two portable classrooms at Sunset High School were used for Early Intervention purposes. EI needs are not incorporated into overall BSD facility needs as BSD is not mandated to provide capacity for these services.

Head Start

Head Start is a federally-funded program that is overseen by Washington County. The Community Action Organization and Oregon Child Development Coalition provide Head Start and Oregon Pre-K services to 4 and 5 year olds throughout Washington County. Community Action also provides limited Early Head Start services for children through age 3. BSD provides classroom space if it is available. Federal money has allowed for the purchase of portable classrooms for BSD campuses. Because most portables do not have restrooms, if space is available, BSD schools allow Head Start programs to use interior classroom space, and use the portable classrooms for older student grades. The current contract BSD has with Head Start requires seven classrooms for students, and is valid through 2013. It is not currently known whether this contract will be renewed.

There has traditionally been a greater need for Head Start classrooms than BSD can provide, due to limitations of school capacity. BSD anticipates that the demand for Head Start programs will grow in the future, but as there is no mandate to provide them, we have not estimated classroom needs for 2025.

Pre-Kindergarten

While not government-mandated, pre-Kindergarten programs are offered at Montclair, McKay, Vose, Beaver Acres, and Aloha Huber elementary schools. Title 1 schools (Vose, Aloha Huber, and Beaver Acres) fund Pre-K programs as needed with Title 1 funding. The Montclair and McKay programs are supported by BSD's General Fund. Like Head Start programs, the need for Pre-Kindergarten is greater than available funding and locations; however, there is no legislative mandate for BSD to provide it.

Conclusions

Figure 5 shows the projected 2025 BSD school enrollment populated into four categories: elementary, middle, high, and stand alone Options schools, and then converted to student space needs. The conversion from student enrollment to student capacity needs was performed using the standard metric of 100 square feet per elementary, 128 square feet per middle, and 141 square feet per high school student, with 200 square feet per student used when calculating ACMA space utilization (2002 School District Facility Plan).

We expect an overall capacity deficit of three elementary, one middle, one high, and two Options schools by 2025 for student enrollment, based on PSU's forecasts and anticipated BSD needs for Special Education programs, ESL, and full-day kindergarten. School deficits were calculated using a standard of 750 students per elementary school (Figure 5 shows a projected 2025 deficit of two 750-student elementary schools and one 900-student K-8 school), 1,200 students per middle school, 2,200 students per high school, and 700 students per Options school. It is important to note the numbers in parentheses in the 2025 Projected Capacity Deficit (Students) and 2025 Projected Capacity Deficit (Number of Schools) columns. These numbers have been included to show the additional impacts at the middle and high school levels in the event that new Options schools are not constructed.

Figure 5. Special Program Requirements and District Capacity

	Total Space (sq.ft.)	2025 Projected Student Space Needs* (sq.ft.)	2025 Projected SpEd Capacity Needs (sq.ft.)	2025 Projected Additional Full-Day KG Needs (sq.ft.)	2025 Projected ESL Capacity Needs (sq.ft.)	2025 Projected Capacity Deficit (sq.ft.)	2025 Projected Capacity Deficit (Students)	2025 Projected Capacity Deficit (Number of Schools)
Elementary**	2,115,767	2,152,936	75,540	73,800	77,400	-263,909	-2,639	-3(-3)**
Middle**	1,047,546	1,059,023	45,360	N/A	36,900	-93,737	-732 (-1389)	-1(-1)***
High	1,330,116	1,632,242	31,440	N/A	22,500	-356,066	-2525 (-3401)	-1(-2)***
Options	316,296	532,660	N/A	N/A	N/A	-216,364	-1534 (0)	-2 (0)***
Total	4,809,725	5,376,861	152,340	73,800	136,800	-930,076	-7430	-7(-6)***

*Does not include students in SCSE programs

**Space needs for students in 6-8 programs at Raleigh Hills, Aloha Huber, and Springville are counted in the elementary section

***If 2 new Options schools are not created by 2025, the middle and high school students deficits can be allocated accordingly

Figure 5 does not include impacts to anticipated capacity deficit from the additional physical education requirements that will be implemented by 2017. The Beaverton School District Wellness Policy EFA: Annual Report to the School Board 2008-2009 study estimated facility needs based on student enrollment and capacity at that time. Since 2008-2009 the District has both added capacity and gained enrollment, and there will be further changes by 2017. The District will need to estimate impacts from PE requirements on a site by site basis.

The District anticipates a three-phased bond program between 2010 and 2025 to meet capacity and program needs. One new elementary or K-8 and one new high school would feature in phase I, with one new elementary and one new middle or Options school in phase II, and at least one new elementary in phase III. All new facilities would need to be constructed to meet 2017 PE requirements.

Facility Plan Committee Recommendation

The District will need to further analyze the ramifications of additional physical education requirements. By 2017, elementary enrollment will have grown by almost 1,600 students, and middle school enrollment will have grown by almost 900 students. Currently we do not have sufficient site specific information to determine which campuses, if any, will be able to support the PE needs of additional students, and what improvements will be necessary to implement the program in 2017 (see Table 6 Summary).

Table 6. Summary of Projected Capacity Deficits and Facility Needs

	Total Space (sq.ft.)	2025 Projected Capacity Deficit (sq.ft.)	2025 Projected Capacity Deficit (Students)	2025 Projected Capacity Deficit (Number of Schools)	Additional PE Facilities Needed by 2025: Gymnasiums	Additional PE Facilities Needed by 2025: Multi- Purpose Rooms	Additional PE Facilities Needed by 2025: Covered Play Areas
Elementary**	2,115,767	-263,909	-2,639	-3(-3)**	17+	11+	5+
Middle**	1,047,546	-93,737	-732 (-1389)	-1(-1)***	8+	5+	2+
High	1,330,116	-356,066	-2525 (-3401)	-1(-2)***	N/A	N/A	N/A
Options	316,296	-216,364	-1534 (0)	-2 (0)***	N/A	N/A	N/A
Total	4,809,725	-930,076	-7430	-7(-6)***	25+	16+	7+

*Does not include students in SCSE programs

**Space needs for students in 6-8 programs at Raleigh Hills, Aloha Huber, and Springville are counted in the elementary section

***If 2 new Options schools are not created by 2025, the middle and high school students deficits can be allocated accordingly

+The total number of physical education facilities needed by 2025 is not known at this time. Further study is needed to determine the actual usage potential of existing PE facilities, and whether these facilities can meet PE needs of existing BSD schools using both current and future enrollments

Further study of this topic will be needed before bond planning can take place.

Glossary of Terms/Acronyms Used

ACMA	Arts and Communications Magnet Academy (grades 6-12); focuses on the arts
HSS	Health and Sciences Academy (grades 6-12); focuses on science and medicine
ISB	International School of Beaverton (grades 6-12); offers International Baccalaureate Middle Years Program and IB Diploma Program
AHP	Aloha Huber Park K-8 school
RH	Raleigh Hills K-8 school
Summa	An Options program designed for highly gifted students, grades 6-8
Rachel L. Carson	An Options program with an emphasis on environmental science and community service
Merlo Station	An Options high school that offers many different programs to meet students' different educational needs
Terra Nova	A "Personalized Learning Community" school in which students help shape their individual learning plans
SCSE	Self contained special education program
ESL	English as a Second Language program. Students in this program as referred to as English Language Learners (ELL)
Head Start	A federally funded program providing pre-kindergarten services for children ages 4-5
Early Intervention	A NWRES D program offering special education services for children from birth to school age
NWRES D	Northwest Regional Education Service District

Issue Paper #9: Efficient Use of School Sites

1. What does “efficient use of school sites” mean?

Pursuant to the school facility planning statute, ORS 195.110:

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

(E) An analysis of:

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

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

2. Portable classrooms

As previously discussed with the Long Range Facility Plan Committee, portable classrooms are an affordable and flexible method for responding to fluctuations in school enrollment and increasing efficient use of a school site. The portables used by Beaverton School District typically generally consist of two classrooms, each about 900 square feet. Portables often make the difference between a school being below or over capacity. The portables used in the District range between being temporary to semi-permanent.

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

- Environmental constraints/conditions – steep or changing slopes; streams, wetlands, or other sensitive lands
- School features – parking, play areas and fields
- Development code – how portables are classified and regulated according to zoning code; building setbacks from lot lines required by the code.
- Fire safety – access roads and proximity to hydrants
- Core facilities – including the lack of restroom facilities in portables

Other issues to consider when making decisions about using portables include educational quality and equity. As discussed in Issue Paper #5 (Existing Facilities Conditions Assessments), there is a growing body of research indicating a positive relationship between the quality of a school facility and student achievement. It cannot necessarily be assumed that permanent classrooms are always better quality than portable classrooms, but because portables are designed to be temporary and uniform, they lack some of the architectural quality and special features or amenities that permanent classrooms have. These differences may make a difference in student achievement. When some schools have more portables than others, there is the potential to foster inequity between schools possibly resulting in, lower performance and achievement.

3. *Multi-story buildings*

Multi-story buildings are typically more expensive to construct than single-story buildings. Local building codes used to prohibit younger students from being taught on floors above or below the main floor. However, these codes have been revised to remove this restriction. At the same time, multi-story buildings provide significantly more student capacity using the same footprint as a single-story building. As land costs increase, multi-story buildings become more cost-effective to build and operate.

Land costs in Beaverton School District have risen significantly in the last 20 years. Therefore, the District has recently made it a practice to construct multi-story buildings when new schools are built. Recent examples of this include:

- Aloha Huber Park (K-8) – constructed in 2006.
- Bonny Slope (Elementary) – constructed in 2008.
- Springville (K-8) – constructed in 2009.

4. *Shared use*

Another effective way of maximizing the use of a site is to share the use with other organizations. It was found during the school facility design workshops held for the 2002 Facility Plan that community members in particular support the partnership between Beaverton School District and Tualatin Hills Parks and Recreation District (THPRD), for the use of outdoor and indoor space. This shares not only the use of a site but the costs associated with fields and outdoor recreation space and operating the facility's indoor recreational and instructional space. Hal Bergsma, THPRD Planning Manager, will discuss the relationship between the District and THPRD at the March 17th meeting.

There are other shared use partnerships that the District has and can enter into and develop. Some natural pairings include those with the City of Beaverton and other educational (Portland Community College) and community service providers.

There may also be opportunities for District schools to share sites with other District functions and facilities. This includes schools and school programs that share

buildings on a site and have their own buildings but share the site itself. Examples of this are found locally in Portland Public Schools and Forest Grove School District. In Portland, Abernethy Elementary School and the Environmental Middle School shared buildings on a southeast Portland school site until the middle school grew to a point where it needed to move to its own site nearby. In Forest Grove, Fern Hill Elementary School and Neil Armstrong Middle School were constructed on the same site. Their buildings are separate but they share fields and other outdoor space. North Clackamas School District also has co-located schools: Sunrise Middle School and Clackamas High School, and Happy Valley Elementary and Middle Schools, which opened in 2008 and 2009.

A related form of schools sharing sites is the K-8 format, which effectively combines two schools – an elementary school and a middle school. The District now has three K-8 schools, the newest of which, Springville, opened September 2009.

1. Aloha-Huber Park (K-8)
2. Raleigh Hills (K-8)
3. Springville (K-8)

5. Shared parking or parking districts

Required vehicle parking standards are a local zoning code issue that can add to the need for larger school sites. For example, given the number of full-time employees at the Hiteon Elementary School, 80 minimum and 120 maximum parking spaces are required pursuant to City of Beaverton code. The school site, which was recently expanded, now has 114 parking spaces that occupy approximate 34,000 square feet or about 0.8 acres. The school sits on a 12.2-acre site, so parking accounts for about 6.5% of the total site area.

In 1998, Boise (Idaho) High School was renovated on site (described in *Why Johnny Can't Walk to School; Historic Neighborhood Schools in the Age of Sprawl* (National Park Service, National Trust for Historic Preservation, and Smart Growth Network; October 2002). The Boise School Board held a contest for ideas to address parking needs so the amount of parking on the school site could be minimized. The following four management ideas emerged and were implemented:

1. Reimbursing the local transit agency for allowing the students to ride for free;
2. Providing better bicycle storage facilities on campus;
3. Creating a special parking district for student parking; and
4. Making shared parking arrangements with churches in the neighborhood.

The transit and bicycle measures require schools that are well-connected to their service area by transit and bicycle routes. While all of these measures could reduce the demand for parking spaces on the school site, the parking district and shared parking arrangements most directly affect the amount of the school site being

dedicated to parking. Shared parking arrangements require nearby organizations with ample parking and compatible use schedules, which may not be available at all school sites. Student parking districts would apply only at the high school level but parking districts in general may be more widely applied to staff and volunteers.

Barnes Elementary School in the Beaverton School District does have a parking agreement with the Foursquare Church adjacent to its site. Figure 1 shows the location of the shared parking area (immediately to the east of the ball fields). The Church parking spaces are available during the week for school activities. Conversely, the parking spaces at Barnes Elementary School are available for Church parking on Sundays and during activities which may require additional parking. Additional agreements like these could be pursued in the future where opportunities exist to reduce land needs (and costs).

Figure 1. Barnes Elementary School



Source: Beaverton School District

6. School Site Size

LRFPAC members agreed that another way of making more efficient use of land is to make the school sites smaller. The Committee agreed that school site sizes should be flexible and the recommendation is presented in Issue Paper #7A.

Similarly, alternative and Options programs in standalone schools vary in size and tend to occupy smaller sites than the District's comprehensive schools. Examples are as follows:

- Arts and Communication Magnet Academy (ACMA) – This school serves both middle school and high school students and is located on a 9.1- acre site;
- Health and Science School/Capital Center – This school serves both middle school and high school students and is located within the Capital Center campus;
- International School of Beaverton – This school serves both middle school and high school students, as well as District Special Education and Nutrition Services uses, and is located on a 13.5-acre site;
- Merlo Station School – This school serves high school students and is located on a 4.2-acre site.
- Terra Nova School – This school is located in the northeastern portion of the District on a 3.8-acre site.

Another option is to reduce the space on a school site dedicated to non-educational uses, such as field and playground space or parking. However, the following factors should be considered in making these types of decisions:

- Good walking, biking, and transit access must be available to reduce the demand for vehicle parking. Otherwise, there is the risk that parking will overflow into the surrounding neighborhood, which can create livability issues and complaints from residents.
- The 2002 Facility Plan Advisory Committee found that sufficient parking was an important issue for parents and others who were coming to volunteer at schools during the daytime. As schools have come to rely more on volunteers in times of operating budget shortfalls, this is a critical consideration.
- School sports and extracurricular activities have consistently been a highly regarded value of families in the District. Unless there are convenient alternatives to providing space for these activities, very careful consideration should be taken when evaluating whether to reduce this space on a school site.

There is also the option of expanding school facilities on existing sites or using existing sites more efficiently. There are several examples of where the District has done this. Hiteon Elementary School offers a good example of how the District has worked to maximize its school sites (Figure 2). The District expanded buildings, parking, and fields on Hiteon's 12.2-acre site in 2008/2009. Building area was expanded 42% for a total of 78,972 square feet. This means that building area makes up almost 20% of the lot area. As for the rest of the site, 61% of the lot is

landscaped or associated with recreational uses, about a quarter of which is Hiteon Park, almost three acres managed by Tualatin Hills Parks and Recreation (THPRD).

Figure 2. Hiteon Elementary School



Source: Beaverton School District

Conversely, Rock Creek Elementary School offers an example of a land-rich school site (Figure 3). Its building area comprises only about 6% of the 17.6-acre lot area. The site, therefore, offers possibilities of redevelopment and co-location of schools in the future. The site could potentially accommodate both an elementary school and middle school. Or the site could be converted to a middle school site if there were a need for additional middle school capacity in this portion of the District. While neither option has been proposed or evaluated, the large Rock Creek school site does appear to provide the District with options for future expansion.

Figure 3. Rock Creek Elementary School



Source: Google

7. Conclusion

There are several ways in which the District makes efficient use of its school sites including using portable classrooms, building multi-story schools, sharing use of school sites for both other District uses and with other public agencies, locating schools on smaller sites, and alternative parking arrangements.

However, the District must consider specific site conditions and the values and demands of the families in the District when evaluating these options. Site conditions such as environmental features like steep slopes and wetlands and development code regulations that establish use standards for school buildings and portable classrooms and setback requirements. Community values may include providing enough parking for volunteers, connected and safe walking, biking, and transit access, providing fields for sports, extracurricular activities and shared uses with THPRD and other community service providers, and making facilities and educational quality equitable between schools.

It is requested that the Committee recommend the options identified in this paper continue to be used by the District or that the Committee change or add options for the District to consider when evaluating efficient use of school sites.

Issue Paper #10: Alternatives to Construction

1. **Background**

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

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

(E) An analysis of:

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

As with making more efficient use of school sites, the statute does not specify what alternatives must be studied. This paper explores program changes, the use of portables, and public/private partnerships as alternatives to new construction and major renovation. Some of these ideas overlap with the statute's requirement that the efficient use of school sites also be analyzed. Please see Issue Paper #9 for that discussion.

2. **Program changes**

The 2002 Facility Plan reviewed three different program changes that schools could institute to potentially increase the capacity of existing school facilities to serve projected enrollment:

1. Single-track year-round schedule
2. Multi-track year-round schedule
3. Double shift schedule.

There are two types of year-round schedules that other school districts use. The single-track year-round schedule is the more traditional year-round schedule wherein all the students are on the same year-round schedule. Year-round school has been shown to have educational benefits. However, with all the students attending at same time, there is not a significant difference in the school's capacity. In fact, it has the potential to make maintenance more difficult because there are no long stretches of time when the school is unoccupied (as compared to schedules in which classes are not held during the summer). Major maintenance and renovations would require closing a school and transporting students temporarily to another location for classes.

The difference between the single-track and the multi-track year-round schedule is that the student body in the multi-track schedule is divided into four groups, and three of the four groups attend at one time. This has educational benefits associated with year-round schedules in addition to the potential to make 25% more capacity available. However, these advantages are somewhat offset by the same

challenges to major maintenance and renovation that single-track year-round schedules face.

A double shift schedule essentially splits the students into two groups: one that attends during the morning shift and one during the afternoon shift. Of these programming options, the double shift has the potential to free up the greatest amount of school capacity; theoretically, this could make 50% more capacity available during each shift. However, this schedule can create challenges for working parents coordinating care as well as interfere with extracurricular and “after-school” activities that families in the District regard dearly. The 2002 Facility Plan Advisory Committee did not further consider this option for those reasons.

3. *Portables*

Portable classrooms offer solutions both for making more efficient use of a school site (Issue Paper #9) and providing a substitute to constructing new permanent buildings. Portables offer flexibility in responding to changes in enrollment and cost less than permanent buildings to purchase and operate. Table 1 shows the number of portable classrooms in use in the district in September 2009, and the corresponding student capacity that these portables provide.

Table 1. Portables in Beaverton School District, September 2009

	Number of Portable Classrooms	Student Capacity
Elementary Schools	116	2,204
Middle Schools	35	735
High Schools	39	897
Options	22	506
Total	212	4,342

As discussed in Issue Paper #9, portables tend to lack some of the architectural quality and special features or amenities that permanent classrooms have. It is these differences that may make a difference in student achievement. When some schools have many more portables than others, this potentially creates inequity—lower performance and achievement related to more portable classrooms and fewer permanent classrooms.

4. *Public/private partnerships*

There may be opportunities on a small scale for public/private partnerships for District programs. The Northwest Regional Education Service District (NWRES D) operates the Cascade Academy and Pacific Academy in an existing office park (Nimbus area). These two programs are described as follows:

- **Cascade Academy** serves students in grades 7-12 with serious conduct, behavioral and emotional needs. Most students are eligible for special education services under the category of emotional disturbance. Local school

district teams refer students who need a small, nurturing and highly structured academic environment along with behavioral and mental health support. The staff to student ratio is 1:4, and curriculum, instruction and assessment are linked to Oregon State Standards. Students receive 22.5 hours per week of instruction and an average of 4 hours per week of mental health services.

- **Pacific Academy** serves students in grades 6-12 referred by local school district teams when a small, supportive academic environment with a mental health focus is indicated. A consulting clinical psychologist and psychiatric nurse practitioner team up with mental health staff and teachers to meet the student's social, emotional and behavioral needs. Curriculum, instruction and assessment are linked to the Oregon State Standards, and staff to student ratio is 1:4. Students at Pacific Academy receive 20 hours per week of instruction and an average of 5 hours per week of mental health services.

These are specialized programs that offer some flexibility in terms of the location of service. A conversation with a NWRES D representative indicated that, when leasing private space for these types of educational uses, there are security, building code issues and logistical issues (meal deliveries, recreational opportunities, etc.) that need to be considered. Additionally, the representative noted that for long-term programs it would be more expensive to lease space.

The Daily Journal of Commerce (December 2, 2009) reported that the Portland Public Schools (PPS) will be leasing the ground floor of a housing development in the Pearl District for an elementary school scheduled to open in spring 2011. This is the first time that PPS has made this kind of arrangement. It has leased out its own buildings to other school districts, but has never done so itself. Currently, Chapman Elementary School is the only elementary level school serving Northwest Portland.

The new school will not have a library, gymnasium, or cafeteria, which is not unusual for alternative programs or private schools but is unusual for traditional schools. However, the last elementary school that PPS opened – Rosa Parks School in North Portland – was constructed with a Boys & Girls Club built in and is sited across the street from a gymnasium that it has an agreement with Portland Parks and Recreation to use.

5. Conclusions

Program changes, the use of portables, and public/private partnerships may provide capacity that could prevent the need to perform major renovation or build a new school. However, each of these strategies has been found to be limited in some way. It is important for the District to explore other options for increasing the amount of school capacity without having to make major capital investments. It is requested that the Committee indicate whether these strategies have potential as alternatives to new construction and major renovation from a community perspective, and whether the Committee has other strategies to suggest.

Issue Paper #11: Financing for Capital Programs

1. **Background**

ORS 195.110(5)(a)(D) requires that school districts include in their Facility Plan: *“Financial plans to meet school facility needs, including an analysis of available tools to ensure facility needs are met.”* This paper provides a discussion of the financing tools available to the Beaverton School District and its capacity for generating capital resources.

