

#### West Linn – Wilsonville Schools

#### Long Range Planning Committee Meeting Administration Building 22210 SW Stafford Rd, Tualatin, OR 97062 October 24, 2018 6:00 PM

#### Agenda

1. Call to Order 6:03 pm Admin Boardroom

2. Roll Call: David Lake Samy Nada

Doris Wehler Grady Nelson
Kent Wyatt Mike Jones
Andrew Kilstrom Kim Jordan

Kathy Ludwig Chelsea Martin (Board Liaison)

Remo Douglas Tim Woodley Keith Liden Amy Berger

Rebecca Stuecker (DOWA-IBI)

- 3. The 3<sup>rd</sup> Quarter Quarterly Report was complete for the term ending September 30, 2018 and was handed out to the group.
- 4. The district is working on updating the Long Range Plan. It is not being redone, just updated. DOWA-IBI Group has been tasked with updating and organizing the plan working with district staff. Part of the update includes demographics. Flo Analytics has been working on the 10 year projections. They are currently updating with the 2018 enrollment numbers and will get the update to the district in the next couple weeks. Keith Liden will be helping the District and DOWA-IBI with the capacity/demographics section.
  - a. The district is now calculating capacity using square foot/student. Along with that a narrative is needed to describe the how and why of this method. A draft narrative was handed out written by DOWA-IBI.
  - b. A district-wide capacity analysis spreadsheet was handed out that shows current enrollment number for each school. The next column shows the building capacity based on the new square foot/student method of calculating. The spreadsheet also shows projected enrollment for the school year starting 2022 and 10 years out based on the numbers from Flo Analytics studies.
  - c. The calculations came from calculating the area of teaching stations. A lot of schools gained space between absorbing resource rooms into general classrooms based on a change in program and inclusion, or through construction physically adding classrooms.
  - d. Calculations were based on classroom size with the understanding that not all classrooms are the same size, and then averaged to determine capacity. Primary

classrooms are straight forward with spaces like the gym and music not adding into the calculations due to the fact that each primary class is in one space at a time, there is not a rotating schedule like in the secondary schools. Middle and High school calculations were different due to a rotating schedule where gyms, music rooms, etc. are taken into account but then a utilization rate was used to balance not all spaces being used at the same time or with the same number of students. You could not take a building square footage and divide by the square foot/student because these numbers only take into account Learning Spaces, not hallways, storage spaces, offices, bathrooms, etc. There might be a building with classroom space but the core space (gym, cafeteria, etc.) might not be big enough to accommodate more students.

- e. The narrative on what the net to gross or learning spaces vs total spaces will be included in order to clarify the differences between a core space, and support space versus a learning space.
- f. The calculation needs to be described well and needs a label of what to call it. The committee reviewed ideas and seemed to lean towards "Learning Space Capacity".
- g. The capacity/demographics section of the updated Long Range Plan will have a complete draft in December and will be discussed at the December Long Range Planning Meeting for the committee to review and give final input before finalizing and going to the school board in January.
- 5. Flo Analytics 2017-18 Review: The handout is the same analysis that was presented at the joint school board/LRPC meeting held in September. Flo Analytics is currently updating with the current school year enrollment. Flo did studies around enrollment in two ways. One around what school the student attends and one for what school the student boundary is based on by student address.
- 6. Superintendent High School Study: Dr. Ludwig handed out the report from the High School Study. The group did lots of research, surveys, panels, tours, held a summit, interviews, etc. where they studied the evolution of high school learning. The group looked at options for programs and evolution at the high school level. A part 2 summit will be held with the same group to further work on some of the findings that came out of the first study. One key finding that came out of the study was having career based opportunities; possibly including internships/externships and industry partnerships.
- 7. Next Steps: Next meeting November 28<sup>th</sup>.
- 8. Adjourn 7:36 pm



#### West Linn – Wilsonville Schools

Long Range Planning Committee Meeting Administration Building 22210 SW Stafford Rd, Tualatin, OR 97062 Wednesday, October 24, 2018 6:00 PM

#### **Bond Oversight Committee**

1. 3<sup>rd</sup> Quarter 2018 Bond Report (information)

