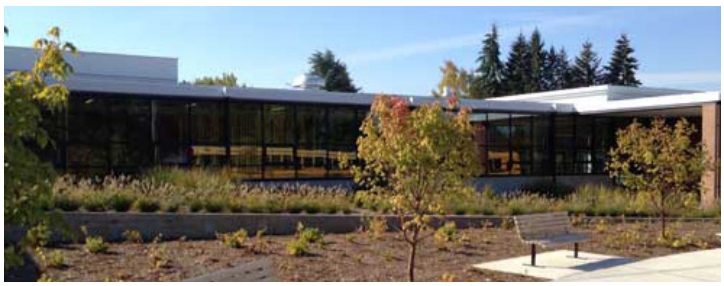
mahlum

LONG-RANGE FACILITY PLAN UPDATE
FOREST GROVE SCHOOL DISTRICT | FOREST GROVE, OREGON

09 JULY 2021



FOREST GROVE SCHOOL DISTRICT
ROOTED IN COMMUNITY – GROWING STRONG

[This page intentionally left blank for the purpose of double-sided printing.]

TABLE OF CONTENTS

APPENDICES

[This page intentionally left blank for the purpose of double-sided printing.]

PARTICIPANTS

FOREST GROVE SCHOOL DISTRICT

DISTRICT LEADERSHIP TEAM

Dave Parker, Superintendent

John O'Neill, Assistant Superintendent

Ilean Clute, Director of Finance & Operations

David Warner, Director of Communications

Kim Shearer, Director of Student Services

Kevin Noreen, Director of Human Resources

Enrique Pinon, Technology Manager

Kathy Bahnsen, Superintendent / Board Secretary

BOARD OF DIRECTORS

Mark Everett, Board Chair

Brad Bafaro, Board Vice Chair

Kate Grandusky, Board Member

Valyrie Ingram, Board Member

Narce Rodriguez, Board Member

Myleana Vernon, Student Representative

COMMUNITY

FOCUS GROUP MEMBERS

Jenny Acosta, Elementary School Parent

Leticia Aguilar, Cornelius Community Member / Adelante Mujeres

Brad Bafaro, School Board Member

Susan Dieter-Robinson, High School Parent

Rob Drake, Cornelius City Manager

Kate Grandusky, School Board Member

Kristy Kottkey, Special Education Parent / Forest Grove City Council

LaAna Littlefield, Viking Booster Representative

Vinnie Martorano, Middle School Parent

Dan Riordan, City of Forest Grove Senior City Planner

Howard Sullivan, Forest Grove Community Member / Retired Teacher

Makaila Takahashi, High School Student

Claudia Yakos, Forest Grove Community Member

COMMUNITY FORUM PARTICIPANTS

Elvira Alcantar

Alejandro Alverez

Laura Ansari

Liliana Arreola

Sarah Ball

Steven Barnard

Hillary Barraza

Crytsal Bertsch

Laura Bower

Angie Carver

Margarita Castellanos

Terra Cavolo

Karina Cerpas

Kristine Dabbs

Sarah Davis

Laura Diaz

Maria Dominquez

Susana Escobar

Holly Factora

Jennifer Fenniman

Serena Fitz

Dolores Francisco

Kristie Freeman

Paula Freeman

Anna Gamble

Nancy Garcia

Sienna Garrett

Sabrina Gomez

Angela Graves

Celeste Goulding

Sugumar Govindarajan

Kristy Granger

Beth Gustafson

Cheryl Hall

Allison Halvorson

Meresa (Merry) Hansen

Patty Harmon

Dayle Henderson

Leah Henriksen

Mathue Henriksen

COMMUNITY FORUM PARTICIPANTS, CONTINUED

Daisy Heredia

Stephanie Hernandez

Luis Hernandez

Sujey Hernandez

Yadira Hernandez-Lopez

Cable Hogue

Lorena Huerta-Brambila

Juliana Kelly

Hanna Kolehmainen

Julia Kollar

Rachael Koschmann

Michelle Labrum

Sarah Lawson

Sean Le

Ruby Leo

Jeri Lerwick

Dora Lopez

Jessica Lunceford

Grecia Mandujano

Sandra Martin

Jessica McGregor

Lourdes Medina

Kristina Meinecke

Janelle Melendez

Cristina Mendoza

Mariela Mireles

Pete Moshinsky

Apolonia Muniz

Kathy Murillo

Kelly Murray

Hannah Orzolek

Jodi Owen

Andrea Reyna

Perla Rodriguez

Jose Luis Juan Salazar

Allison Seavey

Sara Sebby

Wendy Seitz

Bruce Shields

Christa Slaughter

Heather Stone

Blake Timm

Melissa Timm

Eryn Van Horn

Monica Vazquez Tapia

Angela Velandia

Jessica Velasco

Serena Villafana

Alisa Waibel

Stephen Webber

John Worst

Jennifer Yankovich

MAHLUM ARCHITECTS

LeRoy Landers, Principal-In-Charge

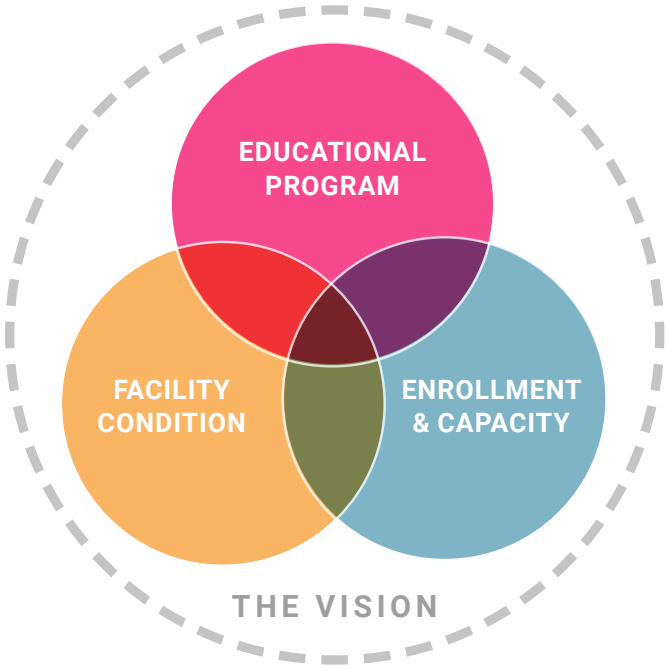
Jennifer Lubin, Senior Planner

Ayssa Leeviraphan, Project Manager

The planning team would like to thank everyone who gave their time, energy, and ideas to develop this Long-Range Facility Plan Update.

The contributions of many diverse individuals from across the community, including District leadership, parents, business owners, and other community members, helped create a plan that reflects the needs and aspirations of the Forest School District and its community.

DIAGRAM:
Long-Range Facility Planning Considerations



SECTION 01

EXECUTIVE SUMMARY

INTRODUCTION

In January 2021, Forest Grove School District (the District) began an update of the previous Long-Range Facility Plan (LRFP), which was completed with Mahlum in 2017. Mahlum was again selected to facilitate the process and assist with preparation of the updated LRFP.

The District is continually monitoring the condition of existing facilities and planning for future facility needs. While most of this effort is under the umbrella of good stewardship and property management, the State of Oregon has statutory and administrative rule requirements that direct school districts to prepare long-range facility plans. This document is the Forest Grove School District 2021 Long-Range Facility Plan Update and represents a complete update of the 2017 LRFP.

PURPOSE

The primary purpose of a Long-Range Facility Plan (LRFP) is to evaluate the adequacy of existing educational facilities within the context of current educational objectives, plan for future capital improvements for those facilities as needed, and address how student populations will be accommodated over the next 10 years. This LRFP provides a strategic framework for the management of Forest Grove School District's (the District) facilities over time, such that they continually support the ongoing success of District students, staff, and community.

The LRFP results from a synthesis of three primary considerations:

> Educational Program: evaluating the adequacy of existing educational facilities within the context of current educational objectives

> Enrollment & Capacity: understanding how student populations will be accommodated over the next 10 years

> Facility Condition: considering deferred maintenance, modernization, and replacement of existing buildings and sites

Plan proposals that address these primary considerations are guided by a strategic vision established by the District and informed by input from the broader District community.

The LRFP also addresses the requirements of OAR 581-027-0040—Long-Range Facility Plan Requirements and Section 5 of ORS 195.110—School Facility Plan for Large School Districts. In doing so, long-range plan options are proposed for a 10-year capital improvement plan that addresses prioritized need, reflects community values, and targets alignment with community capital support.

PROCESS

The District adopted the previous LRFP in May 2017, in compliance with ORS 195.110. Since the District was several years away from a potential capital measure at that time, it was anticipated that a plan update would be completed prior to proposing the next capital measure.

The 2017 LRFP was developed over 10 months through an interactive process with the District and a 30-person Community Advisory Committee with

diverse community representation. Because the Plan was completed only four years ago, and due to timing and other constraints presented by the Covid-19 pandemic, it was determined that the Plan update would be achieved through a more streamlined process.

The planning process included two groups, a District Leadership Team (DLT) and a community Focus Group. Information developed with these groups was later shared with the broader community through community forums. In addition, periodic updates were presented to the Board of Directors throughout the planning process.

District Leadership Team
The District Leadership Team, comprised of key District leadership, was assembled to provide input and develop plan options. Team members included staff representing administration, facilities, technology, educational programming, student services, communications, and human resources. The planning team worked with the DLT on a weekly basis throughout the five-month process, to review and update District goals and needs and develop a long-range facility plan to address those goals and needs.

Focus Group
A 13-member Focus Group was formed at the start of the process to provide input on the LRFP. The group was comprised of parents, community members, school board members, and local jurisdiction representatives from the City of Forest Grove and Cornelius. A number of Focus Group members also participated in the previous LRFP planning process as Community Advisory Committee members, bringing continuity and perspective to the process.

The Focus Group met three times between February and May 2021. They reviewed information and provided feedback regarding District vision and goals, facility need, proposed plan options, and broad community input.

The Focus Group provided valuable input regarding District need and plan development. The DLT used this input to develop and refine the Long-Range Facility Plan options. Meeting minutes and presentations from Focus Group meetings were made available on the District website and are included in Appendix I—Meeting Documentation.

Community Outreach
Public meetings were conducted as part of the planning process, in order to garner as much input as possible from a wide range of community constituents.

In May 2021, two community forums were held virtually in English and Spanish. Each two-hour evening meeting included an informational presentation, open discussion time for questions and feedback, and a real-time poll related to the proposed long-range facility plan options. Information regarding community input is included in Section 08—10-Year Capital Plan and the presentation is included in Appendix I—Meeting Documentation.

This document represents the collaborative effort of the District Leadership Team, Focus Group, Board of Directors, and the planning team, as well as over 90 members of the broader Forest Grove community.

VISION & GOALS

The Long-Range Facility Plan is shaped by a combination of the District's values and broad strategic aims, a clear understanding of need, and response to community interests and priorities.

DISTRICT MISSION & VISION

In 2019, the District developed a strategic plan to guide decision-making around setting priorities, allocating resources, and preparing students for the future. The following themes and maxims evolved from the strategic plan process:

> Build Community: "We Care Deeply"

> Resilience: "We Stand Strong"

> Preparation: "We Adapt and Grow"

In addition, the Board developed three planning priorities to guide future development in the District, that were used to guide the development of the LRFP.

> Priority 1: Maintain small class sizes.

> Priority 2: Provide alternative school options for students who want or need a non-traditional learning environment.

> Priority 3: Support more prekindergarten in the District.

FACILITY PLANNING GOALS

Planning goals were developed and prioritized by the Community Advisory Committee as part of the 2016-17 planning process. These goals were reviewed by the DLT and Focus Group as part of the current planning process and determined to be an accurate reflection of the current thinking related to the Long-Range Facility Plan.

GUIDING PRINCIPLES

Guiding principles were also developed as part of the 2016-17 planning process. They were deemed to be relevant and continued to be used in the current planning process.

> Provide flexible school facilities that foster creativity, support high quality education and offer career pathways

> Schools should reflect the cultural diversity of the District and promote the success of ALL students

> Address safety, security, and seismic issues

> Plan for growth in the District

> Support green initiatives and energy efficient facilities

> Value neighborhood schools

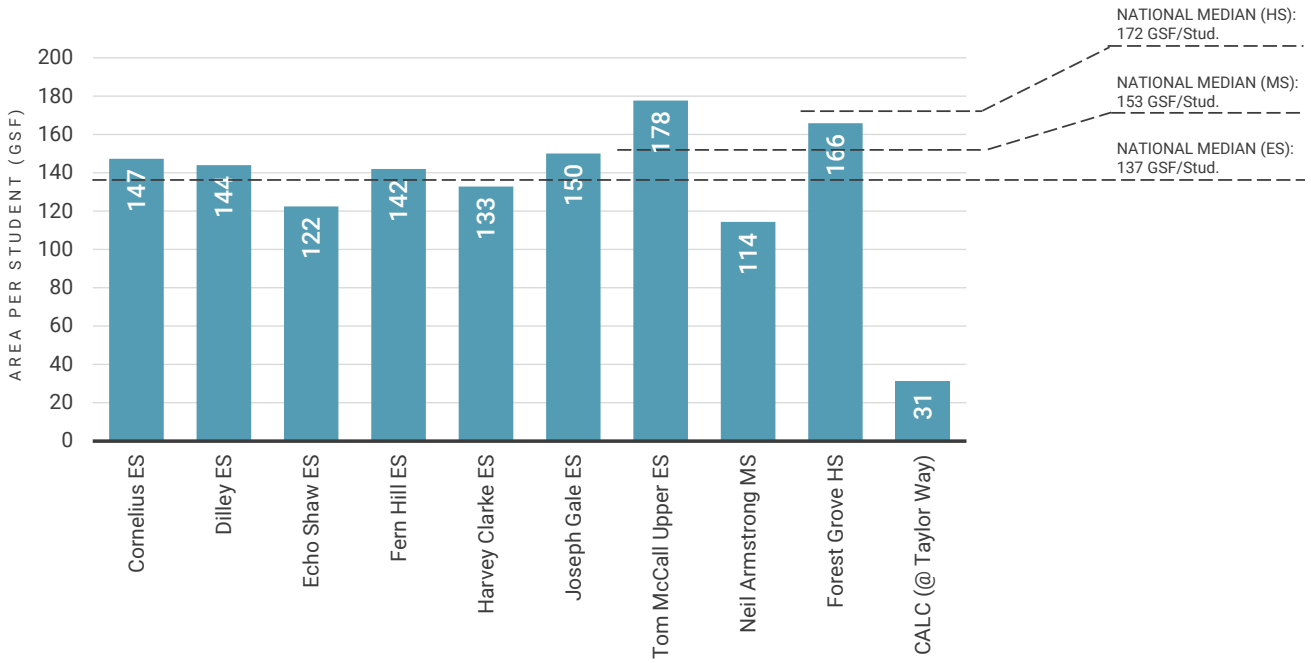
> Protect investment in current facilities by addressing unfunded maintenance needs

> Strategically maintain, modernize and replace facilities within the context of a long-range facility plan

> Provide upgrades / improvements in every school

Additional information regarding LRFP vision and goals can be found in Section 02—Vision and Goals.

CHART:
Area Per Student Comparison



EDUCATIONAL PROGRAM

Ensuring that the District builds modern, student-centered learning environments to accommodate the variety of ways that students learn is essential to fulfilling the Long-Range Facility Plan's purpose. The Plan addresses changing needs for educational program delivery and how facilities can support these requirements.

EDUCATIONAL ADEQUACY

Educational adequacy addresses the following question: How well does the facility create a successful environment for learning, inspiring, and building community?

Gross square footage per student (GSF/student) is one metric that can be used to compare educational adequacy in school facilities. District schools that are significantly below either the District target (for elementary schools) or national median (for middle and high school) include:

> Echo Shaw Elementary School

> Neil Armstrong Middle School

> CALC (in a portion of Taylor Way Support Annex)

For planning purposes, these facilities are identified as having a potential opportunity for improved learning environments, based on their low area per student.

SPECIFIC PROGRAM NEEDS

The following list summarizes goals for specific District educational programs that could require and/or benefit from modification of existing facilities within the 10-year time frame of the LRFP.

> Expand the District's preschool program by adding one additional classroom to Title 1 elementary schools in the District: Cornelius, Echo Shaw, Fern Hill, and Joseph Gale.

> Provide a new stand-alone facility for the District's high school level alternative education program, with an increased student capacity of 150.

> Reconfigure an existing area within Neil Armstrong Middle School to provide a self-contained classroom for alternative education.

> Provide a new addition to support the Mechatronics and Early Childhood Education programs and improve existing space for the Culinary program at Forest Grove High School.

> Ensure adequate space to accommodate State physical eduction (PE) requirements at all District facilities (elementary schools and middle schools).

Additional information regarding educational program need can be found in Section 03—Educational Program.

FACILITY CONDITION

The District operates over a million square feet of facility space covering about 250 acres. This includes six elementary schools, one upper elementary school (in two buildings), one middle school, one high school, and three special / alternative education facilities, as well as two administrative and support facilities.

FACILITY AGE

District educational facilities vary significantly in age, with original construction dates as early as 1942 and as recent as 2012. Although facility age does not solely determine building condition, it is a significant factor that should be considered.

The District has five facilities that are more than 75 years old, including:

> Central Administration (90 years old)

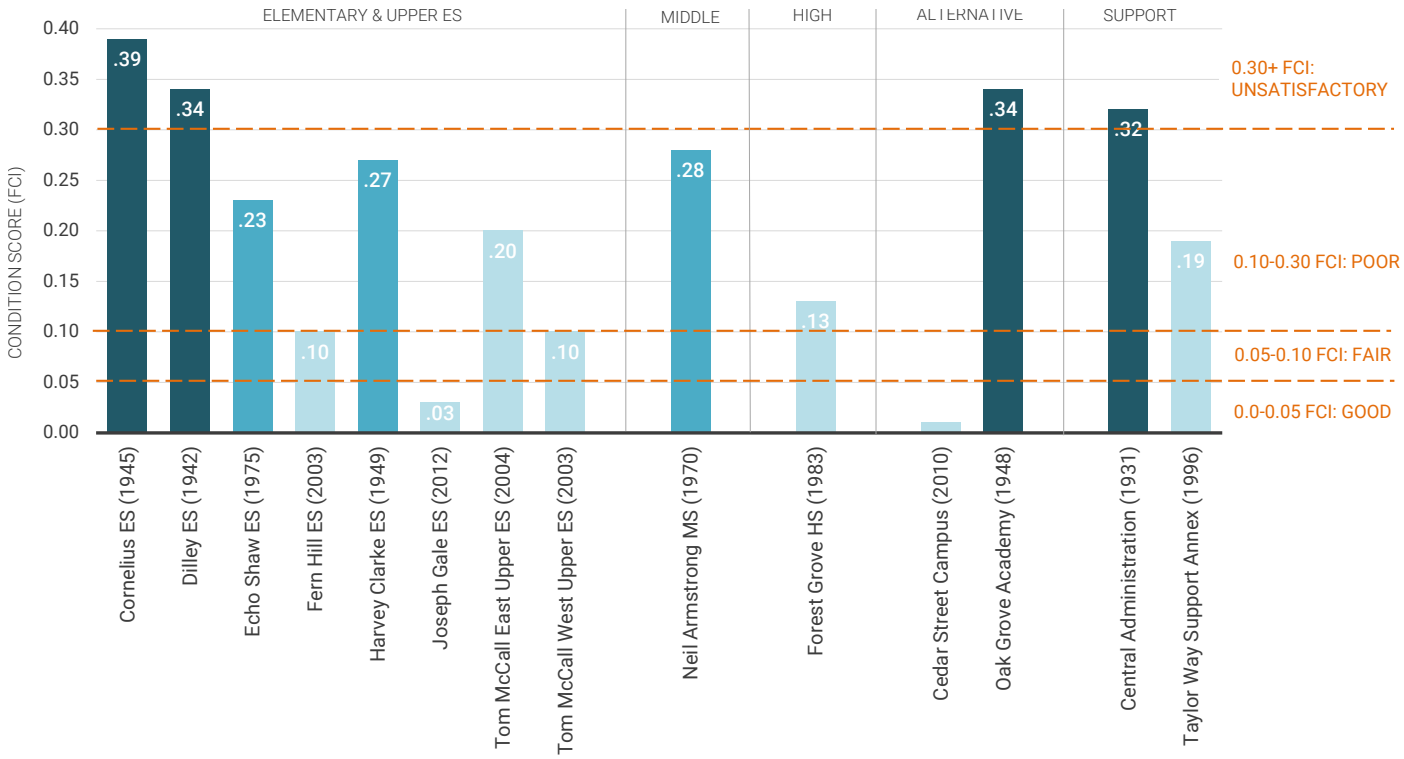
> Dilley Elementary (79 years old)

> Cornelius Elementary (76 years old)

> Oak Grove Academy (73 years old)

> Harvey Clarke Elementary (72 years old)

DIAGRAM:
Facility Condition (FCI Score)



FACILITY CONDITION

In 2019, the District hired an outside consultant to complete a facility condition assessment (FCA) of District facilities in alignment with Oregon Department of Education (ODE) assessment requirements. The FCA evaluated the physical condition of exterior and interior building systems and site elements, and resulted in an facility condition index (FCI) score that is used to compare the relative condition of each facility.

As shown in the chart above, four District facilities were evaluated as being in unsatisfactory condition (with scores above 0.30) and should be considered for possible replacement, including:

> Cornelius Elementary School (0.39 FCI)

> Dilley Elementary School (0.34 FCI)

> Oak Grove Academy (0.34 FCI)

> Central Administration (0.32 FCI)

SEISMIC CONDITION

Although new facilities are built to meet the current seismic codes at the time of construction, many District buildings are more than 30 years old and have had little or no earthquake resistance built into their original designs. Seismic evaluation can be used to prioritize future seismic improvements within the District and work toward meeting the goal of the 2017 Oregon Revised Statute (ORS) 455.400 which notes: "Subject to available funding, all seismic rehabilitations or other actions to reduce seismic risk must be completed before January 1, 2032."

District educational facilities were assessed using the FEMA Rapid Visual Screening (RVS) procedure, completed by the Oregon Department of Geology and Mineral Industries (DOGAMI) in 2006. Based on this very high-level assessment, many schools in the District were found to have a greater than 10 percent chance of collapse in a 2,500-year seismic event, including:

> Cornelius, Dilley, Harvey Clarke, and Echo Shaw elementary schools

> Neil Armstrong Middle School

> Portions of Forest Grove High School

Tom McCall Upper Elementary was also evaluated in this category, however the District has since seismically upgraded the Tom McCall gymnasium to an Immediate Occupancy facility. Other buildings, or portions of buildings, completed after 2000 have been assumed to have been built to modern seismic standards.

WATER QUALITY

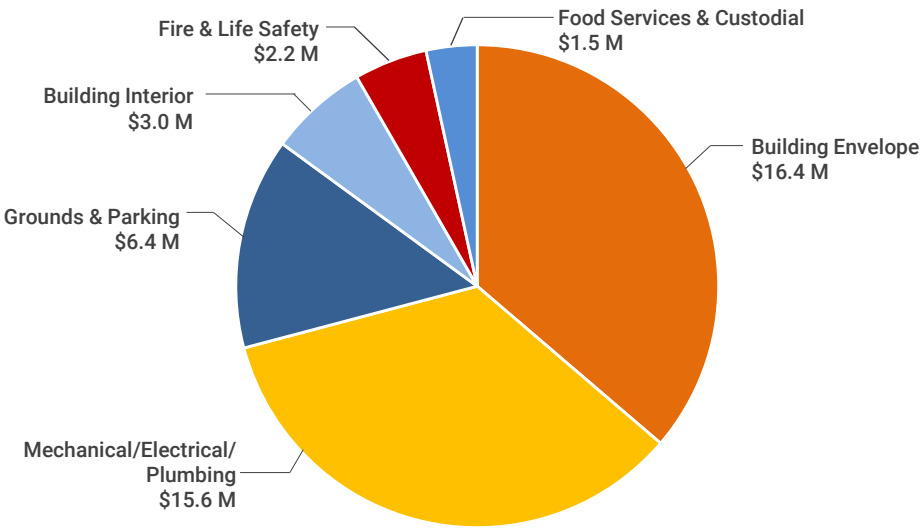
Water quality testing was conducted in every District facility in Summer 2016. Testing was done for both lead and copper levels in the water. It was found that District facilities were at safe levels of lead and copper overall. A few isolated fixtures were found to be over EPA limits. These fixtures have been addressed by the District and are now within EPA limits for both lead and copper.

DEFERRED MAINTENANCE

Although the District continually addresses maintenance issues, there are still considerable facility and site improvement needs throughout the District. As is typical for many school districts, there is more need than the District's alloted operations budget can accommodate, as all facilities continuously wear over time and need to be maintained.

As part of the FCA, deferred maintenance costs were developed for each facility. The District's total 10-year deferred

CHART:
Total Deferred Maintenance by Category



maintenance need was determined to be $45.1 million and includes improvements at all District facilities. Costs are escalated and include soft costs.

Needs were assessed in the following categories:

> Building Envelope ($16.4 M)

> Mechanical, Electrical & Plumbing ($15.6 M)

> Grounds & Parking ($6.4 M)

> Building Interior ($3.0 M)

> Fire & Life Safety ($2.2 M)

> Food Services & Custodial ($1.5 M)

Additional information regarding facility condition can be found in Section 04—Facility Condition.

TECHNOLOGY & SECURITY

District staff identified a total of $6.5 million of technology and security needs in the District that should be addressed within the time frame of the Long-Range Facility Plan, including:

> Security Surveillance and Access Control: Additions & Upgrades ($0.4M)

> Classroom Audio-Visual Equipment: Replacement & Upgrades ($3.8 M)

> Districtwide Dark Fiber Installation ($2.3 M)

ENROLLMENT & CAPACITY

Forest Grove School District currently serves about 6,000 students in kindergarten through 12th grade. The success of the District's educational programs is fostered in part by the ability of each school to house the students, teachers, and spaces needed for effective teaching and learning.

EXISTING CAPACITY

Each school facility has an established capacity, based on the number of teaching stations, target number of students per classroom, and a scheduling utilization factor. Facility capacity will be updated by the District as buildings are altered or as uses change.

The District currently has a total permanent capacity of 6,669 students in grades K-12, including 2,287 at the elementary level, 850 at the upper elementary level, 1,260 at the middle school level, and 2,183 at the high school level. This is based on District planning targets of 23 students per classroom for elementary, 25 students per classroom for upper elementary, and 30 students per classroom for middle and high school.

Many District schools have modular classrooms on site, added over time to provide additional capacity at existing schools and accommodate the enrollment growth. The District has a total portable capacity of 207 students, all at the elementary level. Because of the temporary nature of modular facilities, portable capacity is typically not considered when determining future capacity need in a long-range facility plan.

ENROLLMENT FORECAST

Enrollment forecasts are used, in part, to determine whether the District will need to add or modify facility space to meet school program or configuration needs. The District received student enrollment forecasts in 2019. The 10-year enrollment forecast integrates district enrollment trends with local area population, housing, and economic trends.

Adjustments were made to the PSU Population Research Center's (PRC) 2028-29 enrollment forecast to include prekindergarten enrollment and enrollment from housing developments that occurred after the PRC forecast was completed. In addition, enrollment projections were extended five years beyond the PRC time-frame to 2033-34, using a 'straight-line' projection, to anticipate enrollment beyond the next expected bond cycle (2031-32).

The adjusted enrollment forecast indicates an increase in districtwide enrollment of 9.9 percent (582 students) over the forecast period, resulting in a total projected enrollment of 6,448 students in prekindergarten through twelfth grade.

Enrollment projections by grade level are as follows:

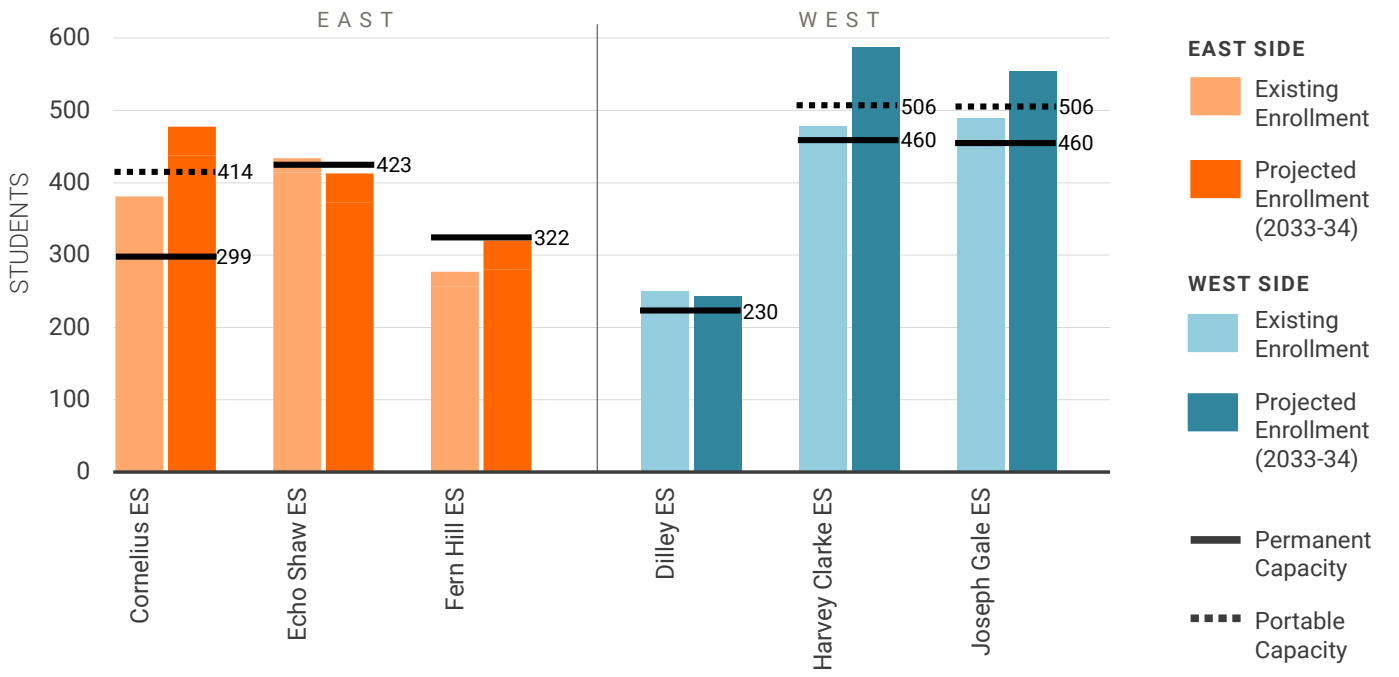
> At the elementary level, a 12.6 percent enrollment increase (284 students) is projected districtwide. There is projected growth on both the east and west sides of the District, with growth rates varying greatly between schools.

> Upper elementary school enrollment is projected to remain stable, with a projected 0.2% increase (two students).

> Middle school enrollment is projected to have a small increase of 1.7 percent (15 students).

> High school enrollment is projected to increase by 15.5 percent (282 students).

CHART:
Elementary Schools: Existing and Projected Enrollment



FACILITY UTILIZATION

For the purposes of long-range planning, school utilization is defined as the portion of the building assigned to students, or more specifically, the number of students enrolled in a school divided by the student capacity of the school. Analysis of school utilization in this Plan uses the adjusted enrollment projections to 2033-34.

Understanding school utilization is necessary to provide effective learning environments for all students. Planning for the effective utilization of schools requires an understanding of space needs for the range of academic programs offered in a school, as well as classroom and common spaces available for current and projected student use.

The charts above and on the following page illustrate the existing and projected enrollments compared to the existing capacity at each school in the District.

Elementary School Utilization

When looking at the combined permanent capacity across district elementary schools, the projected overall utilization is 133 percent, indicating a need for approximately 300 additional seats districtwide. When also including portable capacity, the need drops to about 100 additional seats (104 percent utilization). However, this districtwide metric does not take into account existing school boundaries or regional areas of growth.

Looking at elementary capacity need on the east and west regions of the district, there is projected growth and a need for additional capacity on both sides. West side schools, including Dilley, Harvey Clarke, and Joseph Gale, are projected to have the highest need, with a combined capacity need of 306 seats when looking at permanent capacity, and 99 seats when including existing portable capacity.

On the east side of the District, Cornelius, Echo Shaw, and Fern Hill are projected to have a combined capacity need of 97 seats when looking at permanent capacity, and are 18 students below existing capacity when including existing portable capacity. Accommodating enrollment growth within each region can minimize the extent of boundary adjustments and transportation, as well as strengthen neighborhood schools.

Enrollment accommodation within existing individual school boundaries can minimize or even eliminate the need for boundary adjustments in some instances. Looking at individual school utilization, all District elementary schools are projected to have enrollment that is very close to or above their existing permanent capacity (100% utilization or more) by 2033-34. Three of these schools are projected to have enrollment that is significantly over their existing permanent capacity: Cornelius (156 over), Harvey Clarke (126 over), and Joseph Gale (70 over). All three schools are still over capacity when portable capacity is considered, but to a lesser extent: Cornelius (41 over), Harvey Clarke (80 over), and Joseph Gale (24 over).

Attendance Boundary Map: East & West Side Elementary Schools

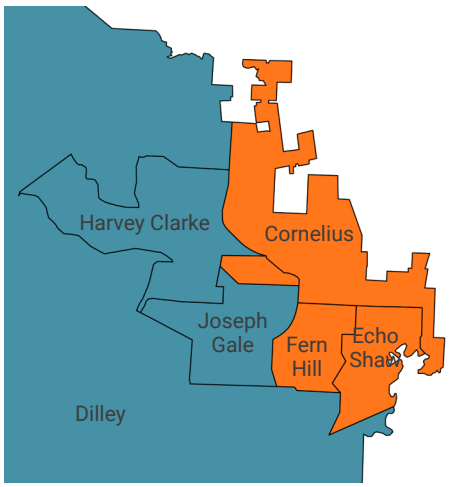
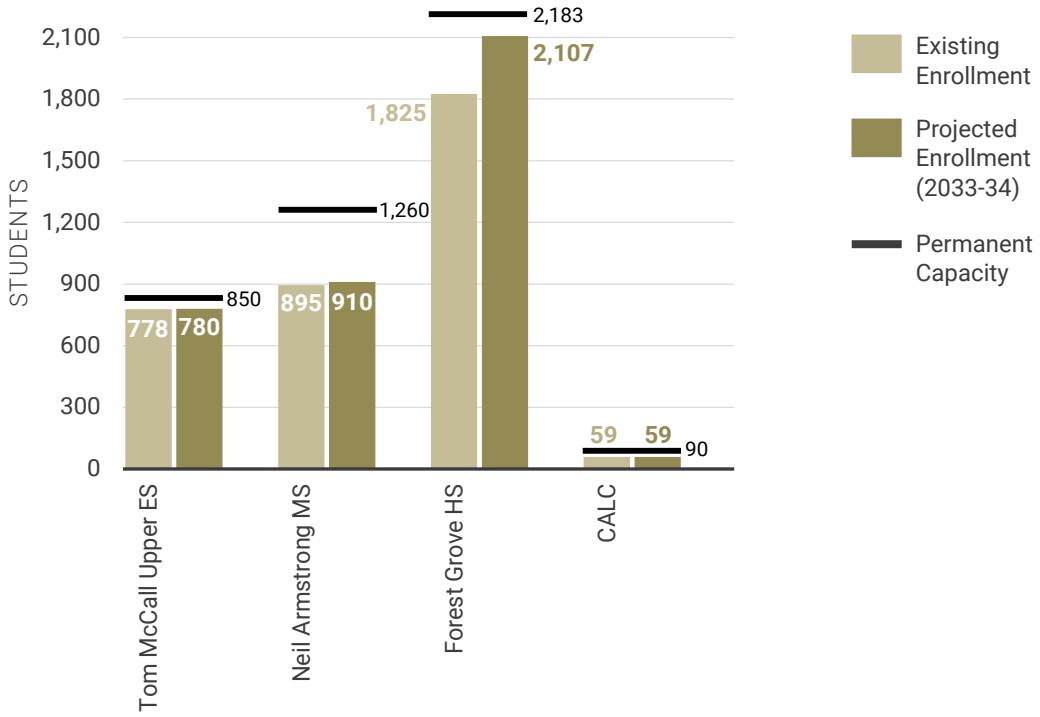


CHART:
Upper Elementary, Middle, and High Schools: Existing and Projected Enrollment



Upper Elementary, Middle, and High School Utilization

With negligible growth anticipated, projected enrollment is less than the existing permanent capacity at the upper elementary and middle school levels. Tom McCall Upper Elementary is projected to be 70 students below its capacity (92 percent utilization), while Neil Armstrong Middle School is projected to be 350 students below its capacity (72 percent utilization). When considering the possible reduction in capacity at Neil Armstrong due to the potential for some existing classrooms to be changed into additional PE or alternative education spaces to meet identified needs, there is still ample capacity available.

Although Forest Grove High School is anticipated to have a significant amount of enrollment growth, there will still be adequate capacity at this school. The projected enrollment of 2,107 is 76 students below the school's existing capacity of 2,183. Additionally, if alternative high school capacity and enrollment increase in the future, this will proportionally reduce enrollment at the high school.

SITE OPPORTUNITIES

The Long-Range Facility Plan assesses current school sites to determine if there are adequate sites within the District to meet long-term enrollment needs and whether these sites are adequate in size and distribution to accommodate long-term forecasts.

EFFICIENT USE OF SCHOOL SITES

The District makes efficient use of its school sites in a variety of ways; however, specific site conditions and the values and demands of the community should be considered when evaluating these options. Many strategies for efficient use of school sites can be considered by the District, including:

Facility Strategies

> Construct multistory buildings
> Utilize modular classrooms
> Expand existing facilities
> Co-locate with existing facilities
> Replace small schools

Operational Strategies

> Implement shared use of facilities
> Develop partnerships
> Minimize the need for student and staff parking on site
> Limit space for non-educational uses

Planning Strategies

> Establish site size targets
> Plan for interim relocation

ANALYSIS OF LAND REQUIREMENTS

Forest Grove School District currently owns and operates 12 active sites located in the cities of Forest Grove and Cornelius, including 10 active school sites (two with multiple facilities on the site) and two administrative / support sites.

Based on the adjusted enrollment projections for the next 10 years, it appears that no additional school sites will need to be acquired as part of the District's Long-Range Facility Plan. The District's three undeveloped sites, described on the following page, combined with opportunities for added capacity at some existing operational sites, appear to offer adequate opportunity to increase capacity to meet enrollment and program demand for the foreseeable future.

Additional site-related information can be found in Section 06—Site Opportunities.

REGULATORY CONTEXT & CAPITAL FINANCING

REGULATORY CONTEXT

The plan also addresses the requirements of OAR 581-027-0040, Long-Range Facility Plan Requirements, and Section 5 of ORS 195.110, School Facility Plan for Large School Districts. In doing so, bond plan options are proposed for a 10-year capital improvement plan that addresses prioritized need, reflects community values, and targets alignment with community capital support.

FINANCING TOOLS FOR CAPITAL PROJECTS

An array of financing tools are available to the District. For Oregon school districts, general obligation (GO) bonds are the primary tool for financing school facility needs. GO bonds are a municipal debt security issued by the District. They are used to finance capital expenditures and are supported by a voter-approved property tax levy.

Historically, Forest Grove 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.

The District currently has a bond rate of approximately $2.60 per thousand dollars of assessed value, with a step-down of the rate in 2022 to approximately $2.15 per $1,000 of assessed value. This step-down provides the opportunity for a potential additional capital measure at that time.

ALTERNATIVES TO NEW CONSTRUCTION

There are a number of ways to accommodate growth in programs and/or enrollment that do not necessitate new construction or renovation. Whenever possible, it is important for the District to explore options for increasing the amount of school capacity without having to make major capital investments. These strategies are identified as potential ideas to be considered, and will not necessarily be implemented by the District.

Strategies that address program need:

> Repurpose existing space for other uses when possible

> Utilize public / private partnerships

> Develop online education programs to reduce enrollment demand

> Locate alternative programs in non-traditional facilities

Strategies that address growth:

> Increase class sizes

> Re-activate vacant / repurposed buildings

> Adjust attendance boundaries to maximize occupancy at underutilized schools

> Allow or maintain enrollment above target capacities

> Add capacity with modular classrooms (typically funded through operational dollars rather than capital funds)

Strategies that address condition:

> Close schools in the poorest condition and consolidate if enrollment / capacity allow

> Address the most critical issues using annual maintenance dollars when possible

10-YEAR CAPITAL PLAN

Over the course of five months of meetings with the District Leadership Team, three meetings with the Focus Group, and two community forums, a number of preliminary capital bond proposals were developed and refined. The District Leadership Team identified potential projects for the proposals based on the District Strategic Plan, Board priorities, LRFP guiding principles and planning goals, and a detailed understanding of the identified facility need in the District.

Project needs were balanced with a recognition of community support levels, resulting in the development of several iterations of plan options. Plan options received feedback from the Focus Group and the broader community, and were then revised by the District Leadership Team based on that input. The final adjusted plan proposals reflect incorporation of selected input.

The two long-range facility plan proposals that received the most community support during the planning process have been identified by the District for further consideration for a potential capital measure and are summarized in the table on the following page. The proposals incorporate community input and intend to strike a balance between community support for funding and projected District facility need.

PLAN COMPONENTS

The two proposals have identical scope, with the exception of the alternative high school. The smaller proposal, at $155.3 million, includes funding estimated to accommodate leasing and modernizing a new space for the alternative high school, with a 75-student capacity. The larger proposal, at $173.3 million, provides funding to construct a new stand-alone alternative high school facility with a 150-student capacity.

Both plan proposals provide a total of 363 seats of additional elementary capacity, distributed across both sides of the District and accommodating the capacity need of both the east and west regions. The additional capacity minimizes the need for boundary adjustments (though any new school will require them) and additional busing. In addition, most, if not all, existing portables in the District can be eliminated or repurposed.

Both proposals also address long-term replacement with the replacement of Cornelius Elementary School. This sets the stage for a continued, strategic approach to facility replacement over the next several bond cycles.

TABLE:
10-Year Capital Plan Proposals

10-Year Capital Plan Proposals			
	$155.3M PLAN	**$173.3M PLAN**	
Deferred Maintenance	**$26.0 M**	**$26.0 M**	63% of total need
Technology & Security Upgrades	**$3.0 M**	**$3.0 M**	46% of total need
New Entry at Neil Armstrong MS	**$1.0 M**	**$1.0 M**	<1% of total need
Expand Prekindergarten	**$3.2 M**	**$3.2 M**	2 schools
New Alternative High School		**$21.5 M**	150-student capacity
Alt. High School: Lease/Modernize	**$4.0 M**		75-student capacity
New Elementary School	**$48.1 M**	**$48.1 M**	300-student capacity
Replace Cornelius Elementary	**$65.5 M**	**$65.5 M**	500-student capacity
Reserve Funds & Bond Fees	**$4.5 M**	**$5.1 M**	3% of total
TOTAL	**$155.3 M**	**$173.3 M**	
Estimated Total Tax Rate:	$4.13 / $1,000 AV	$4.44 / $1,000 AV	In 2024
Estimated Tax Rate Increase:	$2.04 / $1,000	$2.35/ $1,000 AV	Over expected 2024 rate
Estimated Increase for Average Homeowner:	$53 per month	$61 per month	Estimated 2024 AV
Estimated Increase Over Today's Rate	$41 per month	$49 per month	2021 AV
Additional Elementary Capacity:	363 seats	363 seats	East and West side
Eliminate Portables:	YES	YES	East and West side
Minimize Boundary Adjustment:	YES	YES	Add capacity on both sides
Address Long-Term Replacement:	YES	YES	Cornelius

The 10-year capital plan proposals include the following elements:

> Funds about 63% of the 10-year deferred maintenance need in the District ($26.0 million), with work occurring at every school facility

> Funds about 46% of the technology and security need in the District ($3.0 million)

> Provides $1.0 million to improve safety at the entrance to Neil Armstrong Middle School

> Provides $3.2 million to expand the prekindergarten program at two of the District's three highest need schools, Fern Hill and Echo Shaw (prekindergarten at Cornelius will be addressed with the replacement facility)

> Provides a varying funding allocation to address needs at the alternative high school: $4.0 million to lease and modernize space or $21.5 million to construct a new alternative high school (If OSCIM grant funds are awarded to the District, a variation of the smaller plan could include combining those funds with the $4.0 million, providing enough funding to construct a new smaller 'Phase 1' of the alternative high school.)

> Provides 48.1 million to construct a new elementary school for 300 students on the west side of the District, with a planned future capacity of 500 students

> Provides $65.5 million for the replacement of Cornelius Elementary School on the same site, with a capacity of 500 students

> Additional funding (three percent of the total) to accommodate bond fees and provide a reserve fund to provide a buffer for any unforeseen issues

Some identified needs that are not included in the proposal were determined by the District to be addressable outside the scope of the plan options. These needs include:

> Alternative education at the middle school

> CTE improvements and expansion at the high school

> Additional PE teaching stations at the middle school

PROJECT COSTS

Project costs associated with the long-range facility plan proposals were developed by the planning team, with the exception of technology and security upgrades, which were provided by the District. Amounts shown are rough-order-of-magnitude (ROM) project cost estimates developed using assumed new and modernization construction costs for each educational level.

Costs include an additional 35 percent for project soft costs, such as permitting and design fees, and a 10 percent contingency. Projects are escalated to the estimated midpoint of construction (six years, to 2027) at four percent per year. Costs may be revisited prior to a capital measure due to changing market conditions or other adjustments to the cost assumptions.

In addition to individual project costs, three percent of the total estimated cost is allocated for reserve funds and bond management fees.

TAX IMPACT

The $153.3 M plan results in an estimated total tax rate of $4.13 per $1,000 of assessed property value (AV), which is an estimated increase of $2.04 per $1,000 AV over the expected 2024 rate. The estimated tax increase for the average homeowner in the District in 2024 is $53 per month, which is equivalent to $41 per month more than the current rate.

The $173.3 M plan results in an estimated total tax rate of $4.44 per $1,000 AV, which is an estimated increase of $2.35 per $1,000 AV over the expected 2024 rate. The estimated tax increase for the average homeowner in the District in 2024 is $61 per month, which is equivalent to $49 per month more than the current rate.

NEXT STEPS

Either proposal can serve as the basis for a potential capital measure, at the discretion of the Board. The chosen proposal may be adjusted prior to a capital measure, due to additional community input, changes in District need, and/or economic conditions.

Additional community outreach, including a larger scientific poll, is recommended prior to determining the final capital plan components. In particular, determining which alternative high school approach and total funding level the broader District community will support will be key for a successful capital measure. In addition, providing additional detail regarding specific upgrades that are planned at each facility will be helpful to garner community support.