2. **Alternative financing tools available**

Below is a brief discussion of the various financing authorities available to the District.

a) General Obligation Bonds (GO Bonds)

GO Bonds are a municipal debt security issued by the District and is backed by the full faith and credit of the Beaverton School District. They are used to finance capital expenditures and are supported by a voter approved property tax levy. Historically, Beaverton School District has used this method of financing for most of its capital construction. GO Bonds can be issued for land acquisition, construction, new schools, renovation or improvement of school facilities and equipment intrinsic to the facility.

b) Construction Excise Tax (CET)

The 2007 State Legislature passed Senate Bill 1036 allowing school districts to impose a CET on improvements to real property that result in a new structure or additional square footage in an existing structure. Beaverton School District is collecting \$1 per square foot of new residential construction and 50¢ per square foot of new non-residential construction that can be used for land acquisition, construction, renovation or improvement of school facilities, costs to purchase and install equipment and furnishings or other tangible property that has a useful life of more than one year, architectural, engineering, legal or similar costs related to capital improvements.

c) Full Faith and Credit Obligation Bonds (FFCO)

Similar to the GO Bond, the District can issue a municipal debt security by authorization from the school board, and is repaid using resources other than a tax levy. The District issued a FFCO in 2009 to be supported by

CET revenue and State School Fund 70% transportation reimbursement for components of the projects completed with the FFCO resources.

d) Certificate of Participation Bond (COP)

COP's are a financial obligation the District can use to finance essential capital improvements. Like a GO bond, a COP is a loan from investors to the District. Unlike GO bonds, however, COP's are not backed by the full faith and credit of the District, rather, the repayment of the debt service on the COP's is subject to annual appropriation by the District.

e) Build America Bonds (BAB)

Build America Bonds are a taxable municipal bond created under the American Recovery and Reinvestment Act of 2009 that carry special tax credits and federal subsidies for either the bond holder or the bond issuer. The Build America Bond provision is open to governmental agencies issuing capital expenditure bonds before January 1, 2011.

f) Qualified Zone Academy Bonds (QZAB's)

QZAB's are noninterest-bearing bonds, and the borrowing school district pays the principal back in 15 years. QZAB's are part of an annual \$400 million federal program, appropriated by Congress and is administered by the Oregon Department of Education. The money can only be used for qualifying schools where 35 percent or more of students are eligible for free or reduced-price school meals. A 10 percent match is required from a business or nonprofit partner which can be in cash or in-kind donations. The funds can be used for renovation and repairs, energy efficiency and renewable energy, equipment and technology.

g) Local Option Levy (LOL)

In 1997 Ballot Measure 50 amended the constitution to add a new limit to Oregon's local property tax system. The Measure 50 property tax limit is usually less than the 1990 Measure 5 tax limit, and the difference is generally referred to as the tax "gap". The 1997 Legislature approved school use of the gap for a voter approved local option property tax. Districts may use a LOL for operating and capital expenditure.

h) General Fund

The primary fund of the District that provides resources necessary to operate day-to-day activities of the District.

i) State Facilities Grant

The 1997 Legislature established the facility grant, but delayed implementation until 1999-00. The grant is for costs to equip and furnish a facility and cannot be used for construction costs. This was partly in response to the 1996 Measure 47 (included in Measure 50) that limited construction costs that could be bonded to those that are intrinsic to the structure. The District could receive up to 8% of the construction cost of a new school excluding land. The actual revenue limitations have shown this grant to be more in the 3-4% range of project cost.

j) Donations

The District receives donations given by a person or foundation for charitable purposes to benefit the education of Beaverton students. An example would be the Nike School Innovation Fund has donated to the District.

k) Grants

The District pursues federal and state grant opportunities as they are available. An example would be SB1149. The bill went into effect on March 1, 2002, and it provides a 3% charge on electricity services. Ten percent of these funds go towards energy efficiency efforts in the public schools.

3. Current Beaverton School District indebtedness

Beaverton School District
Schedule of Outstanding and Refunded Bonds
for the year ended June 30, 2009

<u>Issue Date</u>	<u>Original Issue</u>	<u>Outstanding at June 30, 2009</u>	<u>Interest Rates</u>	<u>Pay off Year</u>
<u>General Obligation Bonds</u>				
January 9, 2001	40,000,000	\$ 7,785,000	4.10 - 4.40	January, 2013
March 14, 2002	55,000,000	12,965,000	4.00 - 4.40	June, 2014
November 13, 2003	54,780,000	44,810,000	3.00 - 5.00	May, 2023
October 21, 2004	104,530,000	74,040,000	4.50 - 5.00	June, 2019
December 2, 2004	27,800,000	17,575,000	5.00	June, 2012
November 11, 2005	49,470,000	47,020,000	4.00 - 5.00	June, 2015
January 24, 2007	149,090,000	148,930,000	4.13 - 5.00	June, 2026
April 2, 2009	42,810,000	<u>42,810,000</u>	3.00 - 5.00	June, 2018
		<u>395,935,000</u>		
<u>Full Faith and Credit Obligations</u>				
March 19, 2009	22,650,000	<u>22,650,000</u>	2.50 - 5.13	June, 2036
		<u>\$ 418,585,000</u>		

4. Capacity and timing for assuming new debt

See attached levy rate analysis from GO Bond sale of April 2009.

5. Conclusion

For Oregon school district, bonds are the primary tool for financing school facility needs. There is a legal maximum debt capacity of 7.95% of real market value, and the District has remaining capacity of \$2.38 billion remaining. The real limitation is the capacity made available by the voting patrons of the District. In 2014, the District's levy rate is estimated to be \$2.11 per 1,000 of assessed value and will drop to \$1.40 in 2015. This is a potential good timeframe for a bond issue, and in 2019 the rate continues to drop to \$.68 offering an additional possibility for debt issue.

Issue Paper #12: Land Needs for the Facility Plan

1. **Introduction**

Pursuant to the school facility planning statute, ORS 195.110, Beaverton School District must conduct an analysis to determine the land needed to implement the recommendations of the facility plan:

(b) Based on the elements described in paragraph (a) of this subsection and applicable laws and rules, the school facility plan must also include an analysis of the land required for the 10-year period covered by the plan that is suitable, as a permitted or conditional use, for school facilities inside the urban growth boundary.

This paper reviews findings from Issue Paper #8 about projected enrollment and the amount of school facility capacity needed through 2025, and compares the facility needs to land already owned by the District to yield a net land need to accommodate anticipated enrollment growth. The estimates of land needs are based on previous Committee discussions of site size ranges and characteristics (Issue Paper #7). Additionally, locations for these land needs are identified using information regarding buildable land and expected growth from the City of Beaverton and Washington County as well as earlier analysis about attendance areas with enrollment levels that currently exceed the amount of available space (Issue Paper #4A).

It is important to note that this paper estimates land needs based on the premise that needed capacity will be provided by **new schools**. It is understood that the Committee has discussed and recommended other means of providing capacity such as more efficient use of school sites, school expansions, use of portable classrooms, and boundary adjustments. In this way, the land needs estimated in this paper can serve as an approximate upper limit of land that will be needed through 2025. A true upper limit would include the amount of additional facility capacity that will be needed for Physical Education (PE) requirements due to take effect in 2017. However, those impacts are currently difficult to determine and the amount of additional facility capacity that will be needed to meet future PE requirements is unknown at this time. District staff will continue to study the potential implications of these requirements.

2. **Facility Needs and Land Needs**

Facility needs and land needs are summarized by school level in Table 1. The table presents the following information:

1. Findings of facility needs based on projected enrollment and desired school sizes from the 2002 Facility Plan.
2. Increases in capacity supply made between the 2002 Facility Plan and the 2010 update (including new schools built, school expansions, and sites purchased).

3. Findings of facility needs through 2025 based on projected enrollment and desired school sizes for the 2010 Facility Plan (Issue Paper #8).
4. The difference between projected facility needs and site supply, or the number of new sites needed.
5. An estimate of the land needed through 2025 for the net number of sites needed, based on site size ranges and characteristics (Issue Papers #7 and #7A). For additional analysis of minimum site size needs, please see the tables integrating District, Metro, and LEED guidelines in Issue Paper #7A.
6. The general location of needed sites.

The following considerations were made when estimating the location of needed facilities:

- **Elementary schools** – Maps from Issue Paper #4A show that the Oak Hills, Barnes, and Vose schools have the highest occupancy rates in the District. These attendance areas are generally central to the District and growth that the City of Beaverton expects through infill and redevelopment in central Beaverton will add to this demand.
- **Middle schools** – Central and northern attendance areas, particularly Meadow Park, feature the highest occupancy rates in the District. Another high occupancy concentration occurs in the Conestoga attendance area in the south District.
- **High schools** – The two high schools in the north – Sunset and Westview – have the highest occupancy rates in the District. Potential and anticipated growth in the area of the former Teufel nursery site, the Barnes/Peterkort area, and the North Bethany area (both land inside the UGB and in newly designated Urban Reserves) will add to demand in the north.

Aloha and Southridge High Schools in the south are also expected to have high occupancy rates in 2010-2011 (from 95-105%). Growth is expected to continue in the Aloha area outside the City of Beaverton and there are significant areas of infill, redevelopable, and vacant land – as well as Urban Reserves – in the south.

- **Options schools** – These schools are not subject to the same attendance area boundaries as are the other traditional schools. There is typically a competitive application process to attend them. Without the same attendance area restrictions, there is more flexibility in siting Options schools/programs. District-owned sites that do not fit the locational needs of the traditional schools may be potential sites for Options schools. Of the three sites that the District owns north of the Sunset Highway, for example, two may provide land for elementary schools and one for an Options school.

Table 1: Facility and Land Needs for Beaverton School District

School Level	2020 Facility Needs (2002 Plan)	Capacity Supply Activity 2002 - 2010	2025 Facility Needs (2010 Plan)	New Sites Needed (With Portables)*	Amount of Land Needed (With Portables)	New Sites Needed (Without Portables)**	Amount of Land Needed (Without Portables)	Location
Elementary School (K-8)	11	<ul style="list-style-type: none"> Built 3 new elementary schools (including two K-8 schools) Expanded capacity at 5 elementary schools by a total of approx. 100,000 sf Bought 2 elementary school sites in the North Bethany area Acquired 14.9 acres adjacent to Westview 	3	1	7-10 acres	3	21-30 acres	<ul style="list-style-type: none"> District owns 3 school sites in north District (north of Sunset Highway) Need 1 elementary school site central or south District for anticipated growth by 2025
Middle School (6-8)	4	<ul style="list-style-type: none"> No new middle schools built (two K – 8 schools built) Built 2 Options schools Acquired Teufel site 	1	0	0	0 OR 1	0 OR 15-20 acres	<ul style="list-style-type: none"> District owns 1 middle school site in north District (Teufel) No additional middle school sites needed by 2025
High School (9-12)	1	<ul style="list-style-type: none"> No new high schools built Built 2 Options schools Expanded capacity at 3 high schools by a total of 74,615 sf Added 16 classrooms at 2 high schools within existing space 	1 OR 2	1 OR 2	35-40 acres OR 70-80 acres	1 OR 2	35-40 acres OR 70-80 acres	<ul style="list-style-type: none"> District does not own vacant high school sites Potential need for up two high school sites, one in north and one in south District for anticipated growth by 2025

School Level	2020 Facility Needs (2002 Plan)	Capacity Supply Activity 2002 - 2010	2025 Facility Needs (2010 Plan)	New Sites Needed (With Portables)*	Amount of Land Needed (With Portables)	New Sites Needed (Without Portables)**	Amount of Land Needed (Without Portables)	Location
Options School (6-12)	1	<ul style="list-style-type: none"> Built 2 Options schools 	2 OR 0	2 OR 0	To be determined	2 OR 0	To be determined	<ul style="list-style-type: none"> District owns a site at NW 174th/Westview To be determined
TOTAL	17		7 OR 6	4 OR 3	42-50 acres + sites for 2 Options schools OR 77-90 acres (no new sites for Options schools) + ancillary facility sites	6	56-70 acres + sites for 2 Options schools OR 106-130 acres (no new sites for Options schools) + ancillary facility sites	

Note: # **OR** # signifies the number of schools needed depending on whether Options schools are built. In the sequence, the first number represents the number of schools needed if 2 Options schools are provided and the second number represents the number of schools if Options schools are not provided.

* **“With portables”** – This is the estimate of the number of new sites needed given existing total capacity, which includes portable classrooms currently in use in the district.

** **“Without portables”** – This is the estimate of the number of new sites needed given existing permanent capacity, which excludes portable classrooms currently in use in the district and use of them in the planning horizon.

Ancillary Facilities

As presented in Issue Paper #6 and the presentation on ancillary facilities at Meeting #3, there is not a systematic method of evaluating the adequacy of ancillary facilities. Further, in a qualitative assessment, almost all of the facilities – administration, maintenance, and warehousing – are projected to be inadequate by 2025. Where facilities are found to be inadequate, this may correspond to a need to expand, significantly renovate, or replace the facility. The Committee has strongly recommended that the District develop a systematic way of assessing ancillary facility conditions and scaling future ancillary facility needs to growth in enrollment.

3. Conclusion

As presented in Table 1, it is estimated that an additional 42 to 90 acres would be needed for new schools in the District by 2025 (with portable classrooms) and from 56 to 130 acres (without portable classrooms). In addition to sites that the District already owns, three new elementary schools, one middle school, and either one new comprehensive high school site and two new Options schools or two new comprehensive high schools sites will be needed by 2025. There also may be land needed for new ancillary facilities but that will be determined in further study that the Committee has recommended.

The projected need to be addressed through 2025 is different from the need projected in the 2002 Facility Plan. The District's work over the last eight years building new schools, expanding capacity at existing schools, adding portables, and adjusting attendance boundaries has gone a long way towards addressing the need identified in 2002.

The District has used school expansions, portables, and boundary adjustments to increase capacity and will likely continue to use these means to some extent. However, it is acknowledged that the Committee has also recommended that the District conduct a site-by-site analysis to assess and explore if existing school sites can be used more creatively and efficiently. The findings from this analysis – as well as analysis conducted during bond program development – may reveal other ways to increase or reallocate capacity without the need to construct additional schools.

It is also understood that there are PE requirements that will be enacted in 2017 and that these requirements will have significant facility implications for some schools. However, it is not yet clear how to estimate and assess these impacts, and the District will intend to evaluate the implications of the requirements. Until then, the estimated land needs in this paper can be considered as the “approximate” upper bound of potential land needs through 2025 given the unknown facility implications of future additional PE requirements.

With these important caveats, Committee consensus is sought for using the findings in Table 1 of this paper as to the anticipated amount of land and number of sites that the District will need through 2025.

Appendix C

**Portland State University Population Research Center
Beaverton School District Population and Enrollment Forecasts
2009-10 to 2025-26**

**BEAVERTON SCHOOL DISTRICT
POPULATION AND ENROLLMENT FORECASTS
2009-10 TO 2025-26**



Portland State
UNIVERSITY

Population Research
Center



NOVEMBER, 2008

CONTENTS

EXECUTIVE SUMMARY	1
Enrollment by School Level	3
INTRODUCTION	5
POPULATION AND HOUSING TRENDS, 1990 to 2007	7
Population and Migration by Age Group.....	9
Births and Fertility Rates	11
Housing Growth and Characteristics	13
ENROLLMENT TRENDS	15
Private and Home School Enrollment and District “Capture Rate”	17
Neighboring Districts.....	18
ENROLLMENT FORECASTS.....	21
District-wide Forecast Methodology	21
Future Residential Development.....	22
Population Forecasts	28
District-wide Enrollment Forecasts	29

TABLES, CHARTS, AND MAPS

Table 1. Historic and Forecast Enrollment, Beaverton School District.....	2
Table 2. City and Region Population, 1990, 2000, and 2007.....	7
Table 3. Population by Age Group, Beaverton School District, 1990 and 2000.....	10
Table 4. Annual Births, 1990 to 2006, Beaverton School District.....	12
Table 5. Housing and Household Characteristics, 1990 and 2000.....	14
Table 6. New Housing Units Built 2000 to 2007.....	14
Table 7. Beaverton S.D., Enrollment History, 1998-99 to 2008-09.....	16
Table 8. Selected School Districts, Demographic and Enrollment Highlights.....	19
Table 9. Comparison of Population Growth Rates.....	29
Table 10. BSD, <u>Low</u> Range Enrollment Forecasts, 2009-10 to 2025-26.....	31
Table 11. BSD, <u>Middle</u> Range Enrollment Forecasts, 2009-10 to 2025-26.....	32
Table 12. BSD, <u>High</u> Range Enrollment Forecasts, 2009-10 to 2025-26.....	33
Table A1. Total Fertility Rate Assumptions, BSD Population Forecasts.....	A-2
Table A2. Population by Age Group, <u>Low</u> Range Forecast, BSD, 1990 to 2030.....	A-3
Table A3. Population by Age Group, <u>Middle</u> Range Forecast, BSD, 1990 to 2030.....	A-4
Table A4. Population by Age Group, <u>High</u> Range Forecast, BSD, 1990 to 2030.....	A-5
Table A5. BSD, <u>Low</u> Range Enrollment Forecasts, 2009-10 to 2025-26.....	A-8
Table A6. BSD, <u>Middle</u> Range Enrollment Forecasts, 2009-10 to 2025-26.....	A-9
Table A7. BSD, <u>High</u> Range Enrollment Forecasts, 2009-10 to 2025-26.....	A-10

TABLES, CHARTS, AND MAPS (continued)

Chart 1. Beaverton S.D. Enrollment History and Forecasts.....	3
Chart 2. Population Change due to Migration, 1990 to 2000, BSD by Age Group.....	11
Chart 3. Age-Specific Fertility Rates, 1990 and 2000, BSD & State of Oregon.....	12
Chart 3. Age-Specific Fertility Rates, 1990 and 2000, BSD & State of Oregon.....	12
Chart A1. Net Migration, 1990 to 2030, BSD, History and <u>Low</u> Range Forecast.....	A-1
Chart A2. Net Migration, 1990 to 2030, BSD, History and <u>Middle</u> Range Forecast....	A-1
Chart A3. Net Migration, 1990 to 2030, BSD, History and <u>High</u> Range Forecast.....	A-2
Chart A4. BSD Birth Cohorts and Kindergarten Enrollment, <u>Low</u> Range Forecast.....	A-6
Chart A5. BSD Birth Cohorts and Kindergarten Enrollment, <u>Middle</u> Range Forecast..	A-6
Chart A6. BSD Birth Cohorts and Kindergarten Enrollment, <u>High</u> Range Forecast....	A-7
Map 1. Place of Work of Beaverton S. D. Residents, 2006.....	9
Map 2. Beaverton School District Residential Capacity Analysis.....	24

EXECUTIVE SUMMARY

The Beaverton School District (BSD) enrolled 36,200 students in Fall 2008, a decrease of 187 students (0.5 percent) from Fall 2007. This was the second consecutive year with a small enrollment loss; the Fall 2007 total was 232 students (0.6 percent) lower than in Fall 2006.¹ The declines followed at least 20 consecutive years of enrollment growth. In spite of the overall losses, elementary grades (K-5) have added 238 students (1.4 percent) in the past two years, while middle school grades (6-8) have lost 177 students (2.1 percent) and high school grades (9-12) have lost 480 students (4.3 percent).

This report presents enrollment forecasts prepared by the Portland State University Population Research Center (PRC) exploring three possible scenarios for BSD enrollment during the next 17 years based on different assumptions about future net migration and fertility rates. The study includes analysis of population, housing and enrollment trends affecting the District in recent years and forecasts of district-wide enrollments by grade level for the 2009-10 to 2025-26 school years.

Although the weak economy and slow housing market may keep enrollment flat in the short run (one or two years), all three enrollment forecast scenarios indicate that overall BSD enrollment will increase in the long run. There will be less new housing construction on vacant land now that most of the District's residential land is occupied, but our analysis of vacant residential land, redevelopment and infill potential, and specific planning efforts indicates that there may be capacity for an additional 32,000 to 40,000 housing units to be added to the current stock of about 101,000 units.

In the middle, or most likely scenario, the District adds about 8,500 students in the next 17 years, reaching an enrollment of 44,660 in 2025. Enrollment growth under the middle

¹As in previous demographic studies prepared by PSU, enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs. When all students are included, as in the "District Statistics" report prepared by BSD, there was a small enrollment gain of 102 students between Fall 2006 and Fall 2007, and Fall 2008 is identified as the first year with an enrollment loss.

series averages about 500 students annually, a significant rebound considering the downward trend of the past two years. However, the middle range growth is less than the long term average growth of 755 students annually between 1990 and 2006, and also less than in our previous study, which forecast average annual growth of about 620 students from 2004 to 2025 under the medium growth scenario.

Only the high scenario calls for numeric growth comparable to the booming 1990s. With an average of almost 800 additional students per year, total enrollment reaches 49,629 in 2025. In the low scenario, the District adds about 225 students annually, reaching 40,007 students in 2025. The alternate scenarios include different assumptions about migration and fertility. Specific assumptions are detailed in the “Enrollment Forecasts” section and in the Appendix.