Handout

#### **Long Range Planning Committee Meeting**

#### Agenda

1. Call to Order

2. Roll Call Mike Jones Samy Nada
David Lake Kim Jordan

Doris Wehler Kım Jordan Kım Jordan Kım Jordan Kım Jordan

Grady Nelson Chelsea Martin, Board Liaison Kathy Ludwig, Superintendent

3. Re-calibrate School Capacity Presentation & Hand-out

4. FLO Analytics 2017-2018 Review Hand-out

5. Review Superintendent High School Study Kathy

6. Next Steps:

- a. Review Board Safety Advisory Committee Report
- b. Review proposed capital projects
- c. Review Long Range Plan (draft)
- d. Review Capital Improvement Program (draft)
- e. Schedule Board Adoption of Long Range Plan
- f. Schedule Bond Summit (if requested)

Next meeting November 28, 2018

Adjourn





October 2018











# **WEST LINN - WILSONVILLE SCHOOL DISTRICT**

2014 Capital Bond Program Quarterly Report

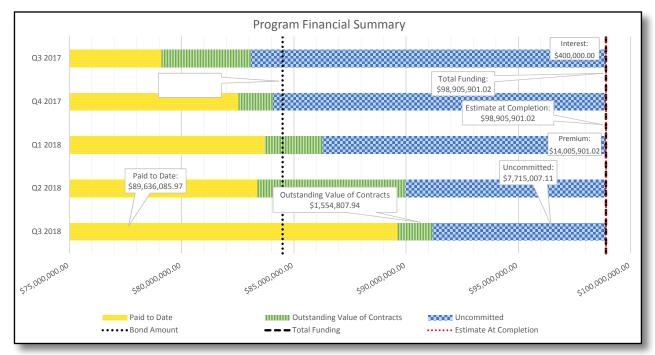
# TABLE OF CONTENTS Q3 2018



1.	2014 CAPITAL BOND PROGRAM SUMMARY	1
2.	PROJECT STATUS / SCHEDULES MERIDIAN CREEK MIDDLE SCHOOL SUNSET PRIMARY SCHOOL REPLACEMENT	3 5
3.	LEARNING WITH TECHNOLOGY	7
4.	SAFETY & SECURITY	8
5.	DISTRICT-WIDE IMPROVEMENTS	9

## PROGRAM SUMMARY

#### Q3 2018



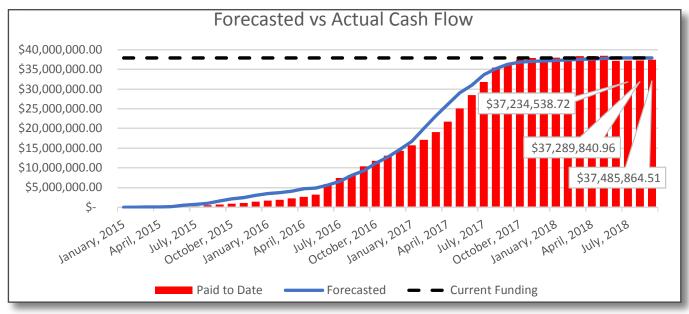
	Onininal Founding	Approved	Command Founding	Current	Paid to Date	Estimate At	Forecasted
	Original Funding	Changes	Current Funding	Commitments	Paid to Date	Completion	Over/(Under)
New Middle School in Wilsonville	40,000,000.00	-2,081,186.33	37,918,813.67	37,654,401.23	37,485,864.51	37,918,813.67	0.00
Sunset Primary School Replacement	24,000,000.00	767,485.78	24,767,485.78	24,497,836.79	24,249,354.68	24,767,485.78	0.00
700 Building Renovation & Addition @ WLHS	3,000,000.00	697,203.76	3,697,203.76	3,675,126.44	3,666,301.44	3,697,203.76	0.00
Performing Arts Renovation & Addition @ WHS	3,000,000.00	189,821.68	3,189,821.68	3,188,841.87	3,181,770.87	3,189,821.68	0.00
Technology @ D-W	7,000,000.00	0.00	7,000,000.00	5,756,669.21	5,731,089.21	7,000,000.00	0.00
Safety & Security @ D-W	500,000.00	1,500,000.00	2,000,000.00	1,770,461.62	1,740,952.92	2,000,000.00	0.00
Improvements @ D-W	7,000,000.00	12,879,556.89	19,879,556.89	14,390,092.33	13,323,287.92	19,879,556.89	0.00
Subtotals	84,500,000.00	13,952,881.78	98,452,881.78	90,933,429.49	89,378,621.55	98,452,881.78	0.00
*Bond Premium	14,005,901.02	-13,652,881.78	353,019.24	257,464.42	257,464.42	353,019.24	0.00
Estimated Interest Earnings	400,000.00	-300,000.00	100,000.00	0.00	0.00	100,000.00	0.00
Subtotals	14,405,901.02	-13,952,881.78	453,019.24	257,464.42	257,464.42	453,019.24	0.00
Grand Totals	98,905,901.02	0.00	98,905,901.02	91,190,893.91	89,636,085.97	98,905,901.02	0.00
*Includes \$4,505,000.00 in as-yet unsold bonds.							