The proposed plan options represent one phase of work in an ongoing process of addressing District need. Projects that were identified during the planning process and have not been prioritized for inclusion in this phase of the Long-Range Facility Plan, such as the replacement of Neil Armstrong Middle School and other aging District facilities, will continue to be tracked and addressed in later phases of the Plan.

SECTION 02

VISION & GOALS

DISTRICT MISSION & STRATEGIC PLAN

In 2019, the District developed a new strategic plan. Through more than 32 meetings and a digital survey, the District collected input from students, staff, parents, and community members representative of the student population. In total, there were nearly 3,000 individual pieces of feedback. Based on the information gathered, the strategic plan was designed to guide decision making around setting priorities, allocating resources, and preparing students for the future.

OUR PURPOSE

Our school district is ROOTED IN COMMUNITY and committed to giving our students experiences that enable them to GROW STRONG and become confident, lifelong learners, equipping them with the knowledge and skills necessary for their future.

OUR PROMISE

We will provide our students with opportunities to care for others and the world around them; to learn through hands-on exploration how to find solutions and persist through challenges; and to develop the critical skills and creativity required for success in an evolving world.

STRATEGIC ANCHORS

In reviewing the 3,000 community comments, three main themes emerged. These themes centered around building community, creating resilient students, and rigorously preparing our students for college or careers.

> Build Community

> Resilience

> Preparation

To better communicate these strategic anchors, the District created "maxims" which illustrate the central values of that anchor, shown at right. Maxims are used to communicate the message throughout the District and community. In addition, each strategic anchor has a number of associated action plan and specific assessment metrics. The Strategic Plan document is included in Appendix B.

STRATEGIC MAXIMS

BUILD COMMUNITY:
"WE CARE DEEPLY"

We welcome everyone into our community. We seek to create an engaging and caring environment where all students collaborate and are safe to pursue their dreams.

RESILIENCE:
"WE STAND STRONG"

We provide an environment that fosters confidence and persistence, where students advocate for themselves and others.

PREPARATION:
"WE ADAPT AND GROW"

We seek to provide students with rigorous, relevant instruction that develops students into lifelong learners and critical thinkers.

IMAGES:
Engaged Learning: Echo Shaw Elementary School (left), Neil Armstrong Middle School (Right)

DISTRICT PLANNING VISION

2021 BOARD PRIORITIES

The District's Board of Directors developed three core planning priorities to guide future development in the District, in alignment with the District mission and strategic plan.

Priority 1
Maintain small class sizes.

Priority 2
Provide alternative school options for students who want or need a non-traditional learning environment.

Priority 3
Support more prekindergarten in the District.

These priorities were used to guide the development of the Long-Range Facility Plan.

2016-17 VISION FOR EDUCATION

The District shared an overarching vision for education in the Forest Grove community as part of the 2016-17 long-range planning process. General planning parameters, related to school and target class size, were also established as a basis for plan development. These components are still relevant today, and have been reviewed and updated as part of the this planning effort, to reflect the current goals and operations of the District.

Values
> Excellence and innovation
> Diversity and integration
> Learning for all children
> Equity and social justice
> Alternative education

Engaged Learning
> Communicating
> Collaborating
> Creating
> Critical thinking

Learning Communities
> Rigorous learning targets
> Real-world relevance
> Fostering collaborative relationships
> Achieving high results

Elementary & Upper Elementary School

Guiding Principles
> Safe, warm, and inviting
> Student-centered and flexible spaces
> Future technology needs
> Large and small group learning
> Community interaction of students, staff, and community
> Diverse learning styles and physical needs

Planning Parameters: Grades PK-4
> Ideal school size of 500 students
> Classroom capacity target of 23 / 20 (PK & K)

Planning Parameters: Grades 5-6
> Ideal school size of 900 students
> Classroom capacity target of 25

Middle School

Guiding Principles
> Student-centered learning environment that supports interdisciplinary teams
> Integrated curriculum that allows for collaboration, communication, and creativity
> Flexible technology integration

Planning Parameters: Grades 7-8
> Ideal school size of 900 students
> Classroom capacity target of 30

IMAGE:
Community Advisory Committee Visioning Session, September 2016

High School

Guiding Principles
> Space allows for flexibility and integration of instruction in a professional environment
> Promote learning and social interaction
> Technology for instruction with flexibility to accommodate future changes and needs

Planning Parameters: Grades 9-12
> Ideal school size of 2,500 students
> Classroom capacity target of 30

Nontraditional Programs

Guiding Principles
> Prepare students for success across all settings , including post-secondary education, meaningful employment, and integration into the community
> Provide support for social-emotional needs, behavioral concerns, and developmental disabilities
> Teach collaborative problem solving
> Provide therapeutic supports / systemic therapy

Planning Parameters: Therapeutic Academic Academy
> Classroom space for 60 students in small groups
> Separate calming and sensory spaces for students

Planning Parameters: Alternative Education
> High school and middle school alternative off-site programs
> Afternoon and evening credit recovery offerings
> On-site daycare for teen parents
> Personalized learning environment

LONG-RANGE FACILITY VISION

FACILITY PLANNING GOALS

The following planning goals were developed and prioritized by the Community Advisory Committee as part of the 2016-17 planning process. They were reviewed by the District Leadership Team and Focus Group as part of the current planning process and determined to be an accurate reflection of the current thinking related to the Long-Range Facility Plan.

Goals have been categorized by theme and listed in order of priority, based on the number of votes received. All goals were used as part of the current planning process.

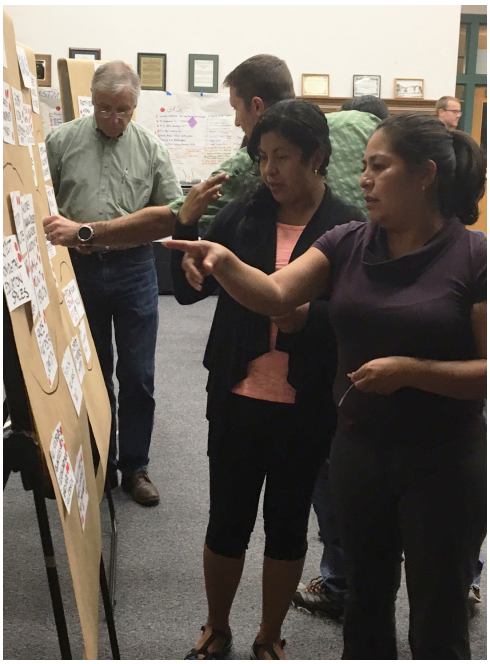
Instruction (19 votes)
> Provide facilities to accommodate high quality instruction
> Facility planning should be focused on high-level academics
> Provide spaces that foster creativity
> Protect non-digital education spaces
> Provide 21st century facilities
> Create flexible facilities

Growth (16 votes)
> Plan for growth
> Provide flexibility for growth
> Plan for future expansion

Diversity (15 votes)
> All students, regardless of socio-economic status, are successful
> Provide spaces that are culturally responsive and reflect diversity
> Increase diversity at the district level (teachers, staff, board members)

Partnerships (14 votes)
> Explore partnerships
> Develop partnerships for emergency shelter
> Partner with the City of Forest Grove
> Partnerships for year-round use

IMAGES:
Community Advisory Committee Visioning Session, September 2016



Sustainability (10 votes)
> Support green initiatives
> Utilize renewable strategies
> Create self-sustaining schools

Safety (6 votes)
> Provide a safe and secure environment
> Provide safe circulation
> Achieve disaster preparedness

Career Education (6 votes)
> Provide career pathways (school-to-community and school-to-work)
> Expand career/technical education

Special Programs (6 votes)
> Provide dedicated special education facilities
> Expand special programs
> Focus on the whole child

Support the Community (5 votes)
> Provide facilities that support the community

Fiscal Responsibility (4 votes)
> Be good stewards of taxpayer money

Equity (4 votes)
> Provide parity and equity among students and across all facilities
> Consider where schools should be built
> Provide gender-neutral bathrooms for increased safety
> Accommodate different modes of educational delivery

Prekindergarten (3 votes)
> Plan for prekindergarten in all elementary schools

Positive Environment (3 votes)
> Foster a welcoming environment
> Foster pride in school

Teacher Support (1 vote)
> Provide respite for teachers (lounges, etc.)

GUIDING PRINCIPLES

Guiding principles were developed as part of the 2016-17 planning process. The guiding principles, listed at right, were derived from the Community Advisory Committee's brainstorming goals, as well as discussions with the Steering Committee and an understanding of successful guiding principles used by other school districts for long-range planning.

The Guiding Principles were reviewed by the District Leadership Team and Focus Group as part of the current planning process and determined to be an accurate reflection of the current thinking related to the Long-Range Facility Plan. They were used to guide the current planning process.

Guiding Principles

> Provide flexible school facilities that foster creativity, support high quality education and offer career pathways
> Schools should reflect the cultural diversity of the District and promote the success of ALL students
> Address safety, security, and seismic issues
> Plan for growth in the District
> Support green initiatives and energy efficient facilities
> Value neighborhood schools
> Protect investment in current facilities by addressing unfunded maintenance needs
> Strategically maintain, modernize and replace facilities within the context of a long-range facility plan
> Provide upgrades / improvements in every school

SECTION 03

EDUCATIONAL PROGRAM

The purpose of a long-range facility plan is to develop a "road map" outlining strategic management of District facilities that offer high-quality, effective, and adaptable learning environments, accommodate District programs, and meet the needs of students. The LRFP addresses changing needs for educational program delivery and how District facilities can support these requirements.

MODERN LEARNING ENVIRONMENTS

Over the last few decades, education has changed dramatically to incorporate a new understanding of how individuals learn. Ensuring that the District builds modern, student-centered learning environments to accommodate the variety of ways that students learn is essential to fulfilling the Long-Range Facility Plan's purpose.

Many of the District's existing facilities are dated and may not support these aspirations or reflect the cultural norms of the community. Education facilities have historically been designed in a "one-size-fits-all" manner. Older building configurations were designed to support one teacher with a group of 30 students, limiting flexibility for team-teaching, variety in student group sizes, and typically with no space outside the classroom for instruction.

BACKGROUND

There have been enormous strides in our understanding of how the brain functions and how children learn. We know that individuals learn in a variety of ways, requiring information to be provided in a variety of formats.

This knowledge has given rise to new approaches towards more effective teaching and learning, such as project-based learning, student-managed learning, small group work, independent research, and presentation. While the realities of our modern world continue to change and evolve, many older school buildings are still configured as they were 80 years ago (designed as factories for learning—with repetitive classrooms, sized for 30 students in a double-loaded corridor configuration).

Today's learners are citizens of the world. They are connected through media and technology to a greater network of information than ever before. They need to be able to sift through vast quantities of information and evaluate it rather than memorize it. They must be more creative, innovative, and work in a more collaborative way. As global community members, students need to understand and relate to different cultures and languages. They live in a rapidly changing world, which requires flexibility to meet the needs of the future.

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

> Enhance teaching and learning and accommodate the needs of all learners

> Serve as centers of the community

> Result from a planning and design process involving all stakeholders

IMAGES:
Learning Everywhere: Examples of flexible modern learning environments

> Provide for health, safety, and security

> Effectively use adaptable resources

> Allow for flexibility and adaptability to changing needs

FACILITY PLANNING IMPLICATIONS

Increasingly, insightful teams of administrators, educators, and parents are collaborating with architects to re-imagine the schoolhouse. The goal is to create buildings that will engage students, welcome the community, and adapt to shifts in population and pedagogy.

Modern learning environments are student-centered and integrate innovative teaching methods, such as hands-on learning and collaborative project-based work, with effective learning environments that are flexible, adaptable and technology-rich. Modern learning environments accommodate and encourage different students, of varying ages, abilities, and interests, to learn different things from different people in different places, in different ways, and at different times.

Modern learning environments engage students, welcome the community and adapt to shifts in student population. They are flexible, connected, collaborative, culturally relevant, multisensory, and multipurpose; with provisions for small study spaces and shared group space.

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

Design Patterns
School facility design contributes to creating successful learning environments. Types of teaching and learning, such as independent study, peer tutoring, project-based learning, student-managed learning, mentoring, and distance learning, create the need for different types of space.

Environmental Responsibility
Teachers and students perform best in facilities that meet their needs. Facilities must be well-ventilated, comfortable environments that are free of hazards and irritants, while also minimizing energy and resource use. Access to daylight and good acoustics are also key elements of a healthy environment.

School buildings can be designed to go beyond sustainability, in terms of energy use, and employ the building as a teacher of environmental stewardship and a laboratory for learning about natural processes and building technologies. There is increasing national concern about the buildings and spaces in which students learn, and how these might affect both health and achievement.

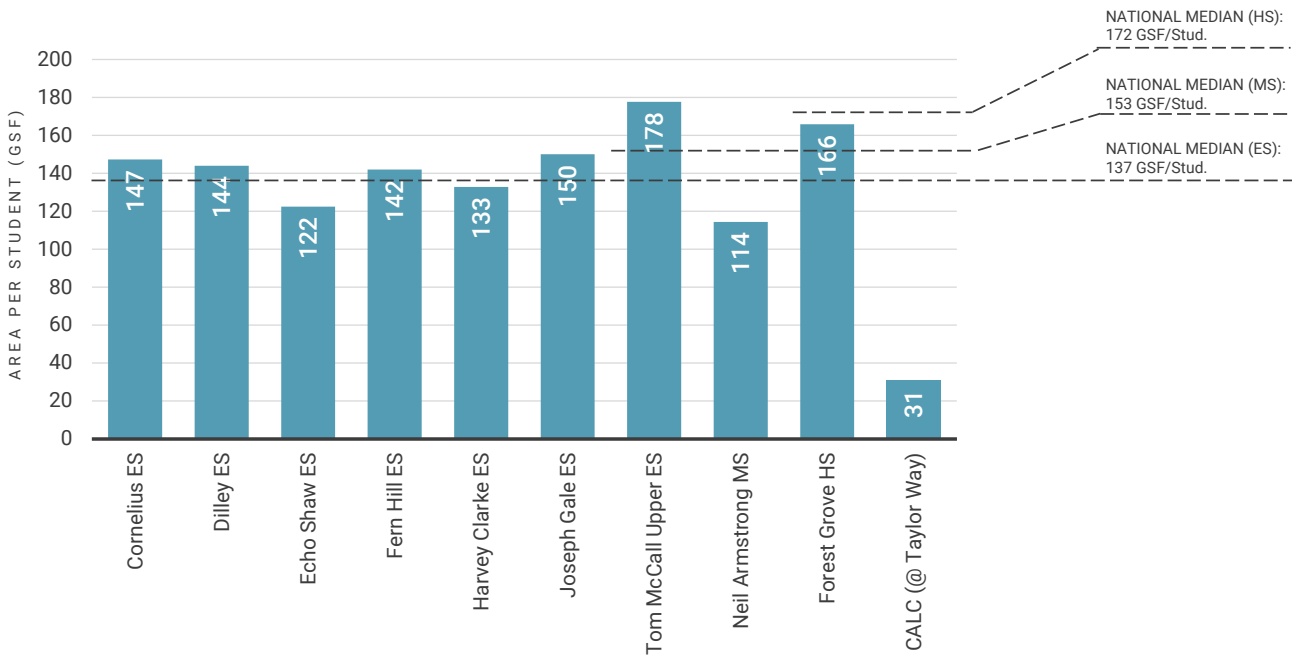
EDUCATIONAL ADEQUACY

Educational adequacy addresses the following question:

How well does the facility create a successful environment for learning, inspiring, and building community?

Although educational adequacy can be difficult to quantify, facilities can be evaluated in a number of different ways, including area per student, elements of successful learning environments, and feedback from people who use the facility every day.

CHART:
Area Per Student Comparison



AREA PER STUDENT

Area per student is one metric that can be used to compare educational adequacy in school facilities. Area per student is determined by taking the total gross square footage of a facility and dividing it by the permanent student capacity of the building. It is important to note that this metric is not necessarily a reflection of classroom size, as it takes into account all spaces within the building and provides the average amount of total space per student. Area per student changes if school capacity is adjusted.

A small amount of difference in area per student can have a big impact on the amount of space in a facility and how it is used. For example, a difference of five square feet per student, when multiplied by the target number of students per classroom (23), equates to an additional 115 square feet per classroom, or approximately 460 square feet of additional space for a cluster of four classrooms. This additional space is enough to provide break-out areas and/or other types of teaching and support space for classrooms that a school with a lower area per student would not be able to have, as shown in the diagram at right.

Distribution and configuration of space is also important to consider. Adding onto an existing school can increase the area per student, but does not always provide the desired types and relationships of spaces, such as break-out spaces adjacent to classrooms.

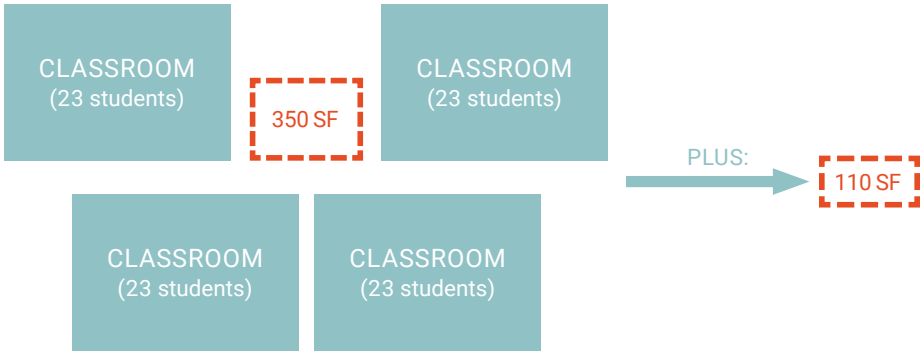
Facility Comparison

A comparison of area per student in the District's school facilities is shown in the chart above. Forest Grove is typical of most school districts, in that its school facilities vary widely in terms of area per student.

The District's area per student target at the elementary level is based on the most recently constructed elementary school in the District, Joseph Gale, which provides approximately 150 square feet per student. Of the District's six elementary schools, one school, Echo Shaw, is significantly (more than 20 square feet per student, or approximately 15 percent) below the District target. For planning purposes, this facility is identified as having a potential opportunity for an improved learning environment, based on its low area per student.

Targets have not been set for middle and high schools in the District, as there have not been any recently constructed facilities or education specifications at these levels. However, evaluation of national medians can provide a typical range, and are included in the above chart for reference. As shown, Neil Armstrong Middle School is significantly below the national median for middle schools, while Forest Grove High School is fairly close to the national median for high schools.

Impact of Five Square Feet Per Student:



The portion of the Taylor Way Support Annex that currently houses the alternative high school program, provides only 31 square feet per student. Although alternative school programs often have lower areas per student because they do not include all of the components of a comprehensive neighborhood school facility, this is extremely low and indicates that the current facility is not providing the desired learning environment for students.

ELEMENTS OF SUCCESSFUL LEARNING ENVIRONMENTS

A good learning environment:

- Reflects a clear understanding of how students learn
- Reflects the values and ideals of the community
- Supports the desired learning experience
- Allows for customization to meet the needs of specialized learning
- Creates a nurturing and inspiring community of teachers and learners

Facilities and their infrastructure can have a large impact in supporting or hindering twenty-first century education. Elements that contribute to a positive learning environment include:

- Flexible break-out areas that support small group collaboration and one-on-one
- Natural light throughout
- Sense of community with appropriate scale and materials, as well as visibility and connections between spaces
- Clear wayfinding
- Appropriate classroom size and configuration
- Areas that can support long-term projects
- Spaces that support partnerships with local businesses and other entities

The following are examples of successful modern learning environment concepts at each grade level.

Elementary Level

Every moment is a learning moment: Knowledge about how our brain functions and what kind of connections are created when we learn inform design.

Provide an atmosphere of clarity and calm: Clear wayfinding, purposeful arrangement of spaces and room for students to leave their mark is the goal. Providing opportunities for students interact, but also to retreat, provides real flexibility.

Students to seek cooperation in doing: When children have the opportunity to work in a group, assign responsibilities to each other and learn to depend on one another, they gain a deeper appreciation of the social fabric societies are made of.

Instill human qualities such as empathy, warmth and emotional commitment: Breaking a larger building into smaller 'neighborhoods' enables students to relate to a smaller group. Knowing your classmates and never encountering an area where you feel alone or vulnerable will help students feel that they belong.

Sustainability: Outdoor learning allows students to experiment with natural elements, get messy, learn about the variety of physical boundaries, organize activities, take responsibility, build things and understand ecosystems.

Strive to maintain a spirit of joy in learning: School can provide many opportunities to connect learning to real life experiences in the world just outside your window.

Middle School Level
Socializing at different scales-the 'village square': Provide outdoor areas for gathering.

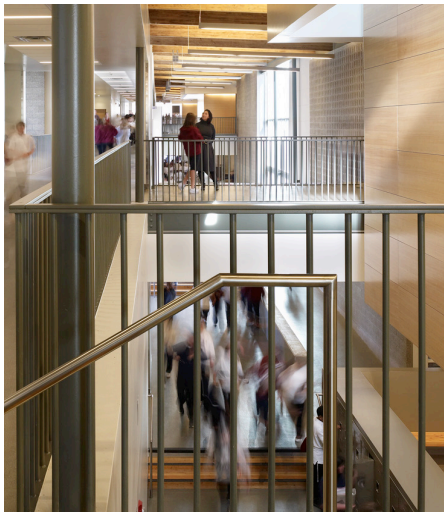
Learning communities: Campus level and pod level, including science rooms, flexible studio / lab spaces, small group and teacher prep spaces.

The commons with stage: Creating spaces that are warm and inviting and serve multiple purposes will nurture body, mind and soul.

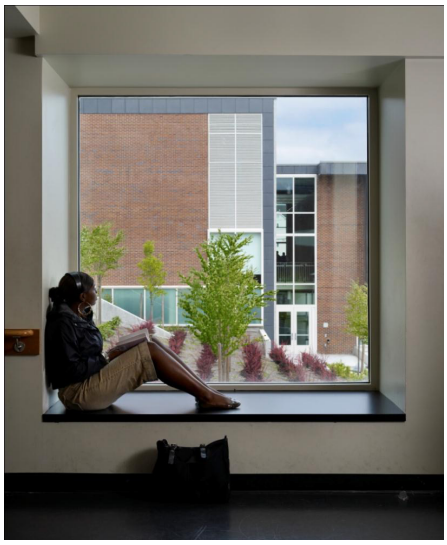
Physical development and community asset: Opening up the gym to the outside through use of glass.

Transparency, views and daylighting: View windows to the outside and internally, so students and staff can see what's happening.

The internal street: Allows students to discover new interests.



High School Level
Create varying scales of space: Individual, small group, classroom and larger shared public spaces.



Classrooms: Dynamic areas where groups can work together.

Creative solutions - shared use: Spaces can support multiple functions, such as public areas supporting community events.

IMAGES:
Limited space in hallways used for pull-out activities (top row) and undersized classrooms (bottom row)

Cornelius Elementary School

Dilley Elementary School

Cornelius Elementary School

Dilley Elementary School

Harvey Clarke Elementary School

FEEDBACK FROM BUILDING USERS

Interviews and facility walk-throughs were conducted with the principal at each school in the District, as well as with the Director of Special Education, as part of the 2017 long-range planning process. (Note: The Echo Shaw interview was not completed, due to scheduling issues.)

Several common themes emerged from discussions with principals and are included below. This feedback is still relevant and has been brought forward as part of the current planning effort. Complete interview documentation can be found in the Appendix of the 2017 Long-Range Facility Plan report.

Instructional Areas

> There is not enough space to work with students outside of classrooms in most District schools; this activity typically occurs in the hallway and causes conflicts

> Flexibility for pull-out and accommodation for different group sizes is desired at all schools

> Classrooms are too small to accommodate current class sizes at many District schools

> Casework in classrooms hinders use of space in some older elementary schools

> There is a desire for air conditioning in elementary school classrooms (typically only the administration area and possibly the cafeteria are air conditioned), as many classrooms get hot in fall and spring

> Mechanical systems cause noise issues in some elementary classrooms

Special Education

> There is a need for specialized spaces for special education, such as calming rooms, time out areas, and testing space

> Bathrooms / changing rooms are needed for self-contained classrooms

> Ideally, special education services would not be split at two locations

IMAGES:

Lack of natural light, difficult wayfinding, isolated cafeteria, and unsupervised entry

Neil Armstrong Middle School

Neil Armstrong Middle School

Echo Shaw Elementary School

Neil Armstrong Middle School

Neil Armstrong Middle School

Communal / Support Areas

> The cafeteria and/or library are too small at several facilities

> Community access to gymnasium, cafeteria and/or library is difficult, due to lack of accessibility or security

> There are poor acoustics and / or sound systems in the cafeteria at some schools

General Building

> There are too many spaces without natural light at the middle school and high school

> Hallways are congested and/or too loud

> There is a lack of space for staff collaboration at some elementary schools

> Staff needs better confidentiality (private offices) at Harvey Clarke

Restrooms

> There is a need for gender neutral restrooms at the middle school and high school

> Older restroom fixtures, such as basin sinks, increase issues such as slippery floors

Safety and Security

> There is a need for increased security for the entry sequence at several schools (everyone has to come through the office)

> There is a desire for more interior and exterior camera coverage at many schools

> There are too many exterior doors at Neil Armstrong

> Sites without full fencing cause security concerns because no ability to monitor access

Parking and Site Areas

> Parent drop-off / pick-up size and / or configuration does not work well at many schools (limited separation creates safety issues and undersized capacity creates congestion)

> Parking area is not adequately sized at Harvey Clarke

> Covered play areas are perceived as too small at some elementary schools

AREAS OF EDUCATIONAL PROGRAM NEED

The following information summarizes specific District educational programs that could require and/or benefit from modification of existing facilities within the 10-year time frame of the Long-Range Facility Plan. Some programs were determined to not require action as part of the Long-Range Facility Plan, and are included for informational purposes only.

EARLY CHILDHOOD EDUCATION

The first few years of a child's life lay the foundation for cognitive functioning, as well as behavioral, social and physical health. Demand for early learning programs, such as preschool and Head Start, are increasing throughout the region and the nation. More space is needed to accommodate this increasing demand. Facilities for early learning must meet specific state-mandated requirements, and include self-contained space for learning, napping, eating, toileting and playing.

Extensive research has shown that high-quality, intensive early childhood education programs have positive effects on cognitive development, school achievement and completion, especially for low-income children. These effects can persist through adulthood, and are most successful when started earlier and provided longer.

In the Forest Grove School District, educational researchers at the University of Oregon are using the easyCBM system to provide a means to measure teaching effectiveness and student success. Their findings over the past three years indicate that there are significantly lower percentages of high-risk students in the population that attended an early learning program, compared to the population that did not attend an early learning program.

EXPAND PRESCHOOL PROGRAM

Goal

Expand the District's preschool program by adding one additional classroom at each of the four Title 1 elementary schools in the District: Cornelius, Echo Shaw, Fern Hill, and Joseph Gale.

Existing Conditions

Cornelius, Echo Shaw, and Fern Hill already have one preschool classroom each, with associated support and outdoor space, but a second preschool classroom is needed at these schools. Joseph Gale does not currently have a preschool program.

Echo Shaw already has a remodeled space ready for a second classroom, therefore it is not included in the proposed plan.

Proposed Plan

Fern Hill is projected to have available space within its existing facility to house an additional preschool classroom, based on enrollment projections through 2033-34. Modernization of existing space is anticipated to provide a preschool classroom at this school.

Cornelius and Joseph Gale are not projected to have available space to house preschool classrooms, based on enrollment projections. However, given the age and condition of Cornelius and the constraints of the Joseph Gale site, it does not make sense to build new classroom additions at these sites.

Possible options for adding a preschool classroom at these schools include adjusting enrollment boundaries to make space, adding a portable, or rebuilding the school at larger capacity, in the case of Cornelius. For the purposes of the Long-Range Facility Plan, it is assumed that modernization of existing space will be implemented to provide a preschool classroom at these schools.

ALTERNATIVE EDUCATION

There is increasing demand for alternative learning options within the District and around the country. All students deserve to have an equal chance at academic success, but not every student learns in the same way. Alternative schools provide students an opportunity to succeed in a different educational setting. For at-risk students, alternative education has the potential to offer a smaller and more personalized environment in which to learn and form strong connections.

RELOCATE & EXPAND THE ALTERNATIVE HIGH SCHOOL

Goal

Provide a new stand-alone facility for the District's high school level alternative education program, CALC, with an increased student capacity. The new facility should be located near the high school, so that students can access specialized learning and physical education / athletics opportunities that are available at the high school.

Existing Conditions

The CALC program is currently located in a portion of the Taylor Way Annex, which is primarily a District transportation and support facility. The space is significantly undersized, does not meet the current needs of the program or its desired expansion, and is not located close to the high school.

The program currently serves 59 students, but there is demonstrated need for a larger capacity, as many District high school students are seeking alternatives to traditional education.

Proposed Plan

Provide an new alternative high school facility with a capacity of 150 students. A potential location is the District's newly purchased David Hill property, which is close to the high school.

For planning purposes, a 24,000 gross square foot facility is assumed, which would provide 160 square feet

per student. Shared use of existing specialized space at the high school, such as gymnasiums and CTE classrooms, is also assumed.

MODERNIZE SPACE FOR ALTERNATIVE EDUCATION AT THE MIDDLE SCHOOL

Goal
Reconfigure an existing area within Neil Armstrong Middle School to provide a self-contained classroom for alternative education.

Existing Conditions
Neil Armstrong Middle School does not currently have an alternative education program.

Proposed Plan
The District determined that funding for this project could be addressed through means outside of the Long-Range Facility Plan.

CAREER-TECHNICAL EDUCATION

There has been a resurgence in demand for CTE programs in recent years, due to the many benefits, including reaching more at-risk students, improving student retention and graduation rates, and deepening community ties. Oregon students who participate in career and technical education courses have had higher graduation rates than those who don't. According to the Oregon Department of Education, nearly 89% of those who participated in those courses in the 2018-19 school year earned a diploma, compared to the 80% overall graduation rate.

Although the District has completed significant CTE improvements in recent years, there are still additional program needs to address.

EXPAND CTE PROGRAM AT THE HIGH SCHOOL

Goal
Provide a new addition to support the Mechatronics and Early Childhood Education programs and improve existing space for the Culinary program at Forest Grove High School.

Existing Conditions
Forest Grove High School does not currently have adequate space to house the Mechatronics or Early Childhood Education Programs. The Culinary classroom is in need of renovation.

Proposed Plan
The District determined that funding for this project could be addressed through means outside of the Long-Range Facility Plan.

PHYSICAL EDUCATION

While physical education (PE) curriculum in recent years has been reduced due to focusing limited funds on the core educational program, more emphasis is now being placed on school districts to provide this important activity. Recent Oregon legislation requires a minimum number of minutes per week of physical education for students in kindergarten through the eighth grade, including 150 minutes per week for elementary students and 225 minutes per week for middle school students. All Oregon school districts will be required to fulfill the requirements of this legislation, with full compliance required by the 2022-23 school year.

A preliminary analysis was completed as part of the planning process, to evaluate whether school facilities in the District can accommodate the required amount of PE instructional minutes. The analysis was based on a number of assumptions related to class size, types of PE teaching stations, and their utilization rates.

Based on preliminary evaluations, two additional PE teaching stations may be needed at Neil Armstrong Middle School, in order to meet this requirement through the capital plan horizon. It appears that the District's existing elementary schools have an adequate number of PE teaching stations to meet State requirements.

A more detailed analysis will be required to confirm specific space needs, as the preliminary evaluation relied on a number of high-level assumptions that will need to be verified. The District will also need to assess the availability of PE instructors and the supporting budget, which is not included in a capital plan.

For reference, the preliminary PE analysis charts are included in Appendix C and the State PE requirements are included in Appendix F.

MEET STATE PHYSICAL EDUCATION REQUIREMENTS

Goal
Ensure adequate space to accommodate State physical eduction (PE) requirements at all District facilities (elementary schools and middle schools).

Existing Condition
Based on a preliminary assessment, the number of PE teaching spaces in existing District elementary school facilities appear to be adequate to meet State requirements. However, it appears that Neil Armstrong Middle School may need to add two additional PE teaching stations to meet State requirements.

Proposed Plan
The District determined that areas within the existing Neil Armstrong facility could be repurposed to provide any additional PE teaching stations that may be needed, and that funding for this project could be addressed through means outside of the Long-Range Facility Plan.

As the PE analysis was based on a number of assumed factors and because there are also programmatic strategies to address this need, such as adjusting class sizes, scheduling, and utilization rates, this need should be re-evaluated prior to planning any work.

SECTION 04

FACILITY CONDITION

EXISTING DISTRICT FACILITIES

The Forest Grove School District is located in Washington County, Oregon and encompasses the communities of Forest Grove, Cornelius, Dilley, and Gales Creek. The District operates over a million square feet of facility space covering about 250 acres. A District map with all facilities and sites is shown above.

There are currently 12 school facilities in the District, including six elementary schools, one upper elementary school (in two buildings), one middle school, one high school, and three special / alternative education facilities. District support facilities include the Central Administration Building and the Taylor Way Support Annex. There is one charter school in the District, Forest Grove Community School, which is not included in this Long-Range Facility Plan.

The District also owns three additional parcels of land, the "Thatcher" property, the "McKibbin" property, and the recently purchased "David Hill" property. These sites total about 63 acres and can be used for future growth or potentially traded for other sites in the District.

ELEMENTARY & UPPER ELEMENTARY SCHOOLS

Six neighborhood elementary schools serve students in the District. Cornelius, Dilley, Fern Hill, Harvey Clarke, and Joseph Gale accommodate students in kindergarten through fourth grade, while Echo Shaw houses students through sixth grade.

Tom McCall Upper Elementary School, housed in two adjacent facilities on the same site (East and West), serves all District students in fifth and sixth grade, with the exception of students who remain in the dual-language program at Echo Shaw.

Cornelius, Echo Shaw, and Fern Hill currently have an early learning (prekindergarten) classroom for four-year-olds. A dual-language program is offered at Cornelius, Echo Shaw, and Tom McCall.

There are four Title I elementary schools in the District, including Cornelius, Echo Shaw, Fern Hill, and Joseph Gale.

MIDDLE & HIGH SCHOOL

All students in the District attend Neil Armstrong Middle School for seventh and eighth grade. This facility is located adjacent to Fern Hill Elementary School.

Forest Grove High School is the District's only high school facility. Located in the northwest part of the District, it serves all students in ninth through twelfth grades. Other facilities on the high school site include a school-based health center and stadium support facilities.

OTHER EDUCATION FACILITIES

The Community Alternative Learning Center (CALC) is a high school program that is currently housed in the Taylor Way Support Annex. It provides an alternative environment of self-paced learning for students working towards a regular diploma.

Oak Grove Academy, located in former Gales Creek Elementary School,

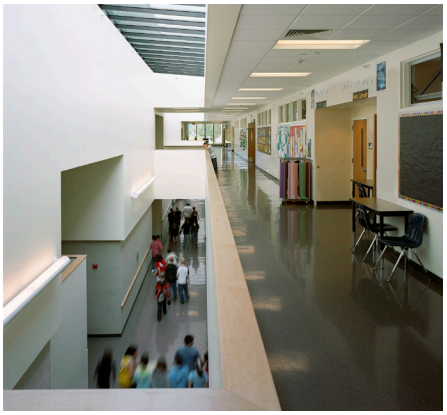
IMAGES:
Recent Capital Measure Successes


Fern Hill Elementary


Tom McCall West Upper Elementary


Joseph Gale Elementary


Tom McCall East Upper Elementary


Tom McCall West Upper Elementary


Forest Grove High School

accommodates special education for students throughout the District. Oak Grove Academy also has program space at Tom McCall Upper Elementary.

Cedar Street Campus is a small facility with a residential configuration that also accommodates special education students in high school.

SUPPORT FACILITIES

The District's support facilities include Central Administration, located in the old Central School building, and the Taylor Way Support Annex, which houses the District's transportation, warehouse, and maintenance services, as well as the CALC program and some additional office space.

HISTORIC BUILDINGS

The District does not have any buildings that are listed on federal, state, or local historic registers.

RECENT CAPITAL MEASURE SUCCESSES

Community members in the Forest Grove School District have supported the District in the past, passing capital measures in 2000 and 2010. The funds from these capital measures have allowed many important improvements in the District, and have continued to protect existing facility investment and build on the legacy of quality school facilities provided by the District community over the years.

2000 MEASURE

Forest Grove School District voters passed a capital measure for approximately $45 million in 2000. Projects completed with this funding include:

New / Replacement Schools
> Fern Hill Elementary School
> Tom McCall West Upper Elementary
> Tom McCall East Upper Elementary

Deferred Maintenance
> Building envelopes
> Mechanical/electrical/plumbing

Safety & Security Improvements

Exterior Upgrades
> Playgrounds and equipment
> Athletic fields
> Parking lots

2010 MEASURE

Forest Grove School District voters passed a capital measure for approximately $65 million in 2010. Projects completed with funding from the 2010 capital measure include:

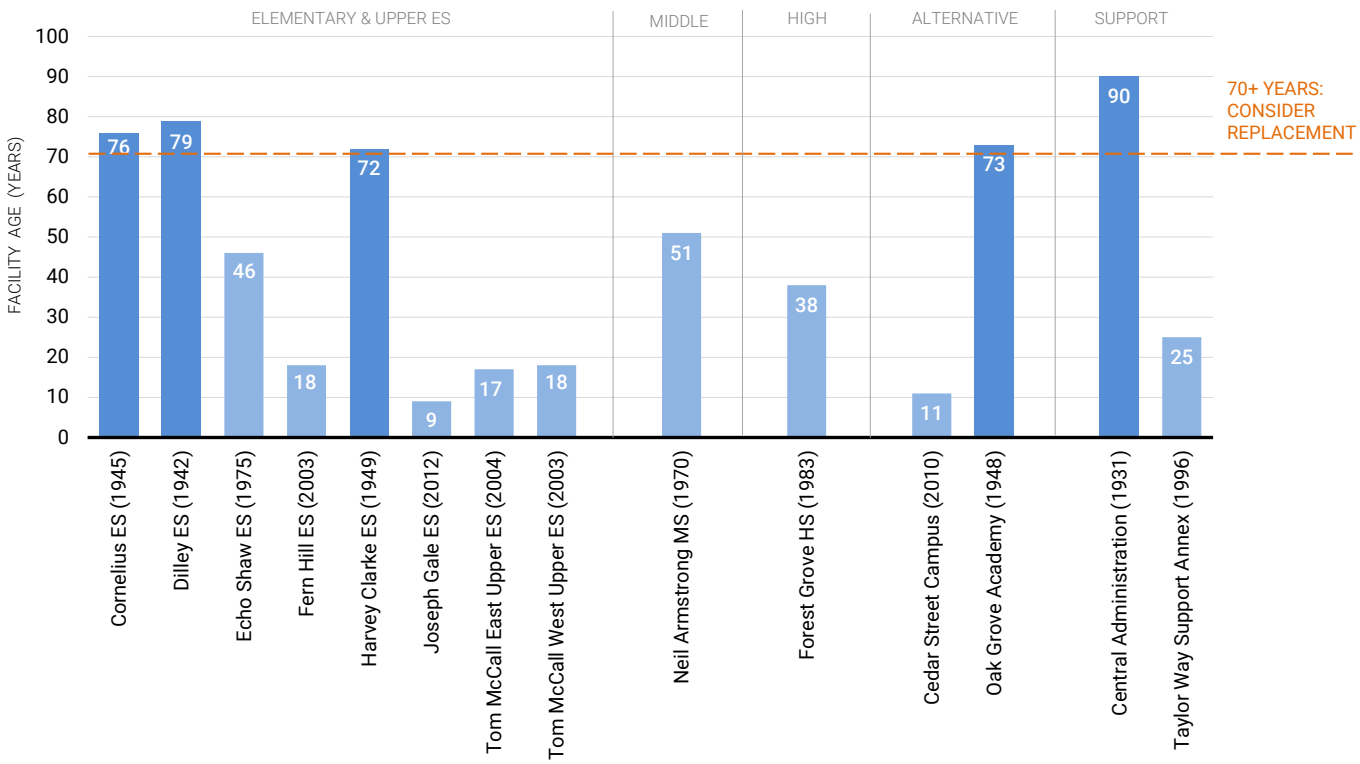
Replacement Schools
> Joseph Gale Elementary School

Additions / Renovations
> Forest Grove High School (science, gymnasium, fields)
> Harvey Clarke Elementary School (cafeteria, special education)
> Neil Armstrong Middle School (science)

Deferred Maintenance
> Building envelopes
> Mechanical / electrical / plumbing

Safety & Security Improvements

CHART:
Facility Age



FACILITY AGE

District educational facilities vary significantly in age, with original construction dates as early as 1942 and as recent as 2012. Although facility age does not solely determine building condition, it is a significant factor that should be considered. The chart above illustrates the age of all District facilities.

In general, original construction dates were used, although some District facilities have received modernizations and additions since their initial construction. This is because major building systems and components, such as foundations, structure and exterior materials, continue to degrade over time and eventually require replacement, regardless of subsequent work that has been done in the building. Facilities built more than 70 years ago (before 1951), shown in blue above, are identified as candidates for potential replacement, due to both physical condition and program accommodation issues.

In addition to age-related degradation, older school facilities were generally not designed to accommodate current models of teaching and learning. Building configurations were typically designed to support one teacher with a group of 20-30 students, providing limited flexibility for team-teaching or convening a variety of student group sizes. Older schools commonly have no space outside of the traditional classroom for individualized instruction or group project work. Shared facilities, such as cafeterias, gymnasiums, restrooms, and administration areas are also often undersized for current educational functions and needs.

ELEMENTARY & UPPER ELEMENTARY SCHOOLS

Three of the District's six elementary schools are more than 70 years old, including Cornelius, Dilly, and Harvey Clarke. For these facilities, age is a factor that indicates considering replacement. The newest elementary schools, Fern Hill and Joseph Gale, as well as Tom McCall Upper Elementary, were all constructed within the last 20 years. Echo Shaw falls in between, at almost 50 years old.

MIDDLE & HIGH SCHOOLS

Neil Armstrong Middle School is over 50 years old and Forest Grove High School is almost 40 years old. Although these facilities have some age-related maintenance issues, facility age is not an indicator for replacement of these schools within the next 10 years.

OTHER EDUCATION PROGRAMS

The larger of the two former Gales Creek Elementary buildings, the Elmer Lyda Building, is currently over 70 years old. The smaller building, the Jenny Ranes Building, is over 90 years old (not shown in above chart). The age of these facilities indicates consideration of replacement based on age.

The Cedar Creek Campus facility was constructed 11 year ago, and the Taylor Way Annex facility that houses CALC was constructed 25 years ago. Age is not an indicator for replacement of these facilities.

SUPPORT FACILITIES

As noted above, the Taylor Way Support Annex is 25 years old and not in need of replacement due to age. The Central Administration facility, however, is 90 years old and should be considered for replacement based on its age.

STRATEGIC REPLACEMENT

Due to the number of facilities with similar dates of original construction, they can be expected to reach the end of their useful life around the same time period. While immediate replacement may not be warranted, incremental replacement implemented over the course of several decades should be considered. This proactive approach can help ensure that the District is not faced with the burden of replacing many facilities within a short period of time.

FACILITY CONDITION

Facility assessments measure the relative condition of building systems and components and provide a framework to identify, compare and prioritize school building needs.

FACILITY ASSESSMENT PROCESS

In 2018, the District hired an outside consultant to complete a facility condition assessment (FCA) of District facilities in alignment with Oregon Department of Education (ODE) assessment requirements. The assessment covered all 14 District facilities, including schools and support facilities. Facility assessment information is included in Appendix D.

The FCA evaluates the physical condition of exterior and interior building systems and site elements. Building systems were evaluated in the following categories:

- Fire and Life Safety– alarm panels, emergency generators, security systems, and fire suppression systems
- Heating System– boilers, furnaces, unit ventilators, terminal units, and other major equipment
- Ventilation System
- Air Conditioning System– cooling towers, chillers, and major labeled equipment
- Roofing System– roof type, reported age, drainage, or any unusual roofing conditions
- Electrical System– electrical service provided and distribution system, including switchgear, transformers, emergency generators, and main distribution panels
- Plumbing– domestic water supply, domestic water heaters, sanitary sewer, and any special or unusual plumbing systems (such as fuel systems and gas systems)
- Vertical Transportation
- Building Envelope– walls, doors, windows, and fire escapes, including curtain-wall systems, glazing, exterior sealant, exterior balconies, and stairways
- Structural Components– footings, foundations, slabs, columns, floor framing system, and roof framing system (no structural testing)
- Furnishings– fixed furnishings (cabinets, casework, etc.)
- Site Paving– site paving and/or site components including pavement, curbs, drains, and sidewalks
- Kitchen Equipment– walk-in freezers and refrigerators, dishwashers, ovens, stoves, broilers, grills, fryers, and ice makers
- Site and Other– playgrounds, synthetic turf fields, sports and ground facilities, natural fields, auditoriums, tracks, outbuildings, and stadiums

Note: Destructive analysis and assessment was not conducted to determine the condition of concealed systems.

FACILITY CONDITION INDEX

Building condition evaluations yielded Facility Condition Index (FCI) scores for each District facility. An FCI score is generally intended to reflect the amount of capital required to address deferred maintenance items. It represents the cost to repair deficiencies as a percentage of the cost to fully replace the existing facility "as-is." It does not necessarily bring the facility up to current code and is not intended to represent improvements required to make the building equivalent to a new facility (a building with an approximate 75-year lifespan and modern learning environments).

The State facility assessment is a tool used to help the ODE understand the relative condition of various districts' facilities across Oregon. It can also be used as a tool to help school districts and their communities understand the relative condition of facilities within their district, and make decisions regarding the modernization and replacement of aging facilities. However, the FCI score does not represent total facility need, and the comparison of cost to repair deficiencies relative to replacement cost does not represent the same finished product as a fully modernized or new building.