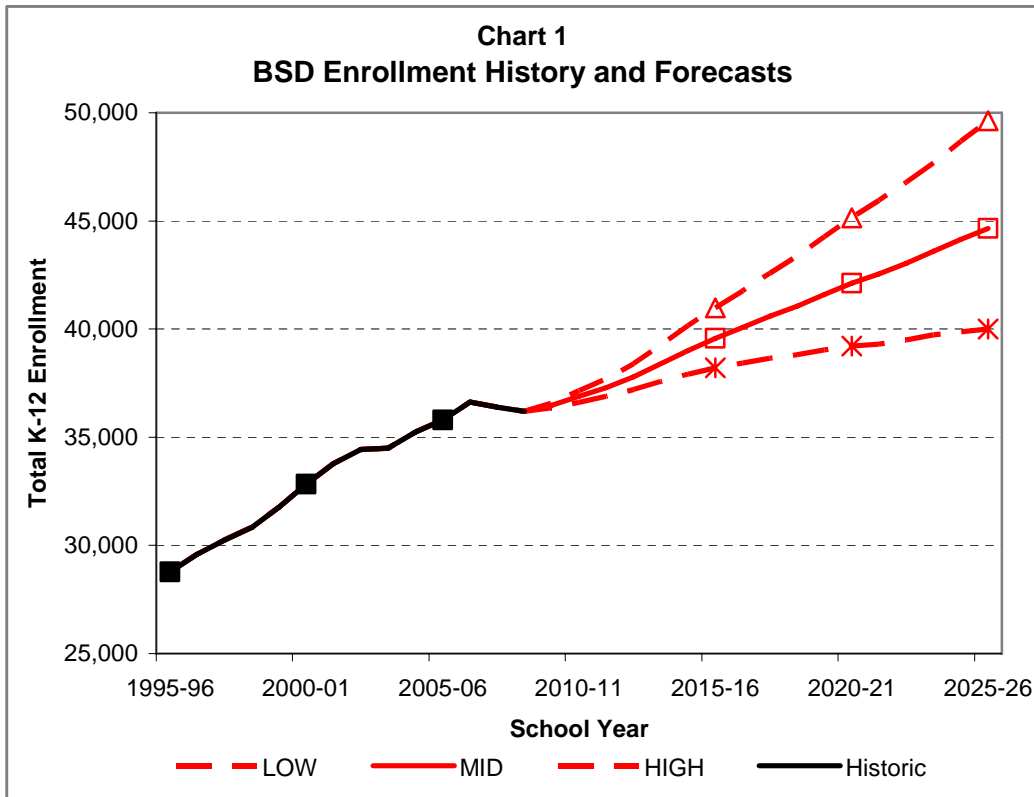
Table 1 contains total K-12 enrollments under the three forecast scenarios, and includes current and historic enrollments for comparison. Following the table, Chart 1 depicts enrollment growth.

Table 1 Historic and Forecast Enrollment Beaverton School District						
School Year	LOW		MIDDLE		HIGH	
	Enroll- ment ¹	5 year growth	Enroll- ment ¹	5 year growth	Enroll- ment ¹	5 year growth
1990-91	24,536		24,536		24,536	
1995-96	28,771	4,235	28,771	4,235	28,771	4,235
2000-01	32,830	4,059	32,830	4,059	32,830	4,059
2005-06	35,795	2,965	35,795	2,965	35,795	2,965
2008-09	36,200	--	36,200	--	36,200	--
2010-11 (fcst.)	36,614	819	36,889	1,094	37,151	1,356
2015-16 (fcst.)	38,206	1,592	39,571	2,682	40,981	3,830
2020-21 (fcst.)	39,213	1,007	42,127	2,556	45,141	4,160
2025-26 (fcst.)	40,007	794	44,660	2,533	49,629	4,488
AAEG ² , 2008-09 to 2025-26	0.6%		1.2%		1.9%	

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual Enrollment Growth.

Source: Historic enrollment, Beaverton School District; Enrollment forecasts, Population Research Center, PSU. October 2008.



Enrollment by School Level

Under the middle range scenario, enrollment in elementary grades grows by an annual average of just 1.0 percent between 2008 and 2015, adding 1,269 students during the next seven years. During the same period, middle grades add 970 students, (1.6 percent annually) and high school grades add 1,132 students (1.4 percent annually).

Between 2015 and 2025, each school level is forecast to grow by 1.2 percent annually under the middle scenario. Elementary grades add an additional 2,419 students in the 10 year period, middle grades add 1,154 students, and high school grades add 1,516 students.

INTRODUCTION

The Beaverton School District (BSD) requested that the Portland State University Population Research Center (PRC) prepare *long-range* enrollment forecasts for use in the District’s planning. PRC has conducted similar studies for the BSD, about once every three to five years for at least 20 years. This report includes forecasts of district-wide enrollment by grade level for each year from 2009-10 to 2025-26 under three different growth scenarios. Information sources include the U.S. Census Bureau, birth data from the Oregon Center for Health Statistics, small area forecasts from Metro, city and county population estimates produced by PRC, county population forecasts from the Oregon Office of Economic Analysis, employment trends and forecasts from the Oregon Employment Department, and planning documents from Washington County, Metro, and the Cities of Beaverton, Hillsboro, Tigard, and Portland.

The District serves nearly the entire City of Beaverton, with the exception of a portion of the West Slope area annexed by Beaverton in the late 1990s and 2000s that is within the Portland School District. Portions of the cities of Tigard, Hillsboro, and Portland also extend into the District. In spite of aggressive annexation by the area’s municipalities, at least half of the District’s residents live in unincorporated Washington County, outside the boundaries of any city.

Following this introduction are sections presenting recent population, housing, and enrollment trends within the District. Next, the “Enrollment Forecasts” section includes a discussion of methodology and summaries of the district-wide enrollment forecasts. The Appendix includes more detailed results and assumptions of the three forecast scenarios.

POPULATION AND HOUSING TRENDS, 1990 to 2007

During the decade between the 1990 and 2000 Censuses, total population within the current boundaries of the BSD grew by 41 percent, from 152,815 persons to 215,423. The District's rate of population growth during the 1990s was only slightly less than the 43 percent growth experienced by Washington County overall, and significantly greater than the 27 percent growth rate in the Portland-Vancouver-Beaverton metropolitan region.

Table 2
City and Region Population, 1990, 2000, and 2007

	1990	2000	2007	Avg. Annual Growth Rate	
				1990-2000	2000-2007
City of Beaverton ¹	53,307	76,129	85,560	3.6%	1.6%
<i>BSD Portion</i>	53,307	75,536	N/A	3.5%	
City of Hillsboro ²	37,598	70,186	88,300	6.2%	3.2%
<i>BSD Portion</i> ⁵	687	4,701	N/A	19.2%	
City of Portland ³	438,802	529,121	568,380	1.9%	1.0%
<i>BSD Portion</i> ⁵	994	912	N/A	-0.9%	
City of Tigard ⁴	29,435	41,223	46,715	3.4%	1.7%
<i>BSD Portion</i> ⁵	4,128	7,483	N/A	5.9%	
BSD Unincorporated	93,699	126,791	N/A	3.0%	
BSD Total	152,815	215,423	N/A	3.4%	
Washington County	311,554	445,342	511,075	3.6%	1.9%
Portland-Vancouver-Beaverton MSA ⁶	1,523,741	1,927,881	2,159,720	2.4%	1.6%

1. A portion of the City of Beaverton's population growth was due to the annexation of 2,468 persons between 1990 and 2000 and 1,944 persons between 2000 and 2007.

2. A portion of the City of Hillsboro's population growth was due to the annexation of 635 persons between 1990 and 2000.

3. A portion of the City of Portland's population change was due to the annexation of 47,227 persons between 1990 and 2000 and 8 persons between 2000 and 2007.

4. A portion of the City of Tigard's population growth was due to the annexation of 1,205 persons between 1990 and 2000 and 1,111 persons between 2000 and 2007.

5. The 1990 populations of BSD within Hillsboro, Portland, and Tigard are estimated because 1990 census blocks were not delineated by school district boundaries.

6. Portland-Vancouver-Beaverton MSA consists of Clackamas, Columbia, Multnomah, Washington, Yamhill (OR) and Clark and Skamania (WA) Counties.

Sources: U.S. Census Bureau, 1990 and 2000 censuses; Portland State University Population Research Center, 2007 estimates.

In the current decade, the area served by BSD has continued to grow, but at a slower rate. Table 2 on the previous page shows that annual average growth rates in the 2000s for Washington County and each of the cities that are mostly or partly within the District are about half of what they were in the 1990s.

Regionally, the growth rate is influenced primarily by the health of the economy, and the current decade illustrates the cyclical nature of the economy. After the end of the 1990s high-tech boom that fueled much of the area's employment and housing growth, the early 2000s recession slowed employment and population growth. Washington County lost jobs in 2002 and in 2003; and by 2004 its job total had barely recovered to its 2000 level.² Between 2004 and 2006, Washington County added about 22,000 jobs, or nearly 10 percent. Employment growth slowed to about 4,000 jobs in 2007. The latest monthly job figures for 2008 indicate that the 2007 gain has been wiped out by the current recession, and the County is back to its 2006 employment level.³

In good economic times or bad, an advantage that residents of the Beaverton School District have is proximity to the region's largest employment areas. Using the results of the Census Bureau's 2007 American Community Survey (ACS), we estimated that BSD residents who worked outside of their homes had an average travel time to work of 23.2 minutes, compared with 25.0 minutes for residents of the remainder of the metropolitan region.⁴ Many residents' workplaces are within the District itself. The Census Bureau's Local Employment Dynamics (LED) data from the second quarter of 2006 identifies 101,106 "primary" jobs within the BSD, not counting most agricultural employment, self-employment, and second jobs. There were 112,118 primary job holders living in the District, a ratio of 0.90 jobs per worker. Map 1 on the next page shows concentrations of BSD residents working in the District or within several miles of it in Downtown Portland, Hillsboro, or the Tigard/Lake Oswego area. More than two thirds of employed BSD residents worked in the cities of Beaverton, Portland, Hillsboro, or Tigard.⁵

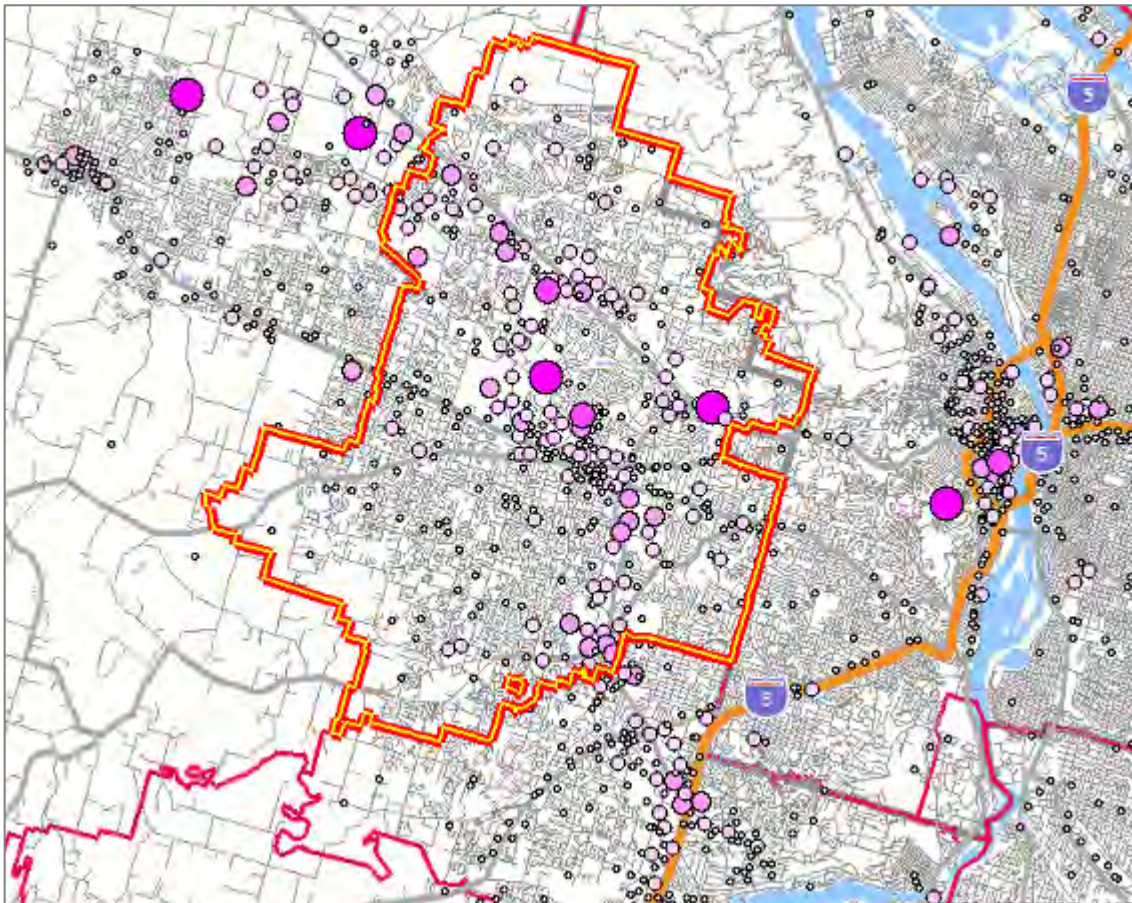
²"Covered Employment and Wages". Oregon Employment Department, OLMIS.

³"Current Employment Statistics". Oregon Employment Department, OLMIS.

⁴U.S. Census Bureau, 2007 American Community Survey one year estimates, Tables B08013 and B08303.

⁵U.S. Census Bureau, LED Origin-Destination Database (2nd quarter 2006). Reports and map created on line at <http://lehdm3.did.census.gov/themap3/>.

Map 1
Place of Work of Beaverton S. D. Residents, 2006



Population and Migration by Age Group

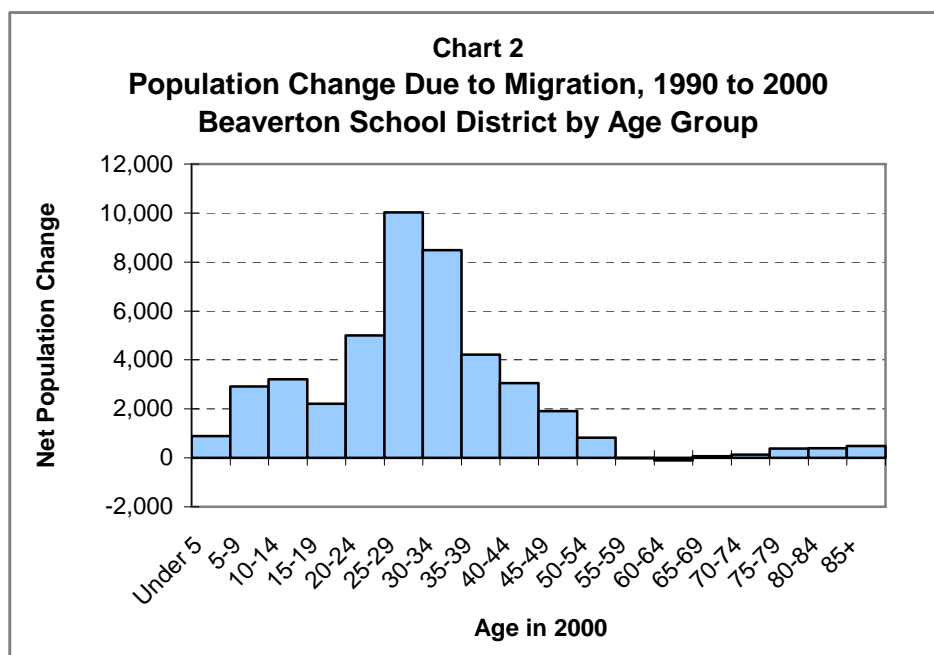
Population by age group for 1990 and 2000 is shown in Table 3 on the next page. Every age group grew by 20 percent or more during the decade with one exception, ages 65 to 69, which grew by only one percent. The 65 to 69 year old age group lost population in Oregon and the U.S. between 1990 and 2000 because the cohort that age in 2000 was born during the depression era of the early 1930s, when births fell from previous levels. The growth rate for school-age population (45 percent) was higher than for total population (41 percent). However, the relative growth rates of the under 18 population, highest for older children (52 percent for ages 15 to 17) and lowest for children under age five (40 percent) provides a clue about one of the reasons that the pace of BSD enrollment gains slowed in the early 2000s compared with the late 1990s.

Table 3
Population by Age Group
Beaverton School District, 1990 and 2000

	1990	2000	1990 to 2000 Change	
			Number	Percent
Under Age 5	11,734	16,405	4,671	40%
Age 5 to 9	11,463	16,171	4,708	41%
Age 10 to 14	10,211	14,914	4,703	46%
Age 15 to 17	5,688	8,644	2,956	52%
Age 18 to 19	3,414	5,000	1,586	46%
Age 20 to 24	10,511	15,137	4,626	44%
Age 25 to 29	14,715	19,042	4,327	29%
Age 30 to 34	15,737	18,876	3,139	20%
Age 35 to 39	15,238	18,699	3,461	23%
Age 40 to 44	13,323	18,470	5,147	39%
Age 45 to 49	9,578	16,795	7,217	75%
Age 50 to 54	6,786	13,757	6,971	103%
Age 55 to 59	5,454	9,129	3,675	67%
Age 60 to 64	5,041	6,183	1,142	23%
Age 65 to 69	4,822	4,891	69	1%
Age 70 to 74	3,555	4,327	772	22%
Age 75 to 79	2,597	4,004	1,407	54%
Age 80 to 84	1,619	2,646	1,027	63%
Age 85 and over	1,329	2,333	1,004	76%
Total Population	152,815	215,423	62,608	41%
Total age 5 to 17	27,362	39,729	12,367	45%
share age 5 to 17	17.9%	18.4%		

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center.

In the 1990s, about 70 percent of BSD's population growth was directly attributable to net migration (people moving in minus people moving out). By "surviving" the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the "survived" population to the actual 2000 population by age group, we are able to estimate net migration by age cohort. Chart 2 shows the estimated population change that each age group contributed due to migration between 1990 and 2000. For example, among the cohort that was 15 to 19 in 1990 and 25 to 29 in 2000, about 10,000 more people moved into the BSD than out of it in the 1990s. Nearly all age groups added population due to migration, with the largest gains among young adults ages 25 to 34. Although Table 3 showed that these age groups grew more slowly than overall population within the District, the large migration of young adults allowed BSD to counter the national decline in population aged 25 to 34.



Births and Fertility Rates

The 40 percent increase in the number of births in the District from 2,559 in 1990 to 3,571 in 2000 roughly kept pace with the 41 percent overall population increase. Since 2000 the number of births to BSD residents has stagnated; the 2006 estimate of 3,687 was only three percent higher than in 2000. With the large baby boom cohort no longer in its prime childbearing years, recent population growth has not been sufficient to generate an increase in births. Table 4 reports the number of births each year from 1990 to 2006 for the District.

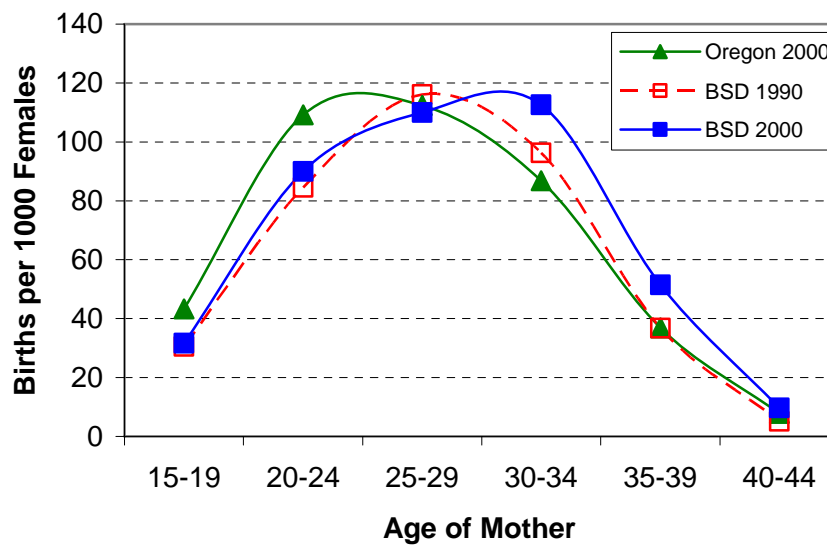
Age-specific fertility rates for the BSD in 1990 and 2000 are shown in Chart 3 following Table 4. For comparison, the State of Oregon's fertility rates for 2000 are also included. The rates were calculated for each age group by dividing the number of births in the calendar year by the female population counted in the census. For example, in 1990 there were 868 births to mothers age 25 to 29 and a population of 7,476 women age 25 to 29 in the BSD, so the fertility rate in 1990 for women age 25 to 29 was $868 \div 7476 = 0.116$ births per female, 116 births per thousand females. Chart 3 shows that BSD fertility rates for women under age 30 in 2000 were similar to those in 1990, and rates for women under 25 were below Oregon rates. For women age 30 and over, BSD fertility rates

Table 4
Annual Births, 1990 to 2006
Beaverton School District

Year	Births
1990	2,559
1991	2,549
1992	2,674
1993	2,716
1994	2,762
1995	2,847
1996	2,910
1997	3,112
1998	3,253
1999	3,296
2000	3,571
2001	3,536
2002	3,538
2003	3,639
2004	3,563
2005	3,592
2006	3,687

Source: PSU-PRC estimates using Oregon Center for Health Statistics data.

Chart 3
Age-Specific Fertility Rates
Beaverton S.D., 1990 and 2000



increased between 1990 and 2000 and are well above the statewide rates. The ethnic component not shown in the chart is that for non-Hispanic women, fertility rates in all age groups under 30 fell between 1990 and 2000. However, the increased share of births to Hispanic women during the decade caused overall fertility rates to increase for women under 25. In 2000, Hispanic women 30 and over had similar fertility rates to non-Hispanic women in the same age groups, but much higher rates among women under 30. Among BSD mothers under the age of 25, the Hispanic share of all births increased from seven percent in 1990 to 30 percent in 2000.

Another common measure of fertility is the Total Fertility Rate (TFR). This is an estimate of the number of children that would be born to the average women during her child-bearing years, based on age-specific fertility rates observed at a given time. The TFR for the District increased from 1.84 in 1990 to 2.03 in 2000. Total fertility rates in 2000 were 2.20 for Washington County overall, and 1.98 for the State.

Housing Growth and Characteristics

During the 1990s, the number of housing units within the District's boundaries increased by more than 25,000, as shown in Table 5 on the next page. There was a 39 percent increase in housing units as well as households (occupied housing units), and the 42 percent rate of growth of households with children under 18 exceeded the overall household growth rate. The share of households in the BSD that included at least one child under the age of 18 was 36 percent in 2000, similar to the 35 percent share in the Portland-Vancouver metro area overall. The average number of persons per household increased from 2.49 in 1990 to 2.52 in 2000.

Based on the change between the 1990 and 2000 Census, there were an average of about 2,500 housing units added in the BSD each year in the 1990s. Since 2000, annual average housing growth has been closer to 1,800 units. Our estimate is based on the information shown in Table 6, an accounting of 14,791 housing units built in the eight year period from 2000 to 2007.