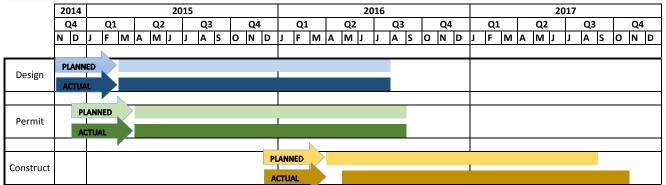
- The two new school projects are in closeout
- 92% of current funding has been committed, 90% of current funding has been spent
- Over \$6.25 million dollars was spent during this quarter
- New secure building entries were completed at West Linn High School, Bolton Primary School and Boeckman Creek **Primary School**
- The district-wide emergency radio system was deployed
- Select camera installation was completed district-wide
- All summer projects achieved substantial completion prior to the start of school and are in closeout
- The Bond Management Team is launching design and permits for summer 2019 projects

	Original Funding	Approved	Current Eundina	Current	Daid to Date	Estimate At	Forecasted
		Changes	Guileilt Lailaili	Commitments	raid to Date	Completion	Over/(Under)
New Middle School in Wilsonville	40,000,000.00	-2,081,186.33	37,918,813.67	37,654,401.23	37,485,864.51	37,918,813.67	0.00
Sunset Primary School Replacement	24,000,000.00	767,485.78	24,767,485.78	24,497,836.79	24,249,354.68	24,767,485.78	0.00
700 Building Renovation & Addition @ WLHS	3,000,000.00	697,203.76	3,697,203.76	3,675,126.44	3,666,301.44	3,697,203.76	0.00
Performing Arts Renovation & Addition @ WHS	3,000,000.00	189,821.68	3,189,821.68	3,188,841.87	3,181,770.87	3,189,821.68	0.00
Technology @ D-W	7,000,000.00	0.00	7,000,000.00	5,756,669.21	5,731,089.21	7,000,000.00	0.00
Safety & Security @ D-W	500,000.00	1,500,000.00	2,000,000.00	1,770,461.62	1,740,952.92	2,000,000.00	0.00
Improvements @ D-W	7,000,000.00	12,879,556.89	19,879,556.89	14,390,092.33	13,323,287.92	19,879,556.89	0.00
Subtotals	84,500,000.00	13,952,881.78	98,452,881.78	90,933,429.49	89,378,621.55	98,452,881.78	0.00
*Bond Premium	14,005,901.02	-13,652,881.78	353,019.24	257,464.42	257,464.42	353,019.24	0.00
Estimated Interest Earnings	400,000.00	-300,000.00	100,000.00	0.00	0.00	100,000.00	0.00
Subtotals	14,405,901.02	-13,952,881.78	453,019.24	257,464.42	257,464.42	453,019.24	0.00
Grand Totals	98,905,901.02	0.00	98,905,901.02	91,190,893.91	89,636,085.97	98,905,901.02	0.00
*Includes \$4.505.000.00 in as-vet unsold bonds.							L