FCI scores are defined with the following "rules of thumb":

Below 0.05: Good Condition
Continue predictive and preventive maintenance

0.05 – 0.10: Fair Condition
Continue maintenance with capital renewal

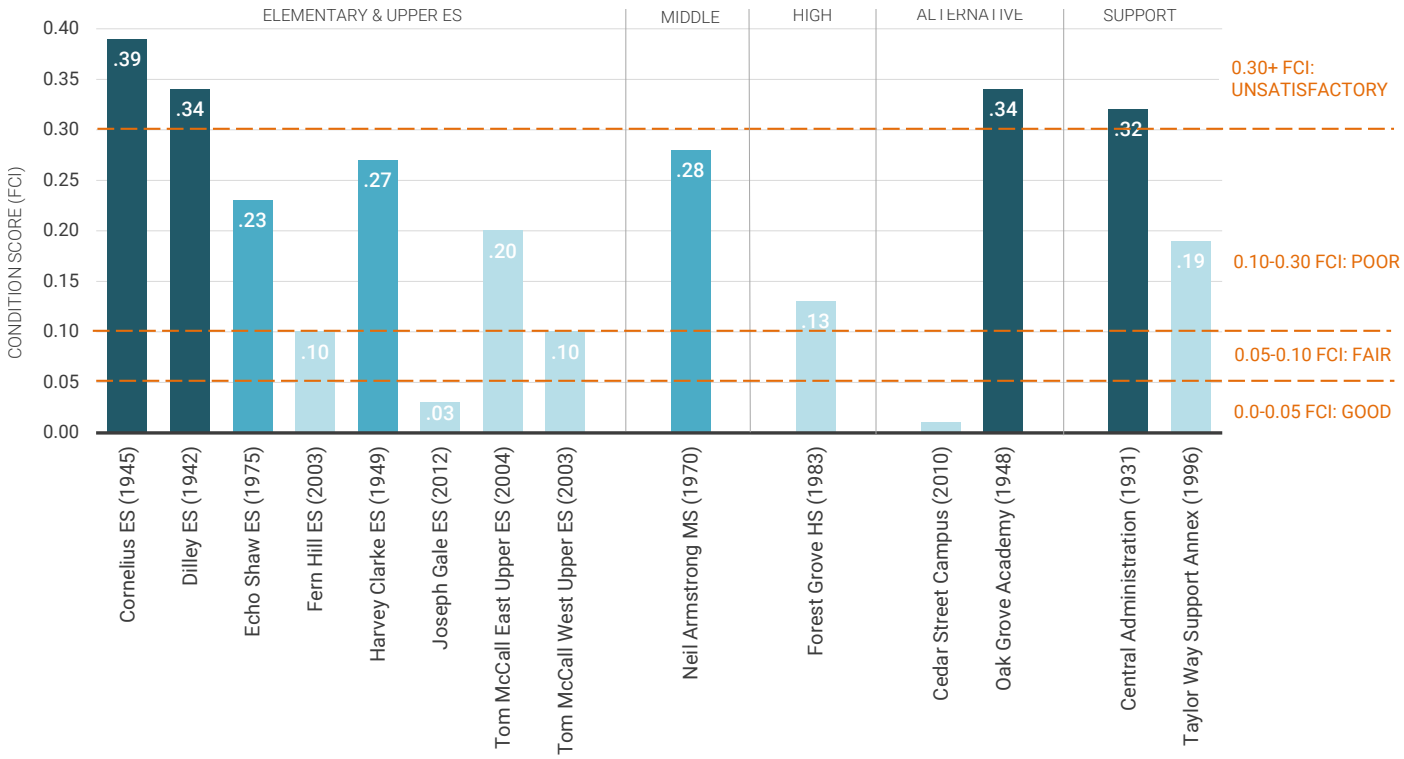
0.10 – 0.30: Poor Condition
Consider whole building replacement or renovation versus repair

Above 0.30: Unsatisfactory Condition
Building is in critical condition and should be considered for replacement

FCI scores for all District facilities are shown in the chart on the following page, and in the table at the end of this section. As illustrated, four District facilities were assessed as being in the Unsatisfactory Condition category. These facilities were identified as the worst-case building conditions for discussion and planning prioritization.

The facility condition assessment summary is included in Appendix D.

CHART:
Facility Condition (FCI Score)



ELEMENTARY & UPPER ELEMENTARY SCHOOLS

The Cornelius, Dilley, and Harvey Clarke elementary school buildings were all constructed in the 1940s. Remodel work was completed at Cornelius and Harvey Clarke in the late nineties, however, these facilities are still over 65 years old. Cornelius and Dilley received FCI scores of 0.39 and 0.30 respectively, placing them in the Unsatisfactory category.

Harvey Clarke received a slightly better score of 0.27, placing it at the upper end of the Poor category.

Echo Shaw was constructed in 1975, with a remodel in 1997 and additional work done with funds from the 2010 bond. This school has an FCI score of 0.23, indicating the facility is in poor condition.

Two of the District's newer schools, Fern Hill Elementary and Tom McCall West, built in 2003 and 2004, received FCI scores of 0.10 and are in good condition. Tom McCall East has a higher (worse) score of 0.20, primarily due to the condition of the old gymnasium, which was built in the early 1950s. However, the District seismically upgraded the gymnasium in the summer of 2020, which is not reflected in the FCI score.

Joseph Gale Elementary, the District's newest elementary school, was constructed in 2012. This facility has an FCI score of 0.03, indicating it is in good condition and no major work is needed.

MIDDLE & HIGH SCHOOLS

Neil Armstrong Middle School, which was built in 1970, has an FCI score of 0.28, indicating it is in poor condition.

The original Forest Grove High School building was built in 1983, with additions in 1999 and 2012. Support facilities on the site include a student health center and stadium support functions, constructed in 2008 and 2011 respectively. Facilities on the high school campus have a combined FCI score of 0.13, placing it at the lower end of the Poor category.

OTHER EDUCATION PROGRAMS

The District's special education program, Oak Grove Academy, is partially housed at the former Gales Creek Elementary School. This facility consists of two buildings that were built in 1929 and 1948, although the 1929 building is not currently used for classes.

The Oak Grove Academy facility has an FCI score of 0.34, indicating the facility is in unsatisfactory condition. There are facility issues throughout the building due to age, including foundations, interior and exterior materials, windows, fixtures, systems and equipment. Significant issues include foundation deterioration in the 1929 building, breakdown of drain piping, creek back-up into the 1929 building and limited or no accessible restroom facilities.

The District also operates the Community Alternative Learning Center (CALC), which is an alternative education program for high school students. It is housed in a portion of the Taylor Way Support Annex (see Support Facilities Condition below for description).

SUPPORT FACILITIES

The District's administrative functions are located in the former Central School facility. The building was constructed in 1931, with some renovation to accommodate the change to an administrative function. Due to nonconformance with current seismic codes, student occupancy is no longer allowed in this facility.

IMAGES:
Existing Facility Condition Examples

Cornelius ES: Missing mortar on exterior

Harvey Clarke ES: Cracking in exterior brick

Forest Grove HS: Roof deterioration

Tom McCall Upper ES: Gymnasium ceiling

Forest Grove HS: Aging electrical switchboard

Neil Armstrong MS: Flooring at urinals

The Central Administration facility has an FCI score of 0.32, indicating it is in unsatisfactory condition. There is some deterioration throughout the building due to age, as well as significant issues with the service systems, including heating, ventilation, cooling, and electrical systems.

The Taylor Way Support Annex houses District support functions and the CALC program. It was originally constructed in 1996 as a manufacturing plant and office, and later purchased by the District. A renovation was completed in 2002. The Taylor Way Support Annex has an FCI score of 0.19, indicating it is poor condition. It is important to note that this score reflects assessment of the facility as a warehouse and transportation facility and does not address the issues with housing an educational program in this space. See Program Accommodation section for more information.

Facility issues include a need for increased ventilation for vehicle maintenance, replacement of aging mechanical and electrical equipment, a back-up generator for food storage, and better security for storage areas.

SEISMIC ASSESSMENT

Although new facilities are built to meet the current seismic codes at the time of construction, many District buildings are more than 30 years old and have had little or no earthquake resistance built into their original designs.

Seismic condition should be considered in the context of "rolling compliance." New codes are typically issued every few years and adjustments related to seismic requirements occur each time. The first seismic code was developed in 1976 and it has evolved over time with each new code, changing zones from low to moderate to high.

Seismic evaluation can be used to prioritize future seismic improvements within the District and work toward meeting the goal of the 2017 Oregon Revised Statute (ORS) 455.400 which notes:

"Subject to available funding, all seismic rehabilitations or other actions to reduce seismic risk must be completed before January 1, 2032."

SEISMIC EVALUATION

District educational facilities were assessed using the FEMA Rapid Visual Screening (RVS) procedure, completed by the Oregon Department of Geology and Mineral Industries (DOGAMI) in July of 2006. The screening process examined building type and occupancy, building height, plan configuration, soil type, falling hazards and other considerations. Areas of the building with different construction types or dates were individually assessed.

The RVS procedure has been developed to identify, inventory and screen buildings that are potentially seismically hazardous. If identified as such, buildings should be further evaluated in more

CHARTS:
FEMA RVS Seismic Evaluation Summary, 2006

2006 FEMA 154 Scores[1]

Facility	Building Area					
	A	B	C	D	E	F
Cornelius Elementary	0.9	0.9	0.6	-	-	-
Dilley Elementary	0.9	0.9	-	-	-	-
Echo Shaw Elementary	0.9	-	-	-	-	-
Fern Hill Elementary[3]	*	-	-	-	-	-
Harvey Clarke Elementary	0.9	0.9	2.3	-	-	-
Joseph Gale Elementary[5]	*	-	-	-	-	-
Tom McCall Upper Elementary[3, 4]	0.7	*	*	-	-	-
Neil Armstrong Middle	0.9	1.9	0.9	-	-	-
Forest Grove High	0.1	1.7	0.1	0.6	1.7	0.1

High	S < 1
Moderate	1 < S < 2
Low	S > 2
Constructed after 2002*	
Recent Seismic Upgrade	

Chance of Collapse[1, 2]

Facility	Building Area					
	A	B	C	D	E	F
Cornelius Elementary	12.6%	12.6%	25.1%	-	-	-
Dilley Elementary	12.6%	12.6%	-	-	-	-
Echo Shaw Elementary	12.6%	-	-	-	-	-
Fern Hill Elementary[3]	*	-	-	-	-	-
Harvey Clarke Elementary	12.6%	12.6%	0.5%	-	-	-
Joseph Gale Elementary[5]	*	-	-	-	-	-
Tom McCall Upper Elementary[3, 4]	20.0%	*	*	-	-	-
Neil Armstrong Middle	12.6%	1.3%	12.6%	-	-	-
Forest Grove High	79.4%	2.0%	79.4%	25.1%	2.0%	79.4%

High	S > 10%
Moderate	1% < S < 10%
Low	S < 1%
Constructed after 2002*	
Recent Seismic Upgrade	

* Facilities were constructed after 2002 and are assumed to be in good seismic condition (not part of RVS Evaluation)

detail to confirm the actual risk and impact of any seismic improvements that may have been made.

The RVS procedure uses a methodology based on a sidewalk survey of a building and a data collection form, which is completed based on visual observation of the building from the exterior and if possible, the interior. Based on the data collected during the survey, a score is calculated that provides an indication of the expected seismic performance of the building.

It is important to note that this process is high-level and general in nature, and estimates the probability that a building will collapse in a 2,500-year seismic event (of which there is a two percent chance every 50 years).

FINDINGS

As shown in the table above, most schools in the District were found to have a greater than 10 percent chance of collapse in a 2,500-year seismic event.

However, the District has completed upgrades since the Rapid Visual Screening was completed, as well as constructed some new facilities. Buildings, or portions of buildings, completed after 2000 have been assumed to have been built to modern seismic standards, including Joseph Gale, Tom McCall East and West (except for the gymnasium), and portions of Harvey Clarke and the high school. In addition, the District has seismically upgraded the Tom McCall gymnasium to an Immediate Occupancy facility (Seismic Risk Factor IV).

Current seismic codes for educational facilities are designed to Seismic Risk Factor III, which means buildings will stay standing to allow exiting after a seismic event, but are not guaranteed to continue to be usable after a seismic event.

SEISMIC CHART NOTES

1. All buildings have been categorized in light of the 2006 code environment.

2. Approximate probability of collapse if ground motions occur that equal or exceed the maximum considered earthquake (MCE, a 2,500-year seismic event), based on limited observed and analytical data.

3. Fern Hill ES and Tom McCall (East and West) were not scored in the original RVS, but were new at the time of assessment, so are assumed to be in good seismic condition.

4. The Tom McCall gymnasium (Building Area A) was seismically upgraded in 2020 to Immediate Occupancy level, however the original RVS scores are still shown for reference.

5. Joseph Gale ES was constructed after RVS scoring was completed, and is assumed to be in good seismic condition.

WATER QUALITY ASSESSMENT

Because children and District staff spend so much time in school buildings, it is important to provide safe drinking water to avoid health problems linked to lead or copper exposure.

The Lead and Copper Rule (LCR) was developed by the EPA to minimize lead and copper levels in drinking water. The most common source of lead and copper in drinking water is from corrosion of plumbing materials, such as pipes, fixtures and faucets. The LCR established an action level of 0.015 mg/L, or 15 ppb (parts per billion), for lead and 1.3 mg/L, or 1,300 ppb, for copper.

DISTRICT TESTING

Water quality testing was conducted in every District facility in Summer 2016. Testing was done for both lead and copper levels in the water, and was completed by Indy Safety and a District representative. Testing followed the EPA's sampling requirements, including the collection of "first draw" samples of water that have been in the pipes for at least six hours.

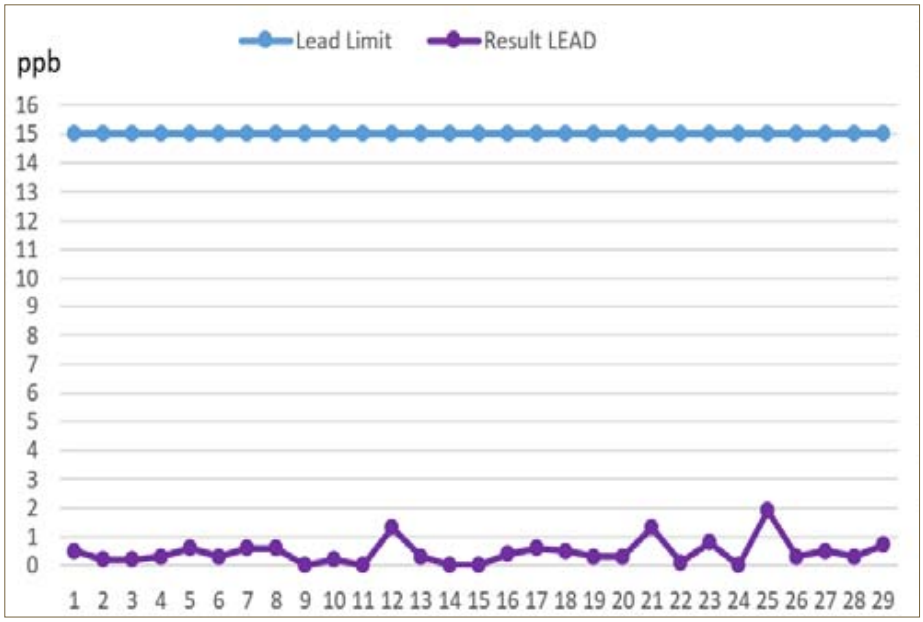
FINDINGS

It was found that District facilities were at safe levels of lead and copper overall. A few isolated fixtures were found to be over EPA limits. These fixtures have been addressed by the District and are now within EPA limits for both lead and copper.

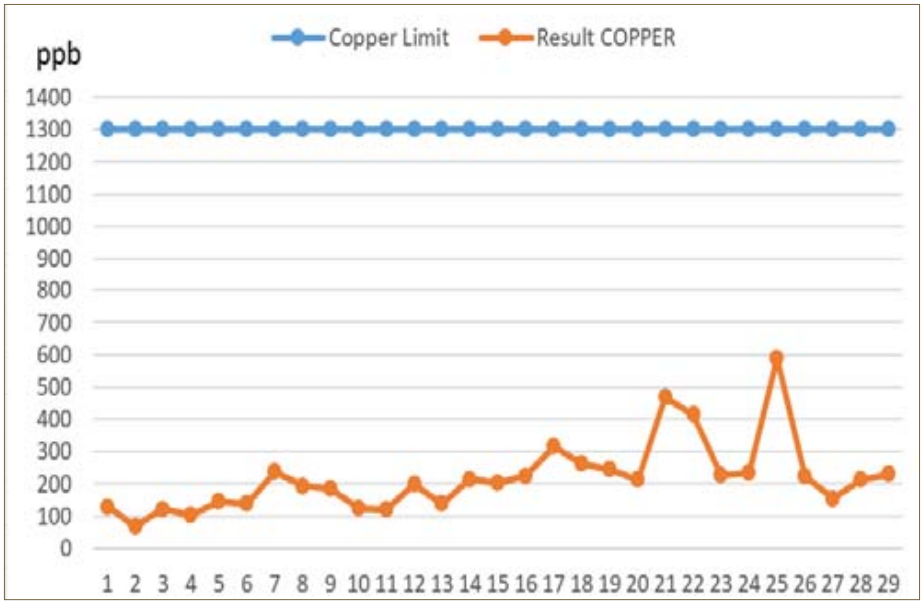
Testing Example

Test results for Cornelius Elementary School are shown above, as an example. In this particular facility, 29 sample fixtures were tested for contaminants, including sink faucets, sink fountains, and hallway drinking fountains throughout the building. Test results show that all fixtures were well within the action limits for lead, with all but three having less than one ppb. All fixtures were also within the action limits for copper.

CHARTS:
Example of Water Quality Test Results, 2016



Cornelius Elementary School: Lead Test Results



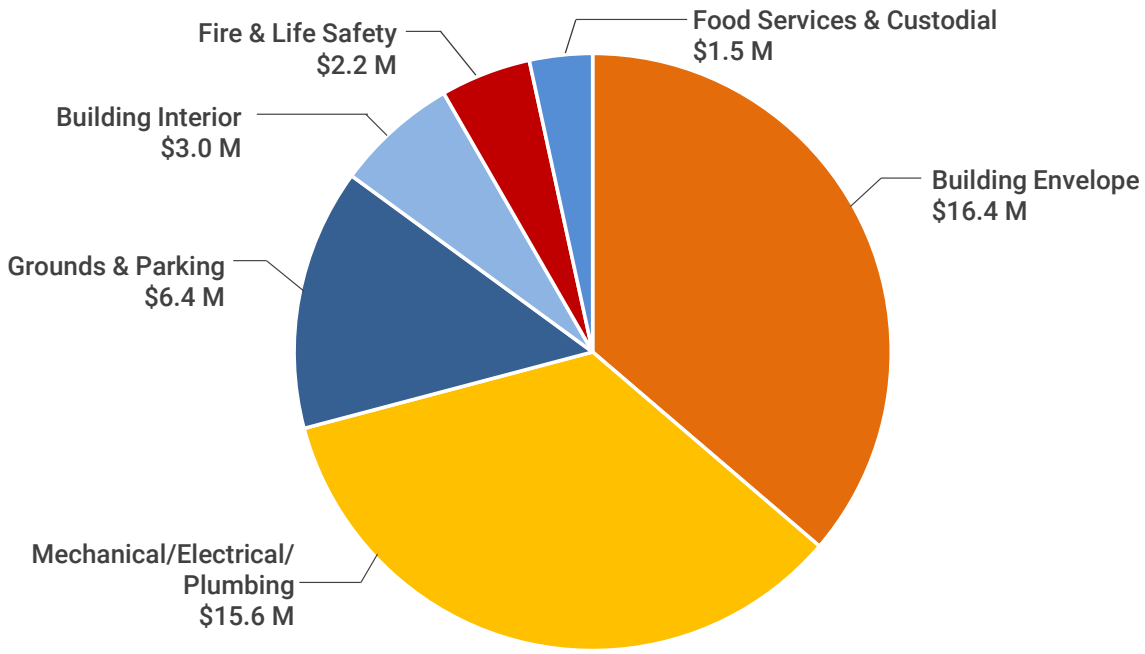
Cornelius Elementary School: Copper Test Results

DEFERRED MAINTENANCE

The initial construction cost of a school accounts for only 10 percent of its lifetime cost, according to School Construction News. Districts often struggle to fund the ongoing facility maintenance, and general operating funds are typically not budgeted to handle major repairs such as roof or mechanical system replacements. A building's life cycle may be 75 years or more, but many building components, including roofs, typically only last 20 years or less.

Although the District continually addresses maintenance issues, there are still considerable facility and site improvement needs throughout the District. As is typical for many school districts, there is more need than the District's alloted operations budget can accommodate, as all facilities

CHART:
Total Deferred Maintenance by Category



continuously wear over time and need to be maintained.

Deferred maintenance needs typically include:

> Upgrades and/or replacements to structural, mechanical, and electrical systems

> Exterior enclosure improvements

> Interior finishes improvements

> Upgrades and/or replacements to commercial equipment and conveyance systems

> Fire and life safety improvements

> Site work

PROCESS

A facilities consultant was hired to evaluate all District facilities in 2016, in conjunction the long-range planning effort at that time, and provided updated information for this plan update. The focus of the 2021 update was to define those projects that were most urgent to ensure facilities operational readiness and reflect the most recent upgrades and remodels.

Source data was gathered through a combined effort of the current facilities staff, previous experienced staff, and the assessment team. The goal of the effort was to provide current baseline data for the 10-year planning process, as well as an ongoing operational working model to assist the District in capital maintenance budgeting through the next 10 years. Programmatic and strategic/growth needs are not included.

The information used to develop the deferred maintenance costs included replacement and renovation schedules and element life spans, based on ASHRAE standards, historical experience, and assessment of actual current conditions. Additionally, a determination was made of the likely replacement costs (updated through January 2021) from service vendors information and similar recent projects undertaken by the District, along with specific industry-provided pricing.

FINDINGS

The District's total 10-year deferred maintenance need was determined to be $45.1 million and includes improvements at all District facilities. The chart above illustrates the total estimated deferred maintenance need by category. Costs shown are escalated project costs, including 35 percent soft costs, 10 percent contingency, and six years of escalation at four percent per year.

Needs were assessed in the following categories:

Building Envelope ($16.4 M)

> Exterior building structure

> Roofing

> Siding, windows, and doors

Mechanical, Electrical & Plumbing ($15.6 M)

> HVAC air handling equipment, ducting, and DDC climate controls

> Boilers, HVAC piping, domestic water and waste

> Refrigeration/chillers, DX, and split units

> Electrical distribution, switchgear, lighting, and controls

Grounds & Parking ($6.4 M)

> Playground equipment

> Athletic fields and tracks

> Parking lot repair and/or maintenance, and landscaping

> Stormwater and off-site issues

Building Interior ($3.0 M)

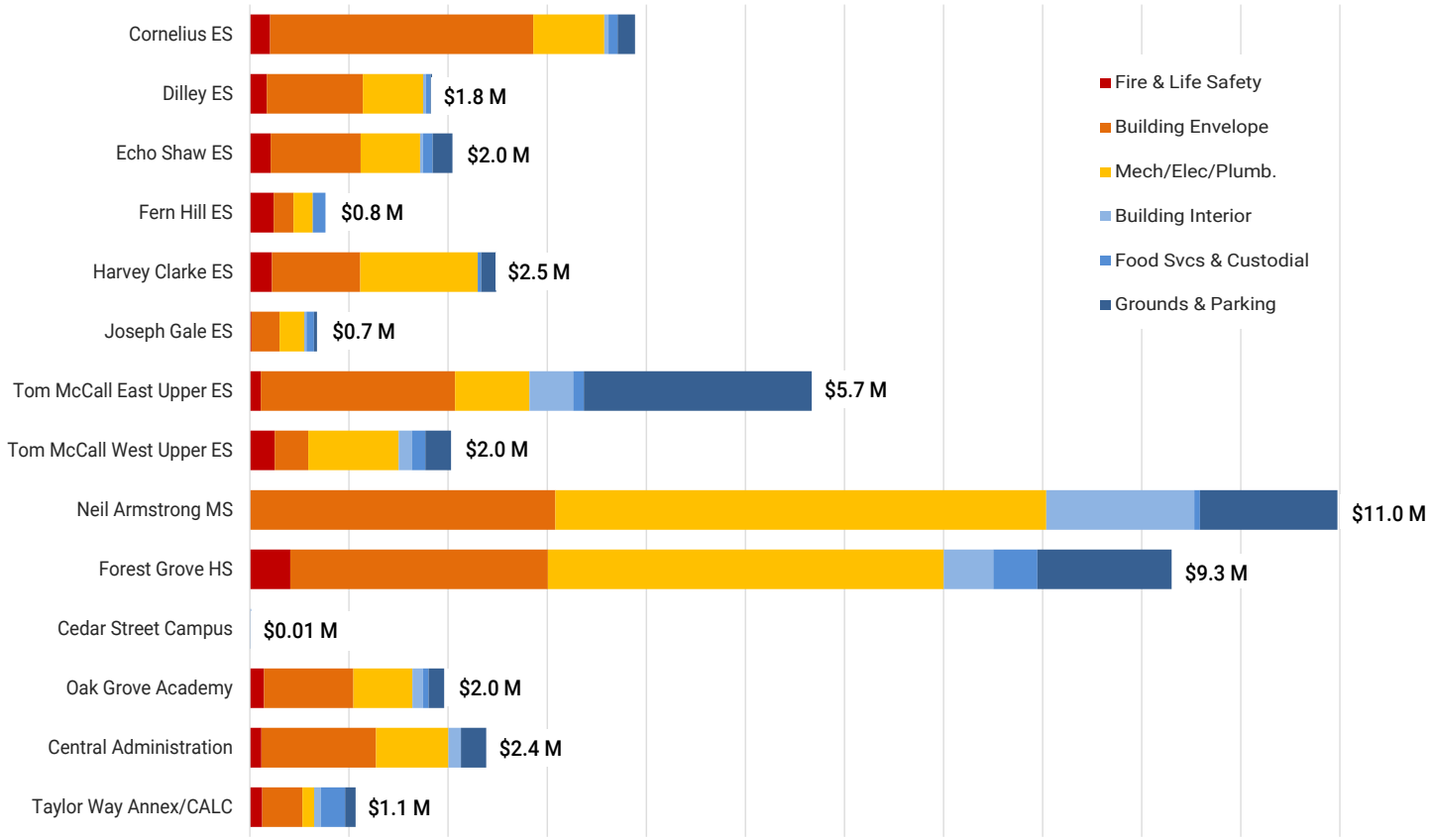
> Interior finishes and surfaces

> Interior finishes abatement

Fire & Life Safety ($2.2 M)

> Access control and perimeter security

CHART:
Total Deferred Maintenance by Facility



- > CCTV monitoring
- > Abatement (lead, air quality, asbestos)
- > Fire monitoring, paging, and egress notification
- > Sprinkler systems
- > Disaster management and emergency generators
- > ADA accommodation

Food Services & Custodial ($1.5 M)

- > Equipment, maintenance, and replacements
- > Reach-in coolers / freezers
- > Regulation-driven upgrades

Deferred maintenance costs were also evaluated by individual building. As shown in the chart above, the largest amounts of deferred maintenance need were identified at Neil Armstrong Middle School and Forest Grove High School, which are the District's two largest facilities. Of the District's six elementary schools, Cornelius had the highest deferred maintenance need, of over $3.0 million, followed by Harvey Clarke.

TECHNOLOGY & SECURITY

District staff identified technology and security needs in the District with an estimated total escalated project cost of $6.5 million. The following items should be addressed within the time frame of the Long-Range Facility Plan:

Security Surveillance and Access Control: Additions & Upgrades ($0.4 M)
The existing security camera management system and some security camera equipment throughout the District is beyond its useful life. There are areas at every District building that either do not have existing camera security and supervision coverage, or that the existing cameras do not provide adequate security and supervision coverage.

- > Replace older analog security cameras
- > Replace EOL security camera software
- > Replace EOL security camera and access control server and storage
- > Add additional security cameras

Classroom Audio-Visual Equipment: Replacement & Upgrades ($3.8 M)
The existing audio-visual (AV) equipment in District classrooms (i.e. projector and interactive whiteboard) is beyond its useful life, with most of the equipment no longer supported by the manufacturer. The existing AV cabling in the classrooms is beyond its useful life, as most modern computers, displays, and projectors no longer provide native ports that connect to the older cabling.

- > Replace EOL interactive whiteboards
- > Replace EOL projectors
- > Upgrade cabling for classroom AV equipment

Districtwide Dark Fiber Installation ($2.3 M)
The District strives to achieve the best possible balance between network performance, reliability, and expense. Objectives include an increase in network capacity to meet projected needs, with excellent reliability, all while holding costs at or below our current expenditures. The vast majority of

MAP:
Existing District Facility Locations

curriculum, applications, and critical infrastructure has become dependent on the network.

The District currently uses leased lit fiber, and the costs associated with leased lit fiber are estimated to increase, with no guarantee of network infrastructure expansion or upgrade.

Dark fiber is fiber-optic infrastructure that is not yet "lit" or put into use by a service provider. A district dark fiber network would allow integration and connectivity with a statewide fiber network that would offer increased resiliency, bandwidth, and redundancy, at lower amortized costs.

Dark fiber is an E-rate eligible service, and there is the potential for State broadband fund matching dollars for construction costs.

> Dark Fiber installation to replace Internet-service provided (i.e. Comcast) lit fiber
> Fiber would connect to the CTA/ESD fiber network

FACILITY SUMMARIES

The table on the following page summarizes basic building condition information for all District facilities, including the facility condition data discussed in this section.

The table is followed by a description summary sheets for each District facility, including site and facility information, assessment scores, and floor plan(s).

Site and Facility Information

> Construction date, site and building area data, provided by the District, is approximate
> Existing building capacity was calculated based on 23 students per classroom for elementary, 25 students per classroom for upper elementary, and 30 students per classroom for middle and high school, in alignment with District planning targets
> GSF / student (gross square foot per student) represents the total building area divided by the stated student capacity of the facility

Assessment Information

> Assessment ratings are from the 2018 Facility Condition Assessment, performed by an outside consultant
> Seismic risk assessment is from the 2006 FEMA Rapid Visual Screening by DOGAMI (high risk: greater than 10% chance of collapse in a 2,500 year event; low risk: less than 1% chance), if available
> Water quality assessment is from the 2016 testing by Indy Safety ("good" indicates all fixtures are at acceptable levels or have been addressed)
> Program accommodation assessment includes elements such as classroom size and configuration, availability of break-out/flex and support areas, access to natural light, sense of community, and ease of wayfinding

TABLE:
Facility Condition Summary

Facility	FACILITY SIZE: Site Area (Acres)	FACILITY SIZE: Building Area (Perm. GSF)	FACILITY CONDITION: Construction Date	FCI Score	Seismic Score	Water Quality	Deferred Maintenance	RECENT $: 2010 Bond Expenditure
ELEMENTARY SCHOOL								
EAST SIDE								
Cornelius ES	8.50	47,445	1945 / 1997	0.39	High	Good	$3.9 M	$0.50 M
Echo Shaw ES	9.70	54,684	1975 / 1997	0.23	High	Good	$2.0 M	$0.96 M
Fern Hill ES	12.00	49,009	2003	0.10	Low	Good	$0.8 M	$0.09 M
WEST SIDE								
Dilley ES	10.00	33,112	1942 / 1997	0.34	High	Good	$1.8 M	$0.27 M
Harvey Clarke ES	10.80	61,111	1949 / 1998	0.27	High	Good	$2.5 M	$3.89 M
Joseph Gale ES	7.50	72,515	2012	0.03	Low	Good	$0.7 M	$20.07 M
Subtotal: Elementary School	***58.50***	***317,876***					***$11.7 M***	***$25.79 M***
UPPER ELEMENTARY SCHOOL								
Tom McCall East Upper ES	28.20	81,416	'50s / 2004	0.20	Low	Good	$5.7 M	$0.19 M
Tom McCall West Upper ES	18.80	69,650	2003	0.10	Low	Good	$2.0 M	$0.22 M
Subtotal: Upper Elementary School	***47.00***	***151,066***					***$7.7 M***	***$0.40 M***
MIDDLE SCHOOL								
Neil Armstrong MS - Original Building	42.70	144,094	1970	0.28	High	Good	$11.0 M	$2.7 M
Neil Armstrong MS - 2003 Addition			2003		Mod.			
Subtotal: Middle School	***42.70***	***144,094***					***$11.0 M***	***$2.66 M***
HIGH SCHOOL								
Forest Grove HS - Original Building	77.00	362,143	1983	0.13	High/Mod.	Good	$9.3 M	$36.00 M
FGHS - 1998 Addition			1998		High			
FGHS - 2012 Addition			2012		Low			
FGHS Health Center	*incl. above*	1,870	2008		-	Good		-
Concessions Building	*incl. above*	2,170	2011		-	Good		-
Stadium Toilets	*incl. above*	1,240	'80s/2011		-	Good		-
Subtotal: High School	***77.00***	***367,423***					***$9.3 M***	***$36.00 M***
SPECIAL PROGRAMS								
CALC (@ Taylor Way)	*incl. below*	2,800	1996 / 2002	-	-	Good	*incl. below*	-
Cedar Street Campus	0.25	2,548	2010	0.01	-	Good	$0.01 M	-
Oak Grove Academy (@ Gales Creek)	5.60	24,274	1929/1948	0.34	-	Good	$2.0 M	$0.31 M
Subtotal: Special Programs	***5.60***	***24,274***					***$2.0 M***	***$0.31 M***
SUPPORT FACILITIES								
Central Administration	6.80	25,889	1931	0.32	-	Good	$2.4 M	$0.04 M
Taylor Way Support Annex	7.50	67,201	1996 / 2002	0.19	-	Good	$1.1 M	$0.09 M
Subtotal: Support Facilities	***14.30***	***93,090***					***$3.5 M***	***$0.13 M***
UNDEVELOPED PROPERTY								
Thatcher Property	16.90	-	-	-	-	-		-
McKibbin Property	30.40	-	-	-	-	-		-
David Hill Property	16.00	-	-	-	-	-		-
Subtotal: Undeveloped Property	***63.30***							
DISTRICT TOTAL	***308.40***	***1,097,823***					***$45.1 M***	***$65.3 M***

ASSESSMENT SUMMARY: CORNELIUS ELEMENTARY SCHOOL

SITE INFORMATION

Address: 200 N 14th Avenue
Cornelius, OR 97113

Site Area: 8.5 acres

Zone: MSC (Main Street Civic)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 1945 (Original)
1997 (Addition)

Building Area: 47,445 GSF

Building Capacity: 322 students (perm.)
115 students (mod.)

Area Per Student: 147 GSF

Permanent Teaching Stations: 19
> 14 General Classrooms (used to calculate capacity)
> 2 Specialized Classrooms (Music/PE)
> 3 Special Education Classrooms

Modular Teaching Stations: 5

FACILITY ASSESSMENT

FCI Score: 0.39 (Unsatisfactory)

Estimated 10-Year Deferred Maintenance: $3.9 M

Seismic Risk: High (per FEMA RVS)

Water Quality: Good

Program Accommodation: Mid / Poor

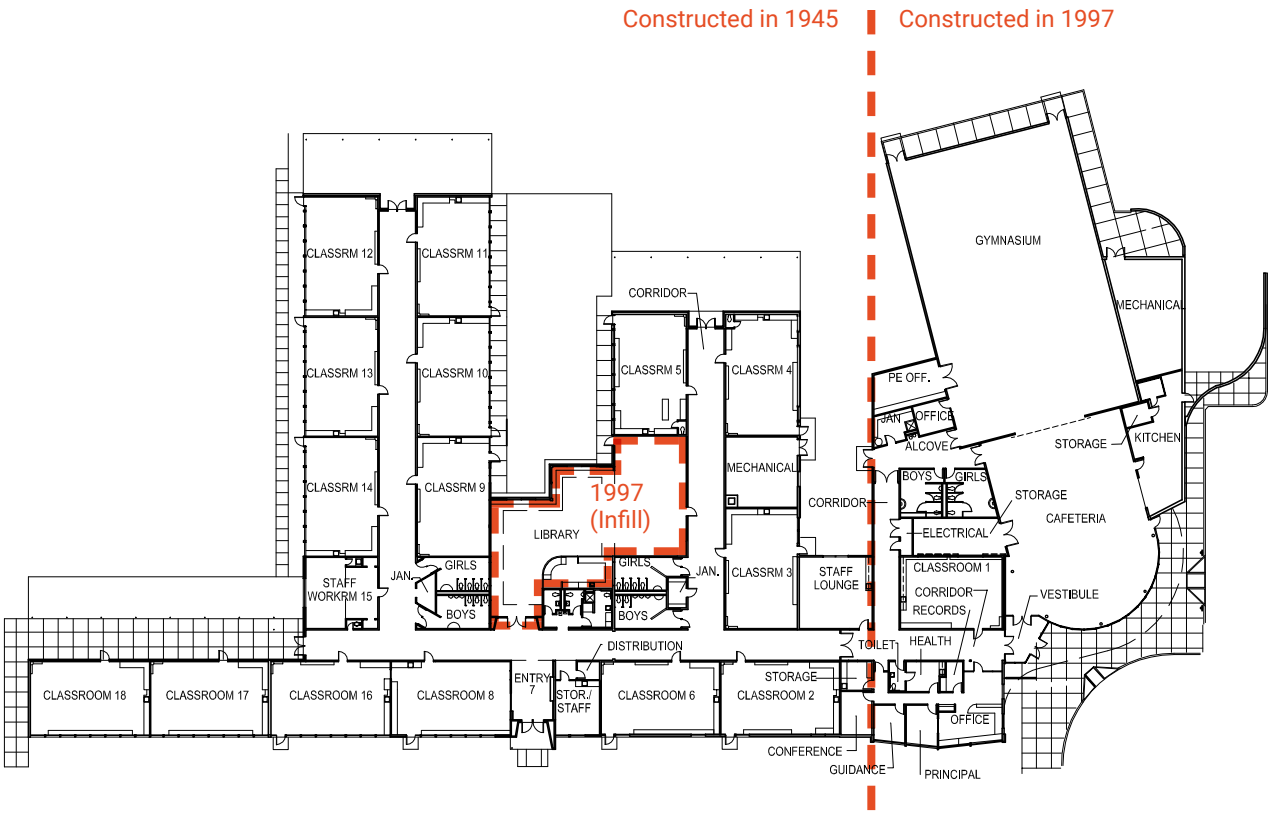
Cornelius Elementary School

Cornelius Elementary School Site

DESCRIPTION

Cornelius Elementary is a neighborhood school that currently houses approximately 360 students in kindergarten through fourth grade. This facility also has one prekindergarten classroom.

The one-story building is slab-on-grade with both wood frame and load-bearing masonry construction. About 50 percent of the building has a pitched roof with composite shingles and the remainder is three-ply built-up roofing, including the top of each of the old wings.



CORNELIUS ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN

Not to scale

(Modular buildings not shown)

ASSESSMENT SUMMARY: DILLEY ELEMENTARY SCHOOL

SITE INFORMATION

Address: 4115 SW Dilley Road Forest Grove, OR 97116

Site Area: 10.0 acres

Zone: AF-5 (Agriculture and Forest District)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 1942 (Original) 1997 (Reno./Add.)

Building Area: 33,112 GSF

Building Capacity: 230 students (perm.)

Area Per Student: 144 GSF

Permanent Teaching Stations: 12
- > 10 General Classrooms (used to calculate capacity)
- > 2 Specialized Classrooms (Music/PE)
- > 0 Special Education Classrooms

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score: 0.34 (Unsatisfactory)

Estimated 10-Year Deferred Maintenance: $1.8 M

Seismic Risk: High (per FEMA RVS)

Water Quality: Good

Program Accommodation: Mid / Poor

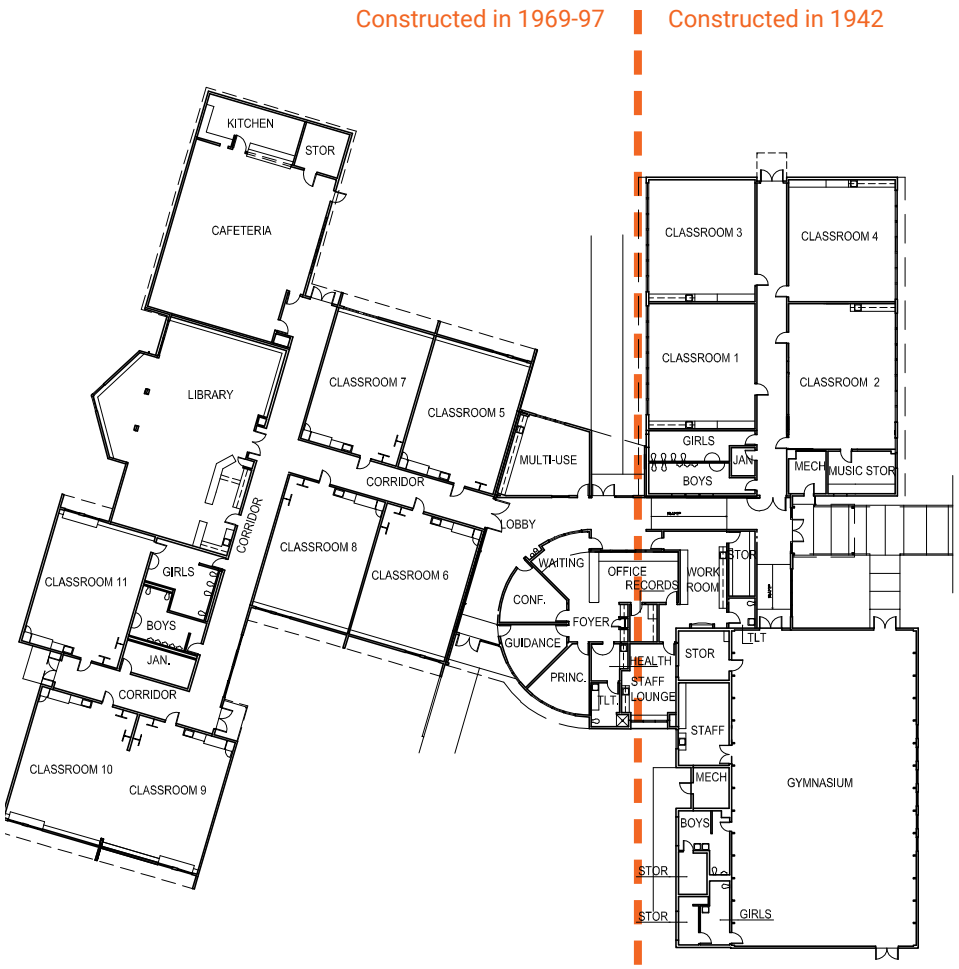
Dilley Elementary School

Dilley Elementary School Site

DESCRIPTION

Dilley Elementary is a neighborhood school that currently houses approximately 260 students in kindergarten through fourth grade.

The one-story building is slab-on-grade with wood-frame construction and a predominantly flat roof, with the exception of the vaulted gymnasium. The building is about 40 percent stucco-clad on the older portions of the building and the remaining is wood or ribbed metal siding.



DILLEY ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: ECHO SHAW ELEMENTARY SCHOOL

SITE INFORMATION

Address: 914 S. Linden Street
Cornelius, OR 97113

Site Area: 9.7 acres

Zone: R-7 (Single Family Residential)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 1975 (original)
1997 (addition)

Building Area: 54,684 GSF

Building Capacity: 447 students (perm.)

Area Per Student: 95 GSF

Permanent Teaching Stations: 22
> 19 General Classrooms (used to calculate capacity)
> 2 Specialized Classrooms (Music/PE)
> 1 Special Education Classroom

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score: 0.23 (Poor)

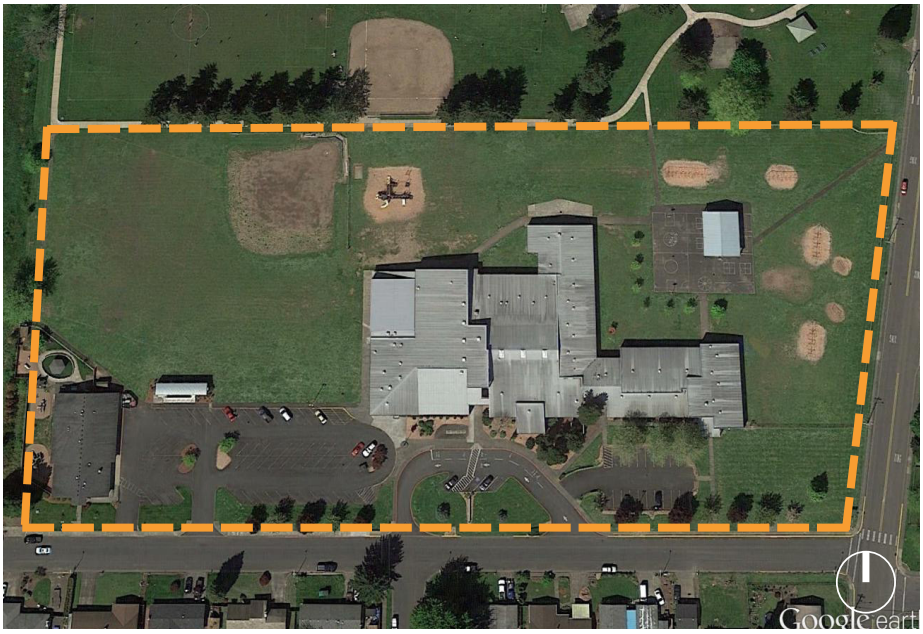
Estimated 10-Year Deferred Maintenance: $2.0 M

Seismic Risk: High (per FEMA RVS)

Water Quality: Good

Program Accommodation: Mid / Poor

Echo Shaw Elementary School

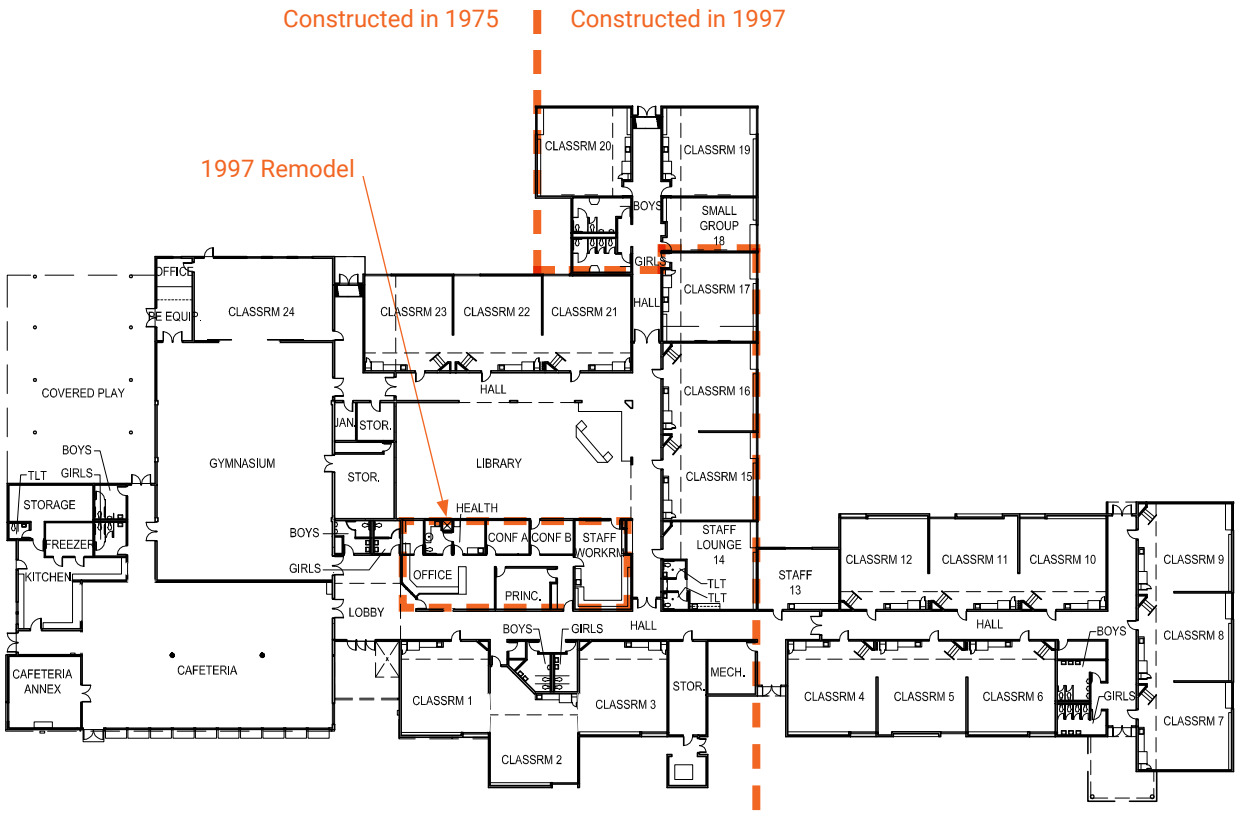


Echo Shaw Elementary School Site

DESCRIPTION

Echo Shaw Elementary is a neighborhood school that currently houses approximately 414 students in kindergarten through sixth grade. This facility also has one prekindergarten classroom.