Table 5
Beaverton School District
Housing and Household Characteristics, 1990 and 2000

	1990	2000	1990 to 2000 Change	
			Number	Percent
Housing Units	64,448	89,723	25,275	39%
Single Family <i>share of total</i>	35,904 56%	49,849 56%	13,945	39%
Multiple Family <i>share of total</i>	26,858 42%	38,474 43%	11,616	43%
Mobile Home and Other <i>share of total</i>	1,686 3%	1,400 2%	-286	-17%
Households	61,052	85,082	24,030	39%
Households with children under 18 <i>share of total</i>	21,749 36%	30,823 36%	9,074	42%
Households with no children under 18 <i>share of total</i>	39,303 64%	54,259 64%	14,956	38%
Household Population	152,044	214,190	62,146	41%
Persons per Household	2.49	2.52	0.03	1%

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center.

Table 6
Beaverton School District
New Housing Units Built 2000 to 2007

	Year Built								2000-07 Total
	2000	2001	2002	2003	2004	2005	2006	2007	
District Total	1,633	2,284	1,442	1,447	1,835	2,590	2,014	1,546	14,791

Note: New homes include single family homes and units in condos and apartments.

Source: Estimates compiled by PSU-PRC. The primary source is tax assessor parcel data. The assessor's data does not include housing unit counts, so the counts were derived from housing-related attributes, such as property code and land use. Additional sources such as residential construction permits were used to supplement and verify the estimates.

ENROLLMENT TRENDS

The Beaverton School District (BSD) enrolled 36,200 students in Fall 2008, a decrease of 187 students (0.5 percent) from Fall 2007. This was the second consecutive year with a small enrollment loss; the Fall 2007 total was 232 students (0.6 percent) lower than in Fall 2006.¹ In spite of the overall losses, elementary grades (K-5) have added 238 students (1.4 percent) in the past two years, while middle school grades (6-8) have lost 177 students (2.1 percent) and high school grades (9-12) have lost 480 students (4.3 percent).

Prior to Fall 2006, the BSD's total enrollment grew each year for 21 years. During those years there were periods of remarkable growth (annual average growth of 1,200 from 1988 to 1992 and 980 from 1998 to 2001) interspersed with moderately rapid growth (annual average growth of 670 from 1992 to 1998 and 570 from 2001 to 2006).

Notable enrollment trends from Fall 2008 include:

- Kindergarten enrollment increased by 168 students from Fall 2007, reaching a record of 2,775 students.
- The current 3rd and 5th grades and total K-5 enrollments are also the largest ever in the BSD.
- Current enrollment in grades 6-8 is the smallest since 2003-04, and enrollment in grades 9-12 is the smallest since 2004-05.

On the next page, Table 7 summarizes the enrollment history for the District by grade level annually from 1998-99 to 2008-09.

Table 7
Beaverton School District, Enrollment History, 1998-99 to 2008-09

Grade	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
K	2,352	2,378	2,433	2,500	2,490	2,503	2,567	2,641	2,644	2,607	2,775
1	2,541	2,561	2,708	2,707	2,710	2,681	2,824	2,839	2,991	2,936	2,886
2	2,629	2,669	2,635	2,756	2,698	2,690	2,760	2,832	2,867	2,957	2,873
3	2,608	2,632	2,636	2,694	2,746	2,643	2,735	2,697	2,895	2,867	2,935
4	2,628	2,654	2,708	2,677	2,747	2,678	2,680	2,755	2,743	2,856	2,849
5	2,359	2,631	2,681	2,745	2,637	2,721	2,704	2,706	2,769	2,733	2,833
6	2,380	2,413	2,676	2,756	2,788	2,647	2,768	2,797	2,785	2,748	2,785
7	2,371	2,405	2,477	2,692	2,733	2,803	2,683	2,752	2,858	2,757	2,749
8	2,330	2,363	2,427	2,520	2,741	2,722	2,818	2,701	2,782	2,820	2,714
9	2,352	2,483	2,486	2,534	2,649	2,802	2,807	2,968	2,825	2,817	2,836
10	2,339	2,387	2,503	2,527	2,583	2,627	2,819	2,868	2,970	2,750	2,760
11	2,212	2,362	2,396	2,522	2,532	2,556	2,571	2,775	2,818	2,865	2,618
12	1,736	1,825	2,064	2,150	2,373	2,421	2,499	2,464	2,672	2,674	2,587
Total*	30,837	31,763	32,830	33,780	34,427	34,494	35,235	35,795	36,619	36,387	36,200
<i>Annual change</i>		926 3.0%	1,067 3.4%	950 2.9%	647 1.9%	67 0.2%	741 2.1%	560 1.6%	824 2.3%	-232 -0.6%	-187 -0.5%
K-5	15,117	15,525	15,801	16,079	16,028	15,916	16,270	16,470	16,913	16,956	17,151
6-8	7,081	7,181	7,580	7,968	8,262	8,172	8,269	8,250	8,425	8,325	8,248
9-12	8,639	9,057	9,449	9,733	10,137	10,406	10,696	11,075	11,281	11,106	10,801

	5 Year Change:		5 Year Change:		10 Year Change:	
	Change	Pct.	Change	Pct.	Change	Pct.
K-5	799	5%	1,235	8%	2,034	13%
6-8	1,091	15%	76	1%	1,167	16%
9-12	1,767	20%	395	4%	2,162	25%
Total	3,657	12%	1,706	5%	5,363	17%

**Note: Enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

Source: Beaverton School District

Private and Home School Enrollment and District “Capture Rate”

The Oregon Department of Education’s 2008 list of private schools includes 21 schools within the BSD offering elementary and/or secondary grades, enrolling a total of 2,902 children in grades K-8 and 2,222 in grades 9-12. Eight of these schools are preschools that also have kindergartens; 13 schools include grades above kindergarten. The largest secondary schools, such as Jesuit High School, Oregon Episcopal School, and Catlin Gabel School, enroll students from throughout the region and are located near the BSD’s boundary with the Portland School District, so the count of students enrolled in secondary schools within the BSD likely overstates the number of BSD residents attending private secondary schools.

Private schools within the BSD enroll local students as well as students from beyond the BSD boundaries; conversely BSD residents attend private schools located throughout the metro area. So the number of students enrolled in private schools physically located within the District can not be used to measure overall private school share. The best source of data for private school enrollment of BSD residents is Census Bureau decennial censuses and more recent ACS. In 2000, approximately 5,135 of the K-12 students living in the District were reported as private school students, a 12.8 percent share of all K-12 students. Specifically, 20 percent of kindergartners, 13 percent of 1st-8th grade students and 11 percent of 9th-12th grade students were enrolled in private schools.⁶ The 2007 ACS, with a smaller sample size and therefore a greater margin of error, reported similar shares of BSD residents attending private schools. The 5,853 private school students in 2007 represented 12.2 percent of BSD residents enrolled in grades K-12.⁷ Notice that these data report children “enrolled in school” so they include children in public or private schools but not those who are home schooled.

Comparing the population counted in the 2000 Census with the BSD enrollment by grade level confirms that the share of area children not attending BSD schools was similar to or

⁶U.S. Census Bureau, 2000 Census, Summary File 3, Table P36 allocated to BSD area from block group data.

⁷U.S. Census Bureau, 2007 American Community Survey one year estimates, Table C14002.

slightly higher than the private school shares. BSD kindergarten enrollment in 1999-00 and 2000-01 averaged about 74 percent of the kindergarten-age population counted in the census, and BSD 1st grade enrollment accounted for about 82 percent of the corresponding census population.

Another difference between BSD enrollment and child population can be attributed to home schooling. Home schooled students living in the District are required to register with the Northwest Regional Education Service District (NWRES D), though the statistics kept by the NWRES D are not precise because students who move out of the area are not required to drop their registration. Students who enroll in public schools after being registered as home schooled are dropped from the home school registry. In 2007-08 there were 853 BSD residents registered as home schooled, compared with 930 in 2006-07 and 852 in 2005-06.⁸ The home schooled population accounts for about two percent of total BSD school age residents.

Neighboring Districts

Table 8 displays several facts about BSD demographic and enrollment trends in comparison to three other nearby large school districts. The overall enrollment growth or decline in each district is influenced by fertility trends, age structure, and housing construction. All of the districts have experienced lower growth rates in the 2000s compared with the 1990s. The BSD's growth rate between 2000 and 2007 was similar to its Washington County neighbors, the Hillsboro and Tigard-Tualatin School Districts. An interesting fact not included in the table is that preliminary enrollment figures for Fall 2008 show the Portland School District experiencing its first K-12 enrollment gain after 11 consecutive years of enrollment losses.

⁸Northwest Regional Education Service District, *Annual Reports*.

Table 8
Selected School Districts
Demographic and Enrollment Highlights, 1990 to 2007

	Beaverton	Hillsboro	Tigard-Tualatin	Portland
Enrollment growth, 1990-91 to 1995-96	17%	13%	28%	4%
Enrollment growth, 1995-96 to 2000-01	14%	16%	9%	-4%
Enrollment growth, 2000-01 to 2007-08	11%	10%	8%	-12%
Latino enrollment, 2007-08	20%	29%	19%	13%
Grades 9-12 enrollment, 2007-08	31%	29%	32%	30%
Population growth, 1990 to 2000	41%	49%	39%	7%
Multi-family housing share, 2000	43%	25%	41%	36%
Population age 5 to 17, 1990	18%	22%	17%	15%
Population age 5 to 17, 2000	18%	20%	18%	14%
Population under age 5, 1990	7.9%	8.5%	7.6%	7.0%
Population under age 5, 2000	7.6%	8.7%	7.1%	5.7%
Population rural, 2000	0.4%	13.2%	0.6%	1.0%

Data assembled by Population Research Center, PSU, from several sources: U.S. Census Bureau; Beaverton and Hillsboro S.D. reports; Tigard-Tualatin S.D.; Portland Public Schools; OR Dept. of Education; U.S. Dept. of Education.

ENROLLMENT FORECASTS

District-wide Forecast Methodology

To ensure that enrollment forecasts are consistent with the dynamics of likely population growth within the District, we combine a grade progression enrollment model with a demographic cohort-component model used to forecast population for the District by age and sex. The components of population change are births, deaths, and migration. Using age-specific fertility rates, age-sex specific mortality rates, age-sex specific migration rates, estimates of recent net migration levels, and forecasts of future migration levels, each component is applied to the base year population in a manner that simulates the actual dynamics of population change under each scenario — high, middle, and low.

The 1990 and 2000 Census results are used as a baseline for the population forecasts. By “surviving” the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the “survived” population to the actual 2000 population by age group, we are able to estimate the overall level of net migration between 1990 and 2000 as well as net migration by gender and age cohort. The net migration data was used to develop initial net migration rates, which were used as a baseline for rates used to forecast net migration for the 2000 to 2030 period. Because all three scenarios include less migration each decade than occurred between 1990 and 2000, the rates are generally lower than in the 1990s, but the relative contributions of each age group are similar in each decade. That is, migration contributes many residents between age 25 to 34 and very few residents age 55 and over.

We estimated the number of births to women residing within the District each year from 1990 to 2006, using data from the Oregon Department of Human Services, Center for Health Statistics. Detailed information including the age of mothers enabled us to calculate fertility rates by age group for both 1990 and 2000. In the middle range scenario we adjusted the future fertility rates to reflect trends of decreasing fertility rates for women under age 25 and increases for women age 30 and older. These trends are

based on state and national observations, as well as the number of births by age of mother occurring within the District during the 2001 to 2005 period for which detailed birth data is available.

Historic school enrollment is linked to the population forecast in two ways. First, the kindergarten and first grade enrollments at the time of the most recent census (the 1999-2000 school year) are compared to the population at the appropriate ages counted in the census. The “capture rate,” or ratio of enrollment to population, is an estimate of the share of area children who are enrolled in BSD schools. Assumptions for capture rates based on census data are used to bring new kindergarten and first grade students into the District’s enrollment. If there is evidence that capture rates have changed since the time of the census, they may be adjusted in the forecast.

The other way that historic population and enrollment are linked is through migration. Annual changes in school enrollment by cohort closely follow trends in the net migration of children in the District’s population. Once the students are in first grade, a set of baseline grade progression rates are used to move students from one grade to the next. These rates, usually 1.00 for elementary grades, represent a scenario under which there is no change due to migration. Enrollment change beyond the baseline is added (or subtracted) at each grade level depending on migration levels of the overall population by single years of age.

Future Residential Development

For several decades, explosive growth of suburban residential development on former agricultural land fueled enrollment growth. Now, most of the BSD is filled with residential, commercial, industrial, and institutional uses; opportunities for development of rural or vacant land are dwindling. Will this limit future growth of the school-age population? Will residential infill and redevelopment and new developments on the fringes of the District generate enough students to counteract the aging of households in existing homes? The current stagnant K-12 enrollment growth may have more to do with a short term economic slowdown than with longer term land use issues, but it serves as a reminder that growth will not continue forever. Urban Growth Boundary (UGB)

expansions added about 2.5 square miles to the UGB within the District, and only about three square miles (six percent) of the District remains outside of the UGB.

In order to benchmark the middle range forecast to current regional plans, we consulted Metro's 2030 population and household forecasts, which Metro allocates to Transportation Analysis Zones (TAZs). We allocated the TAZ forecasts to the BSD, deriving a 2030 population forecast of 339,831, an increase of 102,046 persons from 2005. For the 25 year period, the average annual numeric growth of 4,081 persons is significantly less than the average annual growth of 5,665 persons between 1990 and 2005. Also based on Metro's forecasts, BSD growth of 40,787 households between 2005 and 2030 averages 1,631 annually, compared with an average of 1,948 between 1990 and 2005.

Metro acknowledges that the TAZ forecast allocations "still contain many unresolved issues" and that "several jurisdictions have serious misgivings about the location and timing of prospective UGB additions and the way in which future policy developments may radically alter future UGB additions. Their concern is that these prospective UGB adds are inaccurate and will not correctly reflect future growth allocations."⁹

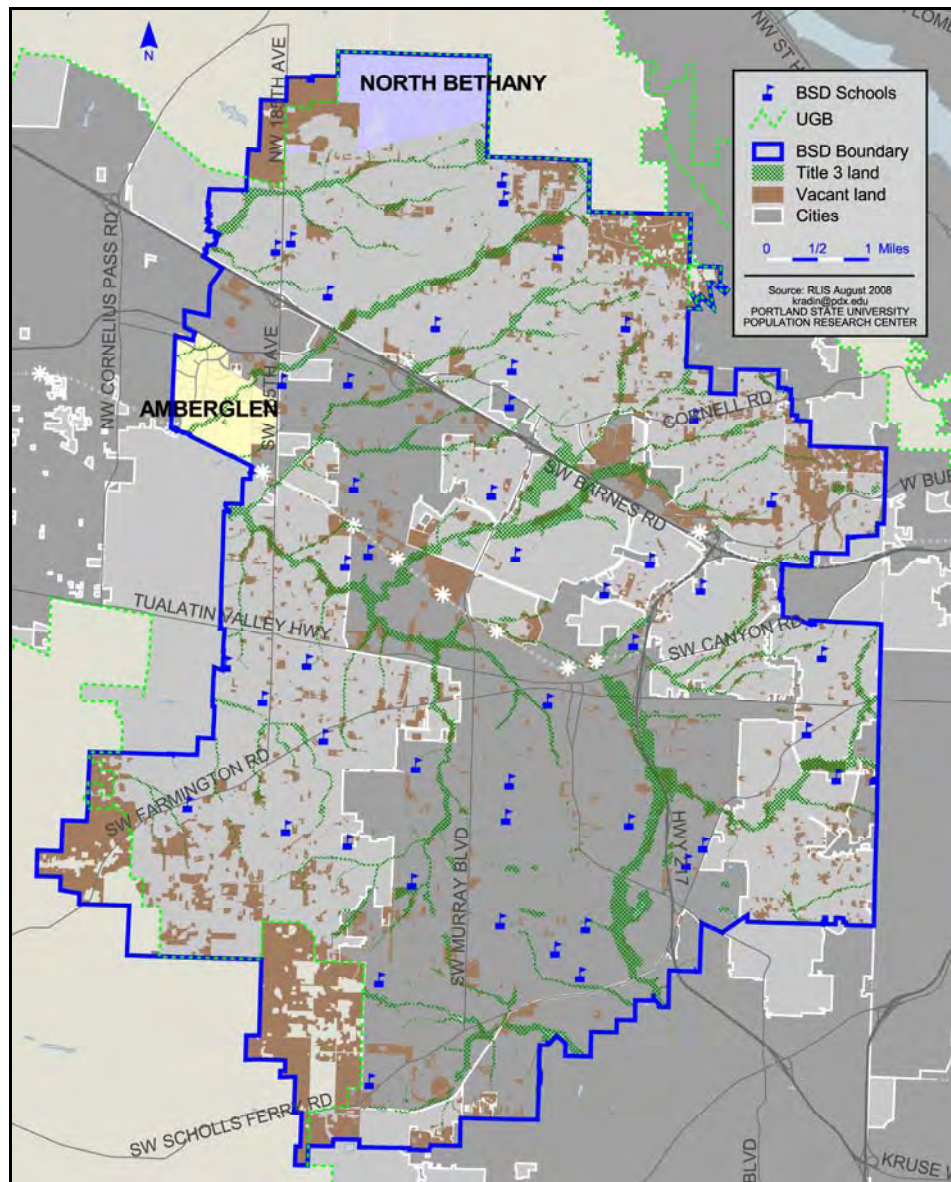
Our own analysis of residential capacity in the BSD is consistent with Metro's TAZ forecast allocation, assuming some future UGB expansion occurs. We estimate that about 32,000 housing units could be added to the housing stock if no UGB expansion occurs, or about 40,000 additional units with UGB expansion. To benchmark *back* to Metro-based 2005 numbers, we can add to our estimates the capacity used up since 2005, approximately 4,000 housing units, producing a capacity range of 36,000 to 44,000 units as of 2005. Converting Metro's household forecast to housing units implies about 42,500 units in the BSD, similar to our high end capacity estimate.

Our housing unit capacity estimate rely on August 2008 Metro RLIS spatial data layers, including land shown in Map 2 as vacant (brown), Title 3 (constrained due to water quality preservation needs; green), and delineation of areas in and out of the current UGB

⁹Metro, Metroscope Gen 2.3 – Year 2030 TAZ Allocation.

(dashed green line). Though separate in-house analyses were developed for the Amberglen and North Bethany planning areas (yellow and violet, respectively), capacities reported in other documents are utilized instead.

Map 2
Beaverton School District Residential Capacity Analysis



Methods are similar to those used by Metro in its determination of residential land capacity for purposes of growth management. Gross vacant land (either wholly or partially vacant parcels) are identified from the RLIS layer and updated to the present,

removing parcels where residential building permits and parcel attribute data identify units built since the Metro vacant land analysis was undertaken. Subtractions from gross vacant land are made for land that is vacant but not buildable, primarily portions of partially or wholly vacant parcels intersecting the Title 3 lands layer. This produces net vacant buildable land. These parcels are aggregated by zoning classes, which classes include allowable housing unit density information (i.e. density coefficients). Net vacant buildable land by zoning class multiplied by the zoning class density coefficients produces housing unit capacity by zoning. Summing these, and adding reported capacities for the Amberglen and North Bethany planning areas, produces an estimate of housing unit capacity for the Beaverton School District.

Other procedures are followed to deal with nuances beyond the general methodology, such as handling land inside and outside the current UGB separately, subtractions for infrastructure (roads, rights-of-way) on large undeveloped parcels, and using minimum, medium and maximum zoned densities to produce low and high scenario outcomes.

In addition to Metro's data, we also consulted several planning documents prepared by local jurisdictions that address potential residential development within the BSD. They are discussed briefly below.

City of Beaverton

In the Housing Element of the current Comprehensive Plan, the City reports that it “conducted a Buildable Lands Analysis and determined that Beaverton would be able to accommodate 12,194 of the 13,580 dwelling units projected by Metro to occur over the next twenty years.”¹⁰ Planning Division staff is currently in the process of producing an updated buildable lands inventory. Results will be available soon.

City of Hillsboro

Most of the current City of Hillsboro portion of the BSD is in the Tanasbourne area. It includes the Tanasbourne Town Center Planning area, where “Proposed and existing

¹⁰City of Beaverton Comprehensive Plan, Volume 1, Chapter 4 (Housing Element), Ordinance 4414, Effective 1/5/2007.

development now approaches 3.5 million square feet and 4000 plus dwelling units.” Tanasbourne also includes the OHSU and AmberGlen area with “somewhere in the neighborhood of 80 acres of vacant land in the heart of Tanasbourne, with no clear plans for development” and additional land with potential for redevelopment.¹¹

The Concept Plan prepared in 2006 for the 582 acre OHSU/Amberglen area calls for almost 5,000 new medium to high density residential units, 3 million square feet of office, 850,000 square feet of retail and hotel, and conference and entertainment uses. This plan projects that over 900 new students will be added to schools once the area is built out.¹²

One of the areas added to the UGB in 2002, known as “Area 69,” consists of 248 acres south of Tualatin Valley Highway, west of SW 209th Avenue. More than half of the area is within the BSD. Although it is currently in unincorporated Washington County, the City of Hillsboro included the area in its recently adopted South Hillsboro Community Plan. The plan calls for “a diverse housing stock within Area 69, including but not limited to detached and attached single family units, courtyard clusters, Charlestown row houses, row houses, subdivided manors, garden apartments and condominiums.”¹³

City of Portland

The City of Portland is currently engaged in a planning effort for another 2002 UGB expansion area, known as “Area 93,” or “Bonny Slope West.” This 160 acre area in unincorporated Multnomah County is entirely within the BSD. Since it is not contiguous with Portland’s city limits or its Urban Services Boundary, Area 93 cannot be annexed by the City at this time, and Multnomah County no longer provides urban services, so part of the planning effort will be look at different governance and service options for facilitating urban development. The plan is expected to be complete by 2011.¹⁴

¹¹ OHSU/AmberGlen Area Plan, Statement of Purpose, at <http://www.ci.hillsboro.or.us/Planning/OHSUAmberGlen.aspx>.

¹² OHSU/Amberglen Concept Plan Summary, City of Hillsboro, 2006.

¹³ Resolution No. 1658-P, HCP 3-08: Area 69, South Hillsboro Community Plan. City of Hillsboro Planning Commission, 2008. Plan adopted by City of Hillsboro June 17, 2008.