# MERIDIAN CREEK MIDDLE SCHOOL

Q3 2018





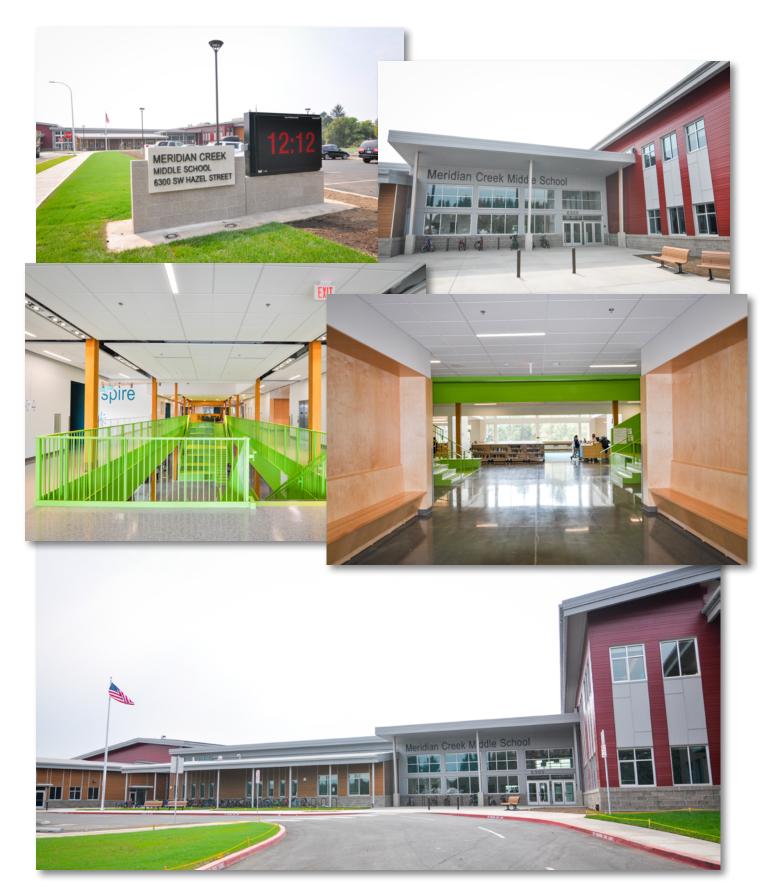
#### **Recent Activities:**

- The project is in closeout
- Punch list scope is complete

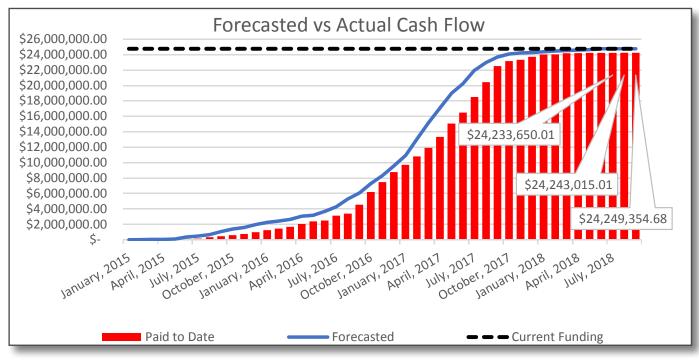
#### **Upcoming Activities:**

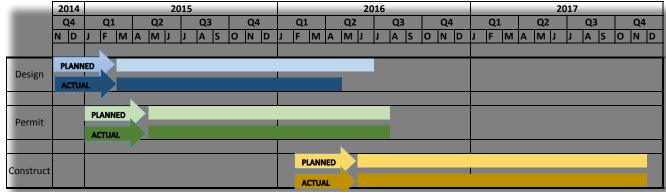
- Processing final payments
- Minor stormwater modifications

## NEW MIDDLE SCHOOL IN WILSONVILLE Q3 2018



## SUNSET PRIMARY SCHOOL REPLACEMENT Q3 2018





#### **Recent Activities:**

■ The project is in closeout

#### **Upcoming Activities:**

- Completion of punchlist scope
- Completion of closeout documentation

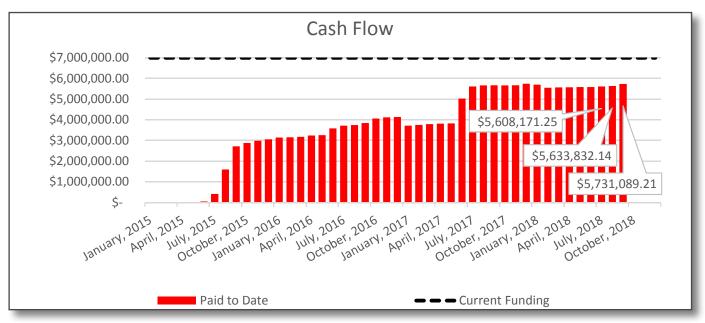
# SUNSET PRIMARY SCHOOL REPLACEMENT Q3 2018





### LEARNING WITH TECHNOLOGY

Q3 2018



The second major wave of student device updates was completed in the summer of 2017, increasing device accessibility at all schools and replacing some aging devices. Building wiring upgrades and installation of additional wireless access points were also completed strengthening the backbone of the IT infrastructure.