The one-story building is slab-on-grade with reinforced concrete columns and wood-frame construction. The building is approximately 90 percent built-up roofing, with the exception of the attached covered play area and structure. The windows are original. Heating is electric and cooling is only provided in the administration area.



ECHO SHAW ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: FERN HILL ELEMENTARY SCHOOL

SITE INFORMATION

Address: 4445 Heather Street Forest Grove, OR 97116

Site Area: 12.0 acres

Zone: R-7 (Single Family Residential)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 2003 (Original)

Building Area: 49,009 GSF

Building Capacity: 345 students (perm.) (Expandable to 500+/-)

Area Per Student: 142 GSF

Permanent Teaching Stations: 18

> 15 General Classrooms (used to calculate capacity)

> 2 Specialized Classrooms (Music/PE)

> 1 Special Education Classroom

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score: 0.10 (Fair)

Estimated 10-Year Deferred Maintenance: $0.8 M

Seismic Risk: Low (per FEMA RVS)

Water Quality: Good

Program Accommodation: Mid

Note: Fern Hill was designed for a second floor classroom addition, however logistics involving construction over occupied classrooms and seismic requirements should be considered.

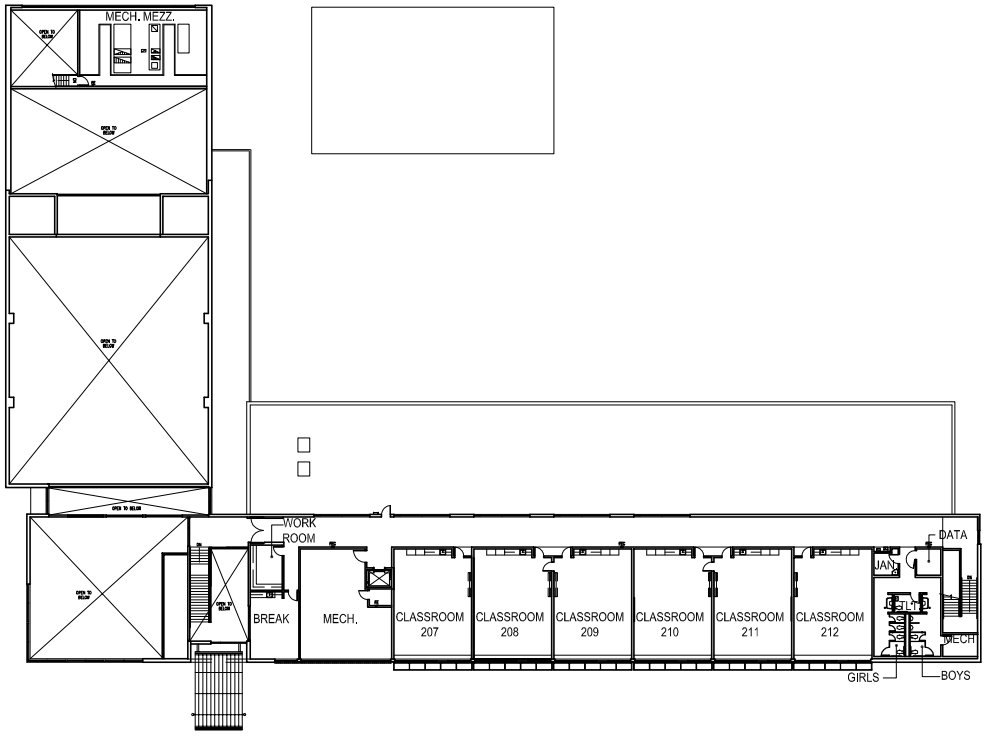
Fern Hill Elementary School

Fern Hill Elementary School Site

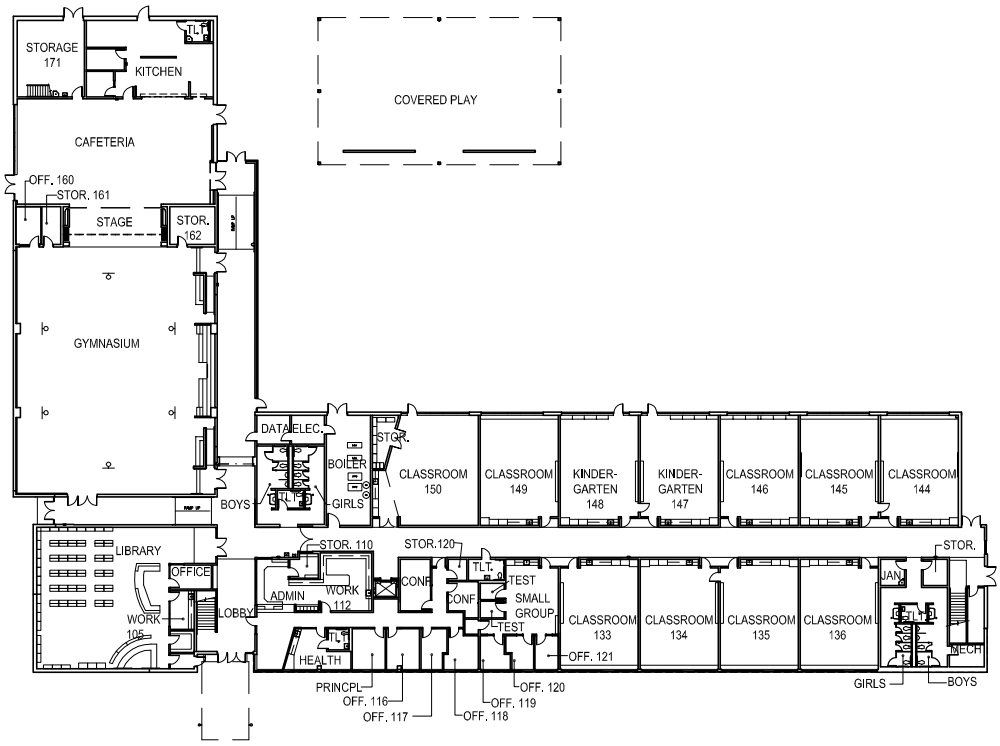
DESCRIPTION

Fern Hill Elementary is a neighborhood school that currently houses approximately 260 students in kindergarten through fourth grade. This facility also has one prekindergarten classroom. Fern Hill is located adjacent to Neil Armstrong Middle School, with shared use of some site areas.

The two-story building is primarily steel and load-bearing masonry construction, with a flat roof. Windows are double-glazed. Heating is via condensing boilers and cooling is only provided in the administration area.



FERN HILL ELEMENTARY SCHOOL: EXISTING SECOND FLOOR PLAN
Not to scale



FERN HILL ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: HARVEY CLARKE ELEMENTARY SCHOOL

SITE INFORMATION

Address: 2516 B Street
Forest Grove, OR
97116

Site Area: 10.8 acres

Zone: R-7 (Single Family Residential)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 1949 (Original)
1998 (Addition)
2010 (Addition)

Building Area: 61,111 GSF

Building Capacity: 460 students (perm.)
46 students (mod.)

Area Per Student: 133 GSF

Permanent Teaching Stations: 25
> 20 General Classrooms (used to calculate capacity)
> 2 Specialized Classrooms (Music/PE)
> 3 Special Education Classrooms

Modular Teaching Stations: 2

FACILITY ASSESSMENT

FCI Score: 0.27 (Poor)

Estimated 10-Year Deferred Maintenance: $2.5 M

Seismic Risk: High (per FEMA RVS), except 2010 addition per code

Water Quality: Good

Program Accommodation: Mid / Poor

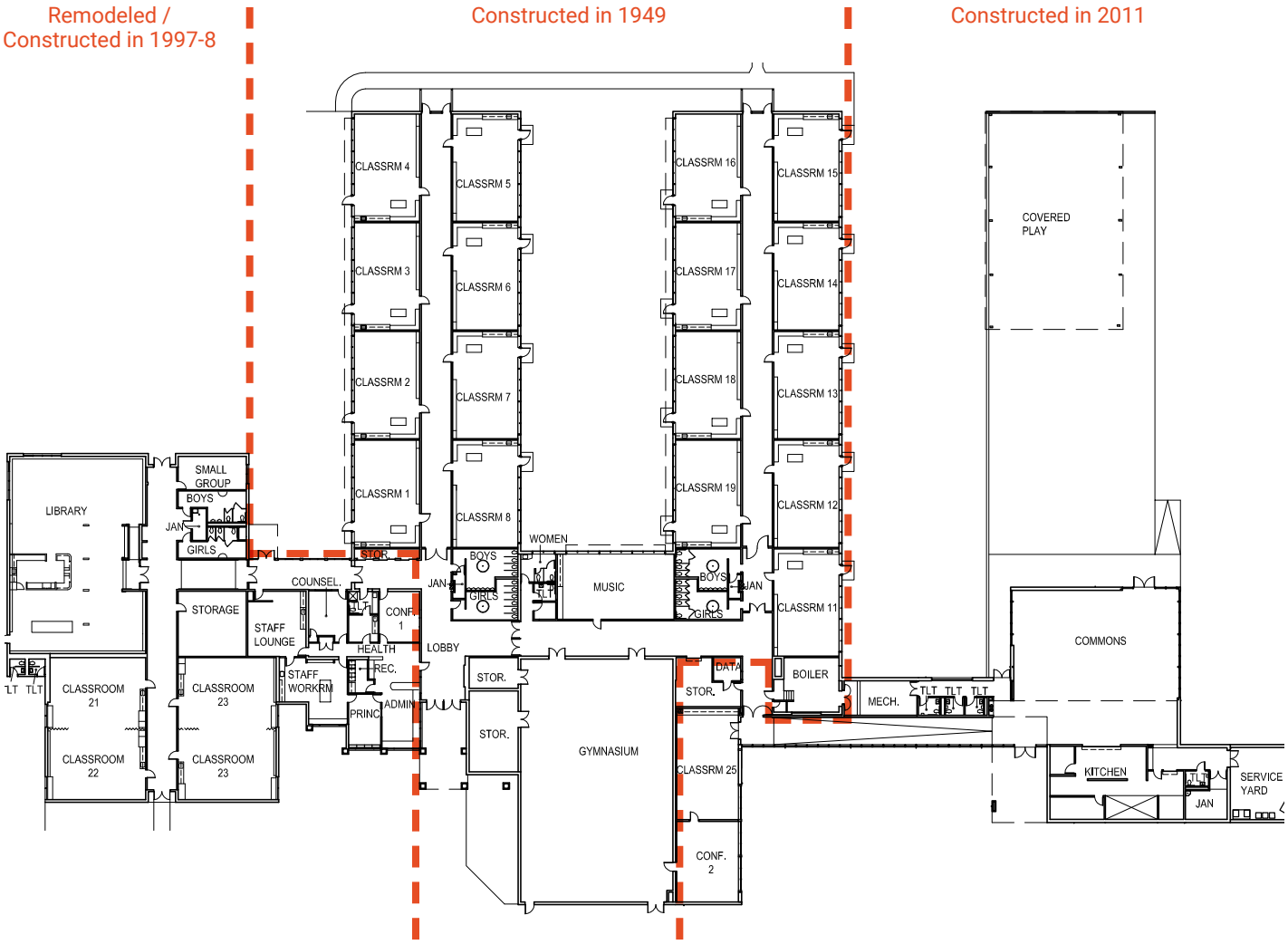
Harvey Clarke Elementary School

Harvey Clarke Elementary School Site

DESCRIPTION

Harvey Clarke Elementary is a neighborhood school that currently houses approximately 480 students in kindergarten through fourth grade.

The one-story building is primarily wood-frame construction, with load-bearing masonry at the gymnasium. The roof is approximately 80 percent built-up asphalt, with standing ribbed metal on the gymnasium barrel roof. Some windows are original, including glass block infill, and some are still original single-glazed.



HARVEY CLARKE ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN

Not to scale

(Modular building not shown)

ASSESSMENT SUMMARY: JOSEPH GALE ELEMENTARY SCHOOL

SITE INFORMATION

Address:	3130 18th Avenue Forest Grove, OR 97116
Site Area:	7.5 acres
Zone:	R-7 (Single Family Residential)
100-Year Flood Plain:	No

FACILITY INFORMATION

Construction Date: 2012

Building Area:	72,515 GSF
Building Capacity:	483 students (perm.) 46 students (mod.)
Area Per Student:	150 GSF

Permanent Teaching Stations: 27

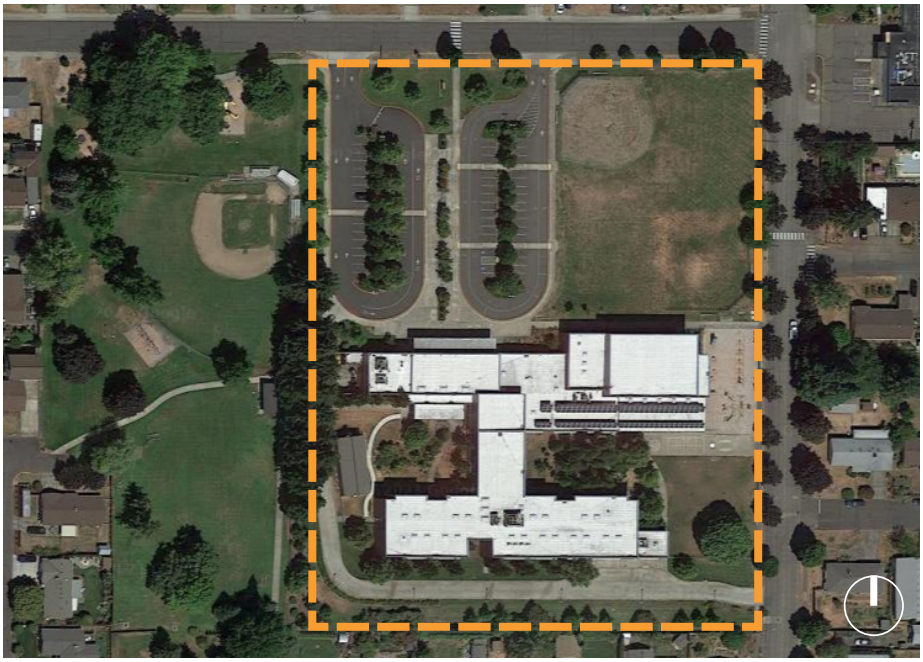
- 21 General Classrooms (used to calculate capacity)
- 2 Specialized Classrooms (Music/PE)
- 4 Special Education Classrooms

Modular Teaching Stations: 2

FACILITY ASSESSMENT

FCI Score:	0.03 (Good)
Estimated 10-Year Deferred Maintenance:	$0.7 M
Seismic Risk:	Not assessed with FEMA RVS, but assumed Low (built to current code at time of construction)
Water Quality:	Good
Program Accommodation:	Good

Joseph Gale Elementary School



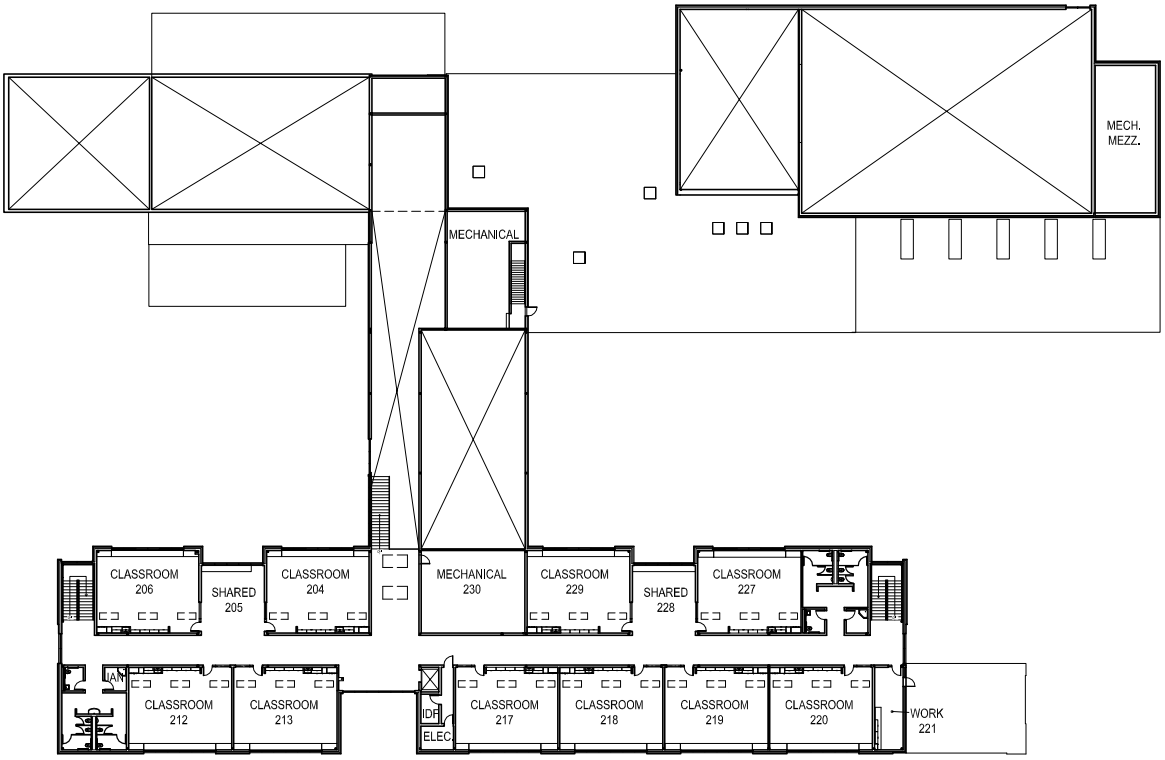
Joseph Gale Elementary School Site

DESCRIPTION

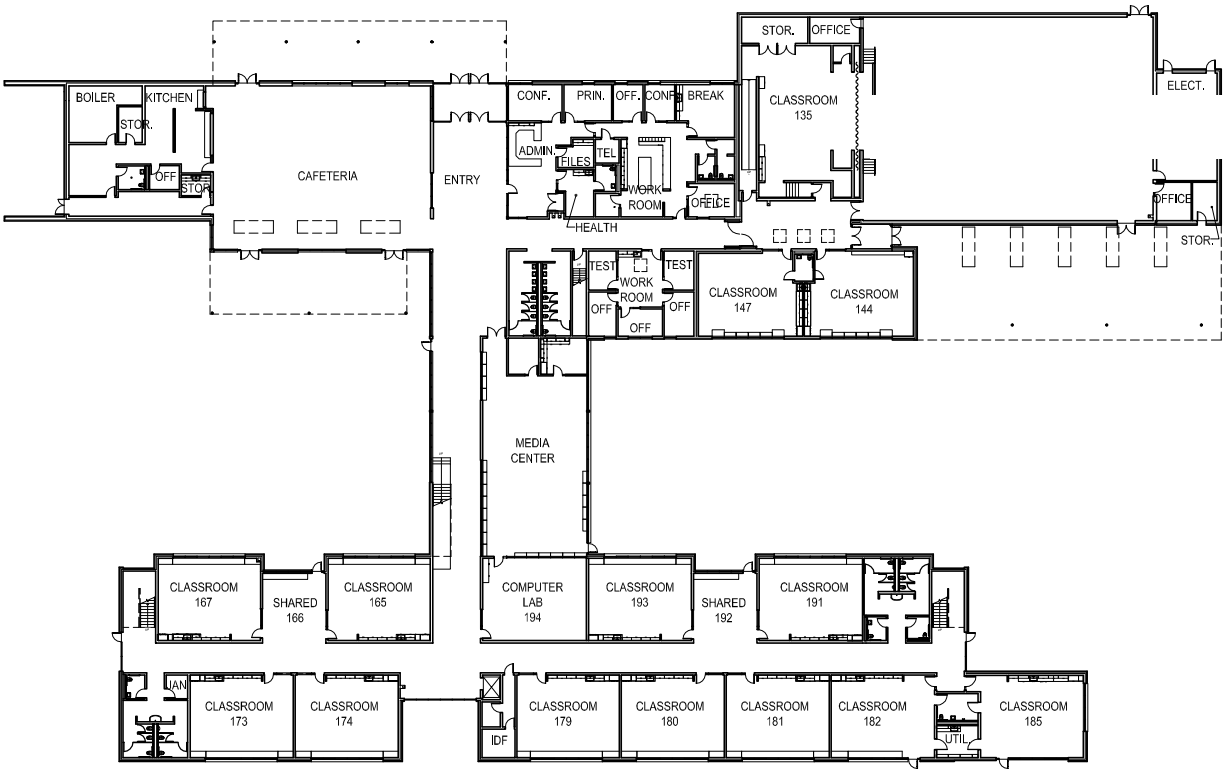
Joseph Gale Elementary is a neighborhood school that currently houses approximately 490 students in kindergarten through fourth grade.

The two-story building is primarily steel construction, with reinforced concrete at the gymnasium and a flat roof. Window systems are double-glazed throughout.

Heating system is served by condensing boilers, and there is cooling throughout.



JOSEPH GALE ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale



JOSEPH GALE ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

(Modular building not shown)

ASSESSMENT SUMMARY: TOM MCCALL EAST UPPER ELEMENTARY SCHOOL

SITE INFORMATION

Address:	1341 Pacific Avenue Forest Grove, OR 97116
Site Area:	28.2 acres
Zone:	R-7 (Single Family Residential)
100-Year Flood Plain:	No

FACILITY INFORMATION

Construction Date:	1950s (Gymnasium) 2004 (Main Building)
Building Area:	81,416 GSF
Building Capacity:	325 students
Area Per Student:	178 GSF (avg. of East & West)

Permanent Teaching Stations: 17

- 13 General Classrooms (used to calculate capacity)
- 3 Specialized Classrooms (Music/PE)
- 1 Special Education Classroom

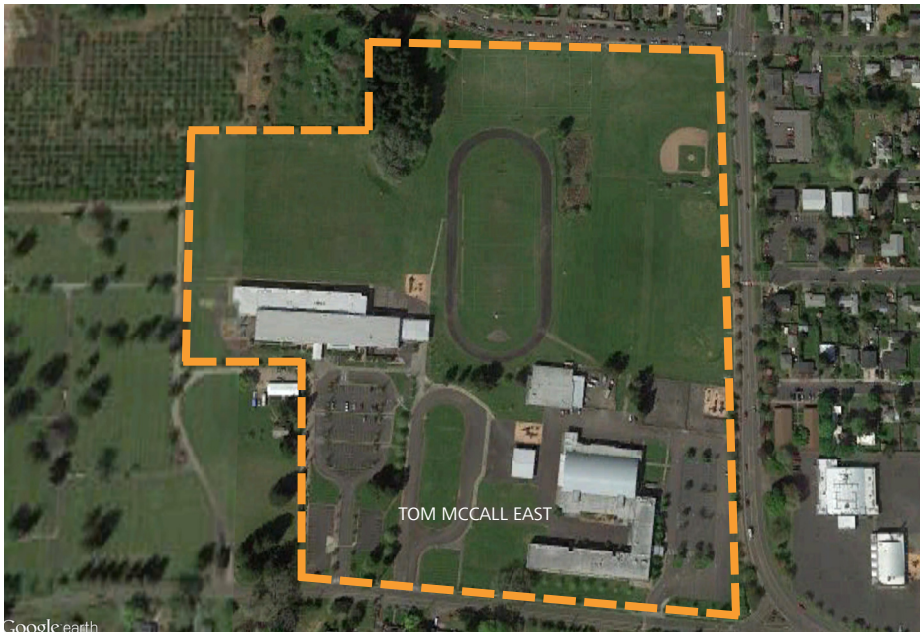
Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score:	0.20 (Poor)
Estimated 10-Year Deferred Maintenance:	$5.7 M
Seismic Risk:	High (gym only), per FEMA RVS, but seismic upgrade has since been completed; all other areas assumed Low (built to current code at time of construction)
Water Quality:	Good
Program Accommodation:	Mid

Note: Tom McCall East was designed for a classroom addition.

Tom McCall East Upper Elementary School

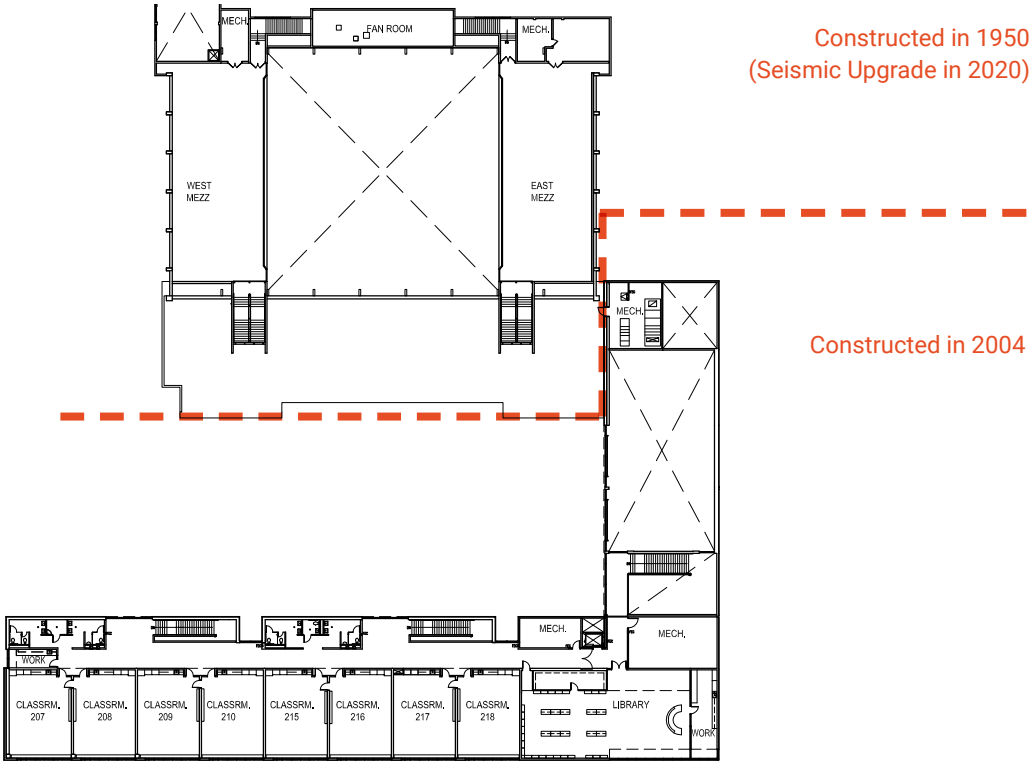


Tom McCall East & West Upper Elementary School Site

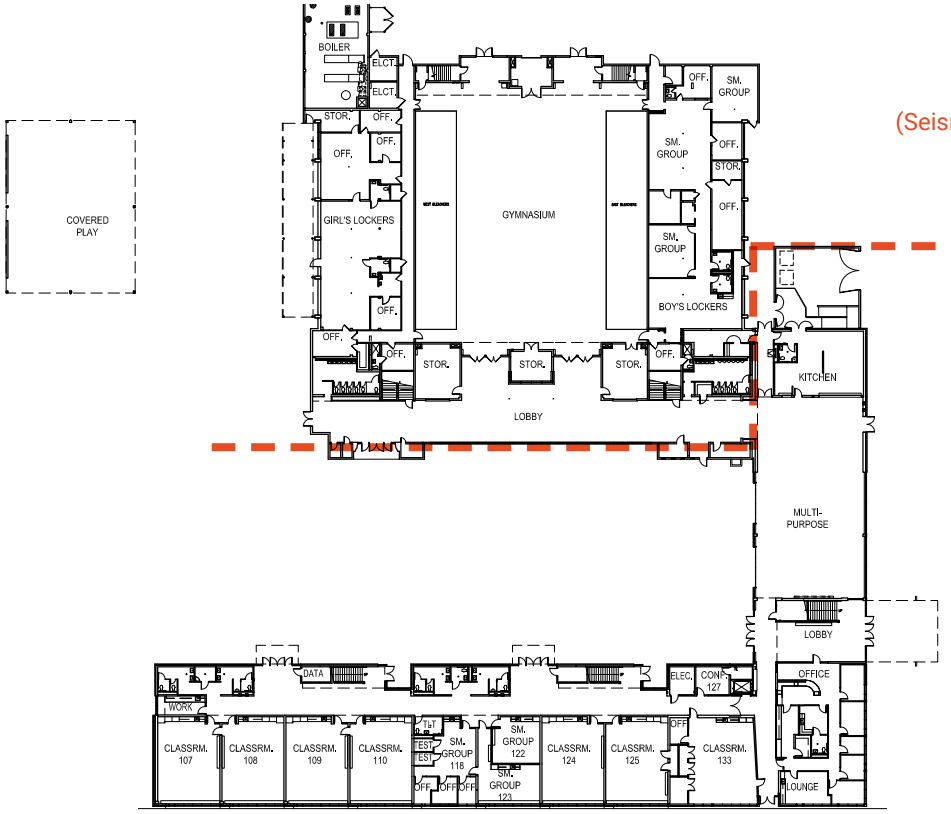
DESCRIPTION

Tom McCall East Upper Elementary is one of two buildings on the site that together house the majority of the District's fifth and sixth grade students. Currently there is a combined total of approximately 780 students in both facilities. The facility consists of an original gymnasium, built in the 1950s, and a newer two-story building that is steel and wood construction.

The Tom McCall East gymnasium was seismically upgraded to Immediate Occupancy in the summer of 2020, which is not reflected in the FCI and seismic scores.



TOM MCCALL EAST UPPER ELEMENTARY SCHOOL: EXISTING SECOND FLOOR PLAN
Not to scale



TOM MCCALL EAST UPPER ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: TOM MCCALL WEST UPPER ELEMENTARY SCHOOL

SITE INFORMATION

Address:	1341 Pacific Avenue Forest Grove, OR 97116
Site Area:	18.8 acres
Zone:	R-7 (Single Family Residential)
100-Year Flood Plain:	No

FACILITY INFORMATION

Construction Date: 2003

Building Area:	69,650 GSF
Building Capacity:	525 students
Area Per Student:	178 GSF (avg. of East & West)

Permanent Teaching Stations: 25

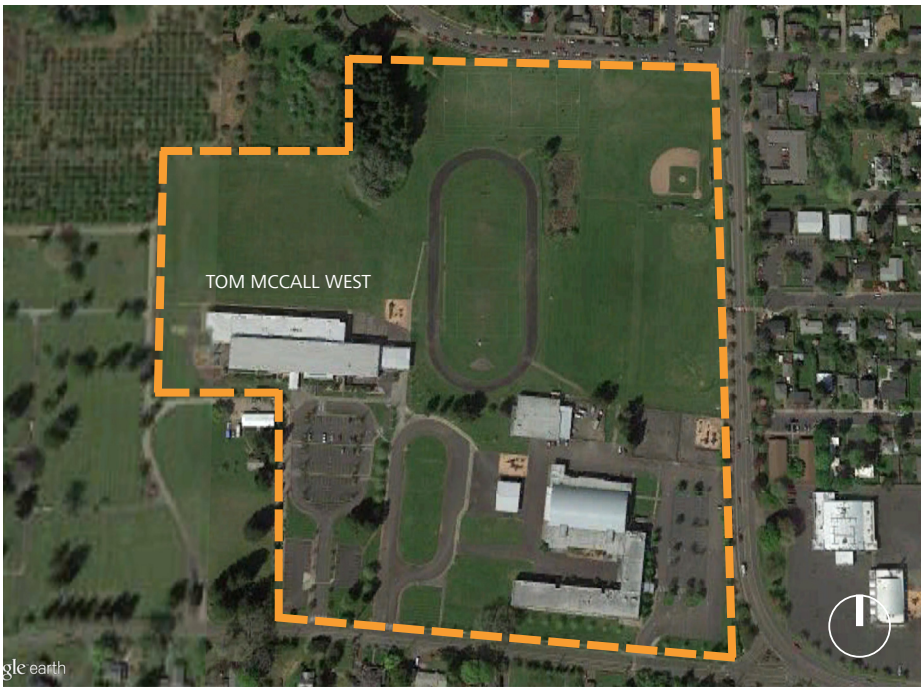
- 21 General Classrooms (used to calculate capacity)
- 2 Specialized Classrooms (Music/PE)
- 2 Special Education Classrooms

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score:	0.10 (Fair)
Estimated 10-Year Deferred Maintenance:	$2.0 M
Seismic Risk:	Not assessed with FEMA RVS, but assumed Low (built to current code at time of construction)
Water Quality:	Good
Program Accommodation:	Mid

Tom McCall West Upper Elementary School

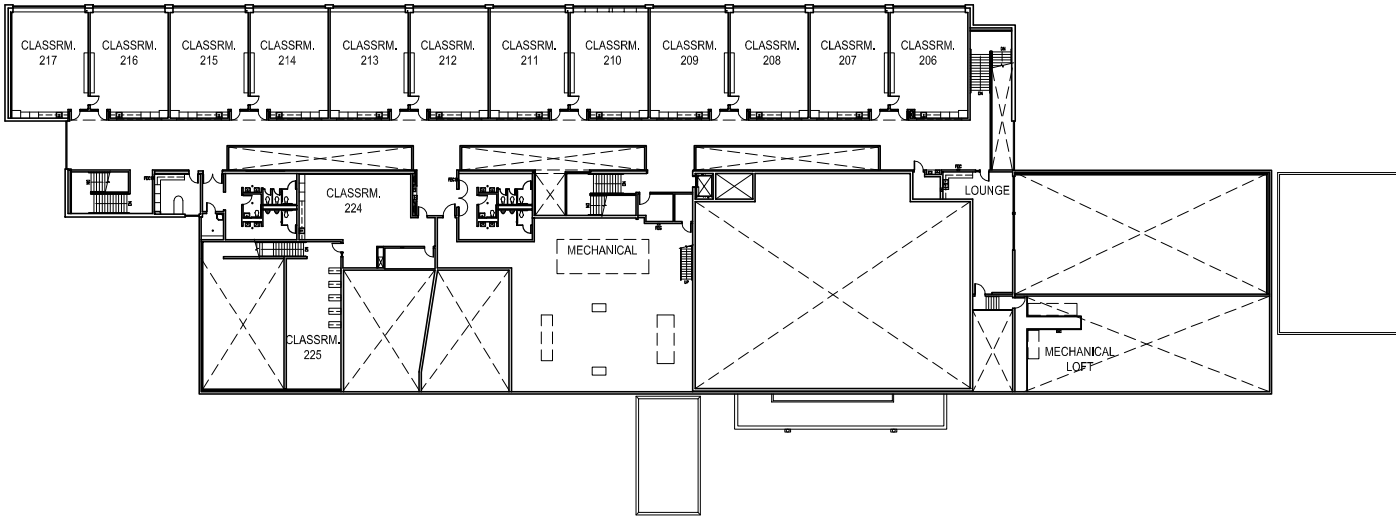


Tom McCall East & West Upper Elementary School Site

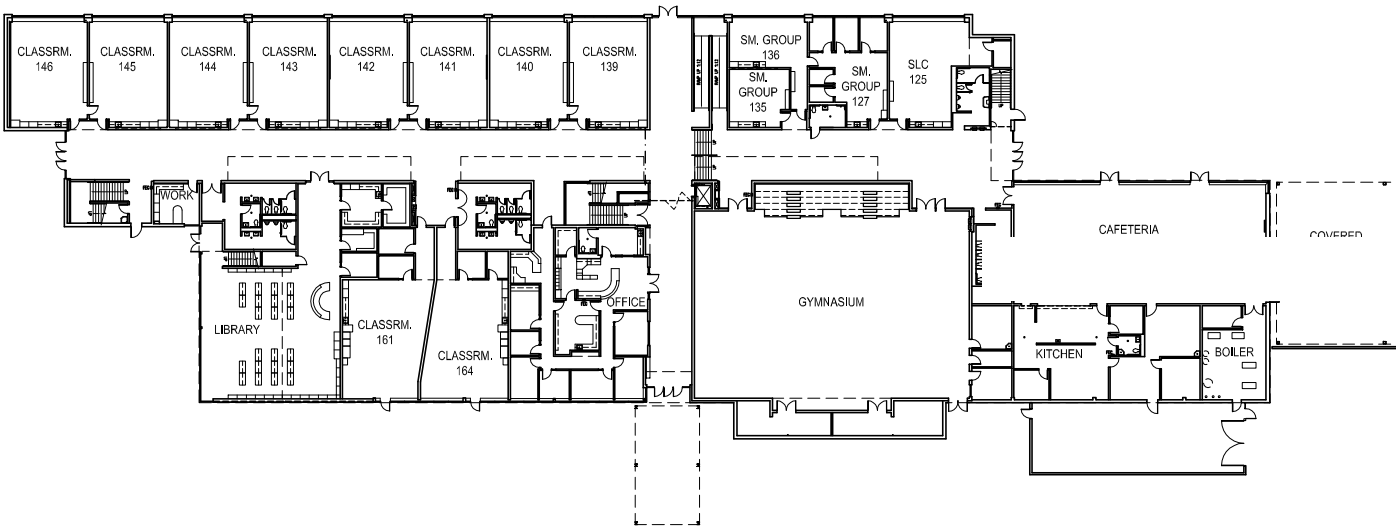
DESCRIPTION

Tom McCall West Upper Elementary is one of two buildings on the site that together house the majority of the District's fifth and sixth grade students. Currently there is a combined total of approximately 780 students in both facilities.

The two-story building is structural steel construction, with load-bearing masonry at the gymnasium. It has a built-up roof and double-glazed windows.



TOM MCCALL WEST UPPER ELEMENTARY SCHOOL: EXISTING SECOND FLOOR PLAN
Not to scale



TOM MCCALL WEST UPPER ELEMENTARY SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: NEIL ARMSTRONG MIDDLE SCHOOL

SITE INFORMATION

Address: 1777 Mtn. View Lane
Forest Grove, OR
97116

Site Area: 42.7 acres

Zone: R-7 (Single Family Residential)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 1970 (Original)
1996 (Renovation)
2003 (Addition)

Building Area: 144,094 GSF

Building Capacity: 1,260 students (perm.)

Area Per Student: 114 GSF

Permanent Teaching Stations: 48
> 48 General / Specialized / Special Education Classrooms (used to calculate capacity)

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score: 0.28 (Poor)

Estimated 10-Year Deferred Maintenance: $11.0 M

Seismic Risk: High (Original) / Moderate (Addition); per FEMA RVS

Water Quality: Good

Program Accommodation: Poor

Neil Armstrong Middle School

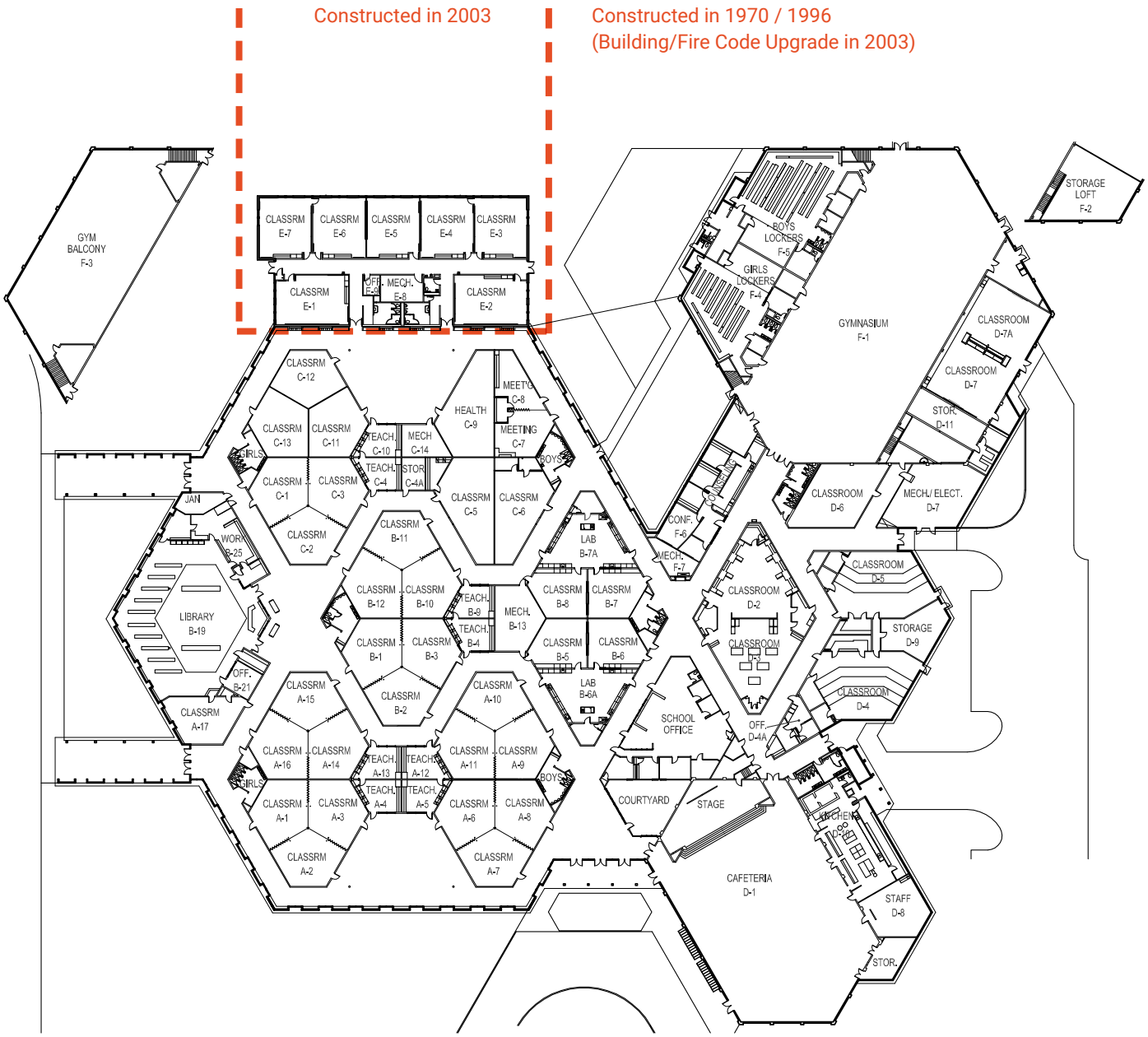
Neil Armstrong Middle School Site

DESCRIPTION

Neil Armstrong Middle School houses all of the District's seventh and eighth grade students and is located adjacent to Fern Hill Elementary School.

The one-story building is primarily tilt-up concrete construction with a built-up roof. Windows are single-glazed. The 2003 classroom addition is load-bearing masonry and has double-glazed windows.

Note: Fire code upgrade to the main building envelope, roof structure, and exterior parapet walls (excluding the gym) and interior compartmentalization was completed along with the construction, as a condition for allowing the additional square footage of the E wing.