¹⁴ Area 93: Existing Conditions, Opportunities, and Constraints Report, (Draft). Prepared for City of Portland Planning Bureau by Winterbrook Planning, October 2008.

City of Tigard

According to the *Tigard 2007 Report* that was part of the City's comprehensive plan update, less than 10 percent of land within the City was considered buildable as of June 2006. Large lots for residential development were scarce, with only 49 lots greater than two acres. "Based on the June 2006 buildable lands data, if the City developed its remaining residential lands, an additional 2,902 to 3,482 units could be built."¹⁵ These estimates include a 20% allowance for additional projects that occur on land not included in the buildable lands inventory (BLI). Using spatial data provided by the City, we estimate that about 14 percent of Tigard's buildable residential land is within the BSD.

Washington County

To the west of the City of Tigard, West Bull Mountain includes 483 acres added to the UGB in 2002, known as Areas 63 and 64. About 125 acres of Area 64 are within the BSD boundary. A team of Washington County staff and consultants is currently working on a concept plan for West Bull Mountain with extensive public involvement. Their timeline calls for public hearings on adopting comprehensive plan amendments as early as Summer 2009.

Among the various areas added to the UGB in 2002, the largest within the BSD is North Bethany. The concept planning for this 800 acre area is complete, and the current timeline anticipates public hearings in Summer 2009. Residential development alternatives in the North Bethany Strategic Programming Draft published in December 2006 ranged from 4,710 to 5,928 housing units. An earlier research paper written by PSU graduate students in May, 2005 estimated that a similar range of 4,700 to 5,280 units might generate between 2,280 and 2,824 BSD students when the residential development is complete.¹⁶ The authors assumed that 60 percent of the development would be complete by 2015.

¹⁵*Tigard 2007 Report*, February 2007. Available at http://www.ci.tigard.or.us/city_hall/departments/cd/long_range_planning/comprehensive_plan.asp

¹⁶Endo, S., Picarsic, J., Ramey, R., & Taylor, E. (2005). "School Enrollment Projections for Beaverton School District UGB Expansion Area, 2000-2015." Portland State University, research paper.

Population Forecasts

Since we are nearing the end of the 2000 to 2010 forecast period, we have a substantial amount of data to compare to the 1990 to 2000 baseline period, including several years of school enrollment, birth, and housing development data. All indicate that population gains within the District in the current decade will be lower than in the 1990s, and that most of the difference will be due to lower levels of net migration (people moving in minus those moving out). The population has continued to grow due to natural increase (births minus deaths). Charts A1, A2, and A3 in the Appendix show the net migration assumptions in each decade for each forecast scenario.

In all three population forecast scenarios, the young adult population will increase due to positive net migration and the larger baby boom “echo” cohort born in the 1980s and 1990s. This increase causes the number of births within the BSD to increase throughout the forecast period in all three scenarios in spite of stable fertility rates in the middle range scenario and lower fertility rates in the low range scenario. The high range scenario incorporates slightly higher fertility rates. A comparison of total fertility rates in the three scenarios is included in the Appendix in Table A1.

Our middle range forecast for 2030 population in the BSD is 339,831, matching our allocation of Metro’s 2030 TAZ forecast to the BSD boundary. The 2000 to 2030 growth rate of 58 percent for the District is lower than the 75 percent growth for Washington County during the same period from the State of Oregon Office of Economic Analysis’ most recent forecast for Washington County. Our current middle range growth rate for the BSD also represents slower growth than we previously forecast. The forecast 2020 population of 301,250 is less than the middle range 2020 forecasts that PRC prepared in 2005 (310,048) and in 2002 (324,410).

The low range 2030 population forecast is 319,369 (48 percent growth from 2000 to 2030), and the high range 2030 forecast is 361,302 (68 percent growth from 2000 to 2030).

The district-wide population forecasts by age group are presented in Appendix Tables A2, A3, and A4.

In Table 9 we compare the 2000 to 2030 average annual growth rates in each of the scenarios with growth rates from several other published forecasts.

<p>Table 9 Comparison of Population Growth Rates</p>		
Area	1990 to 2000 Historic Avg. Annual Growth Rate	2000 to 2030 Forecast Avg. Annual Growth Rate¹
Beaverton S.D. (Low)	3.5%	1.3%
Beaverton S.D. (Middle)	3.5%	1.5%
Beaverton S.D. (High)	3.5%	1.7%
Washington County (OEA, 2004) ²	3.6%	1.9%
Washington County (Metro, 2007) ³	3.6%	1.5%
Region 5 Counties (Metro, 2002) ⁴	2.4%	1.5%
Tualatin Hills P & R (PRC, 2006) ⁵	2.9%	1.4%
<p>1. See notes 3 and 5 for caveats concerning this interval.</p>		
<p>2. Washington County 2000 to 2030 growth rate from "Forecasts of Oregon's County Populations and Components of Change, 2000 to 2040." Oregon Department of Administrative Services, Office of Economic Analysis, April, 2004.</p>		
<p>3. Washington County 2000 to 2035 growth rate derived from 2035 forecast in Metro, "2035 Regional Transportation Plan, Final Draft for USDOT Review", January 2008.</p>		
<p>4. Metro, "2000-2030 Regional Forecast", September 2002. Middle growth scenario 2030 forecast for 5 county region (Multnomah, Clackamas, Washington, Yamhill, and Clark counties).</p>		
<p>5. PSU, Population Research Center, "Tualatin Hills Park and Recreation District, Demographic Portrait and Population Forecasts 2005-2025", February 2006. Medium growth population forecast for 2000 to 2025 was extended to 2030 for this table, using the "safe harbor" approach of extending the 2020 to 2025 growth rate.</p>		

District-wide Enrollment Forecasts

In the description of methodology earlier in this section, we described the two ways that historic school enrollment is linked to the population forecast — 1) capture rates, and 2) migration rates applied to the baseline grade progression rates.

The capture rates used in the long run for each forecast scenario are 0.72 for kindergarten and 0.795 for first grade. That means that about 28 percent of kindergarten-age children and 20.5 percent of first grade age children are assumed to not be enrolled in BSD schools, accounting for students enrolled in private schools, net transfers to and from other public school districts, home schooled students, or children not yet attending school, since school enrollment is not compulsory until age seven. We could have varied

the capture rates between the high, middle, and low scenarios as an additional set of assumptions, but we held the enrollment forecast parameters constant in the alternatives; the differences between the three enrollment forecasts are purely due to different population growth assumptions.

Several years of recent BSD enrollment history were evaluated to develop baseline grade progression rates (GPRs). These are the rates used to move students from one grade to the next before migration is factored in. For students entering most of the grades 2nd to 8th, the rates are 1.00. For students progressing from 5th to 6th grade, we use a rate of 1.01, reflecting a small gain that typically occurs at the middle school level. Similarly, a higher rate of 1.03 is used for students progressing from 8th to 9th grade, as the District also gains additional students at the high school level. For 10th through 12th grade, the rates are slightly below 1.00, reflecting attrition from the regular high schools included in the historic and forecast district-wide enrollments.

Although the weak economy and slow housing market may keep enrollment flat in the short run (one or two years), all three enrollment forecast scenarios indicate that overall BSD enrollment will increase in the long run.

In the middle, or most likely scenario, the District adds about 8,500 students in the next 17 years, reaching an enrollment of 44,660 in 2025. Enrollment growth under the middle series averages about 500 students annually, a significant rebound considering the downward trend of the past two years. However, the middle range growth is less than the long term average growth of 755 students annually between 1990 and 2006, and also less than in our previous study, which forecast average annual growth of about 620 students from 2004 to 2025 under the medium growth scenario.

Only the high scenario calls for numeric growth comparable to the booming 1990s. With an average of almost 800 additional students per year, total enrollment reaches 49,629 in 2025. In the low scenario, the District adds about 225 students annually, reaching 40,007 students in 2025.

Tables 10, 11, and 12 contain grade level forecasts for the Beaverton School District for the years 2009-10, 2010-11, and five year intervals to 2025-26. The forecasts are presented annually in Appendix Tables A5, A6, and A7.

Table 10
Beaverton School District
Low Range Enrollment Forecasts, 2009-10 to 2025-26

Historic			Forecast					
Grade	2007-08	2008-09	2009-10	2010-11		2015-16	2020-21	2025-26
K	2,607	2,775	2,645	2,604		2,746	2,809	2,839
1	2,936	2,886	2,994	2,886		3,021	3,090	3,124
2	2,957	2,873	2,888	2,997		3,002	3,076	3,118
3	2,867	2,935	2,875	2,891		2,995	3,067	3,113
4	2,856	2,849	2,937	2,877		2,972	3,062	3,109
5	2,733	2,833	2,850	2,939		2,865	3,052	3,102
6	2,748	2,785	2,862	2,880		2,935	3,069	3,121
7	2,757	2,749	2,786	2,864		3,046	3,047	3,108
8	2,820	2,714	2,750	2,788		2,938	3,039	3,101
9	2,817	2,836	2,797	2,836		3,016	3,108	3,192
10	2,750	2,760	2,810	2,773		3,057	2,972	3,154
11	2,865	2,618	2,679	2,729		2,884	2,930	3,048
12	2,674	2,587	2,492	2,550		2,729	2,892	2,878
Total¹	36,387	36,200	36,365	36,614		38,206	39,213	40,007
<i>Annual change²</i>		-187 -0.5%	165 0.5%	249 0.7%		318 0.9%	201 0.5%	159 0.4%
K-5	16,956	17,151	17,189	17,194		17,601	18,156	18,405
6-8	8,325	8,248	8,398	8,532		8,919	9,155	9,330
9-12	11,106	10,801	10,778	10,888		11,686	11,902	12,272

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

Table 11
Beaverton School District
Middle Range Enrollment Forecasts, 2009-10 to 2025-26

Historic			Forecast					
Grade	2007-08	2008-09	2009-10	2010-11		2015-16	2020-21	2025-26
K	2,607	2,775	2,715	2,675		2,912	3,091	3,246
1	2,936	2,886	3,010	2,982		3,190	3,387	3,559
2	2,957	2,873	2,891	3,019		3,153	3,358	3,537
3	2,867	2,935	2,878	2,900		3,102	3,337	3,519
4	2,856	2,849	2,939	2,886		3,049	3,320	3,501
5	2,733	2,833	2,853	2,946		3,014	3,294	3,477
6	2,748	2,785	2,865	2,888		3,091	3,298	3,484
7	2,757	2,749	2,789	2,872		3,126	3,257	3,455
8	2,820	2,714	2,753	2,797		3,001	3,201	3,433
9	2,817	2,836	2,800	2,845		3,080	3,244	3,521
10	2,750	2,760	2,812	2,782		3,120	3,180	3,462
11	2,865	2,618	2,681	2,737		2,946	3,139	3,333
12	2,674	2,587	2,498	2,560		2,787	3,021	3,133
Total¹	36,387	36,200	36,484	36,889		39,571	42,127	44,660
<i>Annual change²</i>		-187 -0.5%	284 0.8%	405 1.1%		536 1.4%	511 1.3%	507 1.2%
K-5	16,956	17,151	17,286	17,408		18,420	19,787	20,839
6-8	8,325	8,248	8,407	8,557		9,218	9,756	10,372
9-12	11,106	10,801	10,791	10,924		11,933	12,584	13,449

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

Population Research Center, Portland State University, October 2008.

Table 12
Beaverton School District
High Range Enrollment Forecasts, 2009-10 to 2025-26

Historic			Forecast					
Grade	2007-08	2008-09	2009-10	2010-11		2015-16	2020-21	2025-26
K	2,607	2,775	2,776	2,739		3,075	3,384	3,683
1	2,936	2,886	3,018	3,069		3,359	3,692	4,026
2	2,957	2,873	2,894	3,034		3,307	3,645	3,987
3	2,867	2,935	2,881	2,909		3,212	3,607	3,953
4	2,856	2,849	2,942	2,895		3,124	3,576	3,917
5	2,733	2,833	2,856	2,956		3,159	3,543	3,876
6	2,748	2,785	2,868	2,899		3,244	3,537	3,869
7	2,757	2,749	2,792	2,883		3,207	3,481	3,821
8	2,820	2,714	2,756	2,806		3,075	3,380	3,784
9	2,817	2,836	2,803	2,854		3,155	3,388	3,867
10	2,750	2,760	2,815	2,791		3,195	3,398	3,797
11	2,865	2,618	2,684	2,746		3,016	3,356	3,643
12	2,674	2,587	2,504	2,570		2,853	3,154	3,406
Total¹	36,387	36,200	36,589	37,151		40,981	45,141	49,629
<i>Annual change²</i>		-187	389	562		766	832	898
		-0.5%	1.1%	1.5%		2.0%	1.9%	1.9%
K-5	16,956	17,151	17,367	17,602		19,236	21,447	23,442
6-8	8,325	8,248	8,416	8,588		9,526	10,398	11,474
9-12	11,106	10,801	10,806	10,961		12,219	13,296	14,713

1. Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.

2. Average Annual change after 2010-11.

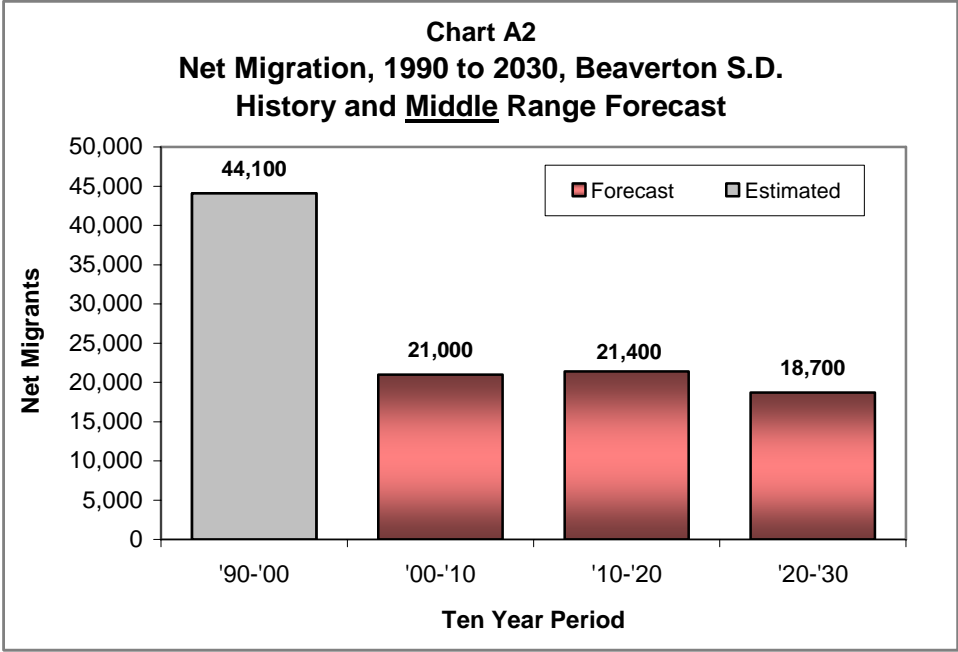
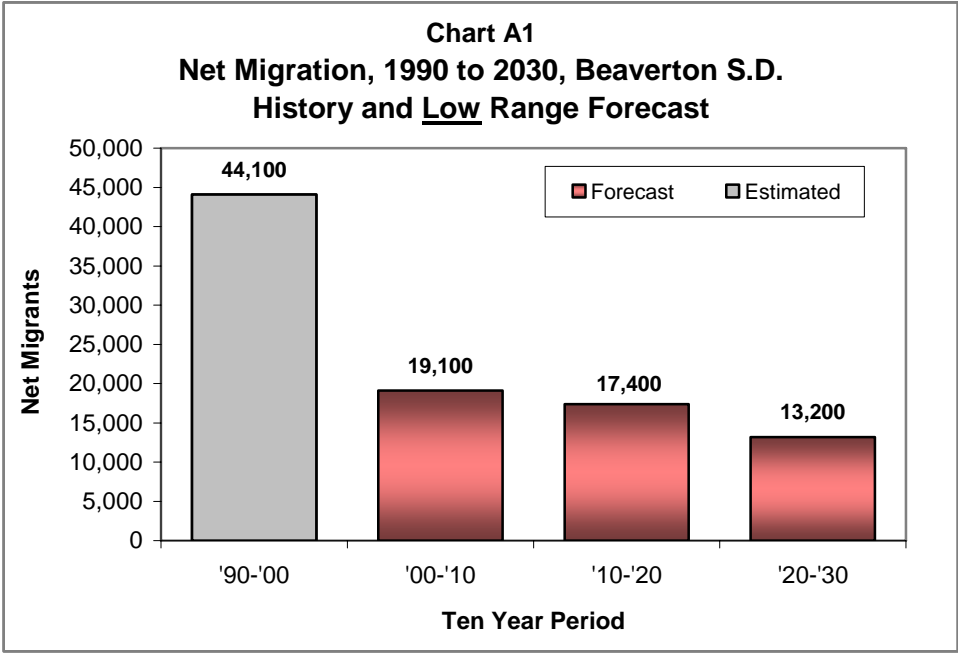
Population Research Center, Portland State University, October 2008.

APPENDIX

POPULATION AND ENROLLMENT FORECASTS

LOW, MIDDLE, AND HIGH SCENARIOS

2008-09 to 2025-26



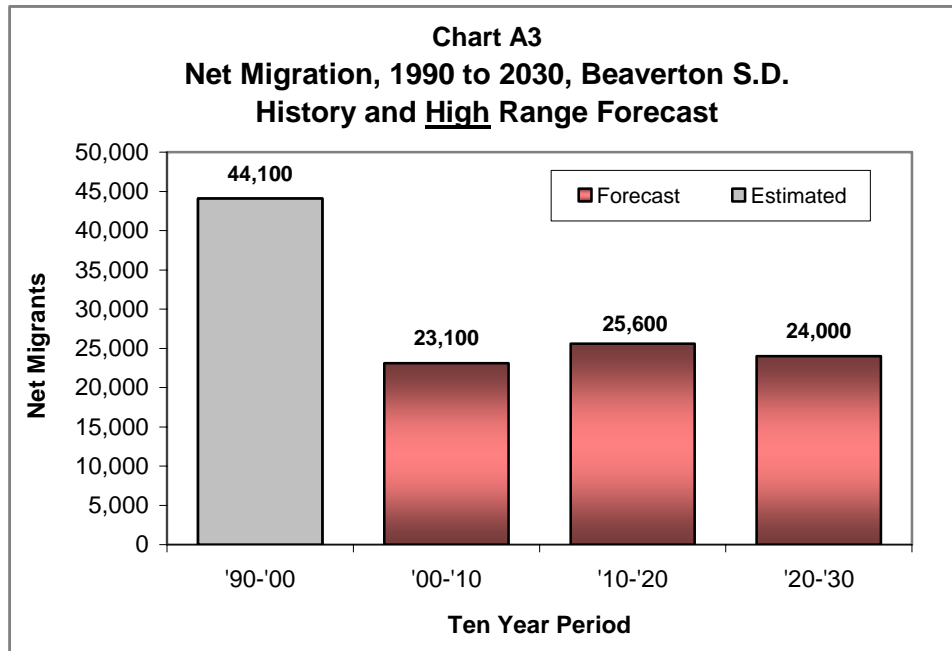


Table A1
Total Fertility Rate Assumptions*
BSD Population Forecasts

Year	LOW RANGE	MID RANGE	HIGH RANGE
1990 estimate	1.84	1.84	1.84
2000 estimate	2.03	2.03	2.03
2010 forecast	2.04	2.10	2.16
2020 forecast	1.94	2.10	2.27
2030 forecast	1.94	2.10	2.27

**The number of children that would be born to the average woman during her child-bearing years, based on age-specific fertility rates observed at a given time.*

Table A2
Population by Age Group, Low Range Forecast
Beaverton School District, 1990 to 2030

	1990	2000	2010	2020	2030	2000 - 2030 Change	
	Census	Census	Forecast	Forecast	Forecast	Number	Percent
Under Age 5	11,734	16,405	18,466	19,468	20,699	4,294	26%
Age 5 to 9	11,463	16,171	18,260	19,343	20,083	3,912	24%
Age 10 to 14	10,211	14,914	17,474	18,953	19,615	4,701	32%
Age 15 to 17	5,688	8,644	9,846	11,103	11,682	3,038	35%
Age 18 to 19	3,414	5,000	6,647	7,428	7,707	2,707	54%
Age 20 to 24	10,511	15,137	16,986	19,652	20,956	5,819	38%
Age 25 to 29	14,715	19,042	19,175	21,635	23,029	3,987	21%
Age 30 to 34	15,737	18,876	19,168	20,182	22,002	3,126	17%
Age 35 to 39	15,238	18,699	20,437	20,363	22,319	3,620	19%
Age 40 to 44	13,323	18,470	19,954	20,116	20,630	2,160	12%
Age 45 to 49	9,578	16,795	19,108	20,780	20,374	3,579	21%
Age 50 to 54	6,786	13,757	18,379	19,801	19,750	5,993	44%
Age 55 to 59	5,454	9,129	16,022	18,225	19,818	10,689	117%
Age 60 to 64	5,041	6,183	12,662	16,918	18,233	12,050	195%
Age 65 to 69	4,822	4,891	8,102	14,207	16,134	11,243	230%
Age 70 to 74	3,555	4,327	5,172	10,575	14,076	9,749	225%
Age 75 to 79	2,597	4,004	3,786	6,245	10,814	6,810	170%
Age 80 to 84	1,619	2,646	2,909	3,445	6,903	4,257	161%
Age 85 and over	1,329	2,333	3,238	3,446	4,545	2,212	95%
Total Population	152,815	215,423	255,791	291,885	319,369	103,946	48%
Total age 5 to 17	27,362	39,729	45,580	49,399	51,380	11,651	29%
share age 5 to 17	17.9%	18.4%	17.8%	16.9%	16.1%		

	'90-'00	'00-'10	'10-'20	'20-'30
Population Change	62,608	40,368	36,094	27,484
Percent	41%	19%	14%	9%
Average Annual	3.5%	1.7%	1.3%	0.9%

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center. PSU-PRC Forecasts, 2010, 2020, and 2030.