#### **Recent Activities:**

- Plan for next rollout
- Device and infrastructure purchases as needed

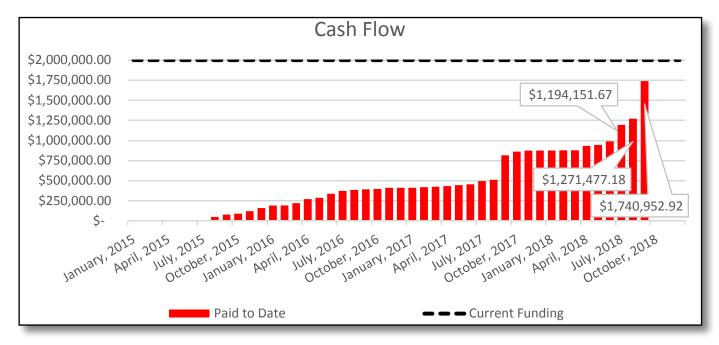
#### **Upcoming Activities:**

- Plan for next rollout
- Device and infrastructure purchases as needed



# **SAFETY & SECURITY**

Q3 2018



West Linn-Wilsonville School District is committed to creating and maintaining safe, secure facilities for students, staff and patrons as a partnership with our community, neighboring school districts, area law enforcement and emergency responders. Our schools have been assessed for safety related corrections and has identified the following specific improvements for each unique school facility.

- **Building Communication Systems**
- School Entrance Security
- Door Hardware and Locking
- Safe Classroom Accommodations
- School-grounds Exterior Security Measures
- Limited Video Surveillance
- Lighting and Controls

#### **Recent Activities:**

- Boeckman Creek Primary secure entry completed
- Bolton Primary secure entry completed
- West Linn High secure entry completed
- Select camera installation across the district completed
- Deployed emergency radio system

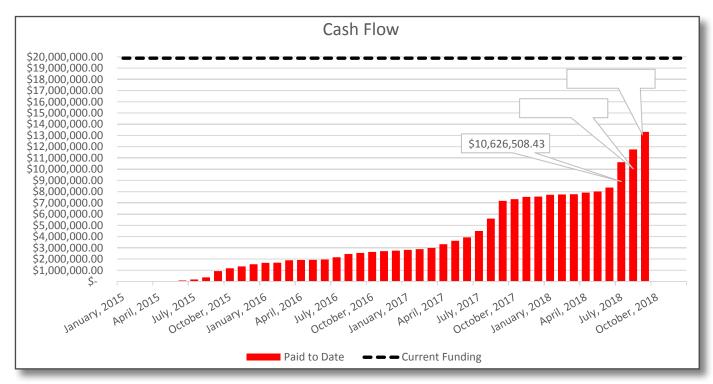
#### **Upcoming Activities:**

- Closeout projects
- Continue creation and implementation of district-wide safety plan
- Continue review of Federal and State law and policy around school safety



### DISTRICT-WIDE IMPROVEMENTS

Q3 2018



This category of projects represents work at all district sites that has been identified over time as improvements that respond to life-cycle replacement, upgrades required by code, changes in instructional models, growth in activity participation and obsolescence. Active and upcoming projects under this bond component will be listed below.

#### <u>16024 - Renovation @ Bolton Primary School</u>

#### **Project Status:**

This project includes interior renovation, lighting upgrades, secure entry and office remodel. The project achieved substantial completion and is in closeout.

#### 16025 - Renovation @ Boeckman Creek Primary School

#### **Project Status:**

This project includes classroom and porch improvements, lighting upgrades, fire sprinkler replacement, carpet replacement, secure entry, and office remodel. The project achieved substantial completion and is in closeout.

#### 16047 - Synthetic Baseball Turf @ Wilsonville High School and West Linn High School

#### **Project Status:**

This project includes the replacement of the existing baseball field synthetic turf at the high schools. One field at West Linn High School and two at Wilsonville High School. The project achieved substantial completion and is in closeout.

#### 17031 – Lighting Replacement @ District-Wide

#### **Project Status:**

This project includes energy efficient lighting replacements at several schools across the school district. The emphasis is on replacing outdated and inefficient gymnasium and commons lighting with new LED fixtures which have proven successful at the high schools. The project is complete.

#### 17050 - Football Field Replacement @ Wood Middle School

#### **Project Status:**

This project includes rebuilding the existing football field at Wood Middle School to include synthetic turf and field lights. The project achieved substantial completion and is in closeout.