NEIL ARMSTRONG MIDDLE SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: FOREST GROVE HIGH SCHOOL MAIN BUILDING

SITE INFORMATION

Address:	1401 Nichols Lane Forest Grove, OR 97116
Site Area:	77.0 acres
Zone:	R-7 (Single Family Residential)
100-Year Flood Plain:	No

FACILITY INFORMATION

Construction Date: 1983 (original)
1998 (addition)
2012 (addition)

Building Area: 362,143 GSF

Building Capacity: 2,183 students

Area Per Student: 166 GSF

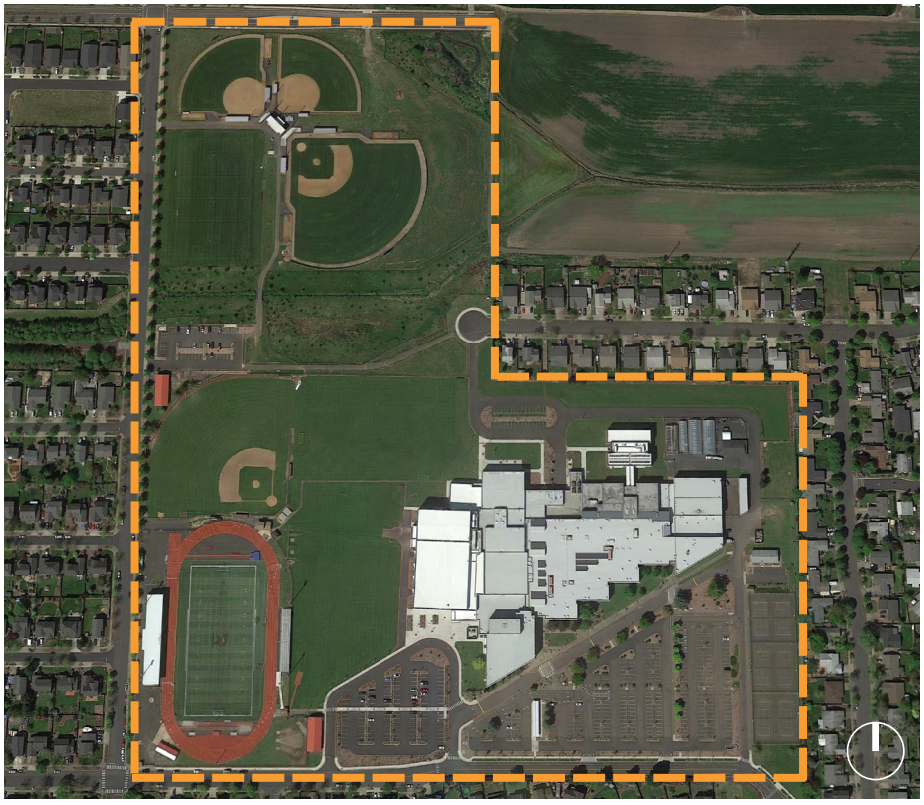
Permanent Teaching Stations: 97
> 97 General / Specialized / Special Education Classrooms (used to calculate capacity)

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score:	0.13 (Fair), combined score for all facilities
Estimated 10-Year Deferred Maintenance:	$9.3 M (all facilities)
Seismic Risk:	High /Moderate (per FEMA RVS), except 2012 assumed Low (built to current code at time of construction)
Water Quality:	Good
Program Accommodation:	Mid

Forest Grove High School

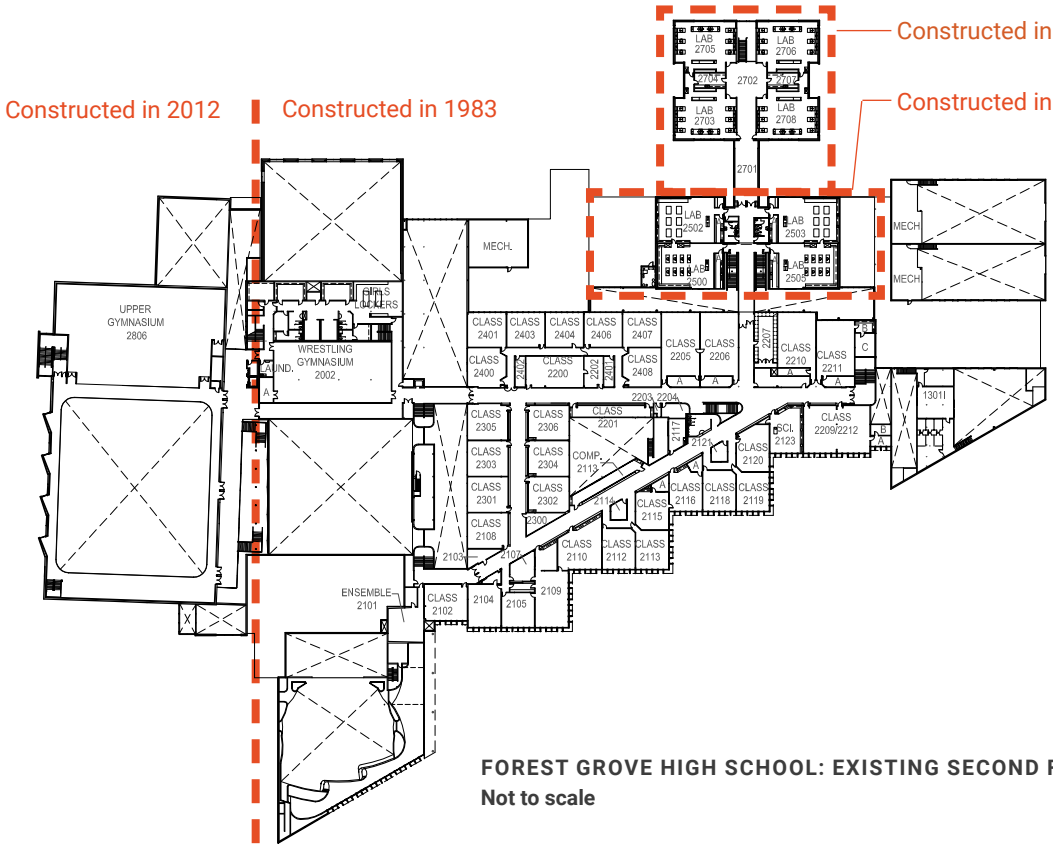


Forest Grove High School Site

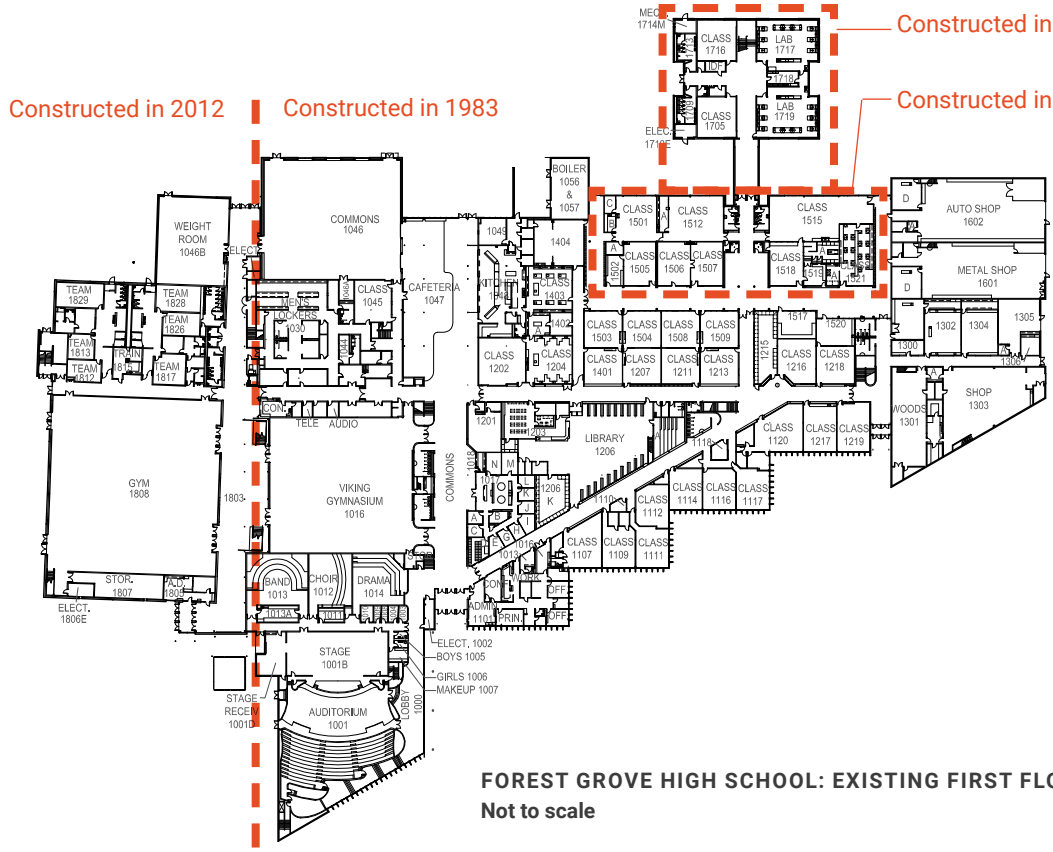
DESCRIPTION

Forest Grove High School houses all of the District's ninth through twelfth grade students, with a current enrollment of approximately 1,825 students.

The two-story building is a combination of tilt-up concrete, poured concrete and steel frame construction.



FOREST GROVE HIGH SCHOOL: EXISTING SECOND FLOOR PLAN
Not to scale



FOREST GROVE HIGH SCHOOL: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: FOREST GROVE HIGH SCHOOL SCHOOL-BASED HEALTH CENTER

SITE INFORMATION

Address:	1401 Nichols Lane Forest Grove, OR 97116
Site Area:	77.0 acres
Zone:	R-7 (Single Family Residential)
100-Year Flood Plain:	No

FACILITY INFORMATION

Construction Date: 2008

Building Area:	1,870 GSF
Building Capacity:	N/A
Area Per Student:	N/A

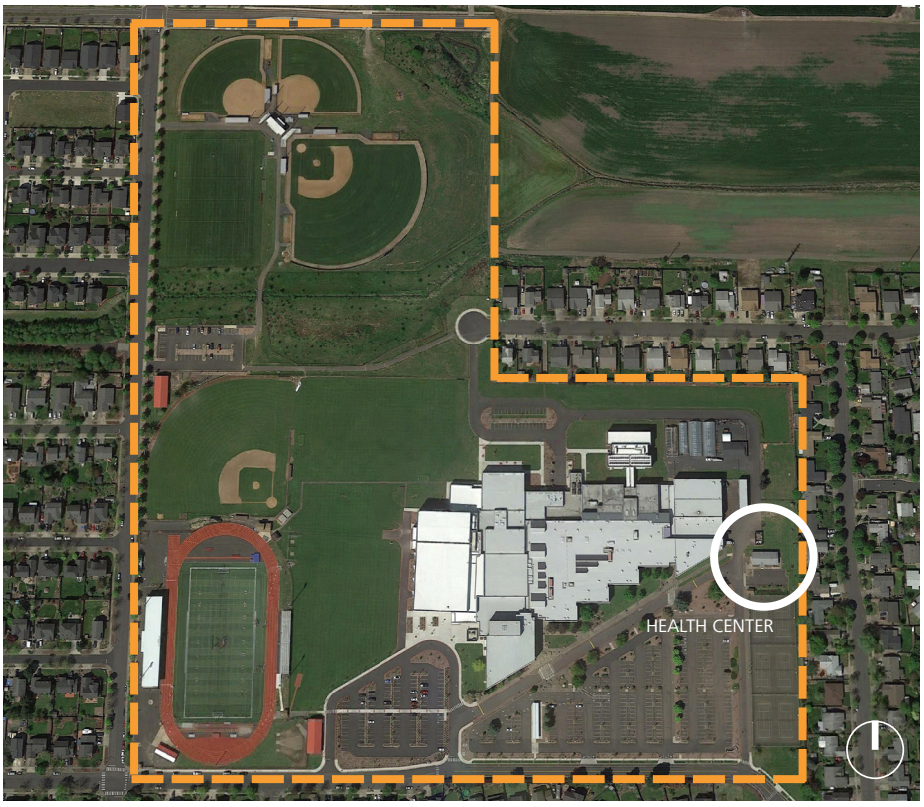
Permanent Teaching Stations: 0

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score:	0.13 (Fair), combined score for all facilities
Estimated 10-Year Deferred Maintenance:	$9.3 M (all facilities)
Seismic Risk:	Not assessed; assumed Low due to recent construction date
Water Quality:	Good
Program Accommodation:	Good

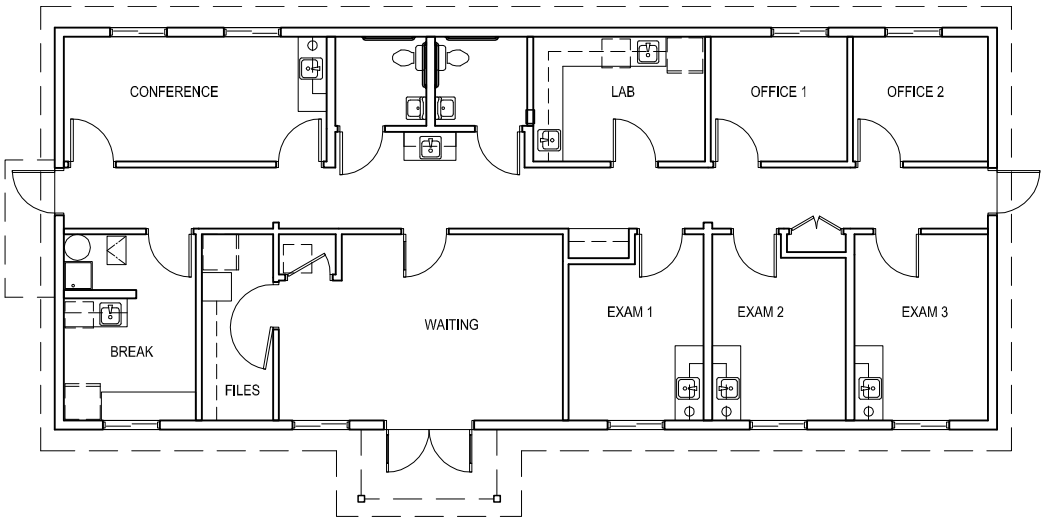
Forest Grove High School: School-Based Health Center



Forest Grove High School Site

DESCRIPTION

The School-Based Health Center is located on the east side of the Forest Grove High School site. It serves all students in the District. The one-story building is wood-frame modular construction.



SCHOOL-BASED HEALTH CENTER: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: FOREST GROVE HIGH SCHOOL STADIUM SUPPORT FACILITIES

SITE INFORMATION

Address: 1401 Nichols Lane Forest Grove, OR 97116

Site Area: 77.0 acres

Zone: R-7 (Single Family Residential)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 2011

Building Area: 2,170 GSF (Concessions) 1,240 GSF (Stadium Toilets)

Building Capacity: N/A

Area Per Student: N/A

Permanent Teaching Stations: 0

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score: 0.13 (Fair), combined score for all facilities

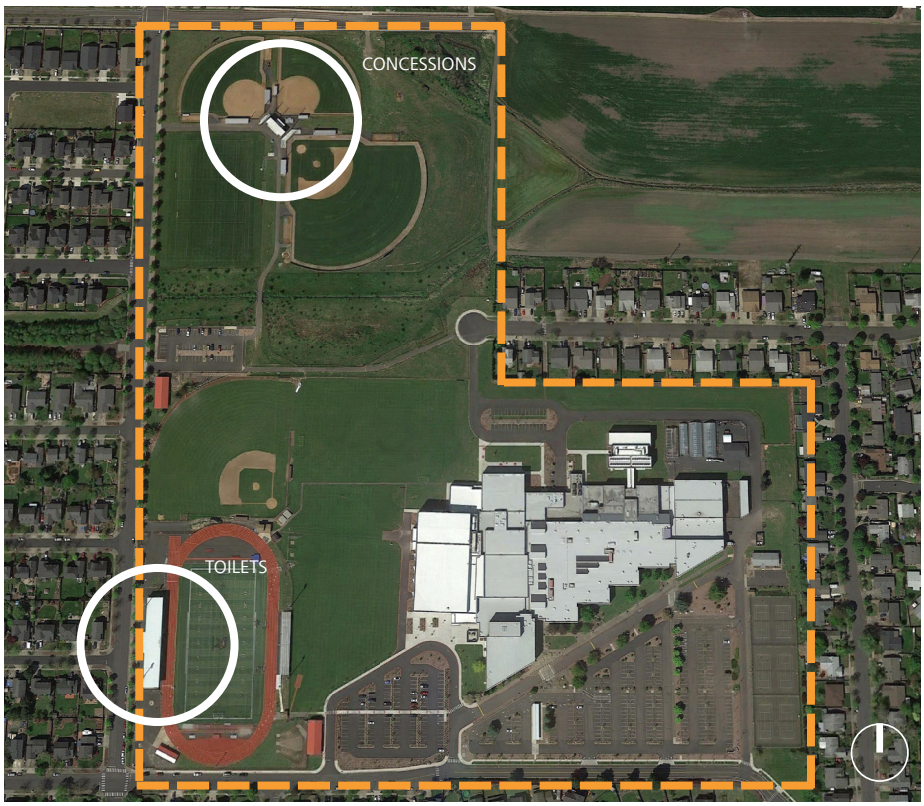
Estimated 10-Year Deferred Maintenance: $9.3 M (all facilities)

Seismic Risk: Not assessed; assumed Low due to recent construction date

Water Quality: Not assessed

Program Accommodation: Good

Forest Grove High School: Concessions Building

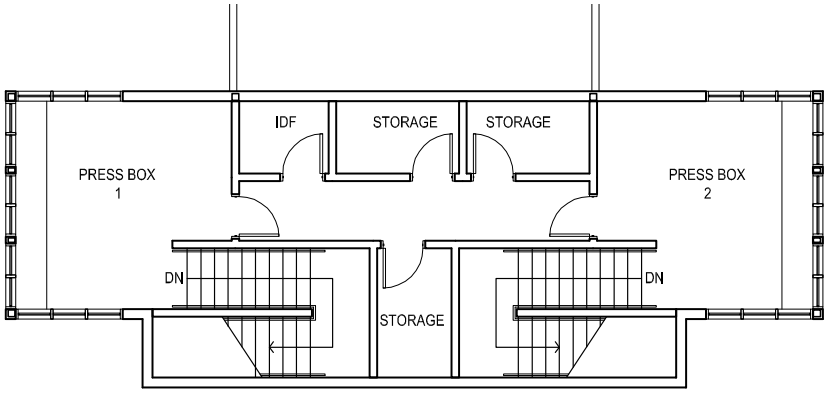


Forest Grove High School Site

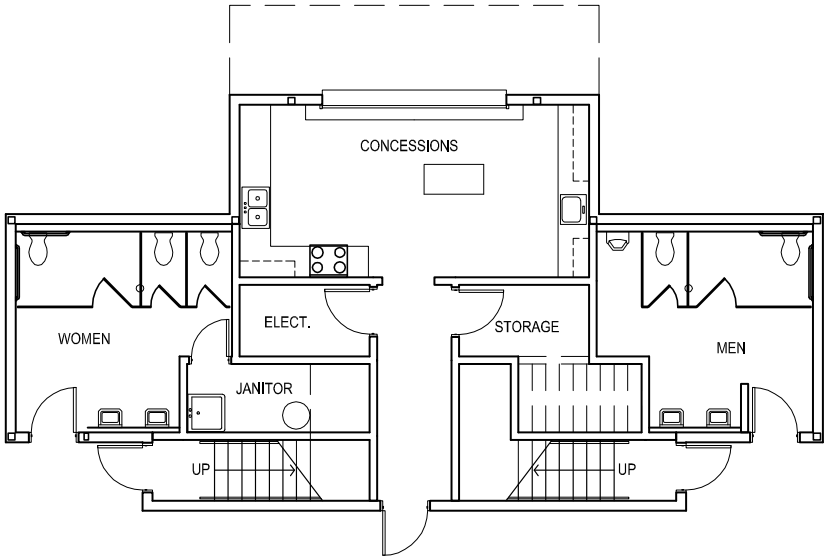
DESCRIPTION

The concessions building is located to the north of Forest Grove High School, between the sports fields. The two-story building is wood-frame construction.

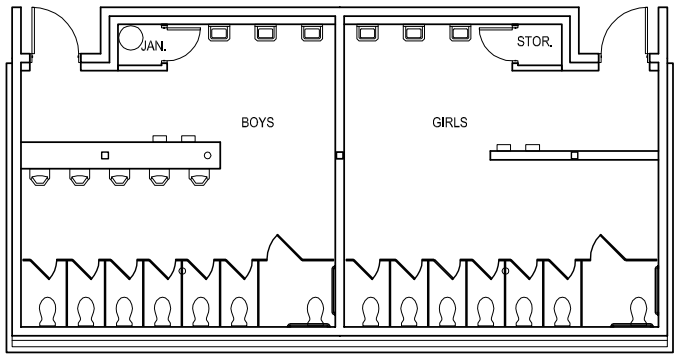
The stadium toilets are located to the southeast of the concessions building, under the adjacent bleachers. This structure is CMU construction.



CONCESSIONS BUILDING: EXISTING SECOND FLOOR PLAN
Not to scale



CONCESSIONS BUILDING: EXISTING FIRST FLOOR PLAN
Not to scale



STADIUM TOILETS: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: OAK GROVE ACADEMY AT GALES CREEK ELEMENTARY

SITE INFORMATION

Address: 9125 NW Sargent Road
Gales Creek, OR 97117

Site Area: 5.6 acres

Zone: AF-5 (Agriculture and Forest District)

100-Year Flood Plain: No

FACILITY INFORMATION

Construction Date: 1929 (Jennie Ranes Building)
1948 (Elmer Lyda Building)

Building Area: 24,274 GSF

Building Capacity: N/A
(184 if used as neighborhood school)

Area Per Student: N/A
(132 GSF if used as a neighborhood school)

Permanent Teaching Stations: 9
> 8 General / Special Education Classrooms
> 1 Library (currently used as classroom)
> 1 PE Classroom

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score: 0.34 (Unsatisfactory)

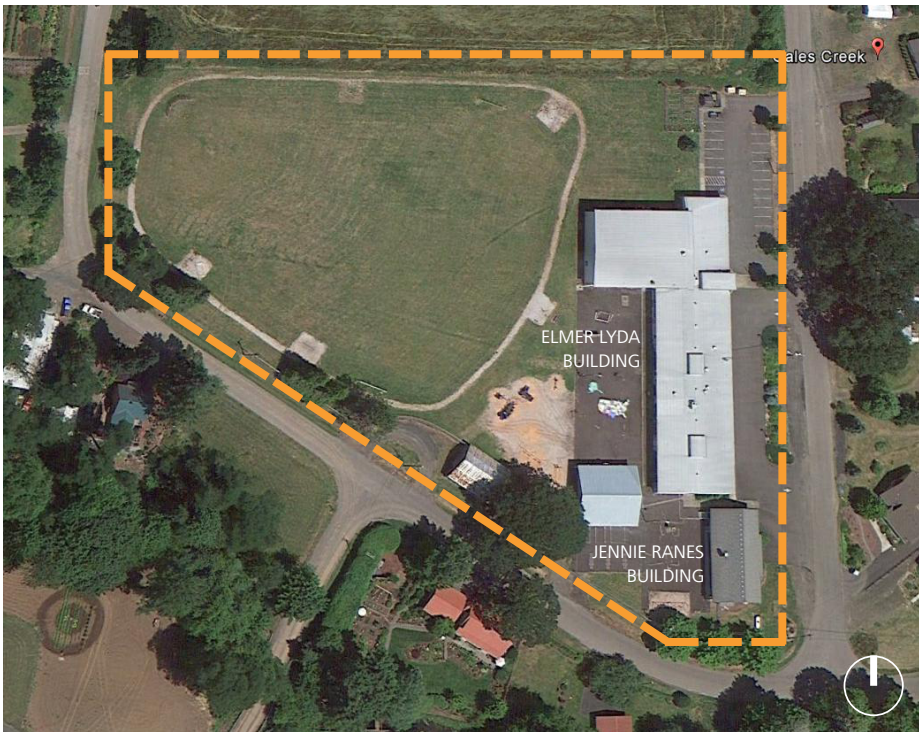
Estimated 10-Year Deferred Maintenance: $2.0 M

Seismic Risk: Not assessed; assumed High due to age of facility

Water Quality: Good

Program Accommodation: Poor

Oak Grove Academy @ Gales Creek

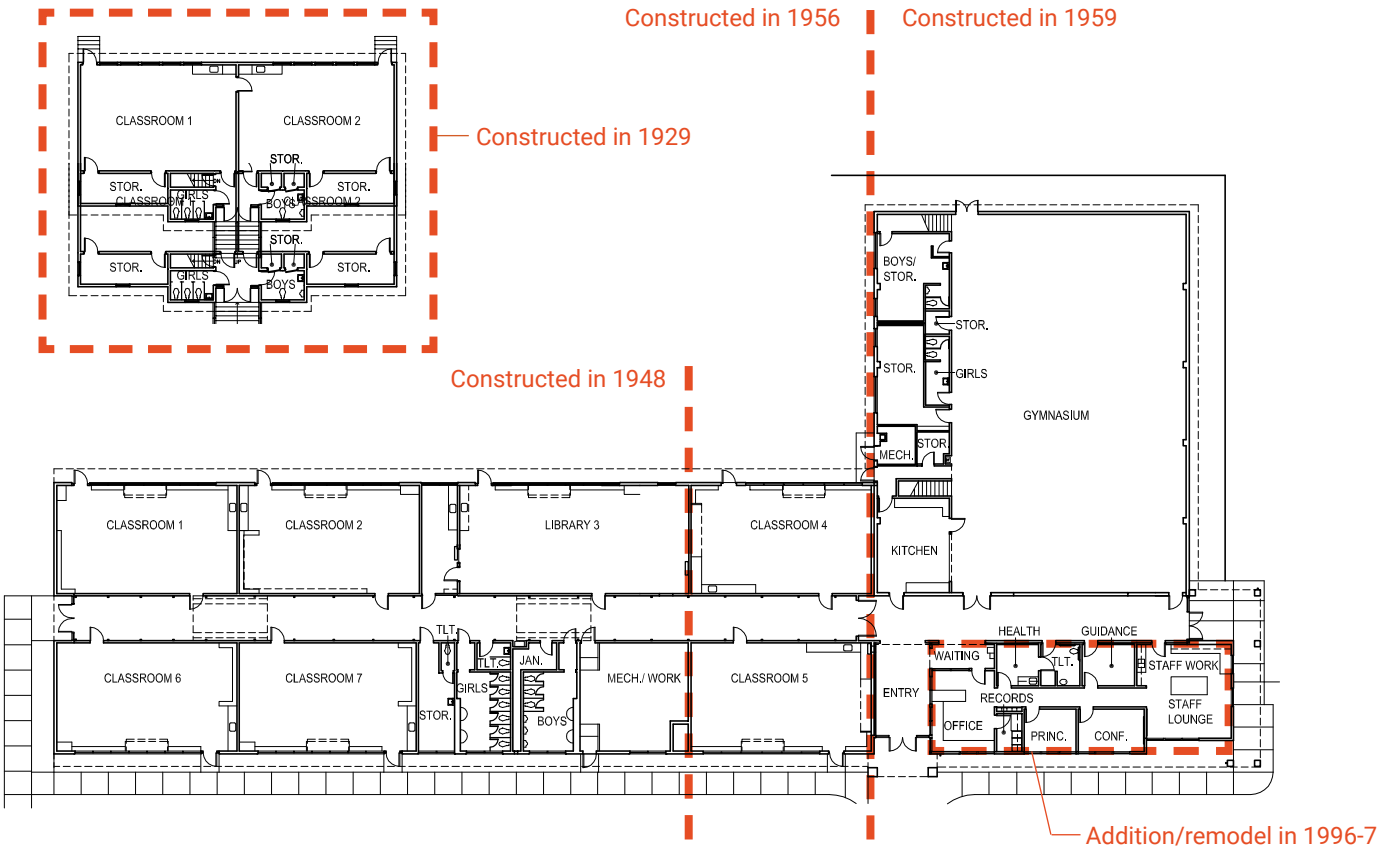


Oak Grove Academy @ Gales Creek Elementary School Site

DESCRIPTION

The Gales Creek Elementary facility is currently being used to house a portion of the Oak Grove Academy, and accommodates about 40 special education students in grades 7-12.

This facility consists of two one-story buildings. The Jennie Ranes building is a two-room building with a wood-frame construction basement. The adjacent Elmer Lyda building was originally constructed with six rooms, with additions in 1956 and 1959. It is primarily concrete block construction.



OAK GROVE ACADEMY AT GALES CREEK ELEMENTARY: EXISTING FIRST FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: CENTRAL ADMINISTRATION BUILDING

SITE INFORMATION

Address:	1728 Main Street Forest Grove, OR 97116
Site Area:	6.8 acres
Zone:	A-1 (Two-Family Residential)
100-Year Flood Plain:	No

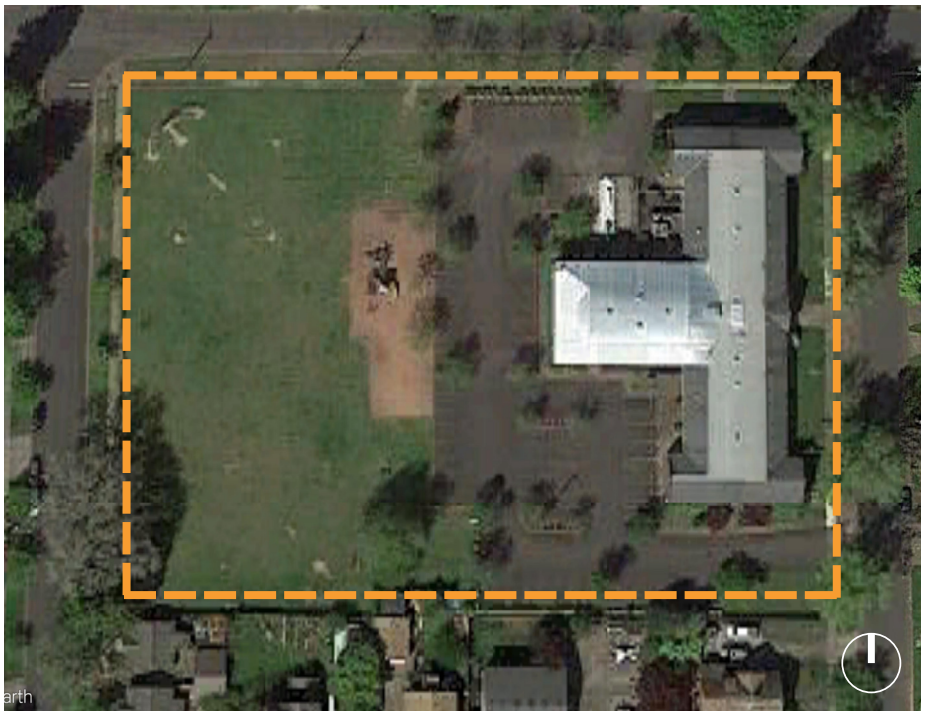
FACILITY INFORMATION

Construction Date:	1931 (original building) 1996 (major renovation)
Building Area:	25,889 GSF
Building Capacity:	N/A
Area Per Student:	N/A
Permanent Teaching Stations:	0
Modular Teaching Stations:	0

FACILITY ASSESSMENT

FCI Score:	0.32 (Unsatisfactory)
Estimated 10-Year Deferred Maintenance:	$2.4 M
Seismic Risk:	Not assessed; assumed High due to age of facility
Water Quality:	Good
Program Accommodation:	Mid

Central Administration Building



Central Administration Building Site

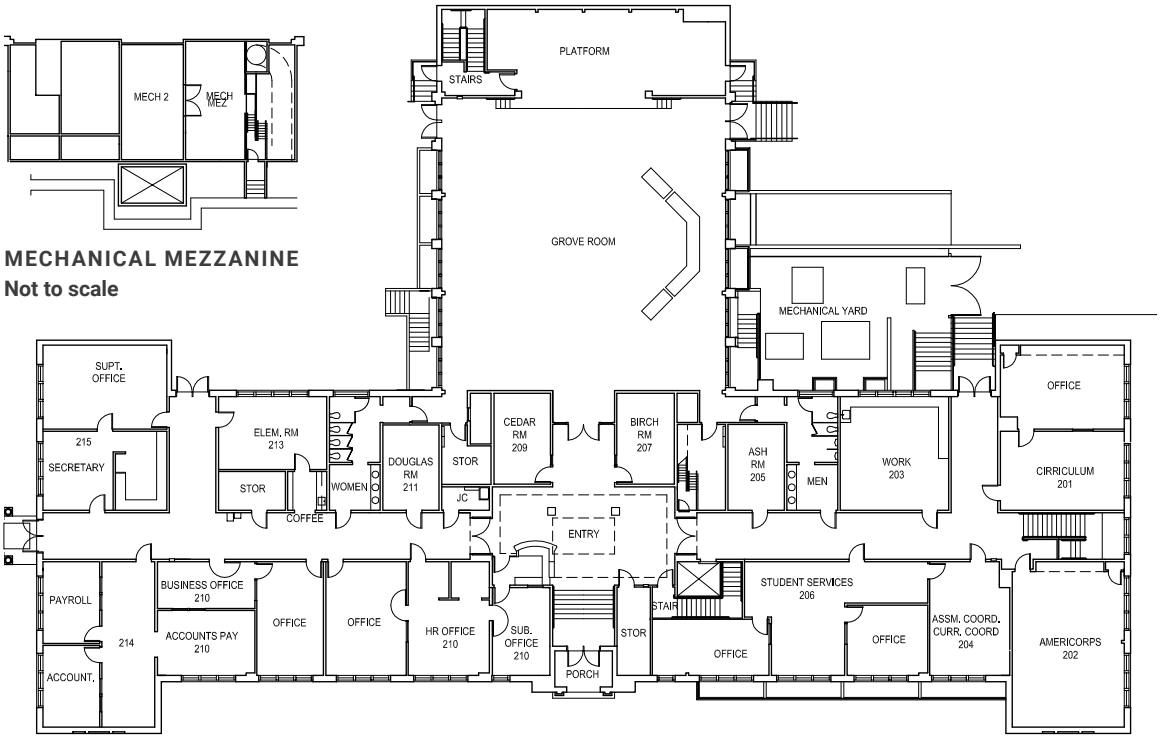
DESCRIPTION

The Central Administration building was originally used as an elementary school for the District, however due to seismic codes, student occupancy is no longer allowed. The one-story building also includes a finished basement and mechanical mezzanine.

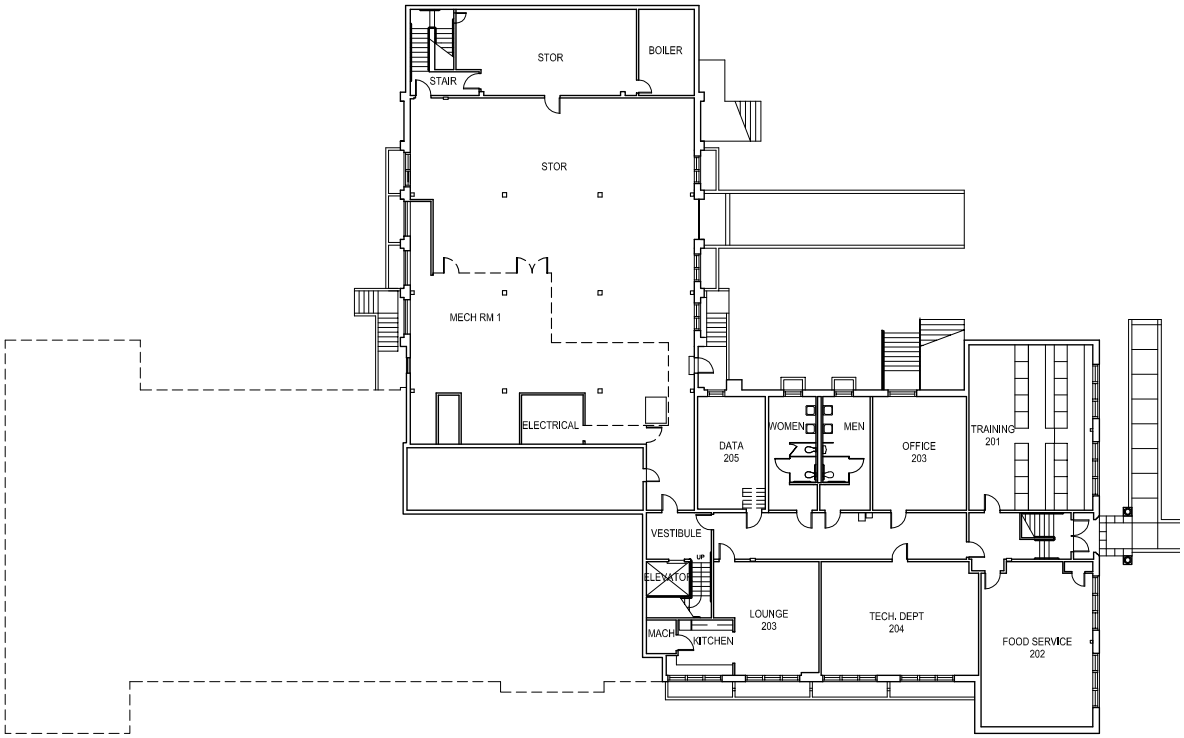
The facility is brick and concrete construction, with a low-slope and pitched roof.

Note: Although this building is not designated as a historic structure, it is in a Forest Grove historic review district and any exterior modifications to this building would require City review and approval.

MECHANICAL MEZZANINE
Not to scale



CENTRAL ADMINISTRATION BUILDING: EXISTING FIRST FLOOR PLAN
Not to scale



CENTRAL ADMINISTRATION BUILDING: EXISTING BASEMENT FLOOR PLAN
Not to scale

ASSESSMENT SUMMARY: TAYLOR WAY SUPPORT ANNEX / CALC

SITE INFORMATION

Address: 2701 Taylor Way
Forest Grove, OR
97116

Site Area: 7.5 acres

Zone: GI (General Industrial)

100-Year
Flood Plain: No

FACILITY INFORMATION

Construction Date:
1996 (original building)
2002 (renovation)

Building Area: 70,001 GSF

Building Capacity: N/A

Area Per Student: N/A

Permanent Teaching Stations: 0

Modular Teaching Stations: 0

FACILITY ASSESSMENT

FCI Score: 0.19 (Poor)

Estimated 10-Year
Deferred
Maintenance: $1.1 M

Seismic Risk: Not assessed

Water Quality: Good

Program
Accommodation: Poor (CALC)
Good (District Support)

Taylor Way Support Annex / CALC

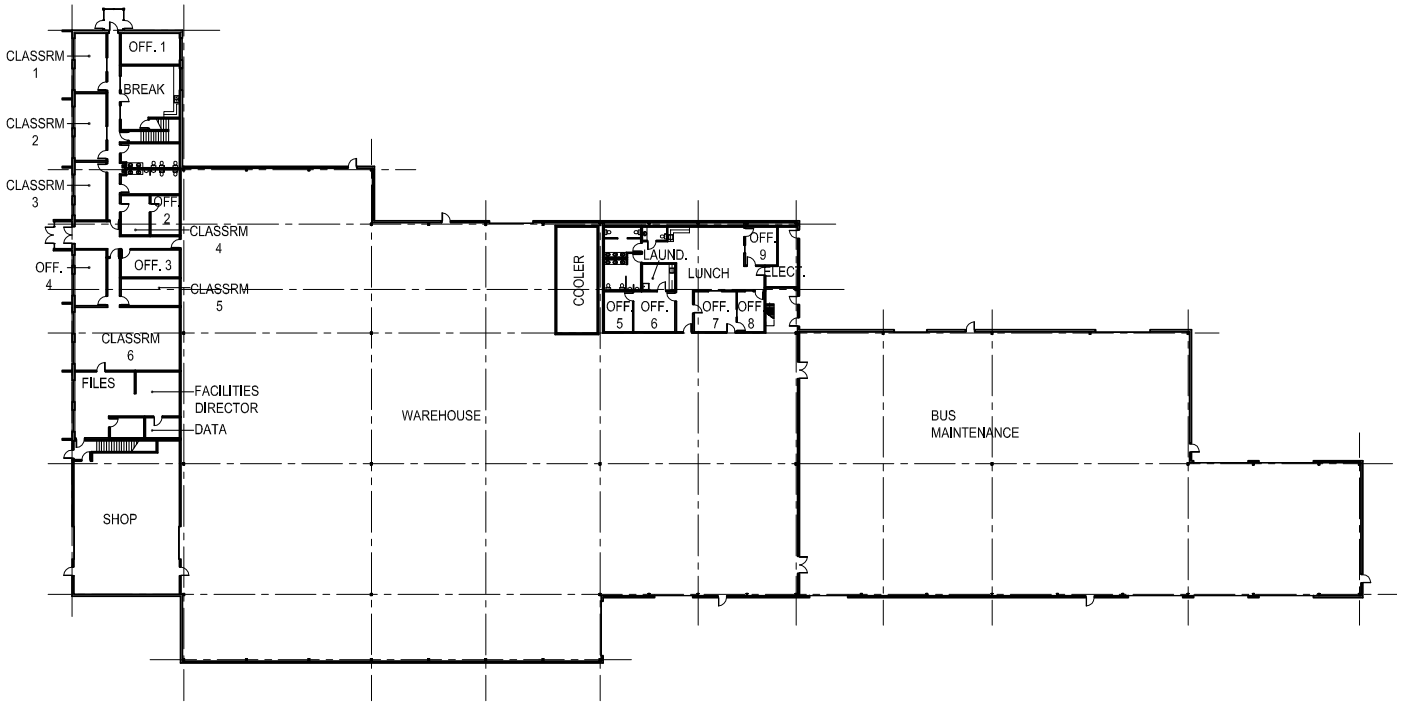
Taylor Way Support Annex / CALC Site

DESCRIPTION

The Taylor Way Support Annex houses the Community Alternative Learning Center (CALC), as well as District transportation, warehouse, maintenance, and office space.

The facility is a one-story warehouse building, with a two-story office portion on the east end that is currently being used for CALC on the first floor and not built-out on the second floor. (Note: When CALC went into the facility with a variance from the City, the square footage utilized for 'E' occupancy was restricted to the south side.)

The building is primarily metal-frame with a wood roof, with a 12,000 square foot tilt-up portion.



TAYLOR WAY SUPPORT ANNEX / CALC: EXISTING FIRST FLOOR PLAN
Not to scale

SECTION 05

ENROLLMENT & CAPACITY

One of the key tasks of the Long-Range Facility Plan is to ensure adequate space and capacity for the expected number of students in the District's desired programs, so that every student has access to a high-quality education regardless of race, class, gender, or ability.

DISTRICT CAPACITY

DETERMINING EXISTING CAPACITY

Facility capacity is a planning metric that reflects the number of students that can be accommodated in a particular building. It does not take into account specific variations in classroom sizes and configurations, and also does not signify the maximum number of students that can be accommodated in a school. The number of students actually enrolled at a school may be higher or lower than its capacity.

Facility capacity can be determined in a variety of ways. For the purposes of this Long-Range Facility Plan, capacity is determined using a classroom count method, which calculates capacity based on the actual number of classrooms or teaching stations in a school, multiplied by the target number of students per classroom and a target classroom utilization factor.

This provides a calculated capacity that is in alignment with the actual building capacity, and is consistent across schools of different ages, configurations, and program components. Special program areas are not included in the calculation at the elementary and upper elementary level, but are counted as teaching spaces at the middle and high school levels.

Updating the capacity calculations, as well as adjusting the target classroom size at the elementary level (described on the following page), resulted in capacity adjustments across the District. Overall, there was a districtwide capacity reduction of approximately 400 seats, compared to previously stated District capacities.

CAPACITY FORMULA

For purposes of the Long-Range Facility Plan, capacity is determined as follows:

Number of general classrooms (elementary schools)
or
Number of teaching stations (middle and high schools)

X

Target number of students per classroom

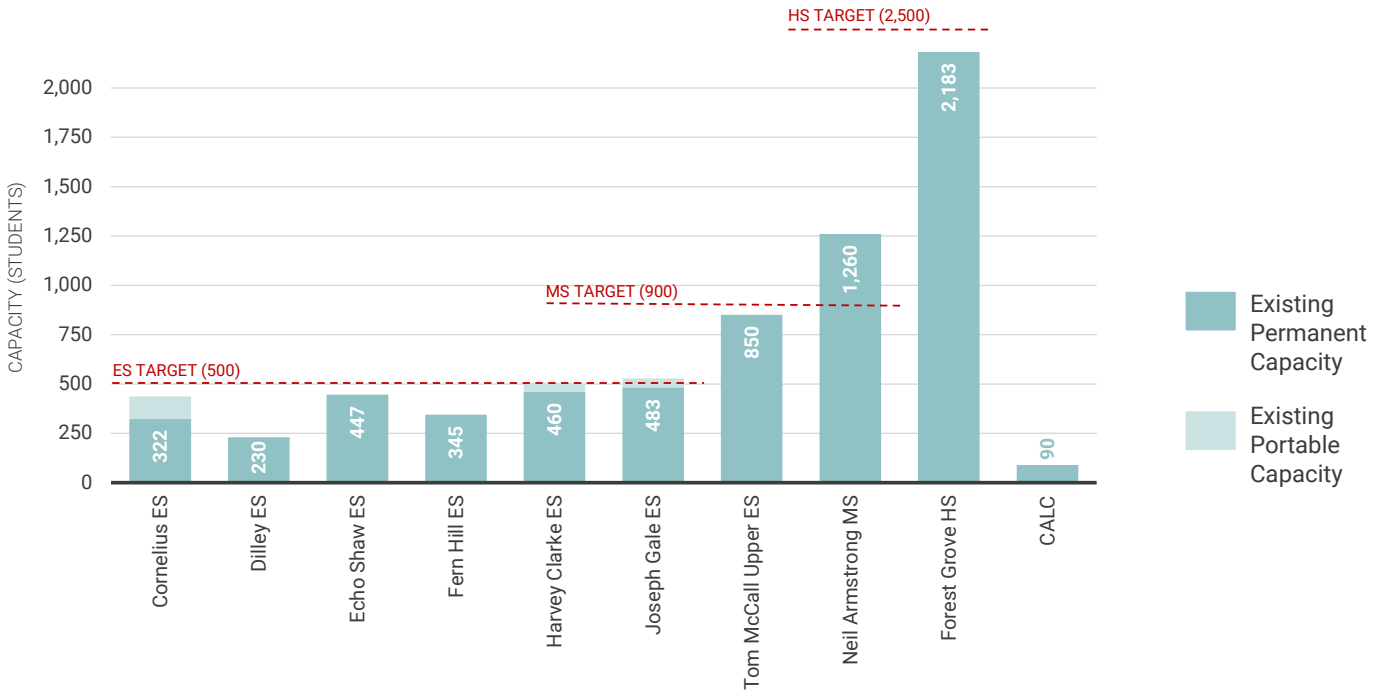
X

Classroom utilization factor

Classrooms / Teaching Stations

General classrooms at the elementary level include grade-level classrooms, but do not include specialized teaching spaces such as music rooms, gymnasiums, self-contained special education classrooms, and resource rooms. At the middle and high school levels, all scheduled teaching stations are included when determining capacity.

CHART:
Existing & Target School Capacity



Target Students per Classroom
The target number of students per classroom is a planning parameter that reflects an "ideal" class size target for a given grade level. Actual class sizes vary, and may be larger or smaller than the targets, depending on many operational factors.

For Forest Grove School District, permanent and portable facility capacities are based on the following class size targets:

> Elementary (K-4): 23 students per classroom

> Upper Elementary (5-6): 25 students per classroom

> Middle (7-8): 30 students per classroom

> High (9012): 30 students per classroom

This reflects a reduction from the previous target classroom size of 25 students per classroom at the elementary level, as determined by the District. All other class size targets are maintained at previous levels. Target classroom capacities will continue to be evaluated, and may be revised in the future, based on the findings of this Plan or other developments in the District. They do not represent District policy, actual student count, or an absolute cap.

Classroom Utilization Factor
A classroom utilization factor is applied, to reflect for the amount of time classrooms can be used for teaching each day. Target classroom utilization factors vary between districts and grade levels, depending on a number of factors, including the number of periods in the school day and whether teachers use their classrooms for planning. It is not possible to achieve 100% utilization at the middle and high school levels, due to scheduling conflicts, the need for specialized rooms for some programs, and the need for teachers to have space to work during planning periods.

Lower utilization factors indicate that classrooms are unused for one or more periods of the day, due to teacher planning time and/or scheduling requirements, which is typical for most middle and high schools. For example, 80 percent classroom utilization reflects classroom usage for four out of five periods a day.

For Forest Grove School District, the classroom utilization factors used in determining capacity are as follows:

> Elementary: 100 percent utilization

> Upper Elementary: 100 percent utilization

> Middle: 87.5 percent utilization

> High: 75 percent utilization

These utilization factors are intended to reflect an average "snapshot" of classroom utilization at each level, and will continue to be evaluated. The District's classroom utilization factors are all within typical planning ranges for each grade level.

EXISTING FACILITY CAPACITY

Permanent Capacity
The District has a total permanent capacity of 6,669 students in grades K-12, including all elementary, upper elementary, middle and high school facilities.