Table A3
Population by Age Group, Middle Range Forecast
Beaverton School District, 1990 to 2030

	1990 Census	2000 Census	2010 Forecast	2020 Forecast	2030 Forecast	2000 - 2030 Change	
						Number	Percent
Under Age 5	11,734	16,405	18,855	21,600	24,022	7,617	46%
Age 5 to 9	11,463	16,171	18,390	21,009	23,327	7,156	44%
Age 10 to 14	10,211	14,914	17,845	20,024	22,534	7,620	51%
Age 15 to 17	5,688	8,644	10,176	11,549	13,199	4,555	53%
Age 18 to 19	3,414	5,000	6,884	7,747	8,609	3,609	72%
Age 20 to 24	10,511	15,137	17,132	20,332	22,532	7,395	49%
Age 25 to 29	14,715	19,042	19,476	22,942	24,830	5,788	30%
Age 30 to 34	15,737	18,876	19,264	20,778	23,430	4,554	24%
Age 35 to 39	15,238	18,699	20,547	20,851	23,930	5,231	28%
Age 40 to 44	13,323	18,470	20,028	20,330	21,399	2,929	16%
Age 45 to 49	9,578	16,795	19,156	20,969	20,967	4,172	25%
Age 50 to 54	6,786	13,757	18,402	19,912	20,011	6,254	45%
Age 55 to 59	5,454	9,129	16,021	18,269	19,997	10,868	119%
Age 60 to 64	5,041	6,183	12,658	16,931	18,322	12,139	196%
Age 65 to 69	4,822	4,891	8,104	14,213	16,182	11,291	231%
Age 70 to 74	3,555	4,327	5,176	10,582	14,105	9,778	226%
Age 75 to 79	2,597	4,004	3,793	6,265	10,863	6,859	171%
Age 80 to 84	1,619	2,646	2,919	3,464	6,955	4,309	163%
Age 85 and over	1,329	2,333	3,254	3,483	4,617	2,284	98%
Total Population	152,815	215,423	258,080	301,250	339,831	124,408	58%
Total age 5 to 17	27,362	39,729	46,411	52,582	59,060	19,331	49%
share age 5 to 17	17.9%	18.4%	18.0%	17.5%	17.4%		

	'90-'00	'00-'10	'10-'20	'20-'30
Population Change	62,608	42,657	43,170	38,581
Percent	41%	20%	17%	13%
Average Annual	3.5%	1.8%	1.6%	1.2%

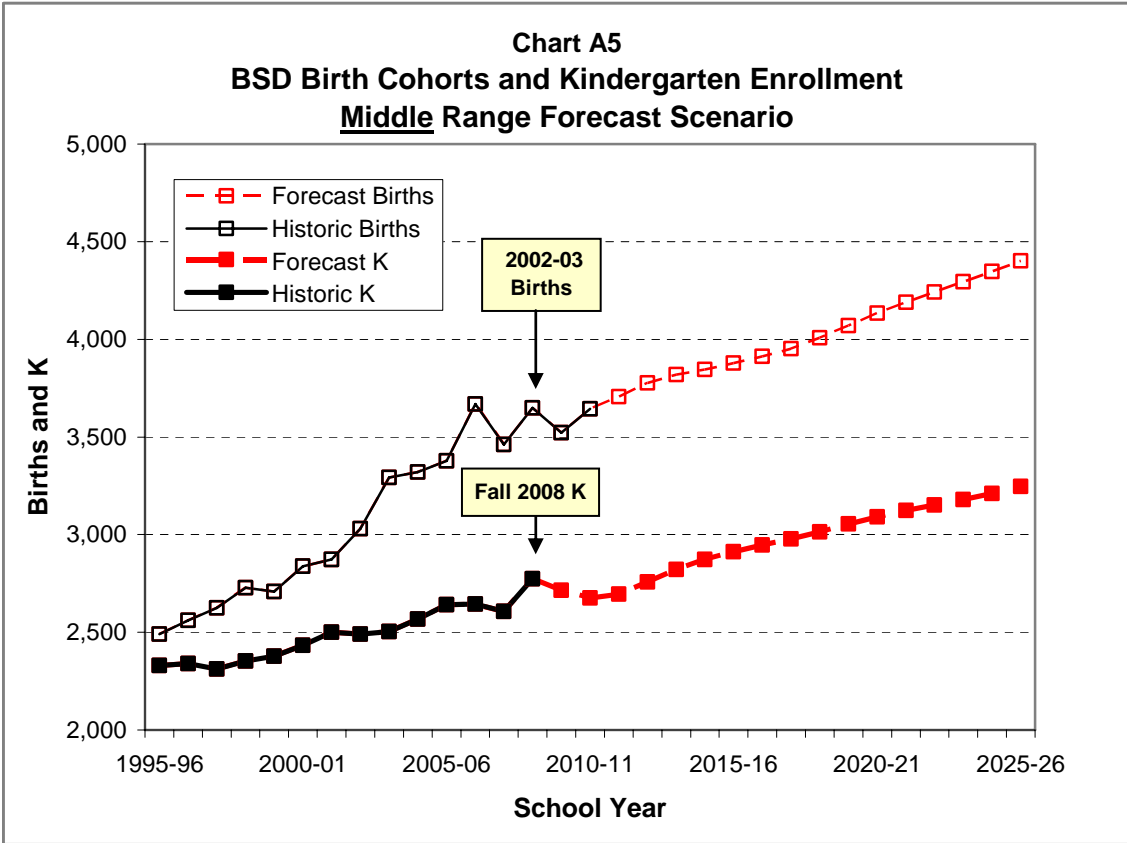
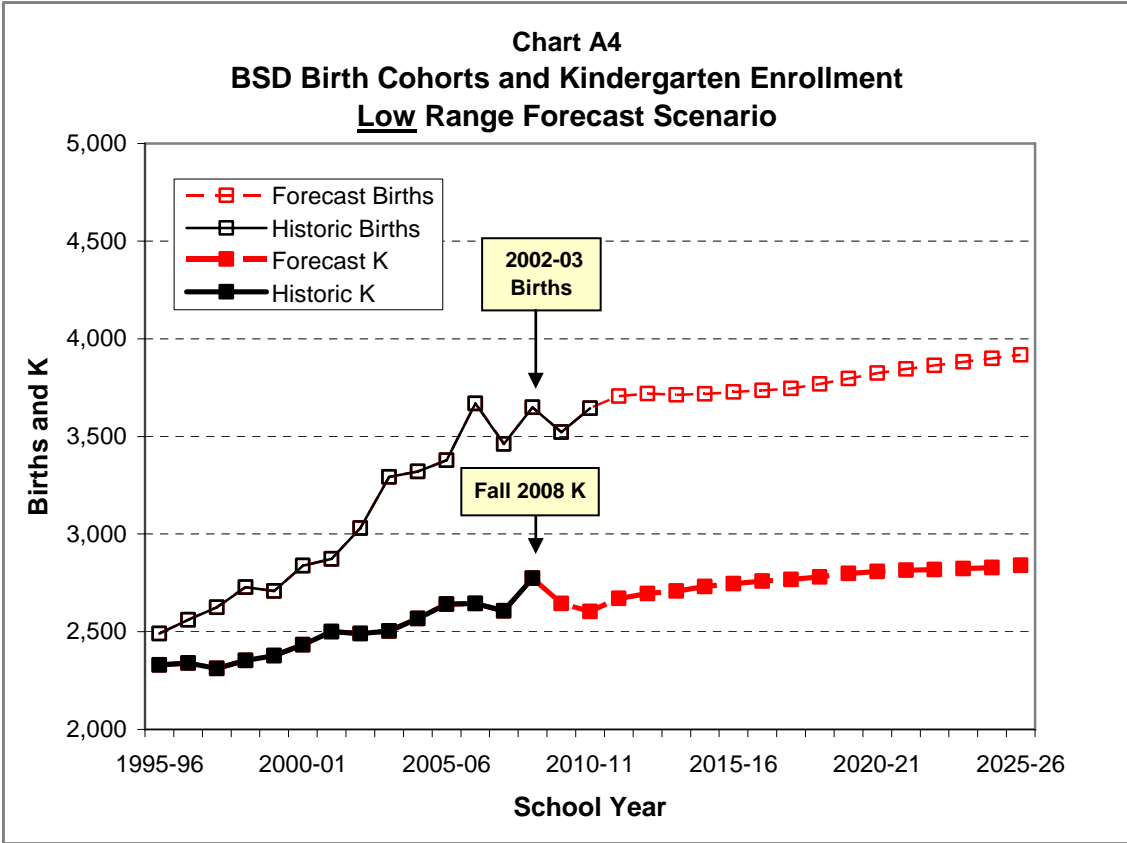
Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center. PSU-PRC Forecasts, 2010, 2020, and 2030.

Table A4
Population by Age Group, High Range Forecast
Beaverton School District, 1990 to 2030

	1990 Census	2000 Census	2010 Forecast	2020 Forecast	2030 Forecast	2000 - 2030 Change	
						Number	Percent
Under Age 5	11,734	16,405	19,242	23,848	27,566	11,161	68%
Age 5 to 9	11,463	16,171	18,454	22,696	26,843	10,672	66%
Age 10 to 14	10,211	14,914	18,159	21,163	25,751	10,837	73%
Age 15 to 17	5,688	8,644	10,536	12,013	14,852	6,208	72%
Age 18 to 19	3,414	5,000	7,149	8,069	9,581	4,581	92%
Age 20 to 24	10,511	15,137	17,278	20,956	24,125	8,988	59%
Age 25 to 29	14,715	19,042	19,777	24,366	26,505	7,463	39%
Age 30 to 34	15,737	18,876	19,664	21,381	24,665	5,789	31%
Age 35 to 39	15,238	18,699	20,658	21,344	25,626	6,927	37%
Age 40 to 44	13,323	18,470	20,101	20,866	22,144	3,674	20%
Age 45 to 49	9,578	16,795	19,203	21,160	21,544	4,749	28%
Age 50 to 54	6,786	13,757	18,425	20,023	20,578	6,821	50%
Age 55 to 59	5,454	9,129	16,021	18,313	20,177	11,048	121%
Age 60 to 64	5,041	6,183	12,654	16,944	18,414	12,231	198%
Age 65 to 69	4,822	4,891	8,107	14,219	16,228	11,337	232%
Age 70 to 74	3,555	4,327	5,179	10,589	14,130	9,803	227%
Age 75 to 79	2,597	4,004	3,801	6,286	10,901	6,897	172%
Age 80 to 84	1,619	2,646	2,928	3,484	6,995	4,349	164%
Age 85 and over	1,329	2,333	3,270	3,520	4,677	2,344	100%
Total Population	152,815	215,423	260,606	311,240	361,302	145,879	68%
Total age 5 to 17	27,362	39,729	47,149	55,872	67,446	27,717	70%
share age 5 to 17	17.9%	18.4%	18.1%	18.0%	18.7%		

	'90-'00	'00-'10	'10-'20	'20-'30
Population Change	62,608	45,183	50,634	50,062
<i>Percent</i>	41%	21%	19%	16%
<i>Average Annual</i>	3.5%	1.9%	1.8%	1.5%

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to BSD boundary by Portland State University Population Research Center. PSU-PRC Forecasts, 2010, 2020, and 2030.



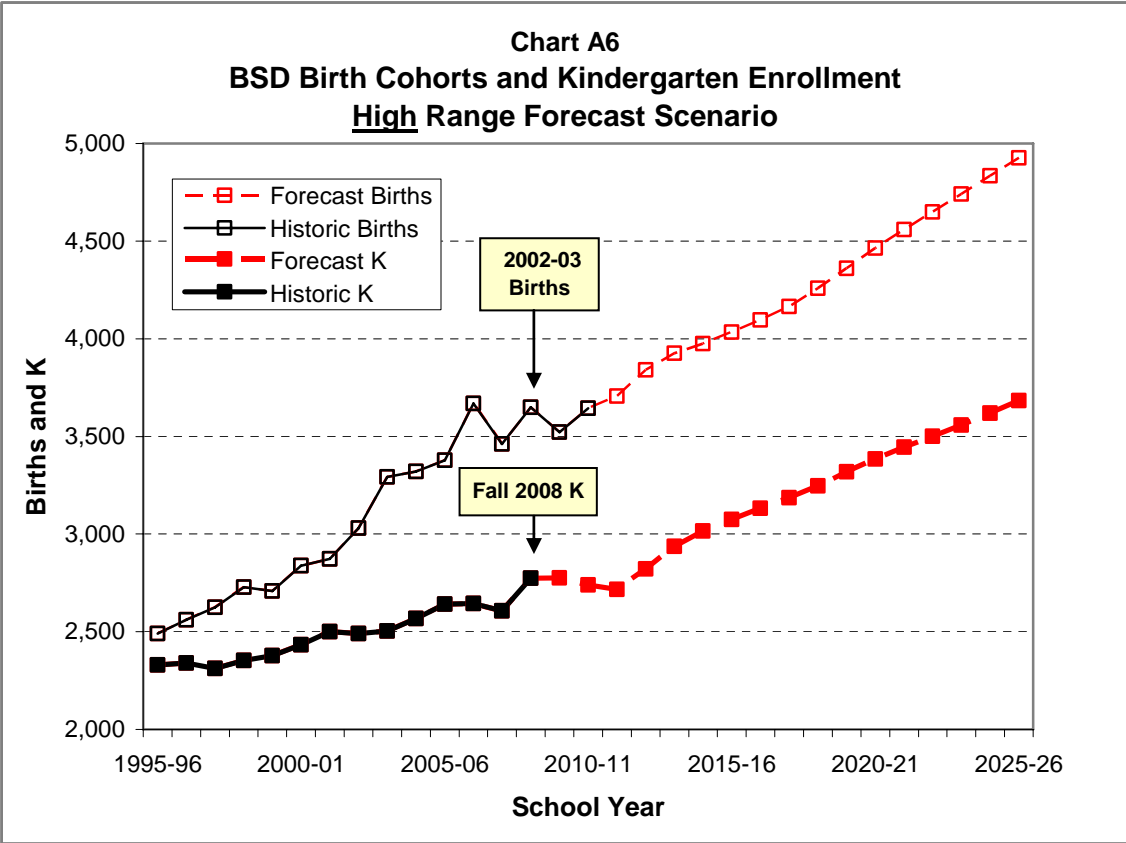


Table A5
Beaverton School District
Low Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic	Forecast																
Grade	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
K	2,775	2,645	2,604	2,671	2,696	2,708	2,731	2,746	2,759	2,768	2,781	2,798	2,809	2,816	2,819	2,823	2,829	2,839
1	2,886	2,994	2,886	2,845	2,956	2,984	2,997	3,021	3,038	3,052	3,062	3,076	3,090	3,102	3,109	3,113	3,118	3,124
2	2,873	2,888	2,997	2,890	2,851	2,962	2,990	3,002	3,026	3,043	3,057	3,067	3,076	3,090	3,102	3,109	3,113	3,118
3	2,935	2,875	2,891	3,001	2,896	2,857	2,968	2,995	3,007	3,031	3,048	3,062	3,067	3,076	3,090	3,102	3,109	3,113
4	2,849	2,937	2,877	2,894	3,006	2,901	2,862	2,972	2,999	3,011	3,035	3,052	3,062	3,067	3,076	3,090	3,102	3,109
5	2,833	2,850	2,939	2,879	2,897	3,010	2,904	2,865	2,975	3,002	3,014	3,038	3,052	3,062	3,067	3,076	3,090	3,102
6	2,785	2,862	2,880	2,970	2,911	2,929	3,043	2,935	2,896	3,007	3,034	3,046	3,069	3,083	3,093	3,098	3,107	3,121
7	2,749	2,786	2,864	2,883	2,974	2,915	2,933	3,046	2,938	2,899	3,010	3,037	3,047	3,070	3,084	3,094	3,099	3,108
8	2,714	2,750	2,788	2,868	2,889	2,980	2,921	2,938	3,051	2,943	2,904	3,015	3,039	3,049	3,072	3,086	3,096	3,101
9	2,836	2,797	2,836	2,877	2,963	2,985	3,079	3,016	3,033	3,150	3,039	2,998	3,108	3,133	3,144	3,167	3,182	3,192
10	2,760	2,810	2,773	2,814	2,858	2,944	2,965	3,057	2,994	3,011	3,127	3,017	2,972	3,081	3,105	3,116	3,139	3,154
11	2,618	2,679	2,729	2,695	2,739	2,782	2,865	2,884	2,973	2,912	2,929	3,041	2,930	2,886	2,992	3,015	3,026	3,048
12	2,587	2,492	2,550	2,599	2,568	2,610	2,651	2,729	2,747	2,832	2,774	2,790	2,892	2,786	2,744	2,845	2,867	2,878
Total¹	36,200	36,365	36,614	36,886	37,204	37,567	37,909	38,206	38,436	38,661	38,814	39,037	39,213	39,301	39,497	39,734	39,877	40,007
<i>Annual change²</i>		165 0.5%	249 0.7%	272 0.7%	318 0.9%	363 1.0%	342 0.9%	297 0.8%	230 0.6%	225 0.6%	153 0.4%	223 0.6%	176 0.5%	88 0.2%	196 0.5%	237 0.6%	143 0.4%	130 0.3%
K-5	17,151	17,189	17,194	17,180	17,302	17,422	17,452	17,601	17,804	17,907	17,997	18,093	18,156	18,213	18,263	18,313	18,361	18,405
6-8	8,248	8,398	8,532	8,721	8,774	8,824	8,897	8,919	8,885	8,849	8,948	9,098	9,155	9,202	9,249	9,278	9,302	9,330
9-12	10,801	10,778	10,888	10,985	11,128	11,321	11,560	11,686	11,747	11,905	11,869	11,846	11,902	11,886	11,985	12,143	12,214	12,272

**Note: Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

Population Research Center, Portland State University, October 2008.

Table A6
Beaverton School District
Middle Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic	Forecast																
Grade	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
K	2,775	2,715	2,675	2,695	2,758	2,821	2,873	2,912	2,947	2,978	3,013	3,055	3,091	3,123	3,151	3,179	3,210	3,246
1	2,886	3,010	2,982	2,945	2,996	3,065	3,136	3,190	3,233	3,272	3,306	3,345	3,387	3,426	3,462	3,493	3,524	3,559
2	2,873	2,891	3,019	2,995	2,964	3,015	3,085	3,153	3,207	3,250	3,290	3,324	3,358	3,400	3,439	3,475	3,506	3,537
3	2,935	2,878	2,900	3,032	3,014	2,983	3,034	3,102	3,170	3,224	3,267	3,308	3,337	3,371	3,413	3,452	3,488	3,519
4	2,849	2,939	2,886	2,911	3,050	3,032	3,001	3,049	3,117	3,186	3,240	3,283	3,320	3,349	3,384	3,426	3,465	3,501
5	2,833	2,853	2,946	2,896	2,926	3,066	3,048	3,014	3,062	3,130	3,200	3,254	3,294	3,332	3,361	3,396	3,438	3,477
6	2,785	2,865	2,888	2,985	2,939	2,970	3,112	3,091	3,056	3,105	3,174	3,245	3,298	3,338	3,377	3,406	3,442	3,484
7	2,749	2,789	2,872	2,898	3,001	2,955	2,986	3,126	3,105	3,070	3,119	3,188	3,257	3,310	3,350	3,389	3,419	3,455
8	2,714	2,753	2,797	2,883	2,916	3,019	2,973	3,001	3,142	3,120	3,085	3,135	3,201	3,270	3,323	3,363	3,403	3,433
9	2,836	2,800	2,845	2,894	2,991	3,025	3,132	3,080	3,109	3,255	3,233	3,196	3,244	3,312	3,384	3,438	3,480	3,521
10	2,760	2,812	2,782	2,831	2,887	2,984	3,018	3,120	3,069	3,097	3,243	3,221	3,180	3,227	3,295	3,367	3,420	3,462
11	2,618	2,681	2,737	2,712	2,767	2,822	2,916	2,946	3,045	2,995	3,023	3,165	3,139	3,099	3,145	3,212	3,282	3,333
12	2,587	2,498	2,560	2,615	2,594	2,646	2,699	2,787	2,816	2,910	2,863	2,889	3,021	2,996	2,958	3,002	3,066	3,133
Total¹	36,200	36,484	36,889	37,292	37,803	38,403	39,013	39,571	40,078	40,592	41,056	41,608	42,127	42,553	43,042	43,598	44,143	44,660
<i>Annual change²</i>		284 0.8%	405 1.1%	403 1.1%	511 1.4%	600 1.6%	610 1.6%	558 1.4%	507 1.3%	514 1.3%	464 1.1%	552 1.3%	519 1.2%	426 1.0%	489 1.1%	556 1.3%	545 1.3%	517 1.2%
K-5	17,151	17,286	17,408	17,474	17,708	17,982	18,177	18,420	18,736	19,040	19,316	19,569	19,787	20,001	20,210	20,421	20,631	20,839
6-8	8,248	8,407	8,557	8,766	8,856	8,944	9,071	9,218	9,303	9,295	9,378	9,568	9,756	9,918	10,050	10,158	10,264	10,372
9-12	10,801	10,791	10,924	11,052	11,239	11,477	11,765	11,933	12,039	12,257	12,362	12,471	12,584	12,634	12,782	13,019	13,248	13,449

**Note: Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

Population Research Center, Portland State University, October 2008.