To: Ms. Kathy Ludwig Date: September 24, 2018

Superintendent

West Linn-Wilsonville School District

From: Tyler Vick Project: F1580.01.01

Jerry Oelerich

Principal

Data Analyst // Use Orm

RE: Enrollment Forecasts Report – West Linn-Wilsonville School District

At your request, FLO Analytics (FLO) conducted demographic and geographic analysis to assist the West Linn-Wilsonville (District) in understanding enrollment trends and to produce forecasts of future student enrollment. The analysis was completed through three main tasks: 1) Student Enrollment Assessment 2) Land Use Analysis 3) Projected Student Enrollment Distribution Analysis. These forecasts provide the number of students by individual grade and grade group that will be residing in each of the District's elementary, middle, and high school attendance areas, as well as attending each of the District's elementary, middle, and high schools at the beginning of the 2018–19 through 2027–28 school years.

This revision to our September 19,2018 memo addresses minor editorial errors that could have confused readers. No substantive changes have been made.

#### **SUMMARY FINDINGS**

#### **Student Enrollment Assessment:**

• FLO's analysis occurred within the boundaries of West Linn-Wilsonville School District (Figure 1). Individual students were mapped and geocoded to the parcel-level. Figure 2 shows the distribution of students across the District.

#### Land Use Analysis:

• Of students enrolled in District schools in 2017–18, 81.4% reside in single-family (SF) housing, 15.9% in multi-family (MF) housing, and 1.7% in housing that FLO is unable to

- immediately classify as SF or MF. Development data compiled by FLO indicates that the MF percentage is likely to increase over the projection range.
- FLO conducted in-person or phone interviews with planners from Clackamas County and the municipalities of West Linn, Wilsonville, and Tualatin to discuss foreseeable residential growth within the District throughout the projection range. Zoning and key development data acquired through these meetings for West Linn are presented in Figure 3 and 4, which Figure 4 showing the locations of expected SF and MF developments. Figures 5 and 6 show the same for Wilsonville. More detailed information from these meetings, as well as assumptions made by FLO staff, are available within the GeoPlanner web application, as well as upon request.
- The most notable areas of residential development include Frog Pond and Villebois, both located within Wilsonville.
- Frog Pond will consist of three areas, built in three general phases, with a planned total capacity of approximately 1,800 units, based on information gathered during the spring and summer of 2018. Frog Pond West, located north of Boeckman Rd. and west of Stafford Rd., is currently under construction and planned to accommodate approximately 575 units. Frog Pond East, located north of Advance Rd. and east of Stafford Rd., is currently within an urban reserve area and is planned to accommodate approximately 760 units. Frog Pond South, located south of Advance Rd and east of Meridian Creek Middle School, is currently within an urban reserve area and is planned to accommodate approximately 475 units. Construction on East is anticipated to begin within the 10-year forecast horizon, after completion of West. We do not anticipate construction on South to begin until after 2028.
- Villebois, located in west-central Wilsonville, has a planned capacity of 2,151 units.
   Construction is ongoing and is approximately 65% built-out. Approximately 806 units remain to be built.
- West Linn does not possess any similarly large developments. Rather, there are a number of small to medium-sized areas of unincorporated County that may be annexed by the City of West Linn. These areas have capacities that range from two to sixty units. The City also currently has no plans to expand the UGB with intent to develop urban reserve in the near future.

#### 5-year Enrollment Forecasts Summary:

- Between the 2017–18 and 2022–23 school years, overall District building attendance enrollment (headcount) is projected to increase from 9,783 to 10,588 or by 8.2%.
- The District is projected to capture 88.1% of the projected District population of all schoolage children (11,878 children). The grade and attendance-level capture rates used were informed by known 2017 student data. Note that out-of-District students accounted for 5.4%

of enrollment in 2017–18; due to recent policy changes regarding inter-district transfers, we project this percentage will fall to 0.6% by 2027–28.

- Included in these projections is an increase in grades:
  - o K-5 enrollment from 4,309 to 4,637 (7.6% gain)
  - o 6–8 enrollment from 2,313 to 2,460 (6.4% gain)
  - o 9–12 enrollment from 3,161 to 3,491 (10.4% gain)
- Both these and the 10-year building attendance forecasts exclude preschool (PS) and Three Rivers Charter students.

#### 10-year Enrollment Forecasts Summary:

- Between the 2022–23 and 2027–28 school years, overall District enrollment (headcount) is projected to increase from 10,588 to 11,282 or by 6.6%.
- The District is projected to capture 88.2% of the projected District population of school-age children (12,488 children).
- Included in these forecasts is an increase in grades:
  - o K-5 enrollment from 4,637 to 4,769 (2.9% gain)
  - o 6–8 enrollment from 2,460 to 2,740 (11.4% gain)
  - o 9–12 enrollment from 3,491 to 3,773 (8.1% gain)
- Over the 10-year range, these 2027–28 forecasts represent an increase over 2017–18 counts by 15.3% for overall District enrollment, 10.7% for grades K–5, 18.4% for grades 6–8, and 19.4% for grades 9–12.