School	Capacity (Students)
Cornelius ES	322
Dilley ES	230
Echo Shaw ES	447
Fern Hill ES	345
Harvey Clarke ES	460
Joseph Gale ES	483
Tom McCall Upper ES (East & West)	850
Neil Armstrong MS	1,260
Forest Grove HS	2,183
CALC (@ Taylor Way)	90
Total Capacity	**6,669**

The existing permanent capacity at the elementary level, which includes five K-4 schools and one K-6 school, is 2,287 students. Capacities vary greatly

between elementary schools, ranging from 230 students at Dilley Elementary to 483 students at Joseph Gale, the District's most recent elementary school. Permanent capacity at the upper elementary level (grades 5-6) is 850 students, including the two Tom McCall facilities.

The existing permanent capacity at the middle school level (grades 7-8) is 1,260 students, all at Neil Armstrong Middle School. The existing permanent capacity at the high school level (grades 9-12) is 2,183 students, all at Forest Grove High School. In addition, the CALC facility has a capacity of 90.

Capacity is not included for Oak Grove Academy facility at Gales Creek or the Cedar Street Campus, as these are special education programs.

Portable Capacity

Many District schools have modular classrooms on site, added over time to provide additional capacity at existing schools and accommodate the significant enrollment growth that has occurred in recent years. The District has a total portable capacity of 207 students, all at the elementary level.

Because of the temporary nature of modular facilities, portable capacity is typically not considered when determining future capacity need in a long-range facility plan.

Capacity Updates

The District will continue to update facility capacity as buildings are altered or as uses change. It is important to check with District facilities staff for the most current capacity figures.

TARGET CAPACITY

DETERMINING TARGET CAPACITY

While actual school building capacities are often a reflection of the educational models in place at the time a school was constructed, school capacity targets are based on current thinking regarding the number of students needed to meet a district's program goals and provide an optimal learning environment.

Facility capacity targets are intended to provide guidelines for planning purposes. They may vary through the years, as educational program models and funding levels change.

The District has established the following target capacities for educational facilities:

> Elementary (K-4): 500 students

> Upper Elementary (5-6): 900 students

> Middle (6-8): 900 students

> High (9-12): 2,500 students

The District's target capacity for elementary schools is lower than many school districts in the region, which typically range from 550 to 750 students. This reflects a desire to maintain small-scale neighborhood elementary schools. The middle school target capacity is similar to other regional districts, which range from 675 to 1,100 students. The District has a relatively high target at the high school level, which reflects that there is only one high school in the District and is typical for smaller districts.

Districts may also establish target 'floor' and 'ceiling' sizes for different types of facilities. A target floor represents the minimum capacity a facility can have and still provide an appropriate learning environment and efficient operations. A target ceiling is the maximum facility capacity that can still allow for an appropriate learning environment.

It is typical for districts to have a wide variety of existing school capacities, as building stock is constructed over a long period of time and reflects the educational models and capital constraints of the time. It is generally assumed that schools that are near the target capacity are able to provide a full academic program. Schools with capacity that is significantly below the target may not be able to offer a full program without supplemental funding.

COMPARISON TO TARGET CAPACITIES

As illustrated in the comparative chart on the previous page, three of the District's elementary schools have permanent facility capacities that are significantly below the established target capacity of 500. This includes Cornelius (168 below target), Dilley (270 below target), and Fern Hill (165 below target). This indicates a potential opportunity to increase capacity in the District in the future at these sites. The Fern Hill facility was designed to accommodate a classroom addition to increase its capacity. All other District schools are either less than 15 percent below the target size or above the target, in the case of Neil Armstrong Middle School.

Elementary Schools

At the elementary level, five schools (shown in red above) have permanent capacities that are less than 60 percent of the target capacity of 750, or less than 450 students, indicating that there is a potential opportunity to increase the capacity and efficiency of these sites in the future. These schools include Montclair, McKay, West Tualatin View, Raleigh Park, and Ridgewood. Many of these schools are older facilities, built at a time when school sizes were typically smaller.

OTHER PROGRAM CONSIDERATIONS

Like many school districts, Forest Grove School District offers programs and special services beyond K-12 general education instruction, to support students whose needs are not met in traditional school settings. The District currently provides alternative education, as well as special services including special education, early childhood education, and language immersion programs.

These programs typically have space and facility requirements that were not anticipated during the design and construction era of most district facilities. It is clear that the success and increased

demand for these programs fosters space needs that must be designed and integrated districtwide into the overall program delivery for each school.

SPECIAL EDUCATION

In 2020, approximately 15.5 percent of District students were eligible for special education services districtwide. Of these students, approximately 71 percent have 80 percent or more of their day in the general education setting, with many not removed from their regular class room at all.

Approximately 21 percent of the special education student population received less than 80 percent of their instruction in a general education setting, in break-out spaces, resource rooms, or specialized classrooms. 0.3 percent of students received special education services and all core instruction in separate special schools operated by other agencies, and five percent received special education services in other District programs, including Oak Grove Academy.

With the exception of Dilley, all elementary and upper elementary schools in the District have a resource room. This is a designated room where students receive pull-out special education services throughout the school day. At the middle school and high school levels, special education teachers use a classroom space similar to their general education colleagues.

Some schools also have specialized classrooms that are designed for the specific needs of students with disabilities. These classrooms are District supported and include students from across the District. Elementary schools may have up to two specialized classrooms. Resource rooms and dedicated specialized classrooms are not counted as a part of a school's total available capacity.

The District also has a specialized program, Oak Grove Academy, that is separate from the District's comprehensive schools. This program has relatively small enrollment and is not included in capacity calculations.

ALTERNATIVE EDUCATION

The District has an alternative high school program that is separate from the comprehensive high school, the Community Alternative Learning Center (CALC). CALC's current location, in the Taylor Way Support Annex, is not designed to support an educational program and does not accommodate student demand. The demand for an alternative high school experience is expected to continue to increase over the next ten years. Because the alternative school enrollment is set by the District, enrollment projections for these facilities may not necessarily reflect the actual need or demand.

ONLINE LEARNING

The District offers online courses for District students at all grade levels who need a flexible learning option due to special circumstances. For the 2020-21 school year, program enrollment includes approximately half of all students in grades K-12, due to the increased need for remote learning due to the Covid-19 pandemic. However, the projected online enrollment for the 2021-22 school year for K-12 students is approximately 150 total students. As District students may be taking in-person classes as well as online courses, online enrollment is not assumed to result in a decreased enrollment elsewhere.

ENGLISH LANGUAGE LEARNERS / ENGLISH LANGUAGE DEVELOPMENT

Although the District has historically had dedicated pull-out classrooms for English Language Learners (ELL) and English Language Development (ELD) programs, it is moving toward a pull-in/ inclusion model where ELL programming will be taught in existing classrooms. Therefore, school capacities include ELL classrooms as general classrooms.

KINDERGARTEN

All District schools currently provide full-day kindergarten and will continue to do so. Full-day kindergarten was implemented districtwide in 2015-16. Kindergarten classrooms are included in school capacities as general classrooms.

PREKINDERGARTEN

While not government mandated, prekindergarten programs are currently offered at three elementary schools in the District, including Cornelius, Echo Shaw, and Fern Hill. All of these facilities are Title 1 schools.

The District anticipates providing prekindergarten programs at all Title 1 schools by 2030-31. Based on current Title 1 status, this would include adding a prekindergarten program at Joseph Gale Elementary, as well as expanding existing preschool programs. Prekindergarten classrooms are counted as part of a school's available capacity, as prekindergarten enrollment is counted as part of a school's enrollment.

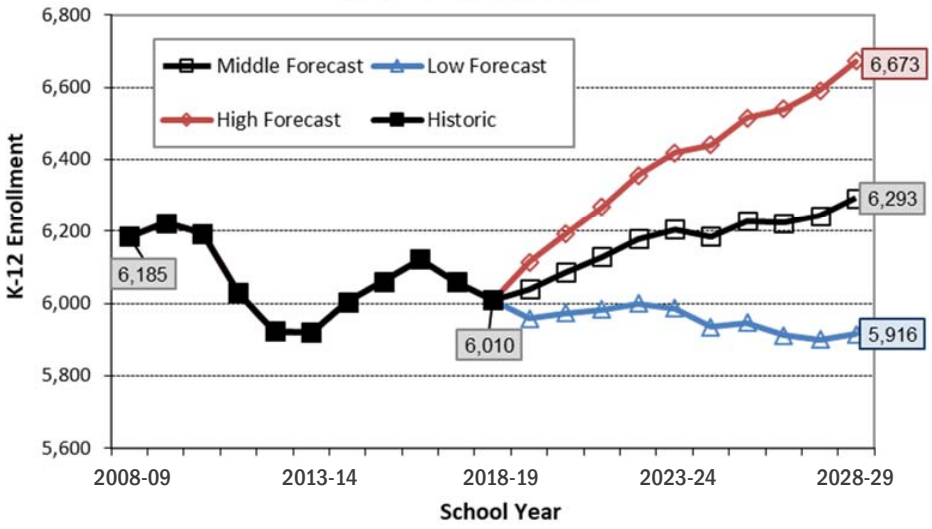
EARLY INTERVENTION (EARLY CHILDHOOD SPECIAL EDUCATION)

The Early Intervention (EI) program offers special education and support services for children from birth to school age. The program is operated by the Northwest Regional Education Service District (NWRESD), however the District is responsible for providing transport services for all preschool aged children with disabilities living within its attendance boundaries. As such, the District provides instruction space to NWRESD programs when possible to reduce transportation expenses. EI program needs are not specifically accommodated in the Long-Range Facility Plan, as the District is not mandated to provide capacity for these services.

PARTNER PROGRAMS

Before- and after-school care, school-based health clinics, and other partner programs are not specifically accommodated in the Long-Range Facility Plan, in terms of capacity. The District will look at adding additional programs as opportunities present themselves, and as partners and facility space are available.

CHART:
K-12 Enrollment History & Forecast, PSU PRC, May 2019



ENROLLMENT FORECAST

Enrollment forecasts are used, in part, to determine whether a school district will need to add or modify facility space to meet school program or configuration needs. Student enrollment forecasts, combined with a methodology for determining student capacity in each school, provide a framework for facility needs to better serve student achievement. As such, student enrollment forecasts comprise an important component of the Long-Range Facility Plan.

PRC FORECAST

The District received student enrollment forecasts from the Population Research Center (PRC) at Portland State University (PSU) in May 2019. The 10-year enrollment forecast, using historic enrollment through the 2018-19 school year, integrates District enrollment trends with local area population, housing, and economic trends. Information sources that inform the forecast include the US Census Bureau, birth data from the Oregon Center for Health Statistics, city and county population estimates produced by PRC, and housing development data from relevant cities and counties.

Key takeaways from the study include:

Population, Housing & Employment Trends

> The number of births to Forest Grove School District residents averaged 527 annually between 2000 and 2009, but only 474 between 2010 and 2017.

> The Oregon Employment Department estimates that the MSA's seasonally adjusted unemployment rate held steady at 3.8 percent in March 2019; the same as the nation and lower than Oregon (4.4 percent).

> In the five year period from 2014 to 2018, building permits were issued for about 1,000 new housing units within the District. Several hundred more homes are slated in new subdivisions that have gained approval.

Districtwide Enrollment Trends

> After three years of K-12 enrollment growth beginning in 2014-15, losses resumed in 2017-18 and 2018-19. The 2018-19 enrollment of 6,010 students was 213 students (3.4 percent) below the peak nine years earlier.

> Fall 2018 elementary (K-4th grade) enrollment of 2,236 was the smallest since 2012-13, and was 141 students (5.9 percent) lower than the District's all-time high 10 years earlier, in 2008-09. The Fall 2018 kindergarten class was the smallest since 2000-01.

> Fall 2018 5th - 8th grade enrollment of 1,890 was just one student less than its peak in 2010-11, and represented a modest increase of 63 students (three percent) from 2008-09.

> High school enrollment in Fall 2018 of 1,884 was 144 students (7.1 percent) lower than its all-time high (2,028 students in 2009-10), and 18 students lower than one year earlier in Fall 2017.

Forecast Range

The PRC study presents three forecasts ("Middle," "Low," and "High") for a 10-year horizon from 2019-20 to 2028-29, as shown in the chart above. PRC considers the middle forecast as most likely to occur. The low forecast considers the effect of less robust local area population growth than anticipated during the forecast period, and the high forecast assumes stronger than anticipated growth. For the purposes of the Long-Range Facility Plan, the middle series forecast is used.

Enrollment forecasts are typically updated annually to incorporate new enrollment data, as well as newly released birth and housing data. For reference, the 2019 PRC enrollment forecast report can be found in Appendix E.

FORECAST ADJUSTMENTS

In addition to the enrollment forecasting provided by the PRC, there are three other significant factors that impact the District's projected capacity need for the Long-Range Facility Plan. These include the inclusion of housing developments that occurred after the PRC forecast was completed, incorporating the District's stated goal of expanding early childhood education, and accommodating enrollment growth beyond the PRC time-frame of 2028-29. Adjustments were made to the PRC forecast to accommodate these factors.

Additional Enrollment from Upcoming Housing Developments

Two upcoming housing developments that were not included in the PRC projections were identified within the

District. It was determined that a third upcoming development, the 'southeast development,' was already included in the PRC enrollment forecast, so no additional enrollment was added for this.

The following additional enrollments were added to the enrollment projections, based on evaluation of these developments:

> 42 additional students projected at Cornelius Elementary School to accommodate additional growth from the upcoming low-income housing development near Fred Meyer

> 21 additional students projected at Harvey Clarke Elementary School to accommodate additional growth from the upcoming market-rate housing development near David Hill

Prekindergarten Enrollment
One factor that contributes to increased enrollment over the next 10 years is the planned expansion of the early childhood program in the District. The District currently provides a prekindergarten program at Cornelius, Echo Shaw, and Fern Hill elementary schools.

One of the District's long-range goals is to support and expand early learning opportunities by adding a prekindergarten classroom at Joseph Gale Elementary, as well as a second prekindergarten classroom at the three schools with existing programs. The ability of the District to implement this goal will be impacted by operational funding availability from the state in the coming years. Future funding will only be available if the District is able to provide the required facilities for early childhood education.

Because of the long-range nature of this planning effort, it is important to quantify and accommodate both existing and planned prekindergarten enrollment. Based on early learning requirements, preschool classrooms will be planned at 20 students each, resulting in a total planned prekindergarten enrollment of 140 students districtwide.

Prekindergarten classrooms anticipated to be implemented by 2030-31 are as follows:

Elementary School	PreK Classrooms	PreK Capacity
Cornelius	2	40
Dilley	0	0
Echo Shaw	2	40
Fern Hill	2	40
Harvey Clarke	0	0
Joseph Gale	1	20
Total	**7**	**140**

Longer-Term Growth
Another factor that will contribute to projected enrollment increases in the Long-Range Facility Plan is the need to accommodate enrollment growth in the District beyond the 2028-29 time frame included in the PRC projections. This is necessary because of the timing of potential future capital measures.

Based on the typical 10-year bond cycle in the District, it is likely that the next capital measure wouldn't be proposed until 2022. Projects included in a potential 2022 capital measure will need to accommodate the District's enrollment needs until the next bond is implemented, most likely in 2031 or 2032, when another rate step-down would be expected to occur. Because there is typically a time delay between bond passage and completion of bond projects (due to time for planning, design, and construction), a long-range facility plan would ideally accommodate enrollment needs a few years beyond the next expected bond date.

For the purposes of this Plan, enrollment is projected through the year 2033-34, an additional five years beyond the PRC enrollment forecast through 2028-29. A straight-line projection, based on the growth rates established in the PRC forecast, was implemented to estimate growth out to 2033-34.

It becomes increasingly difficult to accurately estimate growth the farther into the future it is projected. Straight-line projections are rough estimates that are used for planning purposes only, and do not take into consideration the wide range of impacts used in the PRC study, such as possible changes in population, housing, and employment that may occur beyond the PRC forecast horizon.

PROJECTED DISTRICT ENROLLMENT

The adjusted enrollment forecast indicates an overall increase in districtwide enrollment of 9.9 percent over the forecast period, for a total of 6,448 students. This reflects a projected increase of 582 total students in prekindergarten through twelfth grade.

Elementary School Enrollment
At the elementary level, a 12.6 percent enrollment increase is projected districtwide, an increase of 284 students. There is projected growth on both the east and west sides of the District, with growth rates varying greatly between schools.

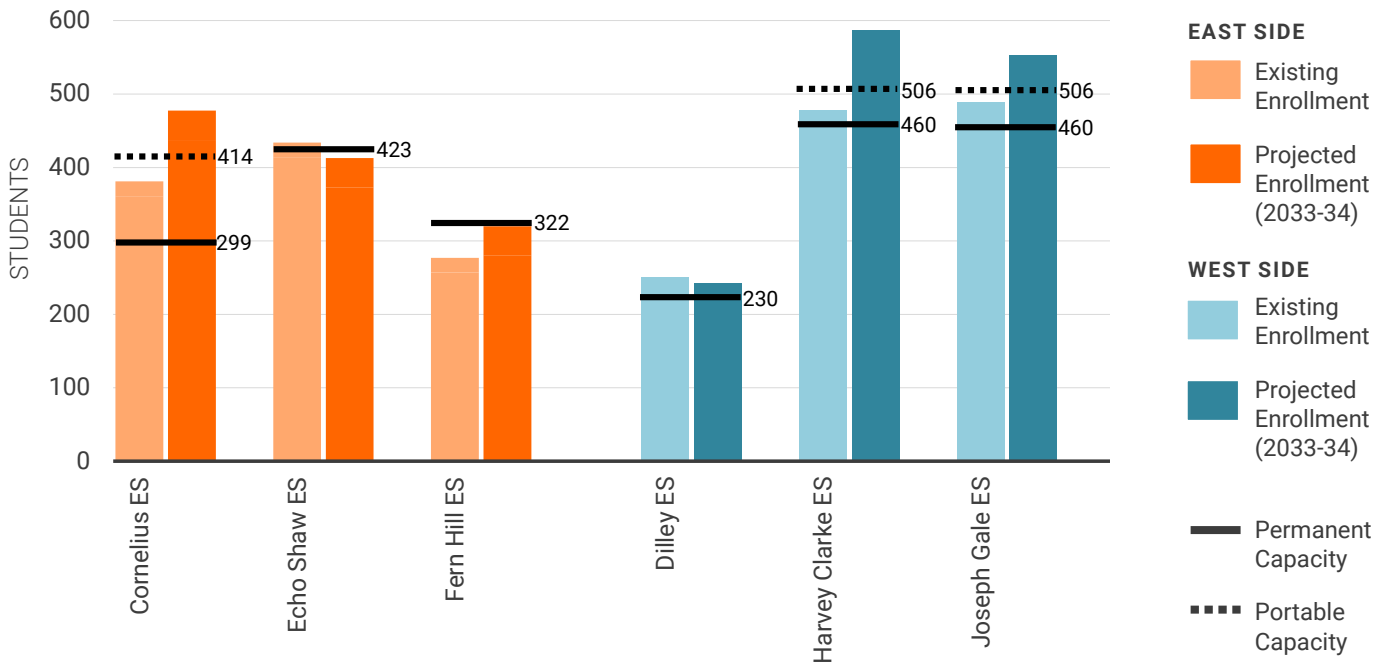
Cornelius, Fern Hill, Harvey Clarke, and Joseph Gale all have projected enrollment increases of 13 percent or more, with Cornelius having the highest projected growth rate of 25.3 percent (97 additional students). Dilley and Echo Shaw are projected to see enrollment declines, at 3.0 percent and 4.9 percent respectively.

Comparing projected enrollment to target school size, Harvey Clarke and Joseph Gale are both projected to have enrollments over the District's target elementary school size of 500.

Upper Elementary School Enrollment
Upper elementary school enrollment is expected to remain stable during the forecast period, with a projected 0.2% increase (two additional students).

Middle School Enrollment
Middle school enrollment is projected to have a small increase of 1.7 percent (15 additional students).

CHART:
Elementary Schools: Capacity & Existing / Projected Enrollment



High School Enrollment
At Forest Grove High School, enrollment is projected to increase by 15.5 percent (282 students). Alternative high school enrollment is identified separately, and is not shown to have any projected enrollment increase. However, this does not reflect the actual enrollment demand for this program.

FACILITY UTILIZATION

Understanding school utilization is necessary to provide effective learning environments for all students. Planning for the effective utilization of schools requires an understanding of space needs for the range of academic programs offered in a school, as well as classroom and common spaces available for current and projected student use.

UTILIZATION

For the purposes of long-range planning, school utilization is defined as the portion of the building assigned to students, or more specifically, the number of students enrolled in a school divided by the student capacity of the school. For example, a school with 500 students and 500 classroom seats would be operating at 100% utilization, while the same building with only 400 students would be operating at 80% utilization. Analysis of school utilization in this Plan uses the adjusted enrollment projections to 2033-34, described on the previous pages.

The charts above and on the following page illustrate the existing and projected enrollments compared to the existing capacity at each school in the District.

Elementary School Utilization
Existing districtwide permanent capacity at the elementary level is 2,287 students. This is less than the projected 2033-34 enrollment of 2,593 by 306 students, resulting in an expected districtwide utilization of approximately 133 percent. When also including portable capacity, the existing districtwide total capacity at the elementary level is 2,494 students, providing 99 seats less than the projected enrollment (104 percent utilization).

Looking at elementary capacity need on the east and west sides of the district, there is projected growth and a need for additional capacity in both regions. West side schools, including Dilley, Harvey Clarke, and Joseph Gale, are projected to have the highest need, with a combined capacity need of 306 seats when looking at permanent capacity, and 99 seats when including existing portable capacity.

On the east side of the District, Cornelius, Echo Shaw, and Fern Hill are projected to have a combined capacity need of 97 seats when looking at permanent capacity, and are 18 students below existing capacity when including existing portable capacity. Accommodating enrollment growth within each region can minimize the extent of boundary adjustments and transportation, as well as strengthen neighborhood schools.

Attendance Boundary Map: East & West Side Elementary Schools

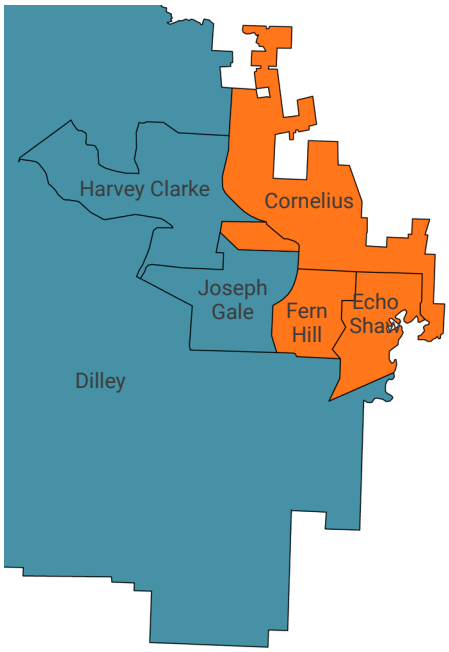
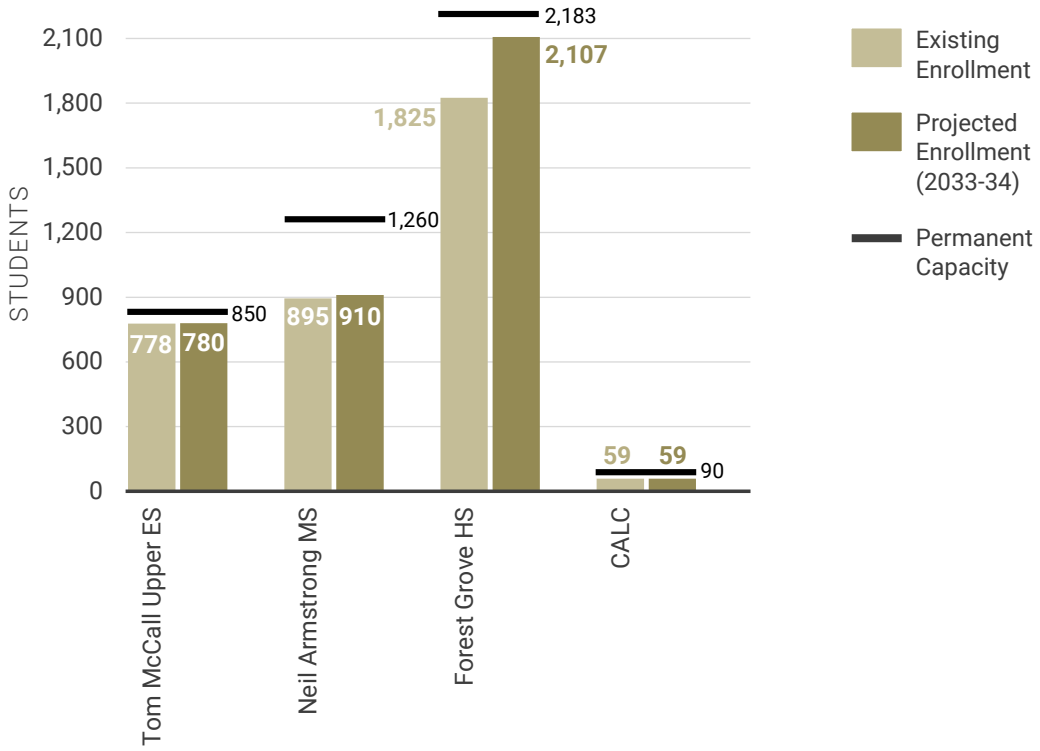


CHART:
Upper Elementary, Middle, and High Schools: Capacity & Existing / Projected Enrollment



Enrollment accommodation within existing individual school boundaries can minimize or even eliminate the need for boundary adjustments in some instances. Looking at individual school utilization, all District elementary schools are projected to have enrollment that is very close to or above their existing permanent capacity (100% utilization or more) by 2033-34. Three of these schools are projected to have enrollment that is significantly over their existing permanent capacity: Cornelius (156 over), Harvey Clarke (126 over), and Joseph Gale (70 over). All three schools are still over capacity when portable capacity is considered, but to a lesser extent: Cornelius (41 over), Harvey Clarke (80 over), and Joseph Gale (24 over).

Upper Elementary, Middle, and High School Utilization

With negligible growth anticipated, projected enrollment is less than the existing permanent capacity at the upper elementary and middle school levels. Tom McCall Upper Elementary is projected to be 70 students below its capacity (92 percent utilization), while Neil Armstrong Middle School is projected to be 350 students below its capacity (72 percent utilization). When considering the possible reduction in capacity at Neil Armstrong due to the potential for some existing classrooms to be changed into additional PE or alternative education spaces to meet identified needs, there is still ample capacity available.

Although Forest Grove High School is anticipated to have a significant amount of enrollment growth, there will still be adequate capacity at this school. The projected enrollment of 2,107 is 76 students below the school's existing capacity of 2,183. Additionally, if alternative high school capacity and enrollment increase in the future, this will proportionally reduce enrollment at the high school.

SUMMARY TABLE

The table on the following page summarizes permanent and portable capacity, historic and projected enrollment, and utilization rates for all District school facilities, as described in this section.

TABLE:
Capacity, Enrollment & Utilization Summary

Facility	CAPACITY			ENROLLMENT			UTILIZATION			
	Perm. Capacity (2020-21)	Portable Capacity (2020-21)	Total Capacity	Total Historic Enroll. (2018-19)	Total Projected Enroll. (2033-34)	Percent Change	Over/ Under Perm. Capacity	Facilty Util. (Perm.)	Over/ Under Total Capacity	Facilty Util. (Total)
ELEMENTARY SCHOOL										
EAST SIDE										
Cornelius ES	322	115	437	381	478	25.3%	**156**	148%	**41**	100%
Echo Shaw ES	447	0	447	434	413	-4.9%	-34	92%	-34	84%
Fern Hill ES	345	0	345	277	320	15.5%	-25	93%	-25	81%
East Side Subtotal	***1,114***	***115***	***1,229***	***1,092***	***1,210***		***97***		***-18***	
WEST SIDE										
Dilley ES	230	0	230	250	243	-3.0%	**13**	105%	**13**	105%
Harvey Clarke ES	460	46	506	478	586	22.7%	**126**	127%	**80**	116%
Joseph Gale ES	483	46	529	489	553	13.2%	**70**	115%	**24**	101%
West Side Subtotal	***1,173***	***92***	***1,265***	***1,217***	***1,382***		***209***		***117***	
Subtotal: Elementary School	***2,287***	***207***	***2,494***	***2,309***	***2,593***	***12.6%***	***306***	***113%***	***99***	***104%***
UPPER ELEMENTARY SCHOOL										
Tom McCall East Upper ES	325	0	325	778	780	0.2%	-70	92%	-70	92%
Tom McCall West Upper ES	525	0	525							
Subtotal: Upper Elementary School	***850***	***0***	***850***	***778***	***780***	*0.2%*	***-70***		***-70***	
MIDDLE SCHOOL										
Neil Armstrong MS	1,260	0	1,260	895	910	1.7%	-350	72%	-350	72%
Subtotal: Middle School	***1,260***	***0***	***1,260***	***895***	***910***	***1.7%***	***-350***		***-350***	
HIGH SCHOOL										
Forest Grove HS	2,183	-	2,183	1,825	2,107	15.5%	-75	97%	-75	97%
Subtotal: High School	***2,183***	***0***	***2,183***	***1,825***	***2,107***	***15.5%***	***-75***		***-75***	
SPECIAL PROGRAMS										
CALC (@ Taylor Way)	90	-	90	59	59	0.0%	-31	66%	-31	66%
Subtotal: Special Programs	***90***	***0***	***90***	***59***	***59***	***0.0%***	***-31***		***-31***	
DISTRICT TOTAL	***6,669***	***207***	***6,876***	***5,866***	***6,448***		***-221***		***-428***	

SECTION 06

SITE OPPORTUNITIES

The Long-Range Facility Plan assesses current school sites to determine if there are adequate sites within the District to meet long-term enrollment needs and whether these sites are adequate in size and distribution to meet long-term forecasts. This evaluation provides assurance that there is a sufficient inventory of properties relative to enrollment demands, and that they are being used effectively to address school needs.

EFFICIENT USE OF SCHOOL SITES

The District makes efficient use of its school sites in a variety of ways; however, specific site conditions and the values and demands of the community should be considered when evaluating these options. Site conditions such as steep slopes, wetlands, and development code regulations that establish use standards for school buildings and other site improvements are also important considerations. Community values may include providing enough parking for volunteers, connected and safe walking paths, biking and transit access; and providing fields for sports, extracurricular activities, and shared uses with other community service providers.

Many strategies for efficient use of school sites can be considered by the District, and are described on the following pages:

Facility Strategies

- > Construct multistory buildings
- > Utilize modular classrooms
- > Expand existing facilities
- > Colocate with existing facilities
- > Replace small schools

Operational Strategies

- > Implement shared use of facilities
- > Develop partnerships
- > Minimize the need for student and staff parking on site
- > Limit space for non-educational uses

Planning Strategies

- > Establish site size targets
- > Plan for interim relocation

FACILITY STRATEGIES:

CONSTRUCT MULTISTORY BUILDINGS

Multistory 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, multistory buildings provide significantly more student capacity using the same footprint as a single-story building. As land costs increase, multistory buildings become more cost-effective to build and operate.

A number of the District's active school sites consist of multistory buildings, including Forest Grove High School and the three most recently constructed elementary schools: Fern Hill, Joseph Gale, and Tom McCall Upper. Land costs in the Forest Grove School District have risen significantly in recent years. The District has made it a practice to construct multistory buildings when new schools are built.

IMAGE:
Potential to Expand Existing Facilities: Tom McCall East Upper Elementary School

UTILIZE MODULAR CLASSROOMS

Modular classroom buildings are an affordable and flexible method for responding to fluctuations in school enrollment and increasing the efficient use of a school site. However, the use of modular buildings must be balanced with site considerations and issues of educational quality and equity between schools.

The following site conditions should be considered when considering modular classrooms:

- Environmental constraints / conditions (steep or changing slopes, streams, wetlands or other sensitive lands)
- School features (parking, play areas and fields)
- Fire safety (access roads and proximity to hydrants)
- Development code (how modular buildings are classified and regulated according to zoning code; building setbacks from lot lines required by the code)
- Core facilities (the ability of the school's core facilities, such as cafeteria, gym and restrooms, to accommodate additional enrollment)
- Safety and security (safe and secure access from the modulars to core facilities in the main building)

Other issues to consider when making decisions about using modular buildings include educational quality and equity. There is a growing body of research indicating a positive relationship between the quality of a school facility and student achievement.

It cannot be assumed that permanent classrooms always provide a better learning environment than modular classrooms. However, because modular buildings are designed to be semipermanent, they often lack some of the architectural quality and amenities provided by permanent classrooms. These differences may impact student achievement. When some schools have more modular buildings than others, there is the potential to foster inequality between schools.

Finally, modular classrooms are often utilized as a last resort strategy to manage enrollment/capacity issues. These classrooms are typically purchased and installed using operation funds rather than capital construction funds. Because of this, the use of modular classrooms may have a significant negative impact on already underfunded operational budgets.

Currently, Forest Grove School District utilizes modular classrooms at three District elementary schools. There are a total of nine modular classrooms, with a combined capacity of 207 students (23 per classroom).

EXPAND EXISTING FACILITIES

Expanding school facilities on existing sites with available space is one way of utilizing existing sites more efficiently. However, the age and condition of the facility must be considered, as well as the need for additional capacity based on enrollment projections. Constructing an addition onto an older facility is typically not an efficient use of funds, as the existing facility will likely need replacement well before the addition has reached the end of its useful life.

The District has two existing schools that are designed to accommodate future expansion, Fern Hill Elementary School and Tom McCall East Upper Elementary School. Both schools are still relatively new, so could be viable candidates for an addition, depending on enrollment needs.

IMAGE:
Colocation: Neil Armstrong Middle School (left) & Fern Hill Elementary School (right)

COLOCATE WITH EXISTING FACILITIES

In some cases, a district's existing facilities may be located on sites that are large enough to accommodate colocation with another facility in the future, if the need arises. This option may be considered in particular for smaller non-neighborhood facilities, such as an alternative program or special education facility. However, it will be important to assess program compatibility before considering colocation, as well as other factors outside the scope of this study, such as setbacks, easements, site access, and the presence of wetlands.

Currently, the District has colocated facilities on two sites. The Neil Armstrong Middle School site is shared with Fern Hill Elementary School and the Forest Grove High School site also houses the District's school-based health center. Other larger District school sites may also offer opportunities for colocation with another future facility in their existing configuration, beyond the shared use that is already occurring. Potential opportunities are described later in this section.

As District facilities continue to age and require replacement, it is recommended that the District consider the possibility of colocation in the future, and plan the location of replacement facilities on larger sites with this potential strategy in mind.

REPLACE SMALL SCHOOLS

School facilities vary in size and capacity for many reasons, including the educational goals and budget parameters at the time of construction. Districts can maximize the utilization of their existing sites by replacing schools that are well below their target capacities, are older facilities in poor condition, and have a need for additional capacity based on projected enrollment. This can significantly increase district capacity without the need for additional sites.

Cornelius Elementary is an ideal candidate for replacement at a larger capacity because of its small size (permanent capacity of 322 students), poor condition (76 years old and in critical condition), and high projected enrollment (478 students in 2033-34). Dilley is also a small school (permanent capacity of 230 students) that is in poor condition, but its remote location and lower projected enrollment (243 students in 2033-34) make it less desirable for replacement at the target capacity of 500 students.

OPERATIONAL STRATEGIES:

IMPLEMENT SHARED USE OF FACILITIES

District school facilities are community assets that are used in a variety of ways by families and community groups. One effective way of maximizing the use of a school site is to share the use with other organizations. Current examples of shared use in the Forest Grove School District include use of fields on the District administration site by the Forest Grove Community School (a local charter school) and Sunday prayer services at both Cornelius and Fern Hill Elementary Schools.

There are also opportunities for District schools to share facilities with other District functions, reducing the need for additional sites. This includes schools, school programs, and District support facilities.

Currently, the District has two sites that house multiple schools and/or programs. The Tom McCall Upper Elementary School facilities also house a portion of the Oak Grove Academy program and the Taylor Way Support Annex facility currently houses CALC, the District's alternative education program.

DEVELOP PARTNERSHIPS

Partnerships with area organizations and businesses can be leveraged to support District programs in a variety of ways. One example is career-technical education, which can utilize spaces in the community where students can learn and work. This benefits both the students and the community.

Currently Forest Grove School District has partnerships with many entities, including AmeriCorps, Nike, the Hillsboro Chamber of Commerce, Pacific University, Western Oregon University, and Portland Community College. The District is currently looking for more opportunities to develop and enhance these type of relationships as part of its strategic framework.

MINIMIZE THE NEED FOR STUDENT & STAFF PARKING ON SITE

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

> Reimbursing the local transit agency for allowing students to ride for free

> Using transportation demand management plans

> Proximity of a frequent transit line

> Providing better bicycle storage facilities on campus

> Making shared parking arrangements with neighborhood organizations

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 near all school sites.

LIMIT SPACE FOR NON-EDUCATIONAL USES

There are several options to reduce the space on a school site dedicated to non-educational uses, such as athletic facilities or parking. However, the following factors should be considered:

> Good walking, biking and transit access should be available to reduce the demand for vehicle parking.

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

> School sports and extracurricular activities have consistently been highly regarded by District families. 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.

PLANNING STRATEGIES:

ESTABLISH SITE SIZE TARGETS

School sites must provide space for: school building(s), exterior instruction, play areas (hard, soft, and covered), intramural / athletic activities, parking, and pedestrian and vehicular circulation. Site areas may need to meet other regulatory requirements, including: property line setbacks, easements, fire separations, fire truck access and/or environmental restrictions (e.g. wetlands).

Minimum site size should be established for each educational level. However, the District should focus investment on larger sites whenever possible, as they provide the most flexibility for use.

Forest Grove School District has established the following school site size targets for the purpose of this Long-Range Facility Plan:

> Elementary site size of 7-10 acres

> Upper elementary and middle schools site size of 15-20 acres

> High school site size of 35-40 acres

Site sizes are basic guidelines, which should be verified based on the District's education specification criteria, such as number and type of play fields, number of building floors, and parking and bus requirements.

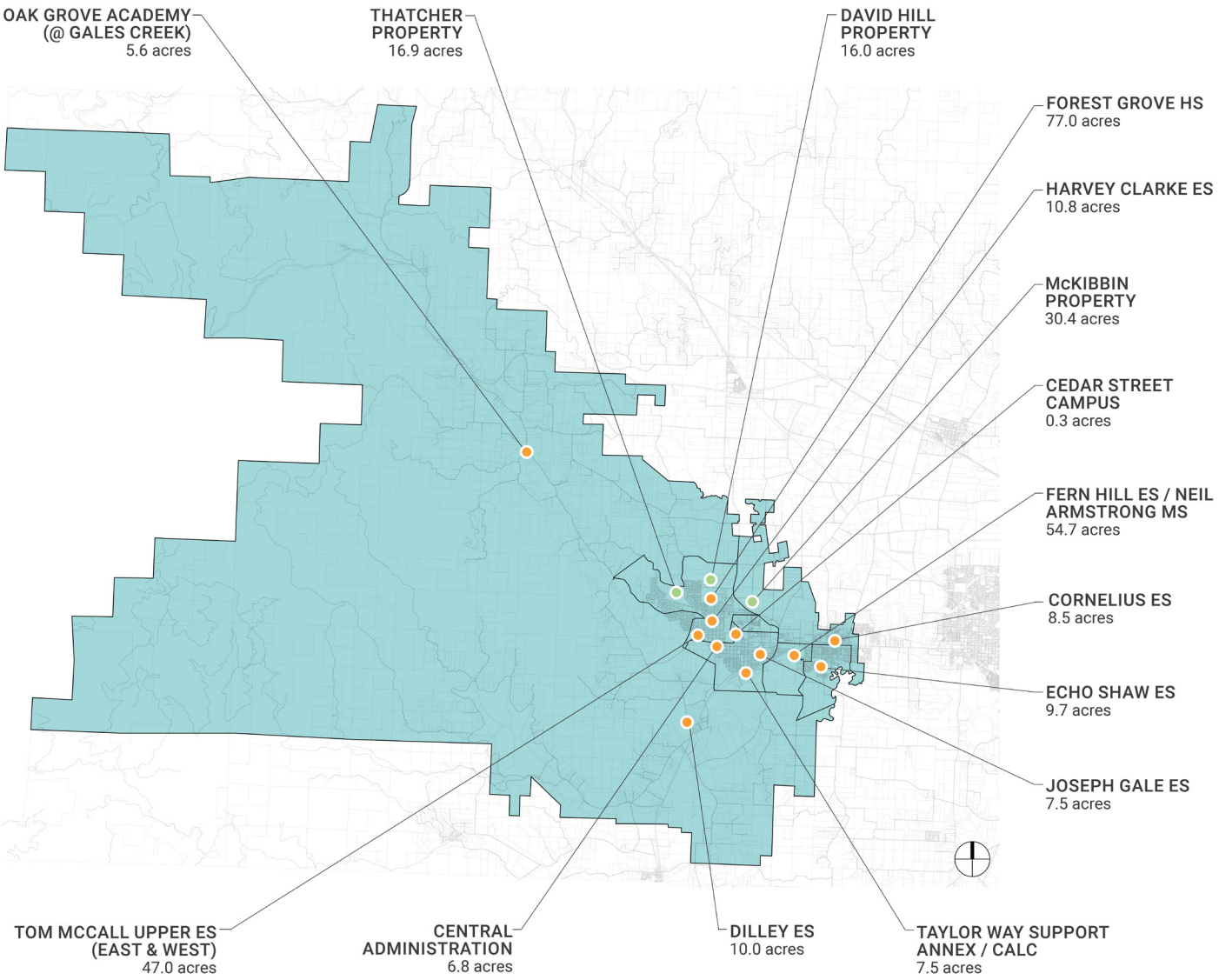
PLAN FOR INTERIM RELOCATION

Because of the extensive work required to upgrade many schools to achieve modern learning environments, entire schools may need to temporarily relocate into different facilities while construction is completed. These facilities that will temporarily house displaced students are called "interim relocation sites." In some instances, vacant school buildings might serve this purpose.

Any school recommended for replacement or major alteration that might require student displacement will require an analysis of the site and its relationship to the neighborhood in order to determine the feasibility to work on-site around the existing buildings.

Many of the District's existing facilities appear to have sites that will likely accommodate replacement on site while maintaining operations in the current facility, but will have to be verified on a site-by-site basis.

DIAGRAM:
District Site Locations



ANALYSIS OF LAND REQUIREMENTS

Based on the adjusted enrollment projections for the next 10 years, it appears that no additional school sites will need to be acquired as part of the District's Long-Range Facility Plan.

The District's three undeveloped sites, described on the following page, combined with opportunities for added capacity at some existing operational sites, appear to offer adequate opportunity to increase capacity to meet enrollment and program demand for the foreseeable future.

DISTRICT-OWNED ACTIVE FACILITY SITES

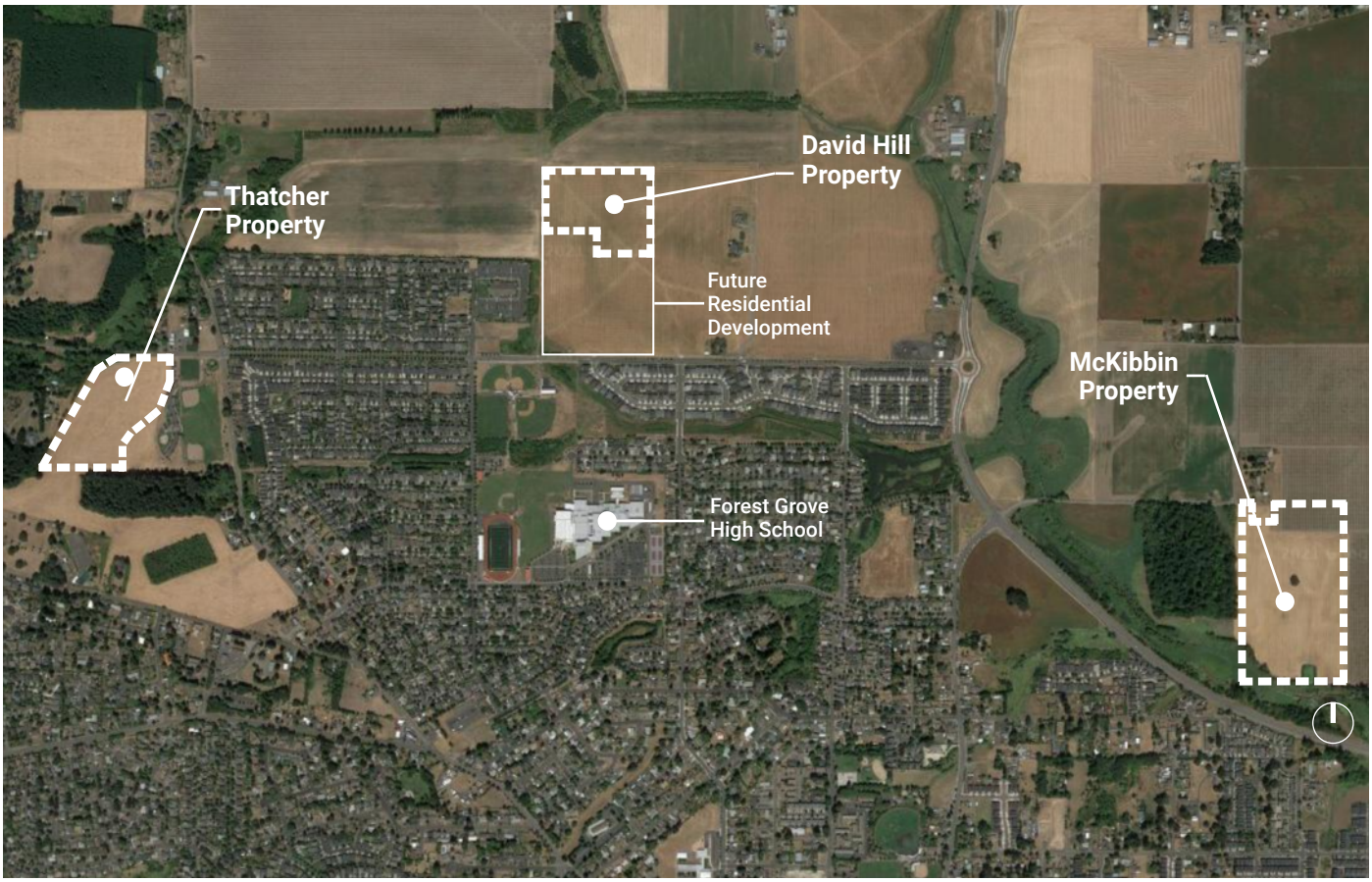
Forest Grove School District currently owns and operates 12 active sites located in the cities of Forest Grove and Cornelius, including 10 active school sites (two with multiple facilities on the site) and two administrative / support sites.