Table A7
Beaverton School District
High Range Enrollment Forecasts, 2009-10 to 2025-26

	Historic	Forecast																
Grade	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
K	2,775	2,776	2,739	2,716	2,822	2,937	3,015	3,075	3,132	3,186	3,247	3,318	3,384	3,445	3,501	3,558	3,619	3,683
1	2,886	3,018	3,069	3,036	3,032	3,150	3,278	3,359	3,426	3,489	3,549	3,618	3,692	3,765	3,832	3,895	3,958	4,026
2	2,873	2,894	3,034	3,091	3,069	3,065	3,184	3,307	3,389	3,457	3,520	3,581	3,645	3,719	3,793	3,860	3,924	3,987
3	2,935	2,881	2,909	3,056	3,124	3,102	3,098	3,212	3,337	3,419	3,488	3,551	3,607	3,672	3,747	3,821	3,889	3,953
4	2,849	2,942	2,895	2,928	3,087	3,155	3,133	3,124	3,239	3,365	3,448	3,517	3,576	3,633	3,698	3,774	3,848	3,917
5	2,833	2,856	2,956	2,914	2,957	3,117	3,186	3,159	3,149	3,265	3,392	3,476	3,543	3,602	3,660	3,725	3,802	3,876
6	2,785	2,868	2,899	3,005	2,972	3,016	3,179	3,244	3,217	3,207	3,325	3,454	3,537	3,606	3,666	3,725	3,791	3,869
7	2,749	2,792	2,883	2,919	3,036	3,003	3,048	3,207	3,272	3,245	3,235	3,354	3,481	3,565	3,635	3,695	3,755	3,821
8	2,714	2,756	2,806	2,903	2,950	3,068	3,035	3,075	3,235	3,301	3,273	3,263	3,380	3,508	3,593	3,663	3,724	3,784
9	2,836	2,803	2,854	2,912	3,024	3,073	3,196	3,155	3,197	3,363	3,432	3,403	3,388	3,510	3,642	3,731	3,803	3,867
10	2,760	2,815	2,791	2,847	2,917	3,030	3,079	3,195	3,154	3,196	3,362	3,431	3,398	3,383	3,504	3,636	3,725	3,797
11	2,618	2,684	2,746	2,728	2,794	2,863	2,974	3,016	3,129	3,089	3,130	3,293	3,356	3,324	3,309	3,427	3,556	3,643
12	2,587	2,504	2,570	2,632	2,619	2,682	2,749	2,853	2,893	3,001	2,963	3,002	3,154	3,214	3,184	3,169	3,283	3,406
Total¹	36,200	36,589	37,151	37,687	38,403	39,261	40,154	40,981	41,769	42,583	43,364	44,261	45,141	45,946	46,764	47,679	48,677	49,629
<i>Annual change²</i>		389 1.1%	562 1.5%	536 1.4%	716 1.9%	858 2.2%	893 2.3%	827 2.1%	788 1.9%	814 1.9%	781 1.8%	897 2.1%	880 2.0%	805 1.8%	818 1.8%	915 2.0%	998 2.1%	952 2.0%
K-5	17,151	17,367	17,602	17,741	18,091	18,526	18,894	19,236	19,672	20,181	20,644	21,061	21,447	21,836	22,231	22,633	23,040	23,442
6-8	8,248	8,416	8,588	8,827	8,958	9,087	9,262	9,526	9,724	9,753	9,833	10,071	10,398	10,679	10,894	11,083	11,270	11,474
9-12	10,801	10,806	10,961	11,119	11,354	11,648	11,998	12,219	12,373	12,649	12,887	13,129	13,296	13,431	13,639	13,963	14,367	14,713

**Note: Historic and Forecast enrollments do not include students in Pre-Kindergarten, Self Contained Special Education, Alternative, and Early College programs.*

Population Research Center, Portland State University, October 2008.

Appendix D

Facility Inventory Sheets

■ Elementary Schools (including K-8)

Aloha Huber Park School (K-8).....	D-1
Barnes Elementary School	D-2
Beaver Acres Elementary School.....	D-3
Bethany Elementary School	D-4
Bonny Slope Elementary School.....	D-5
Cedar Mill Elementary School.....	D-6
Chehalem Elementary School	D-7
Cooper Mountain Elementary School	D-8
Elmonica Elementary School	D-9
Errol Hassell Elementary School	D-10
Findley Elementary School	D-11
Fir Grove Elementary School.....	D-12
Greenway Elementary School	D-13
Hazeldale Elementary School	D-14
Hiteon Elementary School	D-15
Jacob Wismer Elementary School.....	D-16
Kinnaman Elementary School.....	D-17
McKay Elementary School	D-18
McKinley Elementary School	D-19
Montclair Elementary School.....	D-20
Nancy Ryles Elementary School.....	D-21
Oak Hills Elementary School.....	D-22
Raleigh Hills School (K-8).....	D-23
Raleigh Park Elementary School.....	D-24
Ridgewood Elementary School	D-25
Rock Creek Elementary School	D-26
Scholls Heights Elementary School	D-27
Sexton Mountain Elementary School.....	D-28
Springville K-8 School.....	D-29
Terra Linda Elementary School	D-30
Vose Elementary School	D-31
West Tualatin View Elementary School	D-32
William Walker Elementary School.....	D-33

■ Middle Schools

Cedar Park Middle School	D-34
Conestoga Middle School	D-35
Five Oaks Middle School.....	D-36
Highland Park Middle School	D-37
Meadow Park Middle School.....	D-38
Mountain View Middle School	D-39
Stoller Middle School	D-40
Whitford Middle School	D-41

Beaverton School District 2010 Facilities Plan Update

■	High Schools	
	Aloha High School	D-42
	Beaverton High School	D-44
	Southridge High School	D-45
	Sunset High School	D-46
	Westview High School.....	D-48
■	Options Schools	
	Arts & Communications Magnet Academy (ACMA).....	D50
	Health & Science School – Capital Center.....	D51
	International School of Beaverton	D52
	Merlo Station Campus.....	D-54
	Terra Nova High School	D-55
■	Support Facilities	
	Administration – Aloha Branch	D-56
	Administration	D-57
	ESL Welcome Center at Beaverton Resource Center	D-58
	Maintenance Center	D-59
	Transportation & Support Center	D-60
	Transportation 5 th Street Station – North	D-61
	Transportation 5 th Street Station – South	D-62
	Transportation – Allen	D-63

Appendix D: Beaverton School District Facility Inventory Sheets

This appendix represents the inventory of facilities in the Beaverton School District.

The information below is provided for each of the facilities including the source as it is applicable.

Aerial map	<ul style="list-style-type: none"> Beaverton School District Google Maps
Taxlot ID	<ul style="list-style-type: none"> Metro Regional Land Information System (RLIS) Lite, August 2009 (most recent quarterly update) Beaverton School District Facility Handbook Fact Sheets, October 2009 Beaverton School District Facility Handbook Washington County GeoSearch Overlay, 2007
Site address	
Total building area (2009)	
Year built	<ul style="list-style-type: none"> Beaverton School District School Facility Capacity Spreadsheet, September 2009
Year last remodeled	
Parcel size	
Permanent Capacity (2009-2010) (Number of students)	<ul style="list-style-type: none"> Beaverton School District School Facility Capacity Spreadsheet, September 2009
Number of Portable Classrooms (2009)	
Portable Capacity (Number of students)	
Total Available Capacity (Permanent Capacity + Portable Capacity)	
Enrollment (2009-2010)	<ul style="list-style-type: none"> Beaverton School District Official Enrollment Spreadsheet, September 30, 2009
Utilization rate based on Permanent Capacity	<i>Note: calculated from enrollment and capacity data above</i>
Utilization rate based on Total Available Capacity	
Zoning	<ul style="list-style-type: none"> Metro Regional Land Information System (RLIS) Lite, August 2009
Jurisdiction	<ul style="list-style-type: none"> Metro Regional Land Information System (RLIS) Lite, August 2009 Beaverton School District Facility Handbook Washington County GeoSearch Overlay, 2007

Costs for Projected Facility Needs (for projects > \$25,000)	
2011-2015	<ul style="list-style-type: none"> Beaverton School District Building Condition Assessment (BCA) Reports, October/November 2009 Costs are first reported in the BCA during the 5-year period when a facility rating reaches or is projected to reach “poor” On a scale of 0-100: 0-25 = good, 30-45 = average, 50-65 = poor, 70-100 = very poor The costs reported in the fact sheets are those at the end of the five-year period (2015, 2020, 2025) The costs account for 35% soft costs, 10% contingency, and 2% inflation
2016-2020	
2021-2025	

Aloha-Huber Park School
(Grades K-8)



Tax Lot ID	1S118AC00300
Site address	5000 SW 173 rd Street Beaverton, OR 97007
Total building area (2009)	106,046 SF
Year built	2006
Year last remodeled	n/a
Parcel size	9.95 acres
Permanent Capacity (2009-2010) (Number of students)	1,042
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,042
Enrollment (2009-2010)	941
Utilization rate based on Permanent Capacity	90.3%
Utilization rate based on Total Available Capacity	90.3%
Zoning	INST (Institutional)
Jurisdiction	Washington County

<p align="center">Costs for Projected Facility Needs Based on 2009 Building Condition Assessment</p>	
2011-2015	\$40,249
2016-2020	\$170,066
2021-2025	-

Barnes Elementary School



Tax Lot ID	1S104CD05700
Site address	13730 SW Walker Rd Beaverton, OR 97005
Total building area (2009)	79,132 SF
Year built	1927
Year last remodeled	2008
Parcel size	7.8 acres
Permanent Capacity (2009-2010) (Number of students)	732
Number of Portable Classrooms (2009)	4 (2 doubles)
Portable Capacity (Number of students)	76
Total Available Capacity (Permanent Capacity + Portable Capacity)	808
Enrollment (2009-2010)	739
Utilization rate based on Permanent Capacity	101.0%
Utilization rate based on Total Available Capacity	91.5%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	\$693,477
2021-2025	-

Beaver Acres Elementary School



Tax Lot ID	1S107AB00100
Site address	2125 SW 170th Ave Beaverton, OR 97006
Total building area (2009)	86,675 SF
Year built	1955
Year last remodeled	2008
Parcel size	13.68 acres
Permanent Capacity (2009-2010) (Number of students)	750
Number of Portable Classrooms (2009)	8 (4 doubles)
Portable Capacity (Number of students)	152
Total Available Capacity (Permanent Capacity + Portable Capacity)	902
Enrollment (2009-2010)	814
Utilization rate based on Permanent Capacity	108.5%
Utilization rate based on Total Available Capacity	90.2%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$1,312,397
2016-2020	\$873,055
2021-2025	\$62,347

Bethany Elementary School



Tax Lot ID	1N130AC05400
Site address	3305 NW 174th Ave Beaverton, OR 97006
Total building area (2009)	52,665 SF
Year built	1970
Year last remodeled	2003
Parcel size	10.69 acres
Permanent Capacity (2009-2010) (Number of students)	481
Number of Portable Classrooms (2009)	3
Portable Capacity (Number of students)	57
Total Available Capacity (Permanent Capacity + Portable Capacity)	538
Enrollment (2009-2010)	485
Utilization rate based on Permanent Capacity	100.8%
Utilization rate based on Total Available Capacity	90.1%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$370,576
2016-2020	\$1,180,841
2021-2025	-

Bonny Slope Elementary School



Tax Lot ID	1N127CA00200
Site address	11775 NW McDaniel Rd Portland, OR 97229
Total building area (2009)	80,405 SF
Year built	2008
Year last remodeled	n/a
Parcel size	9.77 acres
Permanent Capacity (2009-2010) (Number of students)	768
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	768
Enrollment (2009-2010)	473
Utilization rate based on Permanent Capacity	61.6%
Utilization rate based on Total Available Capacity	61.6%
Zoning	R-9 (Residential, 9 units/acre)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	-
2021-2025	-

Cedar Mill Elementary School



Tax Lot ID	1N135BC01200
Site address	10265 NW Cornell Rd Portland, OR 97229
Total building area (2009)	42,015 SF
Year built	1926
Year last remodeled	2002
Parcel size	5.8 acres
Permanent Capacity (2009-2010) (Number of students)	366
Number of Portable Classrooms (2009)	1
Portable Capacity (Number of students)	19
Total Available Capacity (Permanent Capacity + Portable Capacity)	385
Enrollment (2009-2010)	233
Utilization rate based on Permanent Capacity	63.7%
Utilization rate based on Total Available Capacity	60.5%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$505,130
2016-2020	\$711,574
2021-2025	-

Chehalem Elementary School



Tax Lot ID	1S117CD09200
Site address	15555 SW Davis Rd Beaverton, OR 97007
Total building area (2009)	57,900 SF
Year built	1971
Year last remodeled	2005
Parcel size	10 acres
Permanent Capacity (2009-2010) (Number of students)	498
Number of Portable Classrooms (2009)	4
Portable Capacity (Number of students)	76
Total Available Capacity (Permanent Capacity + Portable Capacity)	574
Enrollment (2009-2010)	485
Utilization rate based on Permanent Capacity	97.4%
Utilization rate based on Total Available Capacity	84.5%
Zoning	R-7 (Residential, Standard Urban Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$231,488
2016-2020	\$187,015
2021-2025	\$306,262

Cooper Mountain Elementary School



Tax Lot ID	1S119DD00300
Site address	7670 SW 170th Ave Beaverton, OR 97007
Total building area (2009)	58,661 SF
Year built	1914
Year last remodeled	2005
Parcel size	8.6 acres
Permanent Capacity (2009-2010) (Number of students)	512
Number of Portable Classrooms (2009)	4
Portable Capacity (Number of students)	76
Total Available Capacity (Permanent Capacity + Portable Capacity)	588
Enrollment (2009-2010)	489
Utilization rate based on Permanent Capacity	95.5%
Utilization rate based on Total Available Capacity	83.2%
Zoning	R-5 (Residential, Standard Urban Density, 5,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$1,331,107
2016-2020	\$190,717
2021-2025	\$163,339

Elmonica Elementary School



Tax Lot ID	1S106AD01101
Site address	16950 SW Lisa St Beaverton, OR 97006
Total building area (2009)	59,319 SF
Year built	1981
Year last remodeled	2005
Parcel size	8.76 acres
Permanent Capacity (2009-2010) (Number of students)	466
Number of Portable Classrooms (2009)	9
Portable Capacity (Number of students)	171
Total Available Capacity (Permanent Capacity + Portable Capacity)	637
Enrollment (2009-2010)	595
Utilization rate based on Permanent Capacity	127.7%
Utilization rate based on Total Available Capacity	93.4%
Zoning	R-7 (Residential, Standard Urban Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$790,110
2016-2020	\$427,558
2021-2025	-

Errol Hassell Elementary School



Tax Lot ID	1S119CB22300
Site address	18100 SW Bany Rd Beaverton, OR 97007
Total building area (2009)	60,345 SF
Year built	1980
Year last remodeled	2002
Parcel size	9 acres
Permanent Capacity (2009-2010) (Number of students)	576
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	576
Enrollment (2009-2010)	498
Utilization rate based on Permanent Capacity	86.5%
Utilization rate based on Total Available Capacity	86.5%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$224,893
2016-2020	\$1,685,140
2021-2025	\$980,018

Findley Elementary School



Tax Lot ID	1N121DC05400
Site address	4155 NW Saltzman Rd Portland, OR 97229
Total building area (2009)	79,348 SF
Year built	1997
Year last remodeled	2001
Parcel size	9.96 acres
Permanent Capacity (2009-2010) (Number of students)	703
Number of Portable Classrooms (2009)	8
Portable Capacity (Number of students)	152
Total Available Capacity (Permanent Capacity + Portable Capacity)	855
Enrollment (2009-2010)	804
Utilization rate based on Permanent Capacity	114.4%
Utilization rate based on Total Available Capacity	94.0%
Zoning	R-6 (Residential, 6 units/acre)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	\$199,916
2021-2025	-

Fir Grove Elementary School



Tax Lot ID	1S121BA01100
Site address	6300 SW Wilson Ave Beaverton, OR 97008
Total building area (2009)	62,106 SF
Year built	1954
Year last remodeled	2005
Parcel size	11.99 acres
Permanent Capacity (2009-2010) (Number of students)	555
Number of Portable Classrooms (2009)	2
Portable Capacity (Number of students)	38
Total Available Capacity (Permanent Capacity + Portable Capacity)	593
Enrollment (2009-2010)	456
Utilization rate based on Permanent Capacity	82.2%
Utilization rate based on Total Available Capacity	76.9%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$306,965
2016-2020	\$627,160
2021-2025	\$406,307

Greenway Elementary School



Tax Lot ID	1S127CB00100
Site address	9150 SW Downing Dr Beaverton, OR 97008
Total building area (2009)	54,991 SF
Year built	1980
Year last remodeled	2007
Parcel size	9.45 acres
Permanent Capacity (2009-2010) (Number of students)	523
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	523
Enrollment (2009-2010)	421
Utilization rate based on Permanent Capacity	80.5%
Utilization rate based on Total Available Capacity	80.5%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$60,877
2016-2020	\$882,806
2021-2025	-

Hazeldale Elementary School



Tax Lot ID	1S224CA01100
Site address	20080 SW Farmington Rd Aloha, OR 97007
Total building area (2009)	55,844 SF
Year built	1942
Year last remodeled	2002
Parcel size	7.2 acres
Permanent Capacity (2009-2010) (Number of students)	477
Number of Portable Classrooms (2009)	5
Portable Capacity (Number of students)	95
Total Available Capacity (Permanent Capacity + Portable Capacity)	572
Enrollment (2009-2010)	579
Utilization rate based on Permanent Capacity	121.4%
Utilization rate based on Total Available Capacity	101.2%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$371,413
2016-2020	\$1,445,544
2021-2025	\$151,089

Hiteon Elementary School



Tax Lot ID	1S128CA00100
Site address	13800 SW Brockman St Beaverton, OR 97008
Total building area (2009)	78,972 SF
Year built	1975
Year last remodeled	2009
Parcel size	8.97 acres
Permanent Capacity (2009-2010) (Number of students)	736
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	736
Enrollment (2009-2010)	486
Utilization rate based on Permanent Capacity	66.0%
Utilization rate based on Total Available Capacity	66.0%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$72,448
2016-2020	\$893,303
2021-2025	\$106,170

Jacob Wismer Elementary School



Tax Lot ID	1N121BB06700
Site address	5477 NW Skycrest Pkwy Portland, OR 97229
Total building area (2009)	74,655 SF
Year built	2001
Year last remodeled	n/a
Parcel size	8.4 acres
Permanent Capacity (2009-2010) (Number of students)	711
Number of Portable Classrooms (2009)	2
Portable Capacity (Number of students)	38
Total Available Capacity (Permanent Capacity + Portable Capacity)	749
Enrollment (2009-2010)	699
Utilization rate based on Permanent Capacity	98.4%
Utilization rate based on Total Available Capacity	93.4%
Zoning	R-6 (Residential, 6 units/acre)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$173,407
2016-2020	\$102,571
2021-2025	-

Kinnaman Elementary School



Tax Lot ID	1S213AB00101
Site address	4205 SW 193rd Ave Beaverton, OR 97007
Total building area (2009)	82,757 SF
Year built	1975
Year last remodeled	2009
Parcel size	7.86 acres
Permanent Capacity (2009-2010) (Number of students)	763
Number of Portable Classrooms (2009)	2
Portable Capacity (Number of students)	38
Total Available Capacity (Permanent Capacity + Portable Capacity)	801
Enrollment (2009-2010)	474
Utilization rate based on Permanent Capacity	62.1%
Utilization rate based on Total Available Capacity	59.2%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$211,644
2016-2020	\$841,453
2021-2025	\$204,174

McKay Elementary School



Tax Lot ID	1S123CC00100
Site address	7485 SW Scholls Ferry Rd Beaverton, OR 97008
Total building area (2009)	48,736 SF
Year built	1929
Year last remodeled	2004
Parcel size	5.44 acres
Permanent Capacity (2009-2010) (Number of students)	415
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	415
Enrollment (2009-2010)	366
Utilization rate based on Permanent Capacity	88.2%
Utilization rate based on Total Available Capacity	88.2%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$1,949,132
2016-2020	\$1,932,531
2021-2025	\$72,088

McKinley Elementary School



Tax Lot ID	1N131BC07900
Site address	1500 NW 185th Ave Beaverton, OR 97006
Total building area (2009)	68,561 SF
Year built	1944
Year last remodeled	2008
Parcel size	10.25 acres
Permanent Capacity (2009-2010) (Number of students)	550
Number of Portable Classrooms (2009)	8
Portable Capacity (Number of students)	152
Total Available Capacity (Permanent Capacity + Portable Capacity)	702
Enrollment (2009-2010)	611
Utilization rate based on Permanent Capacity	111.1%
Utilization rate based on Total Available Capacity	87.0%
Zoning	R-5 (Residential, Urban Standard Density, 5,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$148,037
2016-2020	\$357,566
2021-2025	\$500,077

Montclair Elementary School



Tax Lot ID	1S124AB08900
Site address	7250 SW Vermont St Portland, OR 97223
Total building area (2009)	39,516 SF
Year built	1971
Year last remodeled	2006
Parcel size	7.99 acres
Permanent Capacity (2009-2010) (Number of students)	367
Number of Portable Classrooms (2009)	1
Portable Capacity (Number of students)	19
Total Available Capacity (Permanent Capacity + Portable Capacity)	386
Enrollment (2009-2010)	340
Utilization rate based on Permanent Capacity	92.6%
Utilization rate based on Total Available Capacity	88.1%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$100,157
2016-2020	\$332,154
2021-2025	-

Nancy Ryles Elementary School



Tax Lot ID	1S132BB05400
Site address	10250 SW Cormorant Dr Beaverton, OR 97007
Total building area (2009)	72,559 SF
Year built	1992
Year last remodeled	2000
Parcel size	7 acres
Permanent Capacity (2009-2010) (Number of students)	693
Number of Portable Classrooms (2009)	2
Portable Capacity (Number of students)	38
Total Available Capacity (Permanent Capacity + Portable Capacity)	731
Enrollment (2009-2010)	649
Utilization rate based on Permanent Capacity	93.7%
Utilization rate based on Total Available Capacity	88.8%
Zoning	R-5 (Residential, Urban Standard Density, 5,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$550,229
2016-2020	\$822,616
2021-2025	-

Oak Hills Elementary School



Tax Lot ID	1N129CA09100
Site address	2625 NW 153rd Ave Beaverton, OR 97006
Total building area (2009)	57,443 SF
Year built	1967
Year last remodeled	2006
Parcel size	9.02 acres
Permanent Capacity (2009-2010) (Number of students)	463
Number of Portable Classrooms (2009)	8
Portable Capacity (Number of students)	152
Total Available Capacity (Permanent Capacity + Portable Capacity)	615
Enrollment (2009-2010)	600
Utilization rate based on Permanent Capacity	129.6%
Utilization rate based on Total Available Capacity	97.6%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$2,205,155
2016-2020	\$494,983
2021-2025	\$454,673

Raleigh Hills School
(Grades K-8)



Tax Lot ID	1S113CA00400
Site address	5225 SW Scholls Ferry Rd Portland, OR 97225
Total building area (2009)	62,023 SF
Year built	1927
Year last remodeled	2004
Parcel size	10.02 acres
Permanent Capacity (2009-2010) (Number of students)	505
Number of Portable Classrooms (2009)	6
Portable Capacity (Number of students)	114
Total Available Capacity (Permanent Capacity + Portable Capacity)	619
Enrollment (2009-2010)	489
Utilization rate based on Permanent Capacity	96.8%
Utilization rate based on Total Available Capacity	79.0%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$1,154,060
2016-2020	\$612,313
2021-2025	-