#### Annual District-Wide Building Attendance Enrollment Forecasts by Grade Group:

- Figure 7 shows the total annual District building attendance enrollment projections through the 2027–28 horizon for low, medium (preferred), and high-growth scenarios. Figure 8 shows the enrollment projections broken down by grade group for the medium growth series.
- Figures 9–11 provides elementary, middle, and high school building attendance enrollment projections through 2027–28, respectively, for low, medium, and high-growth scenarios.

#### **Detailed Attendance Area Residence-Based Forecasts:**

• Figures 12–14 detail projected change over the next five years in the number of district students residing in each attendance area for elementary, middle, and high, respectively. Note that our forecasts are produced at a significantly more granular level—that of Census block group, of which there are 28 in the District. For future boundary scenario modeling (or other)

- work, these more granular projections are available upon request, and can be accurately aggregated to current or future attendance area boundaries.
- Figures 15–17 provide annual forecasts by attendance area and grade of District students residing in each attendance area for elementary, middle, and high, respectively. Figure 18 provides District grade totals (and includes both residence-based and building attendance totals by grade group).

#### **Detailed Building Attendance Forecasts:**

- Figures 19–21 detail projected change over the next five years in the number of District students attending elementary, middle, and high school buildings, respectively.
- Figures 22–24 provide annual forecasts by building and grade of District students attending each elementary, middle, and high school building, respectively.
- Building attendance forecasts are derived from the attendance area residence forecasts using an analysis of the rates of intra-district transfer for specific grades, as well as rates of out of district student enrollment. For this forecast set, the October 1, 2017 student information system (SIS) was used as the basis for this analysis, as it provides the address (which we geocoded to the parcel-level) and attending building for each student.

#### Helpful Notes on Using Forecasts:

- The two fundamental types of student enrollment forecasts are building/program attendance (i.e., the number of students expected to attend school at a specific building), and residence-based (i.e., the number of students expected to reside within a certain region, whether it be the District as a whole, or individual attendance areas). This report contains both residence-based and building/program attendance forecasts.
- Residence-based forecasts are generally more accurate than building attendance forecasts, as they are not subject to variability linked to student choices (e.g., intra-district transfers), movement of program locations, constraints on intra-district transfers imposed by building capacities, etc.
- Residence-based forecasts are rooted in student location, and therefore, with the proper granularity, can be re-allocated to different boundaries besides the current attendance areas. This, coupled with their increased accuracy over building attendance forecasts, makes them more suitable for boundary scenario modeling.
- In district-wide totals, building attendance forecasts will always be greater than residence-based ones, as by definition, only the building attendance forecasts include out-of-district students.
- Finally, when comparing building attendance and residence-based forecasts for an individual school, it is important to recognize that the two can sometimes vary quite considerably. In

- some cases the building attendance is higher than the count of students residing in the corresponding attendance area, while at other times it is lower.
- In addition to traditional attendance areas, the District possesses choice zones at the elementary (Boeckman Creek Stafford) and middle school (Athey Creek Rosemont Ridge and Meridian Creek Athey Creek) levels. Students living within these areas have the ability to choose which of elementary or middle school they would like to attend. Choice zones are by design less restrictive than the typical application process for intra-district transfers, and therefore, are less predictable. Although historic data on enrollment patterns helps anticipate future choice, the nature of choice zones adds a considerable degree of uncertainty when forecasting future decisions made by students living with choice zones.
- Upon District request, Figures 25-29 were created to provide more detailed information on factors influencing forecasting:
  - o Figure 25: District-Wide Birth Factors
  - o Figure 26: Assumed Student Yield Factors
  - o Figures 27-29: Enrollment Patterns (Elementary, Middle, and High School)

#### **ENROLLMENT FORECASTS METHODOLOGY**

#### **EXTERNAL DATA SOURCES**

In addition to historic enrollment and housing development data provided by the District, FLO used the following external data sources to inform our student enrollment forecasts:

#### **Enrollment Forecasting:**

- US Census and American Community Survey
- Esri 2017/2022 US Demographics
- Historic October Enrollment provided by the District
- Oregon Department of Education (ODE) October Enrollment
- Oregon Health Authority (OHA) birth data
- Portland State University Population Research Center (PSU PRC) annual July 1 population estimates
- PSU PRC Oregon Population Forecast Program (OPFP) county and urban growth boundary forecasts
- Davis Demographics 2013-2017 Enrollment Forecast Reports