The District's active school sites, shown above and at right, total over 245 acres and fall into the following size ranges:

- Elementary school site sizes range from approximately seven to 12 acres
- Upper elementary and middle school site sizes range from approximately 42 to 47 acres
- The high school site is approximately 77 acres in size

Active Site	Area (Acres)
Cornelius ES	8.5
Dilley ES	10.0
Echo Shaw ES	9.7
Fern Hill ES / Neil Armstrong MS	54.7
Harvey Clarke ES	10.8
Joseph Gale ES	7.5
Tom McCall Upper ES	47.0
Forest Grove HS	77.0
Oak Grove Academy (Gales Creek)	5.6
Cedar Street Campus	0.3
Central Administration	6.8
Taylor Way Support Annex / CALC	7.5
Total Site Area	**245.1**

DIAGRAM:
District Reserve Sites



DISTRICT-OWNED RESERVE SITES

In addition to the District's active school and support sites, the District also owns three undeveloped properties in the Forest Grove area, shown in the diagram above. The three reserve sites, totaling over 57 acres, can be used for the construction of new school facilities when needed.

Reserve Site	Area (Acres)
Thatcher Property	16.9
David Hill Property	16.0
McKibbin Property	30.4
Total Site Area	**63.3**

Thatcher Property

The Thatcher property is located on the south side of David Hill Road and west of Thatcher Park. The site is approximately 16.9 acres, which typically could accommodate an elementary or middle school. However, the site is steeply sloped and is not well-suited for a school facility.

There is a significant amount of planned residential development in this area, so it may be possible to sell or trade this property for another site that is better suited to accommodate an elementary school facility.

David Hill Property

The recently acquired David Hill property is a 16.0-acre site located in an unincorporated area of Washington County, just outside the city limits of Forest Grove, Oregon. It is located to the north of NW David Hill Road at Silverstone Drive. The property is part of larger 37.66-acre residential development that is being annexed into the City of Forest Grove and rezoned for residential development by the developer. The City has the option at time of development to purchase up to two acres of the site at the District's chosen location, depending on development.

The site has generally level topography that is at street grade, with the entire area being considered usable land.

The site is sized to accommodate an elementary school as well as a smaller school facility, such as the alternative high school. Its close proximity to Forest Grove High School makes it an ideal candidate for an alternative high school location.

McKibbin Property

The McKibbin property is located north and east of Highway 47. The site is approximately 30.4 acres, which is ample space to accommodate either an elementary school or a middle school.

However, a portion of the site is identified as wetlands and a high voltage power line runs diagonally through the property, which may limit the usability of the site. Additionally, the site is currently outside of (but adjacent to) the Urban Growth Boundary (UGB). These issues would have to be evaluated in more detail prior to making a decision to build on the McKibbin site.

DIAGRAM:
Neil Armstrong / Fern Hill Site

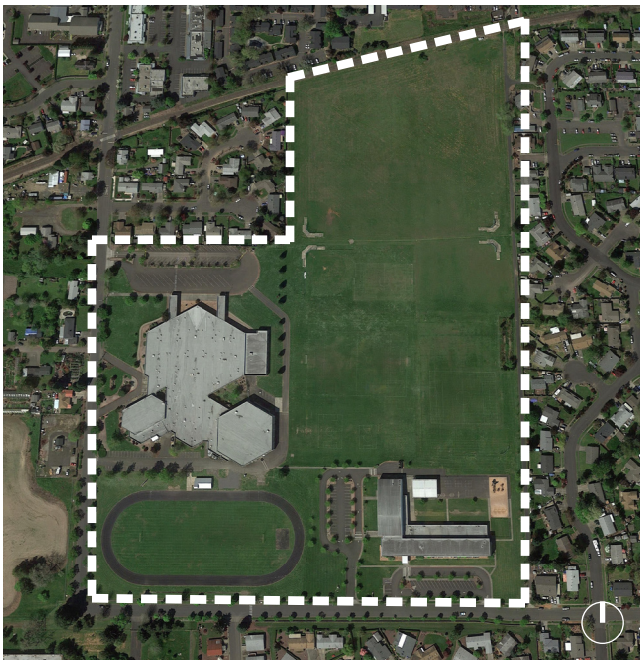
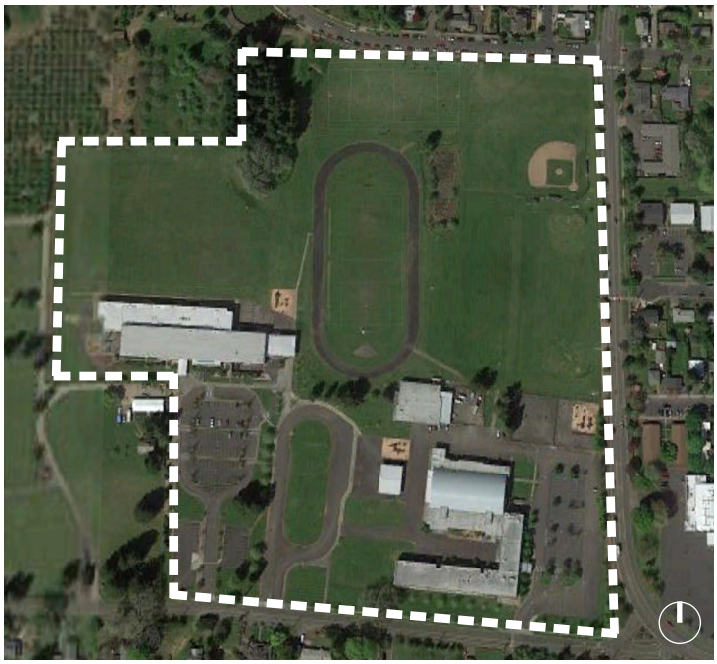


DIAGRAM:
Tom McCall Upper Elementary Site



EXISTING SCHOOL SITES WITH AVAILABLE AREA

Some of the District's existing facilities are located on sites that may be large enough to accommodate colocation with another facility in the future. This option may be considered in particular for smaller non-neighborhood facilities, such as an alternative program facility. However, it will be important to assess program compatibility before considering colocation.

This consideration is based on high-level analysis that includes comparison with District site size targets, general topography and site configuration, and location in the District. Other factors outside the scope of this study must be also be considered for these sites, including setbacks, easements, site access, and the presence of wetlands.

Although further analysis is required to determine the viability of each site for colocation, the following sites appear to have potential for this based on site size, topography, configuration, and location.

Neil Armstrong Middle School / Fern Hill Elementary School Site

The Neil Armstrong Middle School/ Fern Hill Elementary school site is approximately 55 acres in size, and located in the eastern portion of the District. Based on District site size requirements, these two facilities require approximately 22-30 acres, leaving a sizable area (13-29 acres) for potential development. There is also potential for shared use of fields and other amenities by the multiple facilities on the site, making it even more efficient.

As shown in the aerial above, the two existing school facilities are located on the south and west edges of the site, leaving the northern portion of the site available for future development. This area is currently used as outdoor play and field space for both the elementary and middle schools, which would have to be accommodated in any colocation plan. Additional access to the north portion of the site may difficult, due to the railroad line that borders the northern edge of the site.

The east side of the site has two easements totaling 25 feet, including a community trails easement with the City of Forest Grove and a storm water easement. There is also a railroad right-of-way on the east side of the site.

The site is in Forest Grove, but directly adjacent to the City of Cornelius to the east, so jurisdictional issues must be considered. Other issues to be addressed with this site include the potential for additional storm water retention requirements and sewage service to the northeast portion of the site.

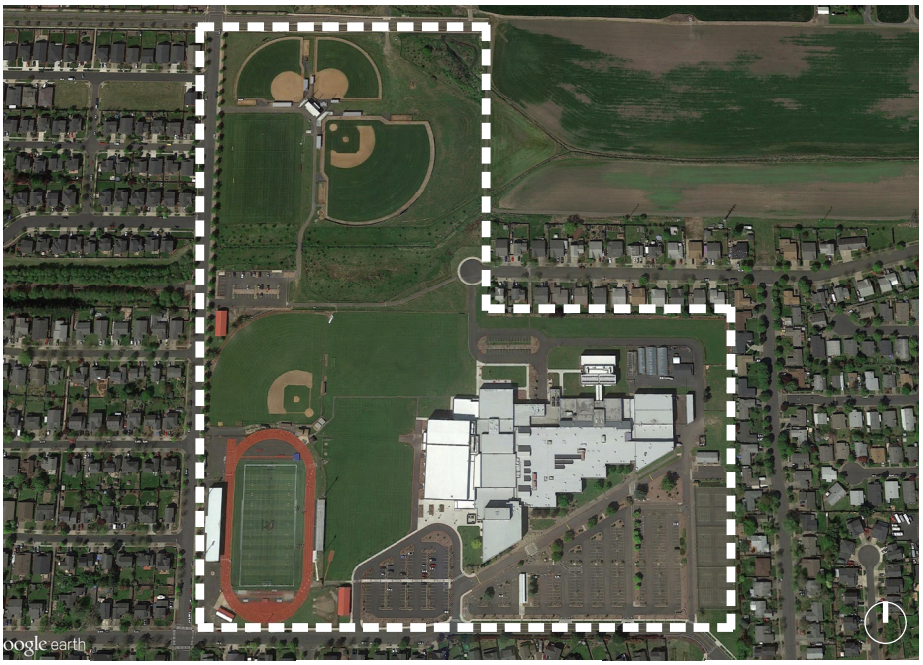
Tom McCall Upper Elementary School Site

The Tom McCall Upper Elementary School site houses both the East and West school facilities, and has a combined total area of approximately 47 acres. The target site size for these two facilities, based on District requirements, is 15-20 acres, leaving a significant portion of the site for potential development. The site is located on the west side of Forest Grove.

As shown in the aerial above, the two existing facilities are on the south and west edges of the site, leaving the northern portion for potential development. Similar to the Neil Armstrong / Fern Hill site, that area is currently used for field space that would need to be accommodated elsewhere if development occurred. Potential additional access to the site may be possible from Goff Road to the north and/or E Street to the east.

There is a large storm water facility on this site that accommodates both the East and West buildings. Additionally, street improvements at Goff Road may be required.

DIAGRAM:
Forest Grove High School Site



Forest Grove High School Site
The Forest Grove High School site has a total of approximately 77 acres, while the District's target site size for high schools is 35-40 acres. It is located in the northern portion of Forest Grove, centrally located in the District and near the area of expected future development. The L-shaped site has buildings, parking, and a football stadium and track in the southern portion of the site, as shown in the aerial above. Currently the northern portion of the site houses a recently constructed set of sports fields, as well as support facilities and parking.

Issues to consider with this site include power and utility easements on the east side of both the north and south portions of the site. Additionally, there are extensive wetlands designated in the northern portion of the site, as well a storm water easement on the northeast corner of the property.

IDENTIFYING FUTURE SCHOOL SITES

One component of a long-range facility plan is to identify desirable sites that may be needed for future use as a district grows. Although the District does not have an immediate need to purchase more land, it is important to identify the criteria for site selection that may be used for future land acquisition.

CRITERIA FOR SITE SELECTION

Each parcel of land identified as a potential school site should be thoroughly examined to determine its suitability in terms of educational plan, accessibility, cost, size, and environmental impact. Each site and the surrounding property should be evaluated on both its present and possible future uses.

The following are general criteria for all educational facilities:

Site Size
Minimum site size targets for each educational level established by the District should be followed. School site size targets established as guidelines for the purpose of this Long-Range Facility Plan are:

> Elementary site size of 7-10 acres
> Upper elementary and middle schools site size of 15-20 acres
> High school site size of 35-40 acres

Site Characteristics
> Usable size and shape
> Ability to support the educational program
> Ability to support future expansion
> Usable topography and soil conditions
> Presence of trees and other vegetation

Infrastructure
> Availability of water, sewer and energy sources (electricity, natural gas)
> Potential for alternative energy use and/or shared use
> Availability of telecommunications

Legal Requirements
> Appropriate zoning
> Ability to comply with state rules and regulations (disabled access, etc.)
> Not a hazardous area (flood plain, etc.)
> Available and free of encumbrances

Location
> Convenient location for majority of students
> Proximity to other community services (library, parks, museums)
> Relationship to existing educational facilities
> Zoning and development/potential development of surrounding land
> Potential for shared use (parks, etc.)
> Appropriate location for open space in the community
> Aesthetically pleasing environment

Access
> Accessible for service vehicles
> Suitable roads and traffic patterns
> Multiple points of access to the site

Health and Safety
> Safe environment
> Healthy air quality
> Free of industrial and traffic noise
> Served by public agencies (police, fire, public transit, etc.)

Reducing Barriers for Pedestrian & Bicycle Access to Schools
> In accordance with ORS 195.115, the City and County shall work with District personnel to identify barriers to children walking or bicycling to and from school
> Districts may develop a plan for funding improvements designed to reduce the barriers and hazards identified

SECTION 07

REGULATORY CONTEXT & CAPITAL FINANCING

STATE OF OREGON REGULATORY CONTEXT

The regulatory context for the Long-Range Facility Plan is primarily established by the Oregon Revised Statutes (ORS) and the Oregon Administrative Rules (OAR), in addition to any applicable city and county ordinances.

Changes to the regulatory environment in the State of Oregon include the recent development of the School Construction Matching Program by the Oregon Department of Education (ODE) and revisions to the physical education requirements.

ORS 195.110 REQUIREMENTS

ORS 195.110: School Facility Plan for Large School Districts is the statute that prescribes what elements the State of Oregon requires in a long-range facility plan. Subsection (5)(a) includes the specific topics the LRFP must include:

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

(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

This Long-Range Facility Plan has been reviewed and updated as needed to meet the specific requirements of ORS 195.110. ORS 195.110 is included for reference in Appendix F—Regulatory Information.

OAR 581- 027 REQUIREMENTS

The Oregon Administrative Rules are created by most agencies and some boards and commissions to implement and interpret their statutory authority. The OARs are the official compilation of rules and regulations having the force of law in the state of Oregon, and are the regulatory and administrative corollary to the Oregon Revised Statutes. The OARs are published pursuant to ORS 183.360 (3).

Chapter 581 of the OAR encompasses the rules and regulations of the Oregon Department of Education (ODE). Division 27 within this chapter covers the School Construction Matching Program and defines requirements for facility assessment, seismic assessment, and long-range facility plans. Adoption of this Plan will satisfy the current requirements

of the applicable OARs. OAR 581-027-0040 is included for reference in Appendix F—Regulatory Information.

Oregon School Capital Improvement Matching Program

The State of Oregon provides matching grants to school districts from designated resources in the Oregon School Capital Improvement Matching (OSCIM) account. The State determines and apportions the amount of available resources to districts among the funding cycles in each biennium.

The total amount of State matching grant funds available and awarded varies during each funding cycle. In order to qualify for an OSCIM program matching grant, Districts must submit a long-range facility plan and facility assessment as part of their OSCIM program application.

Section 581-027-0023 prescribes the elements of the LFRP that a district must submit to be eligible for matching funds. The Long-Range Facility Plan must comply with the standards set forth in OAR 581-027-0040; and demonstrate how the new buildings proposed to be built are integrated into the Long-Range Facility Plan. The Facility Assessment must comply with the standards set forth in OAR 581-027-0035, cover buildings that will be included in the OSCIM program grant application, and cover a District's current buildings even if the District is applying for the OSCIM program only for the construction of a new building.

Districts are not required to use a Certified Contractor to complete the LRFP or the Facility Assessment. A District may use the same Facility Assessment and LRFP as a basis for an OSCIM program application for four years from the year in which the plan was completed.

PHYSICAL EDUCATION REQUIREMENTS

In 2007, the Oregon Legislature enacted House Bill 3141 (ORS 329.496), which calls for a minimum of 150 minutes of weekly physical activity for students in kindergarten through fifth grade, and 225 minutes of weekly physical activity for students in sixth through eighth grades. Senate Bill 4 (SB4) was enacted in 2017, with new provisions and amendments.

School districts are required to provide students with the specified amount of physical activity starting in the 2017-18 school year, with full compliance required by the 2022-23 school year.

Based on preliminary evaluations completed by the District as part of this planning process, additional physical education (PE) teaching stations may be needed at the middle school level, in order to meet this requirement through the 2030-31 school year (the capital plan horizon). It appears that the District's existing elementary schools may have an adequate number of PE teaching stations to meet the state requirements through the ten-year time frame. A more detailed analysis will be required to confirm specific space needs, as the preliminary evaluation relied on a number of high-level assumptions that will need to be verified.

ORS 329.496: Physical Education Participation is included for reference in Appendix F—Regulatory Information.

SEISMIC REQUIREMENTS

ORS 455.400 — Effect of Seismic Rehabilitation Provisions on Exclusive Remedy requires that school districts develop a plan for seismic rehabilitation or other actions to reduce the risk for buildings that pose an undue risk to life safety during a seismic event. Subject to available funding, all seismic rehabilitations or other actions to reduce seismic risk must be completed before January 1, 2032.

Seismic rehabilitation is defined as construction of structural improvements to a building that result in the increased capability of the building to resist earthquake forces and that are based on standards adopted by the State of Oregon or by local governments.

In order to comply with ORS 455.400, the District understands that a phased seismic improvement must be considered, which includes consideration of upgrades to existing buildings in the District, as well as the replacement of substandard seismic facilities.

ORS 455.400 is included for reference in Appendix F—Regulatory Information.

LOCAL COMPREHENSIVE PLANS

Following adoption of the LRFP by the School Board, the Plan will be presented to the City of Forest Grove, the City of Cornelius, and Washington County for adoption into their respective local comprehensive plans.

In accordance with ORS 195.110 (2)(a):

(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.

Upon adoption the local jurisdiction may use the LRFP to evaluate whether a plan or land use regulation amendment proposed within the jurisdiction will significantly impact school capacity. If significant impacts are identified, the school district may request that the city or county implement a coordinated process with the district to identify methods to address the projected impacts.

HISTORIC CONSERVATION

State statute ORS 358.653 requires school districts that have buildings of historic significance in their facility portfolio to coordinate with the State Historic Preservation Office to protect buildings from inadvertently being transferred, sold, demolished, substantially altered, or allowed to deteriorate by work being performed on the buildings.

OPTIONS FOR FUNDING CAPITAL IMPROVEMENTS

The majority of operating funds for public schools in Oregon are allocated by the state under a funding formula that is primarily based upon the number of students enrolled in each school district and funded by local property taxes and state appropriations. In general, these funds cannot be used for capital expenses.

The main source of funding for capital projects for schools in Oregon is voter-approved bonds, such as general obligation bonds. Other potential capital funding sources include the State's recently enacted Oregon School Capital Improvement Matching program, and construction excise tax revenue.

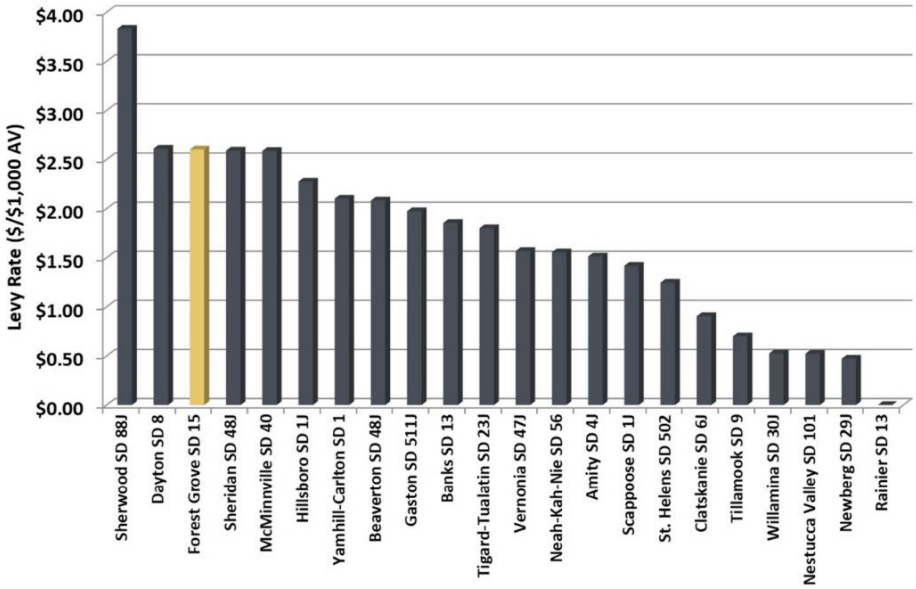
The adjacent chart (upper right) illustrates approximate 2021 bond rates for school districts in the surrounding area. Forest Grove School District is in the upper range, with a bond rate of approximately $2.60 per thousand dollars of assessed value. Forest Grove does not currently have a local option levy at this time.

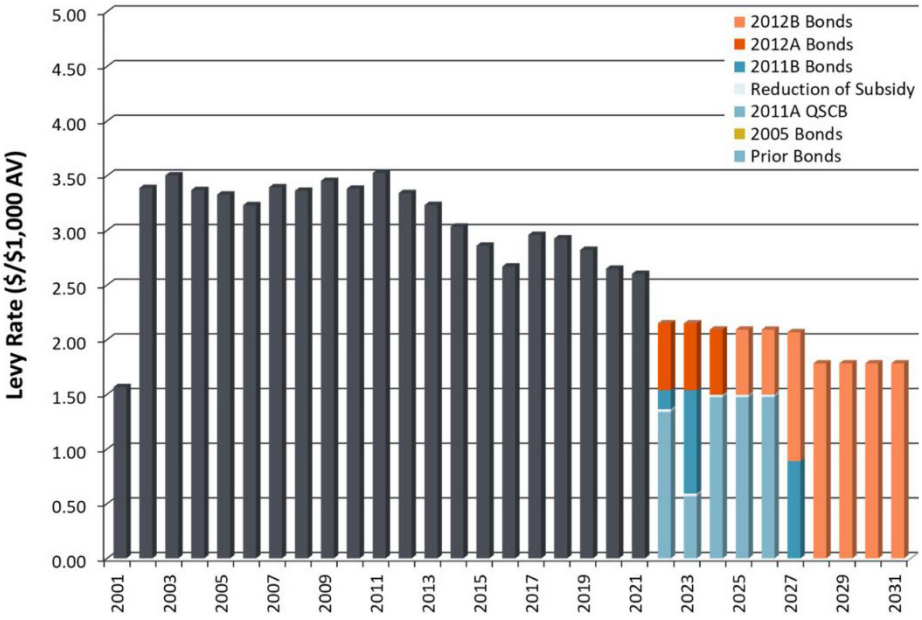
GENERAL OBLIGATION BONDS

General Obligation (GO) bonds are a municipal debt security issued by the District and backed by the full faith and credit of the District. They are used to finance capital expenditures and are supported by a voter-approved property tax levy. School districts typically borrow money to build or improve schools and repay the debt with proceeds from property taxes. The calculation for this tax is based on the assessed value of property, which is different from the market value of property.

GO bonds can be issued for land acquisition, construction, new schools, renovation or improvement of school facilities, and equipment intrinsic to the facility. Historically, Forest Grove School District has used this method

DIAGRAMS:
2021 School District Bond Rates, Piper Sandler (upper)
Outstanding Bonds: Actual & Projected Levy Rates, Piper Sandler (lower)





of financing for most of its capital construction. The chart above illustrates actual and projected levy rates for Forest Grove School District's outstanding general obligation bonds.

The District's current rate of $2.60 per $1,000 of assessed value is the lowest the rate has been in the last 20 years, with a peak in 2011 of approximately $3.50 per $1,000 of assessed value.

The total bond debt can be structured as long-term; 20 or 25 years is a common repayment period. The District's most recent capital improvement bond was passed in 2010. It was structured as a 20-year bond and is scheduled to sunset in 2031, but includes a step-down in the rate after 2021, to $2.15 per $1,000 of assessed value. This step-down provides the opportunity for a potential additional capital measure at that time. For this Long-Range Facility Plan, a bond duration of 20 years was assumed for all proposed capital planning options.

SCHOOL CONSTRUCTION MATCHING PROGRAM

In late 2015, the State Board of Education approved the Oregon School Capital Improvement Matching program (Senate Bill 447), which provides matching grants to support improvements to school facilities, as described on the previous page. Communities that pass general obligation bonds to improve their local school buildings will be eligible to receive matching grants of up to $8.0 million.

The program is intended to help stretch local dollars and address urgent school facility needs across the state. Funds are awarded through two methods:

- Priority List Process – 60 percent of the funds will be awarded through a process which prioritizes districts with low-assessed property value and higher rates of student poverty, to encourage communities with fewer resources to support a local school facilities bond which will be matched by the state
- First-In-Time Process – the remaining 40 percent of the funds will be available to districts on a first-come-first-served basis, to provide all districts with a chance to receive matching grants from the state

Based on the ODE's OSCIM priority ranking and grant calculations for the 2021-23 biennium, Forest Grove School District is ranked 82nd in the state, with a maximum grant amount of approximately $6.7 million.

CONSTRUCTION EXCISE TAX

The 2007 State Legislature passed Senate Bill 1036, allowing school districts to impose a construction excise tax (CET) on improvements to real property that result in a new structure or additional square footage (over 1,000 square feet) in an existing structure. This revenue 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, and architectural, engineering, legal or similar costs related to capital improvements.

Forest Grove School District has a CET rate of $1.00 per square foot for new residential construction and $0.50 per square foot for new nonresidential construction. In the 2020-21 school year, the District received $700,000 in CET funds (to be finalized July 30, 2021), and continues to renew the agreement every year to collect these funds.

OTHER SOURCES OF CAPITAL FUNDS

There are additional sources of capital funding that may be available to school districts, including Cool Schools, SB1149, grants, and donations. However, these can be limited both in amount and in how they can be used.

The District's annual proceeds under SB1149 were approximately $25,000 in 2020-21 (to be finalized July 30, 2021), and can only be used for certain energy-related projects.

The District pursues federal and state grant opportunities as they are available. Having a currently-adopted LRFP is a typical criterion for grant applications.

The District can receive donations given by a person or foundation for charitable purposes to benefit the education of Forest Grove School District students.

Operating funds may be used for some types of capital expenses. The District may choose to use operating budget dollars to pay for unavoidable capital needs. However, that will reduce the amount of funding that is available to pay for critical operating expenses, such as teacher salaries.

PARTNERSHIPS AND CREATIVE FINANCING

Capital improvement partnerships provide vital opportunities for the District and should be further explored in the planning and construction of capital projects. Identifying successful capital funding partnerships is a thoughtful process and must benefit both Forest Grove School District and any potential partner.

ALTERNATIVES TO NEW CONSTRUCTION

There are a number of ways to accommodate growth in programs and/or enrollment that do not necessitate new construction or renovation. Strategies that address program need, growth, and facility condition can provide additional capacity and may influence the extent of major modernizations and/or new construction.

Whenever possible, it is important for the District to explore options for increasing the amount of school capacity without having to make major capital investments. These strategies are identified as potential ideas to be considered and will not necessarily be implemented by the District.

Strategies that address program:

- Repurpose existing space for other uses when possible
- Utilize public / private partnerships
- Develop online education programs to reduce enrollment demand
- Locate alternative programs in nontraditional facilities

Strategies that address growth:

- Utilize flexible student assignment procedures
- Increase class size
- Adjust attendance boundaries to maximize occupancy at underutilized schools
- Allow or maintain enrollment above target capacities
- Add capacity with modular classrooms
- Reactivate vacant / repurposed buildings
- Expand existing schools

Strategies that address condition:

- Close schools in the poorest condition and consolidate if enrollment / capacity allow
- Address the most critical issues using annual maintenance dollars when possible

IMAGES:
Oak Grove Academy at the Former Gales Creek Elementary School (left) & CALC at Taylor Way Support Annex (right)

STRATEGIES THAT ADDRESS PROGRAM:

REPURPOSE EXISTING SPACE

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

Currently the District has repurposed the former Gales Creek Elementary School facility to house a portion of the districtwide Oak Grove Academy program. In addition, Central Administration is housed in the former Central School building. The District has also shifted grade levels at some facilities, which has maximized space utilization as well as improved educational programs.

UTILIZE PUBLIC / PRIVATE PARTNERSHIPS

There may be opportunities for public / private partnerships to support District programs, in lieu of new construction or major renovations. In general, lease arrangements are made on a case-by-case basis to support educational program objectives.

In particular, there is opportunity for career and technical education programs to have robust partnerships with industry, both within school facilities and with internships at industry partner sites.

DEVELOP ONLINE EDUCATION PROGRAMS

Providing a robust online school program can help districts manage enrollment to a limited extent, as well as fill a need for students with particular learning styles and needs. However, this option is typically only used by a small percentage of students.

Forest Grove School District currently has a tuition-free online program for K-12th grade students, FGSD Online. A more robust online learning program is anticipated to be part of an expanded alternative high school program in the future.

Although the current year is an exception due to distance learning requirements that resulted from the Covid-19 pandemic, the District anticipates the use of online learning as a complimentary educational resource in the long term, rather than being used exclusively by students, so this strategy may not provide a significant reduction in enrollment at traditional school facilities.

LOCATE ALTERNATIVE PROGRAMS IN NONTRADITIONAL FACILITIES

Small, specifically tailored educational programs can be located in facilities other than traditional school buildings, allowing districts to utilize other types of building stock they may own, or lease commercial or retail space. The ability to house some students outside of traditional school facilities can reduce enrollment demand. This strategy is most appropriate for high school students and potentially middle school students as well.

Currently, the District houses the Community Alternative Learning Center (CALC) within the Taylor Way Support Annex building, providing space for up to 90 students that would otherwise be housed at the high school. Although this is not an ideal location for the program, it illustrates the ability of the District to utilize this strategy.

STRATEGIES THAT ADDRESS GROWTH:

UTILIZE FLEXIBLE STUDENT ASSIGNMENT PROCEDURES

Flexible student assignment procedures have the potential to help balance enrollment growth, depending on a number of other factors. Open enrollment allows students to transfer to

a school with available capacity outside of their attendance area. If a school that has been offering open enrollment were to reach a high level of utilization, the District could terminate open enrollment at that school to relieve overcrowding.

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 typically reviewed by building administrators and approved or denied on a case-by-case basis. An excessive number of administrative transfers to one school could result in space utilization issues for that building.

Forest Grove School District provides a guaranteed school for every K-12 student, based on their home address. The District also provides options for students to attend other schools, including other District neighborhood schools, magnet schools, and the independently-operated charter school.

INCREASE CLASS SIZE

Districts can choose to increase target class sizes to accommodate growth, however, this approach is impractical to meet long-term needs. All districts have natural fluctuations in class size, both between grade levels and within a given year, however there is a limit to the number of students that can be accommodated within a given space, determined by the size of existing classrooms. Large class sizes may also compromise instruction.

In addition, existing facilities have support spaces, such as a cafeterias and restrooms, that are sized to accommodate a certain number of students. Increasing class sizes beyond what the building was designed for may impact the viability of these support functions.

It was determined by the District that increasing class sizes above the stated targets as a planning strategy does not align with the District's vision and goals, and will not provide the best educational environment for students. However, there are natural fluctuations to class size, both between grade levels and within a given year, and the District has classes that are significantly above the target class size, due to operational funding constraints.

ADJUST ATTENDANCE BOUNDARIES

Adjusting attendance boundaries within the District can help compensate for enrollment growth in individual schools, particularly if growth is concentrated in specific areas. Boundary adjustments can be very emotionally charged, contentious, and complex. However, they do not require capital investment.

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. In addition, this process can cause significant disruption for schools and families and may lead to increased busing requirements and associated costs.

It is important to note that boundary adjustments are not always made by choice. They are necessary when districts construct new school facilities, reconfigure grade levels, or implement other significant program or enrollment changes.

There is also potential to look at boundary adjustment between Forest Grove School District and other neighboring districts, including the Hillsboro School District to the east. However, this area of the District is not projected to have significant enrollment growth. This approach is only viable if the adjustment can be beneficial to both districts.

ALLOW ENROLLMENT OVER TARGETED CAPACITY

Allowing schools to have enrollments over their targeted facility size is another way to compensate for enrollment growth in concentrated areas, if the building and site can accommodate it.

The District does not currently have any schools with enrollment over the District's target capacities. However, two elementary schools have projected 2030-31 enrollments over the stated targeted capacity of 500, including Harvey Clarke and Joseph Gale. There are no upper level schools that currently have, or are projected to have, enrollment over District targets sizes.

It was determined by the District that increasing enrollment above the target capacity as a planning strategy does not align with the District's vision and goals, and will not provide the best educational environment for students. However, it is understood that enrollments fluctuate over time due to a number of factors and cannot always be managed to stay under established targets.

ADD CAPACITY WITH MODULAR CLASSROOMS

Modular classroom buildings, which are typically funded through operational dollars rather than capital funds, offer solutions both for making more efficient use of a school site and providing a substitute to constructing new permanent buildings. Where there are no site conditions prohibiting their use (e.g. site size, environmental constraints, or local zoning and development standards), they are a flexible means of responding to capacity need and cost less than permanent buildings to purchase and operate.

Modular classroom buildings 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. Further, while adding to a school's enrollment, they do not expand the existing shared common areas such as cafeterias, gymnasiums, media centers and restrooms. Finally, it is important to note that the addition of

IMAGE:
Modular Classroom at Cornelius Elementary School (left) & Administration at the Former Central School (right)

modular classrooms may create security concerns and place additional stress on already underfunded operational budgets.

The District has modular classrooms at three of the four elementary schools that are currently over capacity: Cornelius, Harvey Clarke, and Joseph Gale.

The District has a desire to eliminate modular buildings whenever possible. Therefore the Long-Range Facility Plan is based on permanent capacity to the greatest extent possible.

REACTIVATE VACANT AND LEASED BUILDINGS

Reactivation of offline facilities may provide an opportunity for school districts to address growth. However, their location in relation to areas of capacity need must be considered, as well as the significant capital costs associated with maintenance and improvement. Leasing facilities may offset some costs.

The District fully utilizes its existing building stock and does not own any former schools that are currently vacant or being leased. There are two school facilities that are currently in use for other District functions: the former Gales Creek Elementary School is being used for the Oak Grove Academy and the former Central School currently houses the District's administrative functions.

Since both facilities are housing necessary functions in the District, they do not provide significant opportunities to address growth. Additionally, they are not in the right location to accommodate current growth patterns in the District and there are significant capital costs associated with improvement, as these are two of the oldest facilities in the District.

However, this strategy should be kept in mind when replacing facilities in the future. If the District has the opportunity to take buildings offline rather than demolish them, it can provide flexibility for future use, as well as potential swing space during construction periods.

EXPAND EXISTING SCHOOLS

Expanding existing schools with additions to provide additional capacity is an option when capital construction monies are available. Permanent construction costs more than providing modular classrooms and requires confidence that the growth and enrollment levels at schools in that area will be increased or sustained in the long term.

Additions are not recommended for older school facilities without fully modernizing the existing building. However, additions at newer facilities have the potential to leverage existing building support areas, such as gymnasiums and cafeterias, increase efficiency of site usage, and provide operational efficiencies.

Forest Grove School District currently has two school facilities that are designed to accommodate future expansions to increase capacity: Fern Hill Elementary School and Tom McCall East. Both schools were designed with planned additions in mind and support facilities sized to accommodate additional capacity.

STRATEGIES THAT ADDRESS CONDITION:

CLOSE SCHOOLS AND CONSOLIDATE

Closing or repurposing schools that are in the poorest condition can alleviate the need for modernization, if these students can be accommodated at neighboring schools. Possible candidates for closure would include older schools in the District that have significant maintenance and operational needs, do not accommodate educational programs adequately, are significantly smaller than the District target size, and/or have low enrollment.

IMAGE:
Dilley Elementary School

Dilley Elementary School may be a good candidate to consider closing or repurposing in the future, for the following reasons:

- It is the smallest and oldest school in operation in the District
- It has a remote location relative to the majority of projected student enrollment
- It has limited (or potentially no) ability for expansion or replacement on the existing site

However, school closures have a significant impact on the surrounding community, and many other issues should also be considered, such as the potential for increased transportation times, available space in nearby schools, continuation of site-specific programs and activities, and the impact of neighborhood schools in a community.

Utilizing this strategy makes sense if there is excess capacity in the District, which is not the case for Forest Grove School District within the 10-year capital planning horizon. If the need arises in the future, closing or repurposing school facilities, or declaring such facilities as surplus, should be carefully considered by the District.

USE MAINTENANCE FUNDING FOR CRITICAL ISSUES

It may be possible to allocate some operational funds to fix immediate needs in some facilities. As noted previously, this is not a viable long-term strategy and may impact the District's ability to meet operational needs. Currently, the District's maintenance budget has limited capacity for additional projects beyond basic maintenance needs.

SECTION 08

10-YEAR CAPITAL PLAN

PROCESS OVERVIEW

Over the course of five months of meetings with the District Leadership Team, three meetings with the Focus Group, and two community forums, a number of preliminary capital bond proposals were developed and refined.

The District Leadership Team identified potential projects for the proposals based on the District Strategic Plan, Board priorities, LRFP guiding principles and planning goals, and a detailed understanding of the identified facility need in the District.

Plan development began with a review of the proposed plan options and tax impacts identified in the 2017 LRFP, which were developed through an interactive process with a Community Advisory Committee and broader community. The 2017 plan options were used as a baseline for developing the new plan options, along with a detailed understanding of how the District's goals and needs have changed since the previous LRFP. Significant changes that impacted the updated plan included a new District strategic plan and Board priorities, school capacity adjustments, updated enrollment projections, and an updated facility condition assessment.

Project needs were balanced with a recognition of community support levels, resulting in the development of seven initial bond plan options (A-G) that addressed District needs with varying levels of scope and budget.

Feedback from the Focus Group during the planning process led to the elimination of the two lowest and two highest cost plan options, as well as development of an additional mid-range plan option, E2. The revised set of four options were then taken out to the broader community in two community forums. Community members provided input through discussions and real-time polling responses, indicating strong support for two of the plan options.

The District Leadership Team used the community feedback to review the plans, and developed a new plan option, E3, in response. The final five plan options, along with a summary of the community input received, were presented to the Focus Group for a last round of input.

Both the Focus Group and the broader community had similar feedback related to plan components and funding amounts. Based on the feedback received, the District identified two of the final plan options as 10-year capital plan proposals.

Information regarding strategies to address the identified need, plan development, community outreach, and the final plan proposals are included on the following pages.

TABLE:
Strategies to Address Identified Facility Need

STRATEGIES TO ADDRESS FACILITY NEED

The 10-year capital plan addresses identified need in alignment with District goals and programs. The total District facility need is estimated at approximately $540 million (escalated project cost), in the areas of educational program, facility condition, enrollment and capacity, and replacement schools.

Based on analysis of the District's facility need and discussions with the District and Focus Group, a list of potential projects were developed for possible inclusion in the long-term facility plan scenarios. Projects reflect the current and projected needs of the Forest Grove School District, and are described below. Projects not prioritized for inclusion in the long-range planning scenarios will continue to be tracked and addressed in later phases of the Long-Range Facility Plan.

Strategies to Address Facility Need

EDUCATIONAL PROGRAM

Early Childhood Education
- Expand Prekindergarten Program ..... $4.8 M

Alternative Education
- New Alternative High School ..... $21.5 M
- Add Alternative Education at Middle School ..... $2.0 M

Career & Technical Education
- Improve & Expand CTE Programs ..... $13.2 M

Physical Education
- Add Middle School PE Teaching Stations ..... $3.2 M

Educational Adequacy
- Improve Instructional Areas ..... $9.2 M

FACILITY CONDITION
- Deferred Maintenance ..... $45.1 M
- Facility Modernization ..... $112.0 M
- Seismic Upgrades ..... $75.0 M
- Technology & Security Upgrades ..... $6.5 M

ENROLLMENT & CAPACITY
- New Elementary School (300 students) ..... $48.1 M
- Classroom Addition at Fern Hill Elementary (160 students) ..... $10.9 M

REPLACEMENT SCHOOLS
- Replace Cornelius Elementary School (500 students) ..... $65.5 M
- Repurpose Cornelius Cafeteria & Gymnasium ..... $5.0 M
- Replace Neil Armstrong Middle School (900 students) ..... $123.6 M

EDUCATIONAL PROGRAM

The estimated educational program need totals $53.9 million and includes projects in the following program areas, which are described further in Section 03 — Educational Program:

> Early Childhood Education

> Career & Technical Education

> Alternative Education

> Physical Education

> Educational Adequacy

Expand Prekindergarten Program ($4.8M)
Modernize existing space at three Title 1 elementary schools, including Cornelius, Fern Hill, and Joseph Gale, to provide one preschool classroom and associated support at each school.

New Alternative High School ($21.5M)
Construct a new alternative high school facility with a capacity of 150 students to house the District's high school level alternative education program, CALC.

For planning purposes, a 24,000-square-foot facility is assumed, which would provide 160 square feet per student. Shared use of existing specialized space at the high school, such as gymnasiums and CTE classrooms, is also assumed.

Add Alternative Education at the Middle School Level ($2.0M)
Modernize existing space (estimated 3,400 square feet) at Neil Armstrong Middle School to provide a stand-alone alternative education program, including kitchen facilities.

Improve & Expand Career & Technology Education Programs ($13.2M)
New addition (estimated at 13,000 square feet) and modernization of existing space (estimated 2,000 square feet) at the high school to provide improvements for the Mechatronics, Early Childhood Education, and Culinary programs.

Note: It was determined by the District that CTE improvements can be addressed outside of the LRFP with other District funds.

Add Middle School PE Teaching Stations ($3.2M)
Modernize existing space at Neil Armstrong Middle School to provide two additional PE teaching stations, in order to provide adequate facilities to meet the State requirements for PE instruction.

Note: It was determined by the District that meeting the State requirements for PE instruction at the middle school level can be addressed outside of the LRFP.

Improve Instructional Areas ($9.2M)
In order to address educational adequacy, provide a new addition and modernization at Echo Shaw Elementary School, which is the only elementary school that is significantly (more than 20 square feet) below the target area per student established by the latest elementary school, Joseph Gale.

FACILITY CONDITION

The facility condition need totals $238.6 million and includes estimated 10-year deferred maintenance and facility modernization costs established by the facility condition assessment, reflecting costs associated with addressing building and site conditions at all District facilities. It also incorporates estimated lump sum amounts for identified projects related to facility condition, including seismic upgrades and technology and security upgrades. Facility condition needs are described further in Section 04 — Facility Condition.

Deferred Maintenance ($45.1M)
Repair and upgrade projects at all District facilities, based on the facility condition assessment findings. Deferred maintenance projects are identified as prioritized needs that should be addressed within the next 10 years, to maintain operations, protect prior investment, and address critical elements such as life safety and accessibility. Components include roofing, HVAC systems, electrical and plumbing systems, equipment, electrical systems, building envelope, interior finishes, fire and life safety, conveyance, and site improvements.

Although improvements will vary based on the specific facility condition needs of each school, every school facility will receive some improvements.

Facility Modernization ($112.0M)
Repair and upgrade projects at all District facilities, including all other deficiencies identified in the facility assessment that are not included in the deferred maintenance category.

Although facility modernization projects primarily include work that was determined to not be critical to complete within the next ten years, one key project that was identified in this category is improvement to the Neil Armstrong entry. A lump sum of $1.0 million was identified for addressing this need.

Seismic Upgrades ($75.0M)
Modernization to improve the seismic condition at the six District facilities that were assessed in the 2006 FEMA Rapid Visual Screening as having a high chance of collapse in a 2,500-year seismic event. Facilities include four elementary schools, Neil Armstrong Middle School, and portions of Forest Grove High School.

A high-level, rough-order-of-magnitude (ROM) cost estimate, based on an assumed cost per square foot of the buildings, indicates that seismic upgrades could exceed $75 million. A detailed cost estimate was not completed for seismic upgrades.

Technology & Security Upgrades ($6.5M)
Districtwide improvements to address security surveillance and access control, upgrade classroom audio-visual equipment, and install dark fiber. Estimated costs have been provided by the District.

ENROLLMENT & CAPACITY

Districtwide, there is a need to add capacity at the elementary level to address enrollment projections over the next 10 years. Capacity can be addressed in a variety of ways. The two projects in this category each provide additional capacity as the primary driver for the project, although they address educational program need as well, by providing new state-of-the-art facilities for learning.

New Elementary School ($48.1M)
Construct a new elementary school for 300 students on the west side of the District, with core facilities sized to accommodate 500 students in the future. For planning purposes, a 57,000-square-foot facility is assumed. This accommodates the District's target area per student, as well as additional area for larger core facilities.

This project provides the additional capacity projected to be needed on the west side of the District, including the removal of portables, with approximately 100 seats remaining.

Classroom Addition at Fern Hill Elementary School ($10.9M)
Construct a classroom addition at Fern Hill Elementary School, which was designed for expansion, of approximately 160 seats (seven classrooms). For planning purposes, 12,000 square feet of addition is assumed.

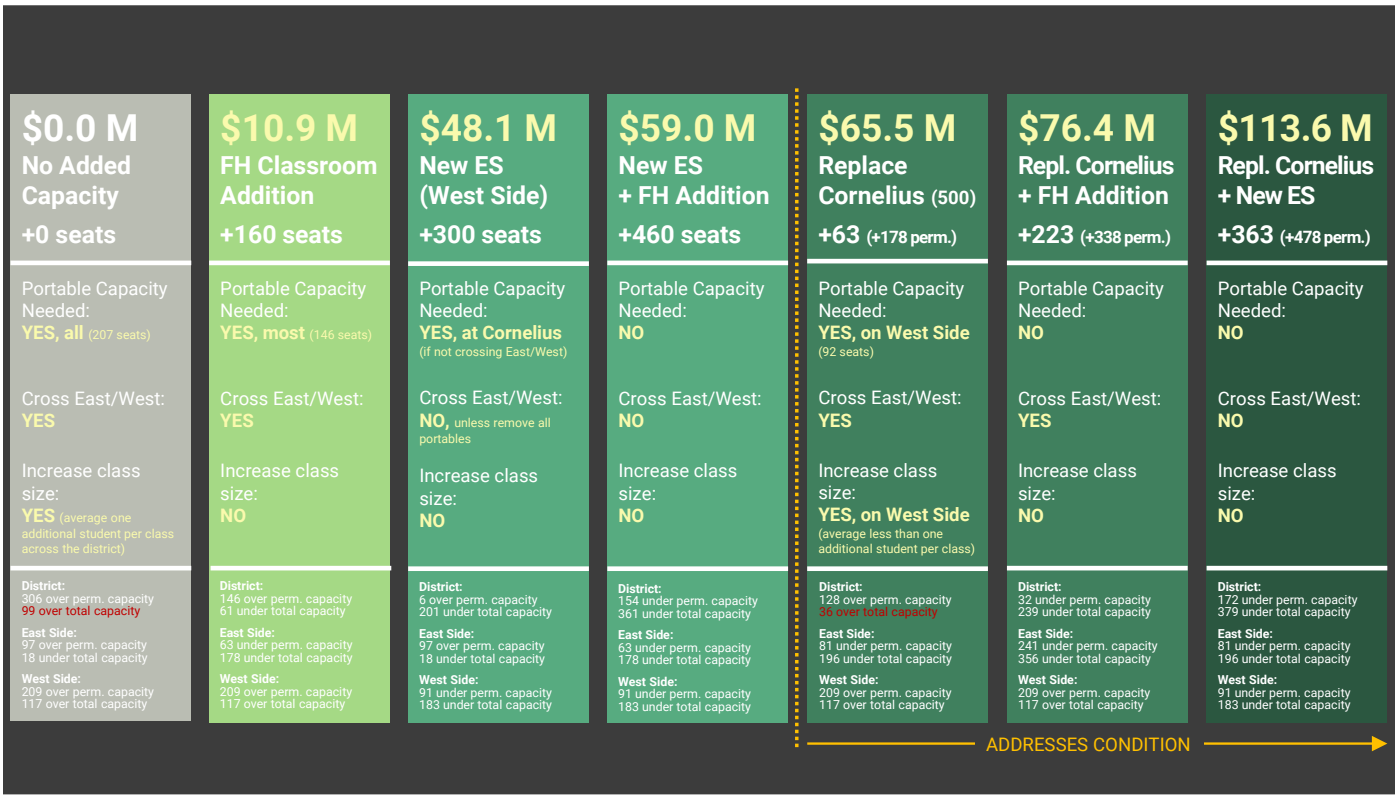
This project provides the additional capacity projected to be needed on the east side of the District, with approximately 60 seats remaining.