Raleigh Park Elementary School



Tax Lot ID	1S112CD03200
Site address	3670 SW 78th Ave Portland, OR 97225
Total building area (2009)	48,862 SF
Year built	1957
Year last remodeled	2004
Parcel size	15.64 acres
Permanent Capacity (2009-2010) (Number of students)	434
Number of Portable Classrooms (2009)	4
Portable Capacity (Number of students)	76
Total Available Capacity (Permanent Capacity + Portable Capacity)	510
Enrollment (2009-2010)	418
Utilization rate based on Permanent Capacity	96.3%
Utilization rate based on Total Available Capacity	82.0%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$218,906
2016-2020	\$687,830
2021-2025	\$530,854

Ridgewood Elementary School



Tax Lot ID	1S111BB03400
Site address	10100 SW Inglewood St Portland, OR 97225
Total building area (2009)	55,499 SF
Year built	1958
Year last remodeled	2005
Parcel size	7.04 acres
Permanent Capacity (2009-2010) (Number of students)	470
Number of Portable Classrooms (2009)	2
Portable Capacity (Number of students)	38
Total Available Capacity (Permanent Capacity + Portable Capacity)	508
Enrollment (2009-2010)	392
Utilization rate based on Permanent Capacity	83.4%
Utilization rate based on Total Available Capacity	77.2%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$93,076
2016-2020	\$1,018,643
2021-2025	\$767,696

Rock Creek Elementary School



Tax Lot ID	1N224DD00100
Site address	4125 NW 185th Ave Portland, OR 97229
Total building area (2009)	57,009 SF
Year built	1975
Year last remodeled	2004
Parcel size	17.61 acres
Permanent Capacity (2009-2010) (Number of students)	497
Number of Portable Classrooms (2009)	6
Portable Capacity (Number of students)	114
Total Available Capacity (Permanent Capacity + Portable Capacity)	611
Enrollment (2009-2010)	520
Utilization rate based on Permanent Capacity	104.6%
Utilization rate based on Total Available Capacity	85.1%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$333,667
2016-2020	\$1,127,818
2021-2025	\$227,631

Scholls Heights Elementary School



Tax Lot ID	2S105BB03800
Site address	16400 SW Loon Dr Beaverton, OR 97007
Total building area (2009)	72,525 SF
Year built	1999
Year last remodeled	n/a
Parcel size	8.72 acres
Permanent Capacity (2009-2010) (Number of students)	662
Number of Portable Classrooms (2009)	4
Portable Capacity (Number of students)	76
Total Available Capacity (Permanent Capacity + Portable Capacity)	738
Enrollment (2009-2010)	696
Utilization rate based on Permanent Capacity	105.1%
Utilization rate based on Total Available Capacity	94.3%
Zoning	R-5 (Residential, Urban Standard Density, 5,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	-
2021-2025	-

Sexton Mountain Elementary School



Tax Lot ID	1S129BA02400
Site address	15645 SW Sexton Mountain Dr Beaverton, OR 97007
Total building area (2009)	73,078 SF
Year built	1989
Year last remodeled	2002
Parcel size	10.83 acres
Permanent Capacity (2009-2010) (Number of students)	628
Number of Portable Classrooms (2009)	6
Portable Capacity (Number of students)	114
Total Available Capacity (Permanent Capacity + Portable Capacity)	742
Enrollment (2009-2010)	675
Utilization rate based on Permanent Capacity	107.5%
Utilization rate based on Total Available Capacity	91.0%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	\$434,176
2021-2025	\$60,787

Springville School
(Grades K-8)



Tax Lot ID	1N1180000800
Site address	6655 NW Joss Ave Portland, OR 97229
Total building area (2009)	87,206 SF
Year built	2009
Year last remodeled	n/a
Parcel size	10.38 acres
Permanent Capacity (2009-2010) (Number of students)	836
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	836
Enrollment (2009-2010)	506
Utilization rate based on Permanent Capacity	60.5%
Utilization rate based on Total Available Capacity	60.5%
Zoning	R-9 (Residential, 9 units/acre)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	-
2021-2025	-

Terra Linda Elementary School



Tax Lot ID	1N133BB00101
Site address	1998 NW 143rd Ave Portland, OR 97229
Total building area (2009)	51,636 SF
Year built	1970
Year last remodeled	2005
Parcel size	10 acres
Permanent Capacity (2009-2010) (Number of students)	480
Number of Portable Classrooms (2009)	1
Portable Capacity (Number of students)	19
Total Available Capacity (Permanent Capacity + Portable Capacity)	499
Enrollment (2009-2010)	418
Utilization rate based on Permanent Capacity	87.1%
Utilization rate based on Total Available Capacity	83.8%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$152,282
2016-2020	\$803,248
2021-2025	\$280,563

Vose Elementary School



Tax Lot ID	1S122DB02000
Site address	11350 SW Denny Rd Beaverton, OR 97008
Total building area (2009)	60,506 SF
Year built	1960
Year last remodeled	2003
Parcel size	8.53 acres
Permanent Capacity (2009-2010) (Number of students)	499
Number of Portable Classrooms (2009)	9
Portable Capacity (Number of students)	171
Total Available Capacity (Permanent Capacity + Portable Capacity)	670
Enrollment (2009-2010)	631
Utilization rate based on Permanent Capacity	126.5%
Utilization rate based on Total Available Capacity	94.2%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$375,996
2016-2020	\$2,672,425
2021-2025	-

West Tualatin View Elementary School



Tax Lot ID	1S102AD00600
Site address	8800 SW Leahy Rd Portland, OR 97225
Total building area (2009)	43,447 SF
Year built	1955
Year last remodeled	2005
Parcel size	7.2 acres
Permanent Capacity (2009-2010) (Number of students)	398
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	398
Enrollment (2009-2010)	298
Utilization rate based on Permanent Capacity	74.9%
Utilization rate based on Total Available Capacity	74.9%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$582,006
2016-2020	\$1,712,511
2021-2025	\$109,977

William Walker Elementary School



Tax Lot ID	1S110BB00600
Site address	11940 SW Lynnfield Ln Portland, OR 97225
Total building area (2009)	57,484 SF
Year built	1962
Year last remodeled	2002
Parcel size	9.25 acres
Permanent Capacity (2009-2010) (Number of students)	457
Number of Portable Classrooms (2009)	7
Portable Capacity (Number of students)	133
Total Available Capacity (Permanent Capacity + Portable Capacity)	590
Enrollment (2009-2010)	490
Utilization rate based on Permanent Capacity	107.2%
Utilization rate based on Total Available Capacity	83.1%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$178,103
2016-2020	\$1,707,335
2021-2025	\$91,785

Cedar Park Middle School



Taxlot ID	1S103DC08300
Site address	11100 SW Park Way Portland, OR 97225
Total building area (2009)	122,078 SF
Year built	1966
Year last remodeled	2003
Parcel size	16.86 acres
Permanent Capacity (2009-2010) (Number of students)	865
Number of Portable Classrooms (2009)	6
Portable Capacity (Number of students)	126
Total Available Capacity (Permanent Capacity + Portable Capacity)	991
Enrollment (2009-2010)	861
Utilization rate based on Permanent Capacity	99.5%
Utilization rate based on Total Available Capacity	86.9%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$344,345
2016-2020	\$786,825
2021-2025	\$1,568,266

Conestoga Middle School



Taxlot ID	1S134BB00100
Site address	12250 SW Conestoga Dr Beaverton, OR 97008
Total building area (2009)	133,811 SF
Year built	1974
Year last remodeled	1998
Parcel size	25.2 acres
Permanent Capacity (2009-2010) (Number of students)	952
Number of Portable Classrooms (2009)	6
Portable Capacity (Number of students)	126
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,078
Enrollment (2009-2010)	940
Utilization rate based on Permanent Capacity	98.7%
Utilization rate based on Total Available Capacity	87.2%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$3,735,403
2016-2020	\$339,299
2021-2025	-

Five Oaks Middle School



Taxlot ID	1N1310000500
Site address	1600 NW 173rd Ave Beaverton, OR 97006
Total building area (2009)	151,167 SF
Year built	1976
Year last remodeled	2005
Parcel size	32.49 acres
Permanent Capacity (2009-2010) (Number of students)	1,047
Number of Portable Classrooms (2009)	9
Portable Capacity (Number of students)	189
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,236
Enrollment (2009-2010)	1,134 (with Rachel Carson students)
Utilization rate based on Permanent Capacity	108.3%
Utilization rate based on Total Available Capacity	91.7%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$621,530
2016-2020	\$88,335
2021-2025	\$210,299

Highland Park Middle School



Taxlot ID	1S121BD03500
Site address	7000 SW Wilson Ave Beaverton, OR 97008
Total building area (2009)	122,172 SF
Year built	1965
Year last remodeled	2002
Parcel size	20 acres
Permanent Capacity (2009-2010) (Number of students)	871
Number of Portable Classrooms (2009)	6
Portable Capacity (Number of students)	126
Total Available Capacity (Permanent Capacity + Portable Capacity)	997
Enrollment (2009-2010)	816
Utilization rate based on Permanent Capacity	93.7%
Utilization rate based on Total Available Capacity	81.8%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$433,050
2016-2020	\$56,770
2021-2025	\$3,064,015

Meadow Park Middle School



Taxlot ID	1S104BC00100
Site address	14100 SW Downing St Beaverton, OR 97006
Total building area (2009)	120,266 SF
Year built	1965
Year last remodeled	2003
Parcel size	19.7 acres
Permanent Capacity (2009-2010) (Number of students)	841
Number of Portable Classrooms (2009)	4
Portable Capacity (Number of students)	84
Total Available Capacity (Permanent Capacity + Portable Capacity)	925
Enrollment (2009-2010)	876 (with Summa students)
Utilization rate based on Permanent Capacity	104.2%
Utilization rate based on Total Available Capacity	94.7%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$429,779
2016-2020	\$147,566
2021-2025	\$556,380

Mountain View Middle School



Taxlot ID	1S118DC00103
Site address	17500 SW Farmington Rd Beaverton, OR 97007
Total building area (2009)	137,302 SF
Year built	1969
Year last remodeled	2004
Parcel size	24.14 acres
Permanent Capacity (2009-2010) (Number of students)	990
Number of Portable Classrooms (2009)	4
Portable Capacity (Number of students)	84
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,074
Enrollment (2009-2010)	864
Utilization rate based on Permanent Capacity	87.3%
Utilization rate based on Total Available Capacity	80.4%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$545,570
2016-2020	\$1,209,825
2021-2025	\$146,782

Stoller Middle School



Taxlot ID	1N121BC06100
Site address	14141 NW Laidlaw Rd Beaverton, OR 97229
Total building area (2009)	142,788 SF
Year built	1999
Year last remodeled	2002
Parcel size	16.8 acres
Permanent Capacity (2009-2010) (Number of students)	1,067
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,067
Enrollment (2009-2010)	985
Utilization rate based on Permanent Capacity	92.3%
Utilization rate based on Total Available Capacity	92.3%
Zoning	R-6 (Residential, 6 units/acre)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$1,433,277
2016-2020	\$143,510
2021-2025	-

Whitford Middle School



Taxlot ID	1S123CC02802
Site address	7935 SW Scholls Ferry Rd Beaverton, OR 97005
Total building area (2009)	116,962 SF
Year built	1965
Year last remodeled	2005
Parcel size	29 acres
Permanent Capacity (2009-2010) (Number of students)	850
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	850
Enrollment (2009-2010)	692 (with Summa students)
Utilization rate based on Permanent Capacity	81.4%
Utilization rate based on Total Available Capacity	81.4%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$426,140
2016-2020	\$161,322
2021-2025	\$2,052,998

Aloha High School



Taxlot ID	1S213AD03100
Site address	18550 SW Kinnaman Rd Beaverton, OR 97007
Total building area (2009)	265,477 SF
Year built	1968
Year last remodeled	2008
Parcel size	33.4 acres
Permanent Capacity (2009-2010) (Number of students)	1,804
Number of Portable Classrooms (2009)	5
Portable Capacity (Number of students)	115
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,919
Enrollment (2009-2010)	1,795
Utilization rate based on Permanent Capacity	99.5%

Utilization rate based on Total Available Capacity	93.5%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$491,449
2016-2020	\$686,394
2021-2025	\$754,125

Beaverton High School



Taxlot ID	1S116AC02100, 1S116AC00250, 1S116AD01090, 1S116AD02900, 1S116AD07100
Site address	13000 SW Second St Beaverton, OR 97005
Total building area (2009)	272,976 SF
Year built	1915
Year last remodeled	2005
Parcel size	20.44 acres
Permanent Capacity (2009-2010) (Number of students)	1,809
Number of Portable Classrooms (2009)	10
Portable Capacity (Number of students)	230
Total Available Capacity (Permanent Capacity + Portable Capacity)	2,039
Enrollment (2009-2010)	1,713
Utilization rate based on Permanent Capacity	94.7%
Utilization rate based on Total Available Capacity	84.0%
Zoning	R-10 (Residential, Urban Low Density, 10,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$5,296,895
2016-2020	\$295,863
2021-2025	-

Southridge High School



Taxlot ID	1S128DD00300
Site address	9625 SW 125th Ave Beaverton, OR 97008
Total building area (2009)	256,070 SF
Year built	1971
Year last remodeled	2007
Parcel size	32.39 acres
Permanent Capacity (2009-2010) (Number of students)	1,771
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,771
Enrollment (2009-2010)	1,787
Utilization rate based on Permanent Capacity	100.9%
Utilization rate based on Total Available Capacity	100.9%
Zoning	R-7 (Residential, Urban Standard Density, 7,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$66,713
2016-2020	\$101,222
2021-2025	\$604,964

Sunset High School



Taxlot ID	1N133BC01300, 1N133BD09200, 1N133CB00100
Site address	13840 NW Cornell Rd Portland, OR 97229
Total building area (2009)	260,543 SF
Year built	1959
Year last remodeled	2008
Parcel size	33.5 acres
Permanent Capacity (2009-2010) (Number of students)	1,748
Number of Portable Classrooms (2009)	8
Portable Capacity (Number of students)	184
Total Available Capacity (Permanent Capacity + Portable Capacity)	1,932
Enrollment (2009-2010)	1,841

Utilization rate based on Permanent Capacity	105.3%
Utilization rate based on Total Available Capacity	95.3%
Zoning	CI (Campus Industrial)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$4,151,140
2016-2020	\$1,694,355
2021-2025	\$147,005

Westview High School



Taxlot ID	1N1190002300
Site address	4200 NW 185th Ave Portland, OR 97229
Total building area (2009)	294,367 SF
Year built	1994
Year last remodeled	2008
Parcel size	45.4 acres
Permanent Capacity (2009-2010) (Number of students)	1,950
Number of Portable Classrooms (2009)	16
Portable Capacity (Number of students)	368
Total Available Capacity (Permanent Capacity + Portable Capacity)	2,318
Enrollment (2009-2010)	2,365
Utilization rate based on Permanent Capacity	121.3%

Utilization rate based on Total Available Capacity	102.0%
Zoning	R-5 (Residential, 5 units/acre)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$2,282,161
2016-2020	\$782,760
2021-2025	-

Arts & Communication Magnet Academy (ACMA)
(Grades 6-12)



Tax Lot ID	1S110DB02000
Site address	11375 SW Center St Beaverton, OR 97005
Total building area (2009)	81,729 SF
Year built	1949
Year last remodeled	2002
Parcel size	9.13 acres
Permanent Capacity (2009-2010) (Number of students)	223
Number of Portable Classrooms (2009)	8
Portable Capacity (Number of students)	184
Total Available Capacity (Permanent Capacity + Portable Capacity)	407
Enrollment (2009-2010)	579 (middle school and high school)
Utilization rate based on Permanent Capacity	259.6%
Utilization rate based on Total Available Capacity	142.3%
Zoning	R-2 (Residential, Urban Medium Density, 2,000 SF lot)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$875,498
2016-2020	\$1,138,331
2021-2025	-

Health & Science School – Capital Center
(Grades 6-12)



Tax Lot ID	1N2360004100
Site address	18640 NW Walker Rd Beaverton, OR 97006
Total building area (2009)	112,633 SF + 76,608 SF leased = 189,241 SF
Year built	1970, 1977
Year last remodeled	2009
Parcel size	18.55 acres
Permanent Capacity (2009-2010) (Number of students)	543 (891 in 2010-2011)
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	543 (891 in 2010-2011)
Enrollment (2009-2010)	495 (middle school and high school)
Utilization rate based on Permanent Capacity	91.2%
Utilization rate based on Total Available Capacity	91.2%
Zoning	SC-RP (Station Community, Research Park)
Jurisdiction	Hillsboro

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$882,825
2016-2020	\$502,291
2021-2025	\$408,266

International School of Beaverton



Tax Lot ID	1S118BA00600
Site address	17770 SW Blanton St Aloha, OR 97007
Total building area (2009)	86,153 SF
Year built	1913
Year last remodeled	2007
Parcel size	13.5 acres
Permanent Capacity (2009-2010) (Number of students)	530
Number of Portable Classrooms (2009)	12
Portable Capacity (Number of students)	276
Total Available Capacity (Permanent Capacity + Portable Capacity)	806
Enrollment (2009-2010)	707 (middle school and high school)
Utilization rate based on Permanent Capacity	133.4%
Utilization rate based on Total Available Capacity	87.7%
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$66,243 \$34,830 (District Special Education Building)
2016-2020	\$1,288,700 \$93,690 (District Special Education Building)

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2021-2025	\$63,294 (District Nutrition Services Building)

Merlo Station Campus



Tax Lot ID	1S106DD01000
Site address	1841 SW Merlo Dr Beaverton, OR 97006
Total building area (2009)	52,917 SF
Year built	1994
Year last remodeled	2002
Parcel size	4.2 acres
Permanent Capacity (2009-2010) (Number of students)	330
Number of Portable Classrooms (2009)	2
Portable Capacity (Number of students)	46
Total Available Capacity (Permanent Capacity + Portable Capacity)	376
Enrollment (2009-2010)	430
Utilization rate based on Permanent Capacity	130.3%
Utilization rate based on Total Available Capacity	114.4%
Zoning	SC-MU (Station Community, Multiple Use)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$1,019,538
2016-2020	\$410,336
2021-2025	\$65,236

Terra Nova High School



Tax Lot ID	1N1W26BB02600
Site address	10351 NW Thompson Rd Portland, OR 97229
Total building area (2009)	11,800 SF
Year built	1938
Year last remodeled	1975
Parcel size	3.83 acres
Permanent Capacity (2009-2010) (Number of students)	84
Number of Portable Classrooms (2009)	0
Portable Capacity (Number of students)	0
Total Available Capacity (Permanent Capacity + Portable Capacity)	84
Enrollment (2009-2010)	59
Utilization rate based on Permanent Capacity	70.2%
Utilization rate based on Total Available Capacity	70.2%
Zoning	RR (Rural Residential)
Jurisdiction	Multnomah County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$411,494
2016-2020	\$538,365
2021-2025	-

Administration – Aloha Branch



Taxlot ID	1S17CC006000, 1S17CC006100
Site address	17840 SW Blanton Rd Beaverton, OR 97007
Total building area (2008)	7,139 SF
Year built	1999 (purchased)
Year last remodeled	2001
Parcel size	1.68 acres
Zoning	INST (Institutional)
Jurisdiction	Washington County

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	-
2021-2025	-

Administration – Central Office



Taxlot ID	1S107AA00600
Site address	16550 SW Merlo Rd Beaverton, OR 97006
Total building area (2008)	48,883 SF
Year built	1972
Year last remodeled	2007 (when last remodel began)
Parcel size	4.28 acres
Zoning	SC-E (Station Community – Employment)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$371,731
2016-2020	\$805,623
2021-2025	-

ESL Welcome Center at Beaverton Resource Center



Taxlot ID	1S121AA00200
Site address	12500 SW Allen Blvd Beaverton, OR 97005
Total building area (2008)	7,500 SF
Year built	2001 (building converted to resource center)
Year last remodeled	2001
Parcel size	1.7 acres
Zoning	NS (Neighborhood Service Center)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	-
2021-2025	-

Maintenance Center



Taxlot ID	1S107AA00600
Site address	2180 SW 170th Ave Beaverton, OR 97006
Total building area (2008)	34,428 SF
Year built	1971 (purchased)
Year last remodeled	2004
Parcel size	5.29 acres
Zoning	SC-E (Station Community – Employment)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$238,601
2016-2020	\$173,108
2021-2025	-

Transportation & Support Center (TSC)



Taxlot ID	1N131AD00300
Site address	1270 NW 167 th Pl Beaverton, OR 97006
Total building area (2008)	53,390 SF
Year built	2001 (purchased)
Year last remodeled	2002
Parcel size	13.67 acres
Zoning	LI (Light Industrial)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	-
2021-2025	-

Transportation 5th Street Station – North



Taxlot ID	1S115AD02300
Site address	10615 SW Fifth St Beaverton, OR 97008
Total building area (2008)	5,139 SF
Year built	2001 (purchased)
Year last remodeled	2001
Parcel size	3.44 acres
Zoning	IP (Industrial Park)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	-
2016-2020	\$78,404
2021-2025	-

Transportation 5th Street Station – South



Taxlot ID	1S114CB00400
Site address	10550 SW Fifth St Beaverton, OR 97008
Total building area (2009)	25,800 SF
Year built	1997 (first leased)
Year last remodeled	2002
Parcel size	2.94 acres
Zoning	IP (Industrial Park)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$212,986
2016-2020	\$1,049,588
2021-2025	\$120,463

Transportation – Allen



Taxlot ID	1S123BB00500
Site address	10420 SW Allen Ave Beaverton, OR 97005
Total building area (2008)	9,779 SF
Year built	1969 (first occupied)
Year last remodeled	2003
Parcel size	7.04 acres
Zoning	IP (Industrial Park)
Jurisdiction	Beaverton

Costs for Projected Facility Needs Based on 2009 Building Condition Assessment	
2011-2015	\$280,134
2016-2020	\$216,626
2021-2025	-