REPLACEMENT SCHOOLS

In addition to the three primary areas of need described above, the District also identified two school replacement projects for consideration in the LRFP, based on condition, capacity, and potential educational program improvements. School replacements address facility need in all these the areas.

Replace Cornelius Elementary School ($65.5M)
Replacement elementary school for 500 students on the existing Cornelius Elementary site. For planning purposes, a 75,000-square-foot facility is assumed, which would provide 150 square feet per student, in alignment with the area per student of the District's most recently constructed elementary school, Joseph Gale. It is assumed that the existing school would remain in operation during construction.

DIAGRAM:
Enrollment & Capacity Approaches



This project addresses educational program (provides a modern learning environment and prekindergarten), facility condition (removes one of the oldest and poorest condition buildings in the District), and capacity (adds 63 seats and replaces 115 seats in portables).

Repurpose Cornelius Cafeteria & Gymnasium ($5.0M)
If Cornelius Elementary School is replaced, it may be possible to keep the newer portion of the existing building, the administration/cafeteria/gymnasium portion on the east side. This strategy is dependent on a number of factors, including the location of the replacement school on the site, and should be carefully considered.

If implemented, a lump sum of $5.0 million is estimated to cover the cost of modernizing the space for its new purpose and providing necessary upgrades (as this portion the facility is already 25 years old).

Replace Neil Armstrong Middle School ($123.6M)
Replacement middle school for 900 students on the existing Neil Armstrong Middle School site. For planning purposes, a 135,000-square-foot facility is assumed. This provides 150 square feet per student, which is close to the national median for middle schools.

This project addresses educational program by providing a modern learning environment for all middle school students in the District and facility condition, by replacing an older District facility.

Although there are functional and programmatic issues with the building, the Neil Armstrong facility is just over 50 years old (not one of the oldest facilities) and has an FCI rating of poor (not in the worst condition). Addressing Neil Armstrong, either through replacement or major modernization, is recognized by the District as an upcoming need that should be addressed within the time frame of the following two bond cycles (10-25 years).

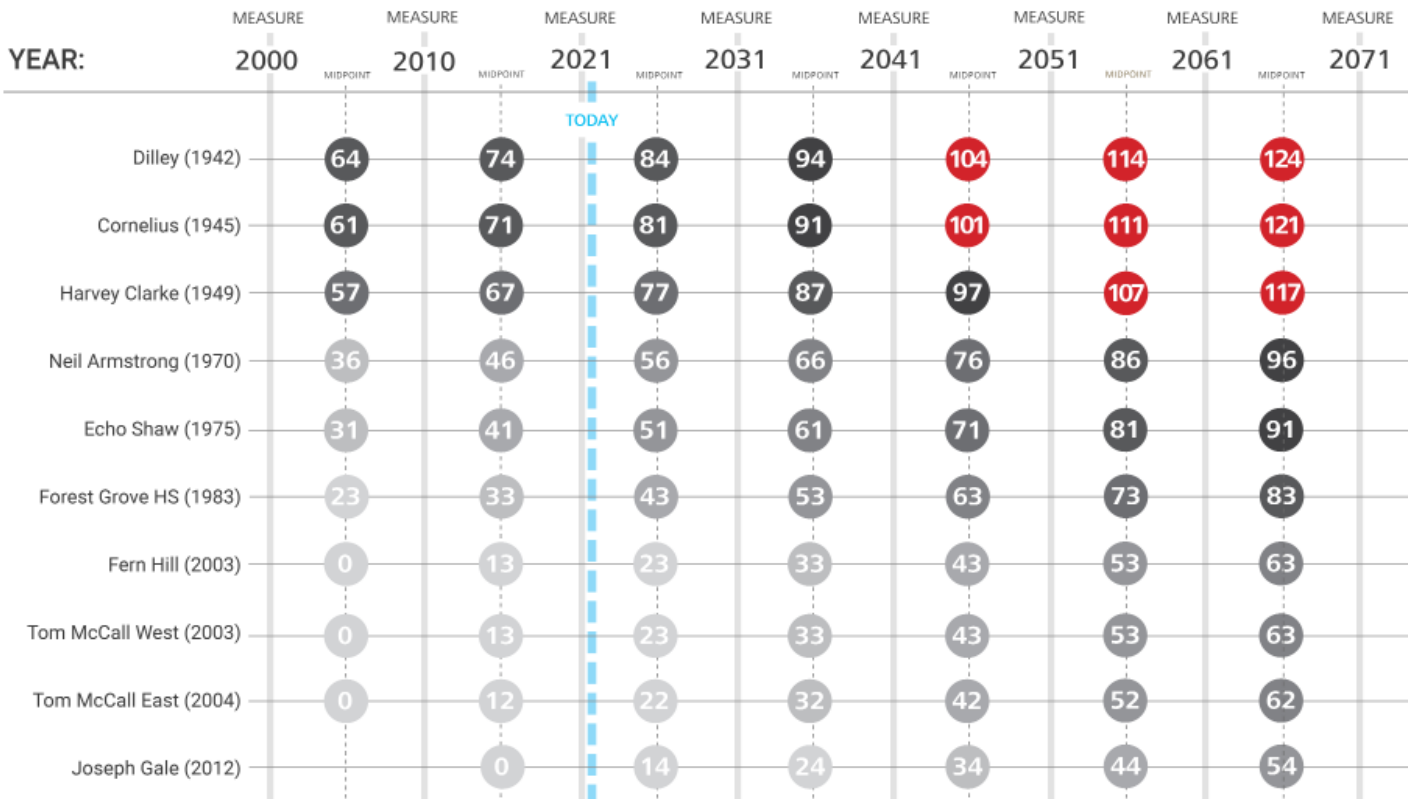
ENROLLMENT & CAPACITY APPROACHES

A series of approaches to address enrollment and capacity at the elementary level were studied by the planning team, and were used as a tool to guide the planning process.

As shown in the diagram above, approaches range from $0.0 (no added capacity) to $113.6 million and provide varying amounts of additional capacity in different locations. Potential projects that were used to develop the approaches include the Fern Hill classroom addition, new elementary school on the west side, and the Cornelius replacement school, all of which are described in more detail on the previous page.

The seven approaches compared the impact of adding capacity on the east and/or west regions of the District and considered the related extent of required boundary adjustments, continuing need for modular classroom use, and the impact on class size within specific school boundary areas.

DIAGRAM:
Long-Term Replacement Approach



LONG-TERM REPLACEMENT APPROACH

The District discussed a continued strategy of replacing the oldest schools in the worst condition, with the intent of avoiding an increasing backlog of very old schools in very poor condition.

Bond Cycle

The Long-Range Facility Plan covers a span of 10 years, but really must look at a much longer time frame. This allows strategic decisions that are made in the next 10 years to set the stage for the next 30-50 years in the District. One factor that impacts long-range planning for the District are bond cycles.

The typical bonding cycle provides the opportunity for school districts to propose a capital measure approximately every eight to10 years, with projects averaging completion at the midpoint of the bond. Bond duration is typically 20-25 years, usually with a partial step-down in the levy rate after about 10 years that allows capacity for another bond to potentially come online. This means there are most likely only five capital measure opportunities for the District in the next 50 years. Each capital measure has the potential to provide a limited amount of funds, based on what the community will support at that time.

Age of District Facilities

Of the District's 10 primary educational facilities, three of them are already more than 65 years old (Dilley, Cornelius, and Harvey Clarke) and three others are between 30-50 years old (Neil Armstrong, Echo Shaw, and Forest Grove High School). Within the next 50 years, many of these facilities will likely require either major modernization or replacement. In addition, the District's central administration building and Gale's Creek facility (currently used for Oak Grove Academy) are older facilities that may also need to be replaced within this time frame.

If aging facilities are not significantly modernized or replaced on a strategic, recurrent cycle, these buildings will "stack up." With three or more facilities going beyond their projected life cycle within the next several decades, the District may face an insurmountable problem that extends beyond the financial capacity of the community.

This is illustrated in the diagram above, with building ages shown in darkening circles over time. Facilities are shown in red when they are more than 100 years old for the purposes of this diagram, however many districts often begin to consider major modernization or replacement at about 75 years.

Long-Term Facility Strategy

In order to avoid a potentially catastrophic "stack up" of aging District facilities, the District should consider implementing a strategy of completing a major school project every eight to 10 years (every bond cycle).

The specific type of major project may vary depending on the needs and conditions identified by each Long-Range Facility Plan update. Projects may include the major modernization of an existing school, the replacement of an existing school, or the construction of an entirely new school to proactively address enrollment growth.

The District has already begun to implement this strategy, starting with the previous capital measures in 2000 and 2010. The 2000 bond provided two new school facilities and a major modernization and the 2010 bond provided a replacement school facility.

TABLE:
Preliminary Plan Options A-G

PREFERRED

A $45.2 M	B $73.3 M	C $89.5 M	D $122.9 M	E $173.3 M	F $184.6 M	G $191.8 M
Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *
Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *
New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS
	Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten
	New Alternative High School		New Alternative High School	New Alternative High School	New Alternative High School	New Alternative High School
Fern Hill Addition	Fern Hill Addition		Fern Hill Addition		Fern Hill Addition	Fern Hill Addition
		New Elementary School	New Elementary School	New Elementary School	New Elementary School	
				Replace Cornelius Elementary	Replace Cornelius Elementary	
						Replace Neil Armstrong MS
Adds 160 seats $2.15 / $1,000	Adds 160 seats	Adds 300 seats $2.95 / $1,000	Adds 460 seats $3.56 / $1,000	Adds 363 seats $4.44 / $1,000	Adds 520 seats	Adds 160 seats

** Does not include the total identified need amount (~67% of Deferred Maint., ~46% of Tech. & Sec.)*

PRELIMINARY PLAN OPTIONS

Seven preliminary plan options, shown in the table above, were developed by the District Leadership Team. Plans A through G were based on an understanding of District goals, identified facility need, and initial input from the Focus Group.

The plans ranged in size from a low of $45.2 million, which allowed the current tax rate to be maintained, to a high of $191.8 million, which incorporated replacement of Neil Armstrong Middle School. Each plan option included a unique combination of projects at varying funding levels. The amount of additional capacity provided and the tax rate impacts (in some cases) were also provided for comparison.

Projects that were considered "must-haves" and were included in all plan options included deferred maintenance, technology and security upgrades, and a new entry at Neil Armstrong for security.

It is important to note that only a portion of the funding for deferred maintenance and technology and security upgrades were included in all the plans, rather than the full amount of identified need. This was done to maintain a reasonable funding level that could be expected to be supported by the community, while allowing other projects to be included.

Most of the plan options also include at least two of the following projects: a new elementary school, a new alternative high school, and prekindergarten, in alignment with the Board's stated priorities to maintain small class sizes, provide alternative school options, and support more prekindergarten in the District.

FOCUS GROUP FEEDBACK

Focus group members were asked which of the plan options they would most support, if any. 42 percent were in support of Plan Option D ($122.9M) and 58 percent were in support of Plan Option E ($173.3M).

While both options include prekindergarten expansion, a new alternative high school, and a new elementary school to accommodate growth on the west side, Option D accommodates enrollment growth on the east side with an addition to Fern Hill and Option E accommodates it with the replacement of Cornelius.

The Fern Hill addition nets more additional capacity for the District (160 additional seats), but requires shifting Cornelius students to Fern Hill. The Cornelius replacement adds 63 permanent seats (and replaces 115 portable seats) and locates the additional capacity at the school where it is needed, so boundary adjustments would be minimized on the east side. It also supports a long-term replacement strategy by replacing one of the District's oldest and poorest condition buildings.

Discussion comments indicated that there was strong recognition of the need to replace Cornelius Elementary, but some concern about the cost of the

TABLE:
Revised Plan Options C-E

C $89.5 M	D $122.9 M	PREFERRED E2 $135.0 M	E $173.3 M
Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *
Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *
New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS
Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten
	New Alternative High School	New Alternative High School	New Alternative High School
	Fern Hill Addition	Fern Hill Addition	
New Elementary School	New Elementary School		New Elementary School
		Replace Cornelius Elementary	Replace Cornelius Elementary
Adds 300 seats $2.95 / $1,000	Adds 460 seats $3.56 / $1,000	Adds 223 seats $3.75 / $1,000	Adds 363 seats $4.44 / $1,000

Elementary Capacity
Estimated Total Tax Rate

** Does not include the total identified need amount (~67% of Deferred Maint., ~46% of Tech. & Sec.)*

plan options that included this project. The expansion of prekindergarten, a new alternative high school, and a new elementary school were also strongly supported by the Focus Group.

It was felt that options A, B, and C did not address enough of the District's facility need, and options F and G were too costly. Although Option G, the plan that included the replacement of Neil Armstrong Middle School, did not receive support from the Focus Group, several members expressed a desire to address the middle school in a more significant way than just the entry and deferred maintenance items that were included in other options. However, it was also recognized that the cost of replacing it is very high and its need is not greater than the other proposed projects.

Although there are functional and programmatic issues with the building, the Neil Armstrong facility is just over 50 years old (not one of the oldest facilities) and has an FCI rating of poor (not in the worst condition). Addressing Neil Armstrong, either through replacement or major modernization, is recognized by the District as an upcoming need that should be addressed within the time frame of the next two bond cycles (10-25 years). Therefore, it is not fiscally responsible to make a significant investment in Neil Armstrong in the near term.

REVISED PLAN OPTIONS

Based on the Focus Group feedback regarding the preliminary plan options, the two highest and lowest options were eliminated. In addition, an alternative version of Option E, dubbed E2, was developed, shown above.

The E2 plan option has a significantly lower cost ($135.0M) than Option E because it includes the Fern Hill addition rather than a new elementary school to provide the additional capacity needed. All other elements of E2 are the same as Option E.

COMMUNITY FEEDBACK

The set of four revised plan options shown above (C, D, E2, and E) were presented to the broader community through two virtual community forum sessions. Community members were asked which of the plan options they would most support, if any. Options E2 and E received the most support, with 50 percent and 35 percent respectively.

Similar to the Focus Group, there was significant support for replacement of Cornelius Elementary, both in recognition of its condition and as an equity issue. Equity was also a community consideration in other ways, including the need to fund improvements across all school facilities and provide better facilities for the alternative high school.

More detailed information about the community outreach process and the feedback received is included on pages 99 to 101 and in Appendix G—Community Outreach.

TABLE:
Final Plan Options C-E

C $89.5 M	D $122.9 M	E2 $135.0 M	PREFERRED E3 $155.3 M	E $173.3 M
Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *	Deferred Maintenance *
Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *	Tech. & Security Upgrades *
New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS	New Entry at Neil Armstrong MS
Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten	Expand Prekindergarten
	New Alternative High School	New Alternative High School	Alternative High School Lease/Modernize	New Alternative High School
	Fern Hill Addition	Fern Hill Addition		
New Elementary School	New Elementary School		New Elementary School	New Elementary School
		Replace Cornelius Elementary	Replace Cornelius Elementary	Replace Cornelius Elementary
Adds 300 seats $2.95 / $1,000	Adds 460 seats $3.56 / $1,000	Adds 223 seats $3.75 / $1,000	Adds 363 seats $4.13 / $1,000	Adds 363 seats $4.44 / $1,000

Elementary Capacity
Estimated Total Tax Rate

** Does not include the total identified need amount (~63% of Deferred Maint., ~46% of Tech. & Sec.)*

FINAL PLAN OPTIONS

Based on the community feedback regarding the four revised plan options, another lower-cost version of Option E, dubbed E3, was developed. Option E3 is identical to Option E, with the exception of the funding allocation for the new alternative high school. Option E3 reduces the funding amount for this project from $21.5 million to $4.0 million, which is a lump sum amount estimated to cover leasing and modernizing an existing space in the community for the program, rather than building a new facility.

The total amount of Option E3 is $155.3 million, a reduction of $18.0 million compared to Option E, with an estimated tax rate of $4.13 per $1,000 of assessed property value.

This plan would allow the alternative high school program to relocate into larger and more appropriate educational space, with the intent of funding the construction of a new alternative high school facility in a future bond cycle. Leasing options have not yet been identified by the District, but it is assumed that available space could be found in the District, and would ideally be located close to Forest Grove High School.

The District strongly supports alternative education and recognizes that there is significant support for it in the community as well. However, addressing elementary level capacity needs in an equitable way, and on both sides of the District, is seen as a higher priority for the 10-year capital plan.

A possible variation to Option E3 includes funding construction of a reduced 'Phase 1' portion of the Alternative High School by utilizing OSCIM grant funds, if awarded, in addition to the allocated $4.0 million. The phased option is assumed to include roughly half of the total facility area (12,000 square feet) and accommodate roughly half of the student capacity (75 students). In reality, additional students could potentially be served if varying schedules were implemented, such as night classes. The estimated ROM cost for the Phase 1 work is $11 million. It is anticipated that the second phase of the project would be included in the next bond cycle.

The OSCIM grant, if awarded, would provide up to $6.7 million of additional funding for capital projects. Because OSCIM funds are not guaranteed, they are not assumed as part of the funding for the plan options. However, if awarded, they can potentially be applied to any of the capital projects.

FOCUS GROUP FEEDBACK

Of the five final plan options presented to the Focus Group, support was divided between Options E3 and E. There was significant concern regarding not fully funding the alternative high school, as it has been overlooked in the past two bond measures and is in a very poor location. However, there was also concern that Option E was more money that the community would support.

COMMUNITY OUTREACH

Community input is a critical component of a long-range facility plan. It is important to understand the needs of the District's community, so that they are adequately represented in the plan. Community support is also critical for successful implementation of a long-range facility plan.

PROCESS

Community outreach was implemented by the District as a part of the planning process, in order to garner as much input as possible from a wide range of community constituents. In addition to working with a community Focus Group, outreach efforts also included holding community forums with real-time polling.

Outreach efforts were limited by the constraints of the Covid-19 pandemic quarantine that was in place during the planning time frame, requiring all outreach to occur virtually via a digital platform rather than in person.

As part of the long-range facility plan process, the District held two open house sessions in May 2021 to garner input from the broader community. Sessions were open to the public and facilitated by the planning team, with participation from a number of District representatives.

The primary goals of the community forums were to:

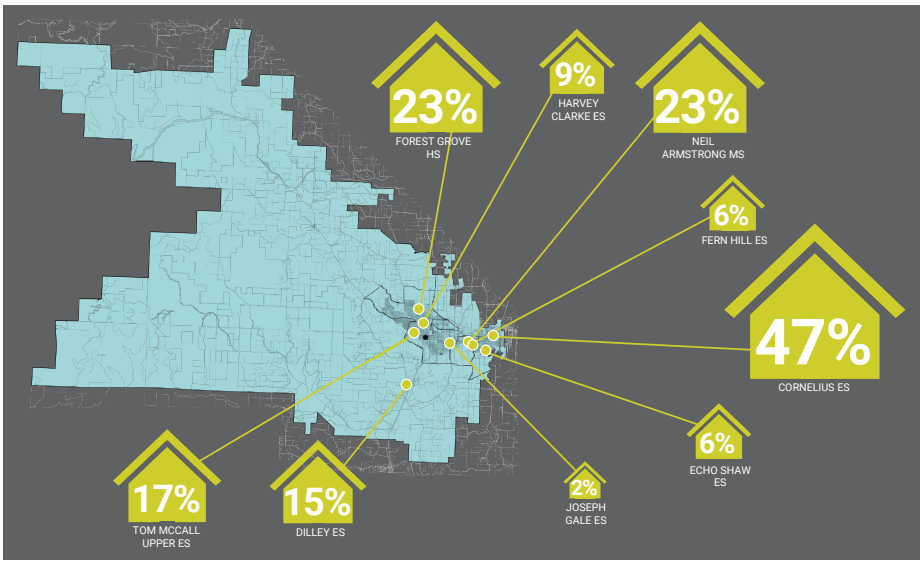
> Provide an understanding of the District's facility-related goals and needs

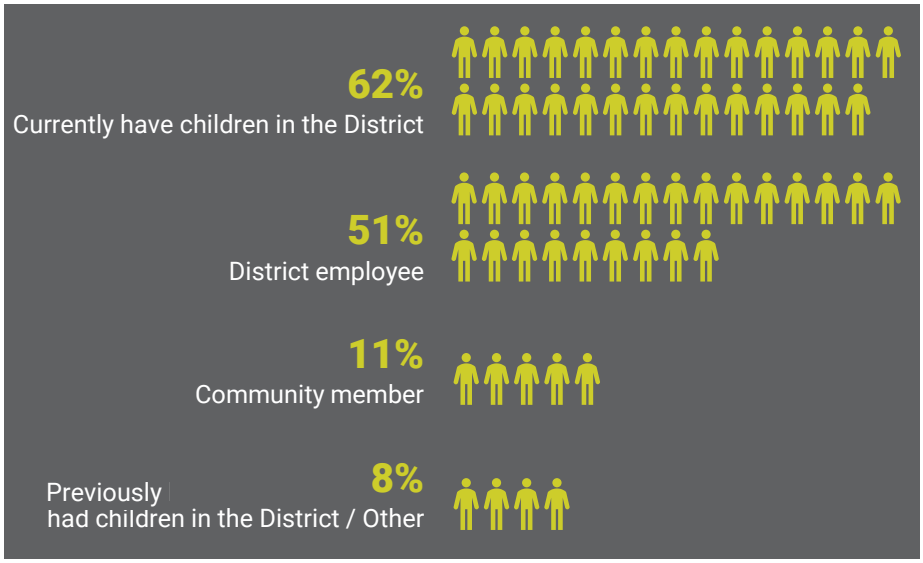
> Present preliminary long-range facility plan options and rationale

> Hear community feedback regarding District need and plan options

Two community open houses were held virtually in English and Spanish. Each two-hour evening meeting included an informational presentation, open discussion time for questions and feedback, and a real-time poll related to the proposed long-range facility plan options.

DIAGRAM:
Participant Representation: School (above) & Relationship to District (below)





PARTICIPANTS

Over 90 community members attended a community forum, with approximately 50 responding to the polling. Although this is a relatively small sample of the community, it provides key insight regarding the community's prioritization of the proposed projects and their level of funding support. It is recommended that the District also implement a larger and more scientific survey to gather additional input from constituents who may not have been able to have their voice heard through other avenues.

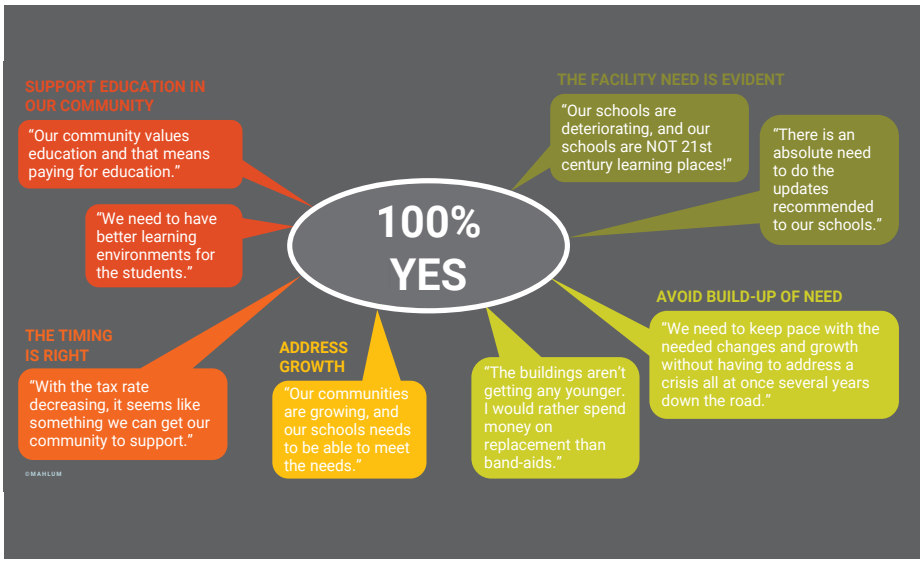
Community members attended from every school in the District, with the largest representation from Cornelius Elementary School, Neil Armstrong Middle School, and Forest Grove High School. The diagram above illustrates the school or community affiliation of forum participants. (Note: if participants were affiliated with more than one school, they were counted more than once.)

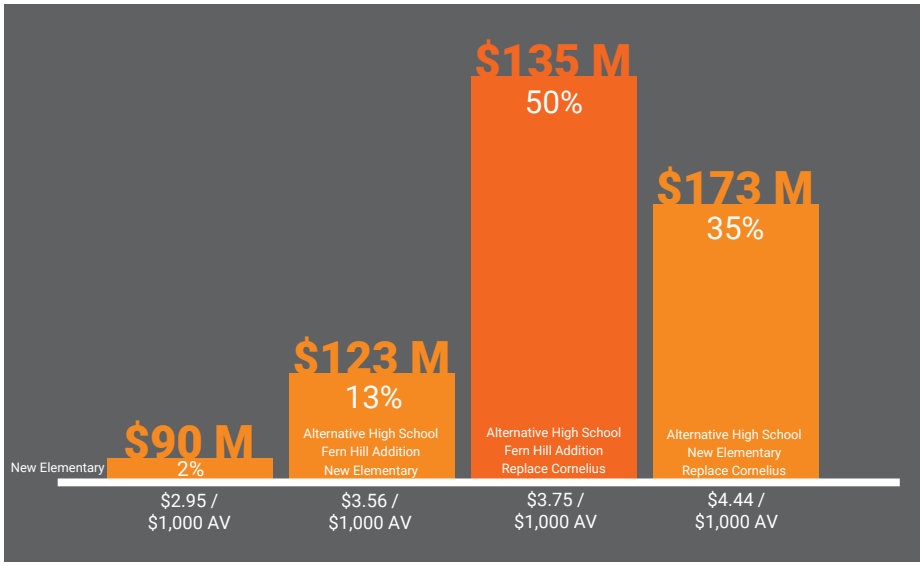
Over 60 percent of participants currently have children in the District and over 50 percent are District employees.

SURVEY FEEDBACK

The real-time survey conducted during the forums included a number of questions relating to the long-range facility plan. Survey questions and responses are summarized below and on the following pages, with additional information in Appendix G—Community Outreach.

DIAGRAM:
Survey Responses: Support for a Capital Measure (above) & Support for Plan Options (below)





Should the District consider implementing the first phase of the long-range facility plan by proposing a capital measure within the next two years?
Respondents overwhelmingly supported proposing a capital measure within the next two years, as shown above. Reasons cited reflected similar themes to the Focus Group responses:

> Support education in our community

> The timing is right

> Address growth

> Avoid a build-up of need in the future

> The facility need is evident

Of the approaches presented, which one would you most support and why?
50 percent of respondents supported a $135.0 million capital measure that includes a new alternative high school, Fern Hill classroom addition, and replacement of Cornelius Elementary. The reasons cited for this choice primarily involved the need to include the replacement of Cornelius Elementary School in the proposed plan. Several respondents noted that they would have chosen the $173 million plan option, which also includes Cornelius, except that the cost was seen as too high to be supported by the community.

35 percent of respondents supported a $173 million capital measure that includes a new alternative high school, a new elementary school, and replacement of Cornelius Elementary. The reasons cited for this choice also included strong support for the replacement of Cornelius Elementary. Additionally, respondents referenced the significant amount of need in the District, expanding educational opportunities, planning for future capacity with the new elementary school, and spending money now to save money in the future.

13 percent of respondents supported a $123 million capital measure that includes a new alternative high school, Fern Hill classroom addition, and a new elementary school. Most responded cited cost as the primary issue for choosing this option, with some noting that it was the lowest cost option that provides a balanced approach to adding capacity on both sides of the District.

There was minimal support (two percent) for the $90 million option that included a new elementary school as the only major project, with no reasons cited.

Do you see anything that is missing from the proposals?
Though many respondents did not feel anything was missing from the proposals, some common themes included the following:

> Address Neil Armstrong Middle School, either through replacement or significant improvement

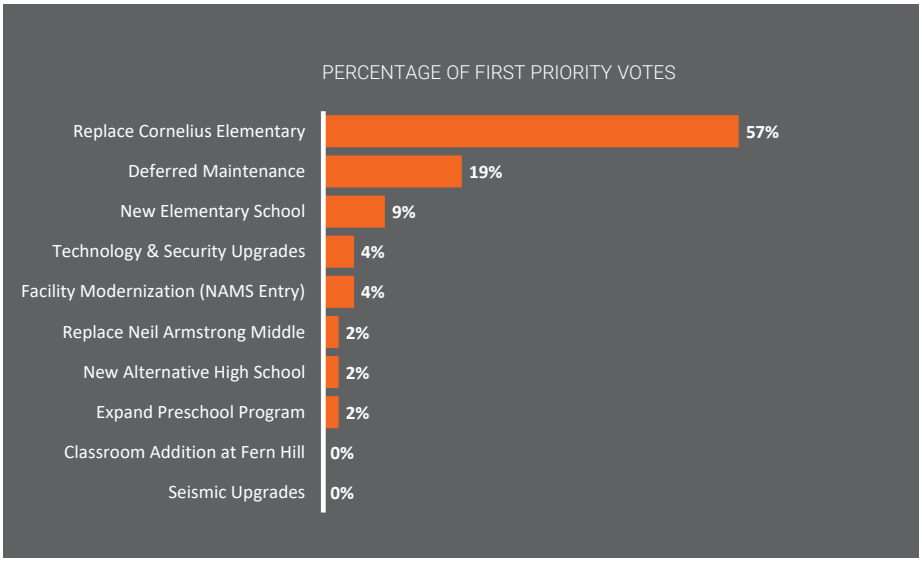
> Consider elementary grade reconfiguration as a strategy to address capacity issues

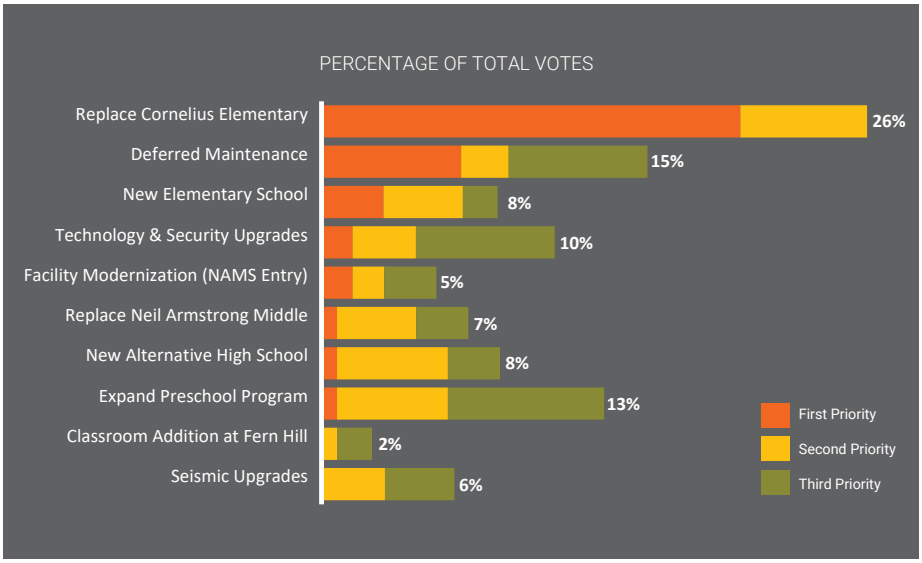
> Recognize the importance of providing improvements at all school facilities in the District and communicate the specifics

> Consider how the long-range plan might address equity issues across the District, including socioeconomic, linguistic, ethnic, and cultural diversity

> Cornelius Elementary should be recognized as a high priority and be included in every proposal

DIAGRAM:
Survey Responses: First Priority Projects (above) & Top Three Priority Projects (below)





Do you see anything in the proposals that should <u>not</u> be included?
Most respondents did not see anything that should not be included, however a few project-related concerns were mentioned:

> The new elementary school, because funds could be better spent replacing or repairing the existing buildings and there may be other ways to achieve the needed capacity

> The new Alternative High School, because $21 million is too much to spend to serve 150 students

> Expansion of prekindergarten, because the academic element is encroaching into too young of an age

> The Fern Hill classroom addition, because it would be less of a neighborhood school with expanded boundaries

In addition, some political concerns were voiced, including:

> Redoing boundaries of elementary schools will be very political, so making improvements that will lead to lots of movement of schools could be hard to pass on a bond

> When you look at the middle-range plan options it feels like a battle between east and west.; we need to tread very lightly and with an equity lens

Of the projects listed, what are your top three priorities?
Respondents were given a list of 10 projects, including all projects that were identified as part of the total District facility need, with the exception of the projects that the District determined could be addressed outside of the Long-Range Facility Plan (CTE improvements, alternative education at the middle school, and PE improvements at the middle school).

Responses to this question are summarized in two ways: looking solely at first priority votes and looking at first, second, and third priority votes combined. Both are summarized in the charts above.

In both cases, replacing Cornelius Elementary school was the most supported, with 57 percent of the first priority votes and 26 percent of the total votes, and deferred maintenance was the second-most supported, with 19 percent of the first priority votes and 15 percent of the total votes.

The new elementary school, which ranked third in first priority votes, was significantly farther down the list when looking at total votes, behind expanded preschool program and technology and security upgrades.

OUTREACH TAKEAWAYS

Recognizing that this was a small sample of the community with a high percentage of Cornelius supporters and District staff, a few high-level 'takeaways' can be gleaned:

> There is very strong support for a capital measure in the next two years

> Proposed plans should include the Cornelius Elementary School replacement, a new alternative high school, and either a new elementary school or the Fern Hill classroom addition (as well as the "must-haves")

> The strongest financial support is in the $135 million to $173 million range

> The Cornelius Elementary School replacement is the top priority project

> Additional explanation is required to communicate the needs and how the plans fully address those needs to the broader community

TABLE:
10-Year Capital Plan Proposals

10-Year Capital Plan Proposals			
	$155.3M PLAN	**$173.3M PLAN**	
Deferred Maintenance	**$26.0 M**	**$26.0 M**	63% of total need
Technology & Security Upgrades	**$3.0 M**	**$3.0 M**	46% of total need
New Entry at Neil Armstrong MS	**$1.0 M**	**$1.0 M**	<1% of total need
Expand Prekindergarten	**$3.2 M**	**$3.2 M**	2 schools
New Alternative High School		**$21.5 M**	150-student capacity
Alt. High School: Lease/Modernize	**$4.0 M**		75-student capacity
New Elementary School	**$48.1 M**	**$48.1 M**	300-student capacity
Replace Cornelius Elementary	**$65.5 M**	**$65.5 M**	500-student capacity
Reserve Funds & Bond Fees	**$4.5 M**	**$5.1 M**	3% of total
TOTAL	**$155.3 M**	**$173.3 M**	
Estimated Total Tax Rate:	$4.13 / $1,000 AV	$4.44 / $1,000 AV	In 2024
Estimated Tax Rate Increase:	$2.04 / $1,000	$2.35/ $1,000 AV	Over expected 2024 rate
Estimated Increase for Average Homeowner:	$53 per month	$61 per month	Estimated 2024 AV
Estimated Increase Over Today's Rate	$41 per month	$49 per month	2021 AV
Additional Elementary Capacity:	363 seats	363 seats	East and West side
Eliminate Portables:	YES	YES	East and West side
Minimize Boundary Adjustment:	YES	YES	Add capacity on both sides
Address Long-Term Replacement:	YES	YES	Cornelius

LONG-RANGE FACILITY PLAN PROPOSAL

The two long-range facility plan proposals that received the most community support during the planning process have been identified by the District for further consideration for a potential capital measure and are summarized in the table above. The proposals incorporate community input and intend to strike a balance between community support for funding and projected District facility need.

PLAN COMPONENTS

The two proposals have identical scope, with the exception of the alternative high school. The smaller proposal, at $155.3 million, includes funding estimated to accommodate leasing and modernizing a new space for the alternative high school, with a 75-student capacity. The larger proposal, at $173.3 million, provides funding to construct a new stand-alone alternative high school facility with a 150-student capacity.

Both plan proposals provide a total of 363 seats of additional elementary capacity, distributed across both sides of the District and accommodating the capacity need of both the east and west regions. The additional capacity minimizes the need for boundary adjustments (though any new school will require them) and additional busing. In addition, most, if not all, existing portables in the District can be eliminated or repurposed.

Both proposals also address long-term replacement with the replacement of Cornelius Elementary School. This sets the stage for a continued, strategic approach to facility replacement over the next several bond cycles.

The 10-year capital plan proposals include the following elements:

> Funds about 63% of the 10-year deferred maintenance need in the District ($26.0 million), with work occurring at every school facility

> Funds about 46% of the technology and security need in the District ($3.0 million)

> Provides $1.0 million to improve safety at the entrance to Neil Armstrong Middle School

> Provides $3.2 million to expand the prekindergarten program at two of the District's three highest need schools, Fern Hill and Echo Shaw (prekindergarten at Cornelius will be addressed with the replacement facility)

> Provides a varying funding allocation to address needs at the alternative high school: $4.0 million to lease and modernize space or $21.5 million to construct a new alternative high school (If OSCIM grant funds are awarded to the District, a variation of the smaller plan could include combining those funds with the $4.0 million, providing enough funding to construct a new smaller 'Phase 1' of the alternative high school, as described on page 98.)

> Provides 48.1 million to construct a new elementary school for 300 students on the west side of the District, with a planned future capacity of 500 students

> Provides $65.5 million for the replacement of Cornelius Elementary School on the same site, with a capacity of 500 students

> Additional funding (three percent of the total) to accommodate bond fees and provide a reserve fund to provide a buffer for any unforeseen issues

Some identified needs that are not included in the proposal were determined by the District to be addressable outside the scope of the plan options. These needs include:

> Alternative education at the middle school

> CTE improvements and expansion at the high school

> Additional PE teaching stations at the middle school

PROJECT COSTS

Project costs associated with the long-range facility plan proposals were developed by the planning team, with the exception of technology and security upgrades, which were provided by the District. Amounts shown are rough-order-of-magnitude (ROM) project cost estimates developed using assumed new and modernization construction costs for each educational level.

Costs include and additional 35 percent for project soft costs, such as permitting and design fees, and a 10 percent contingency. Projects are escalated to the estimated midpoint of construction (six years, to 2027) at four percent per year. Costs may be revisited prior to a capital measure due to changing market conditions or other adjustments to the cost assumptions.

In addition to individual project costs, three percent of the total estimated cost is allocated for reserve funds and bond management fees.

TAX IMPACT

The $153.3 M plan results in an estimated total tax rate of $4.13 per $1,000 of assessed property value (AV), which is an estimated increase of $2.04 per $1,000 AV over the expected 2024 rate. The estimated tax increase for the average homeowner in the District in 2024 is $53 per month, which is equivalent to $41 per month more than the current rate.

The $173.3 M plan results in an estimated total tax rate of $4.44 per $1,000 AV, which is an estimated increase of $2.35 per $1,000 AV over the expected 2024 rate. The estimated tax increase for the average homeowner in the District in 2024 is $61 per month, which is equivalent to $49 per month more than the current rate.

NEXT STEPS

Either proposal can serve as the basis for a potential capital measure, at the discretion of the Board. The chosen proposal may be adjusted prior to a capital measure, due to additional community input, changes in District need, and/or economic conditions.

Additional community outreach, including a larger scientific poll, is recommended prior to determining the final capital plan components. In particular, determining which alternative high school approach and total funding level the broader District community will support will be key for a successful capital measure. In addition, providing additional detail regarding specific upgrades that are planned at each facility will be helpful to garner community support.

The proposed plan options represent one phase of work in an ongoing process of addressing District need. Projects that were identified during the planning process and have not been prioritized for inclusion in this phase of the Long-Range Facility Plan, such as the replacement of Neil Armstrong Middle School and other aging District facilities, will continue to be tracked and addressed in later phases of the Plan.

IMPLEMENTATION

FUNDING

Funding is assumed to be provided through a general obligation bond with an approximate 20-year term. The District and School Board have not yet determined the best time to bring a capital measure to the community to address current and projected needs. Capital measures must be approved by voters, with revenues derived from specifically allocated property taxes.

Bond and levy rate analysis was provided to the District by Piper Sandler. Bond amounts and levy rates are estimated based on a number of factors, including growth in the community, changes to

assessed property values, and interest rates. It is important to note that bond amounts included in this Long-Range Facility Plan are estimates only, and will need to be reassessed and adjusted prior to proposing a capital measure.

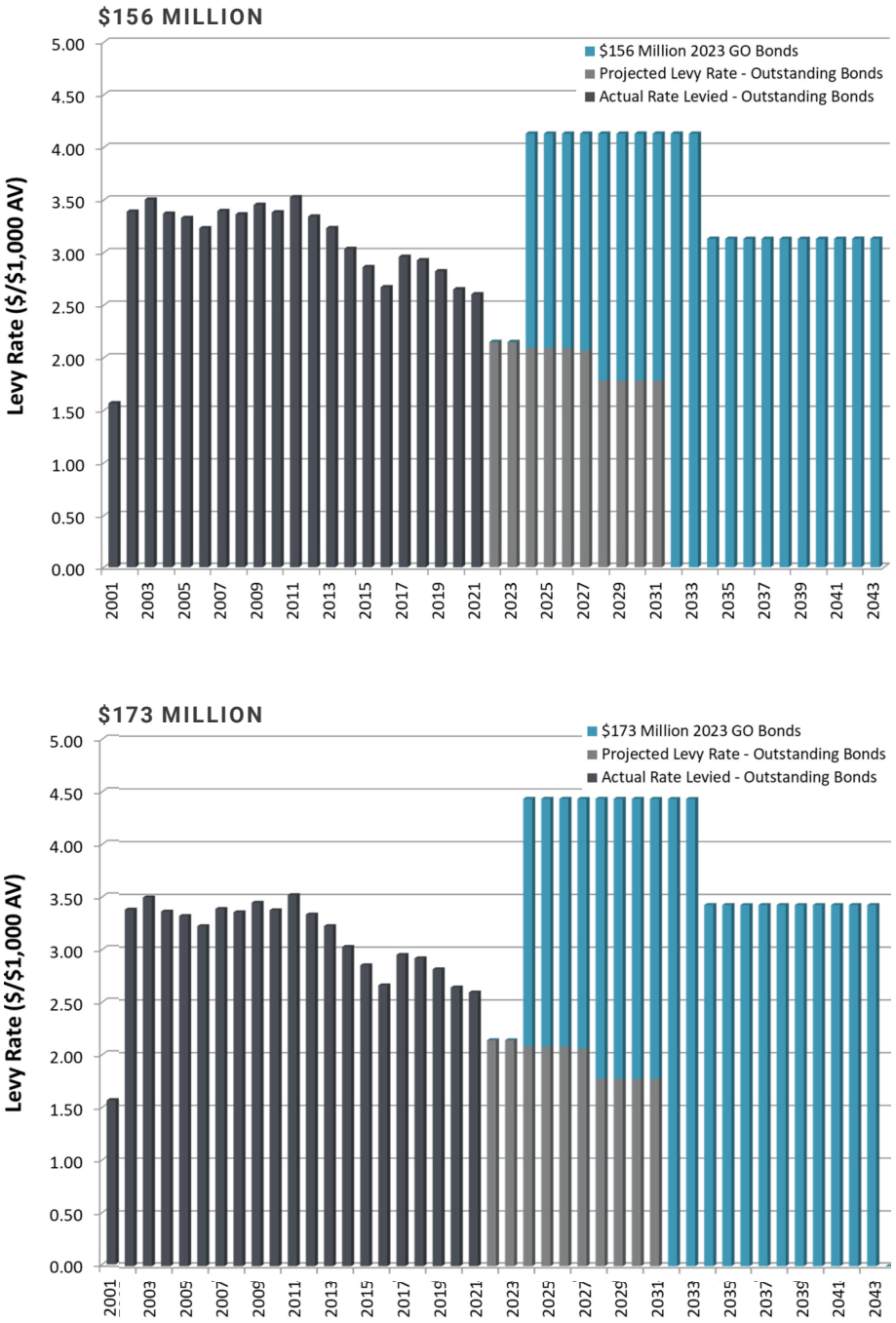
Piper Sandler also provided estimated tax rate increases per $1,000 of assessed property value for the plan proposals. The average assessed property value within the Forest Grove District is approximately $287,000 in 2021. This is different from the market value of property. For the purposes of determining the estimated amount for an average homeowner, the average assessed property value was escalated at three percent per year for three years (to 2024), when the tax rate is anticipated to increase if a capital measure is passed.

The proposed bond amortization structure for the two final plan proposals are shown at right. (Note: The $153.3 million plan option was originally estimated at $156 million, which is the amount used by Piper Sandler. It was assumed that the resulting rates were close enough for this high-level planning, but will need to be reassessed prior to undertaking a capital measure.)

For both plan proposals, the amortization structure provides an incremental rate "step-down" after ten years (estimated in 2034), to allow the potential for the District to go out for another capital measure at that time.

Additional preliminary bond information may be found in Appendix H—Levy rate analysis Reports.

CHARTS:
Proposed Bond Amortization Structure: $156 Million Issue (above) & $173 Million Issue (below)



CAPITAL MEASURE SUPPORT

Although there was some concern about proposing a capital measure in the immediate future, due to the impacts of the Covid-19 pandemic, Focus Group members were unanimously in support of the District considering implementation of the next phase of the Long-Range Facility Plan by proposing a capital measure within the next two years.

Survey respondents in the community forums also indicated unanimous support for a capital measure in the within the next two years.

Reasons cited by both groups fell into the following common themes:

> Support education in the community

> The facility need is evident

> The timing is right

> Avoid a build-up of need in the future

> Address enrollment growth

mahlum

1380 SE 9TH AVENUE | PORTLAND, OREGON 97214 | (503) 224-4032 | MAHLUM.COM