#### Student Enrollment Assessment and Land Use Analysis:

- Student addresses and attribute data from the District's October 1, 2017 student information system (SIS)
- School attendance area boundaries provided by the District
- Clackamas County Parcels
- 2017 Statewide Urban Growth Boundaries and City Limits from Oregon Geospatial Enterprise Office's Oregon Spatial Data Library
- Development data compiled by the District
- FLO-conducted interviews with planners from Clackamas County and the municipalities of West Linn, Wilsonville, and Tualatin

#### **INITIAL STEPS**

Our first step in preparing enrollment forecasts is to perform a detailed assessment of the geographic distribution of District students, as well as historic enrollment trends (i.e. last five years). The results of this preliminary analysis feed into our enrollment forecasts, which use a combination of the demographic cohort-component model to forecast population for the District by age and sex, and the enrollment rate method, which advances each age cohort through successive grade levels. In the former, the components of population change are births, deaths, and migration (which includes a detailed analysis of expected housing development and resulting student yields).

#### **USE OF ENROLLMENT RATE METHOD**

In terms of linking historic enrollment trends to future enrollment forecasts, the enrollment rate method is first used to look at the percent of five-year-olds living in the District boundary in the 2017–18 school year that enrolled in K at District schools. This is referred to as the K enrollment (or "capture") rate. Separate enrollment rates are computed in a similar manner for each of the other age/grade cohorts present in 2017–18 (i.e., 1st through 12th grades). These cohort-specific enrollment rates modified based on certain assumptions (e.g., drop-out rates in high school), are the primary basis for determining the rate at which each given cohort will be enrolled in the future, and can be thought of as a means of calibrating the future enrollment forecasts. For example, the 2017–18 3rd grade enrollment rate of 8-year-olds heavily informs the 8th grade capture rate of the projected 13-year-old District population in 2022–23, and so forth.

Note that following calculations applying capture rates to available school-age children, a 3-year average of grade progression ratios (e.g., ratio of 2nd graders for a given year to 1st graders in the year prior) is enforced at the District level.

Ms. Kathy Ludwig September 24, 2018 Page 7

#### **PROJECTING NET MIGRATION**

Another way historic enrollment data are used is by leveraging knowledge of the geographic distribution of the 2017–18 student population to calculate enrollment rates at the sub-District level. To do this, FLO divided the District into 12 regions (corresponding to Census tracts), each with a sufficient number of students at each grade level to permit statistical calculations. These sub-District, cohort-specific enrollment rates were applied as a baseline to new District school-age children projected to be added due to net in-migration over the next five years. Note that the future migration rate and population projections used, which were largely informed by Esri's 2017/2022 US Demographics, were prepared at an even finer geographic resolution (Census block groups), and at units that are generally socioeconomically distinct from each other.

The Esri 2017/2022 US Demographics dataset is prepared using recent growth trends derived from US Census and state/local sources such as OFM, and account for regional land use and comprehensive plans, publicly available development data (i.e. permits), housing inventory, and US Postal Service carrier route additions to track growth. Prior to use, FLO reviews these data and confirm proper assumptions and incorporation of local data sources, particularly with respect to any publicly available vacant lands and comprehensive plan data, making modifications as warranted based on our detailed review of local data. In particular, FLO performs a very detailed analysis to incorporate expected housing development and associated student yields.

The benefit of this approach is that the geographic analysis performed allowed for a granular forecasting of how many of the eligible new children in the District over the next five years will enroll in District schools, which is expected to be more accurate than simply using District-level rates to predict capture. This is key, as migration often plays a larger role in future enrollment levels than any other factor—more so than gradual changes in birth rate, for example—but can vary greatly within a region.

At the end of each 5-year window, the attendance area numbers are modified as needed to ensure they are consistent with District-wide numbers, which are computed using only District-wide population and historic enrollment numbers. In this way, the District-wide numbers are used to "control" the attendance area-level numbers.

#### **LONGER-TERM FORECASTS (10-YEAR)**

Our 10-year forecasts assume similar Census tract-level migration patterns between 2022–23 and 2027–28 as were applied between 2017–18 and 2022–23, only scaled back proportionately as the slowing in District total population growth, as well as quantities of buildable land within district boundaries and the relative rates at which those spaces are expected to be built out (e.g., as ascertained from review of all known development data).

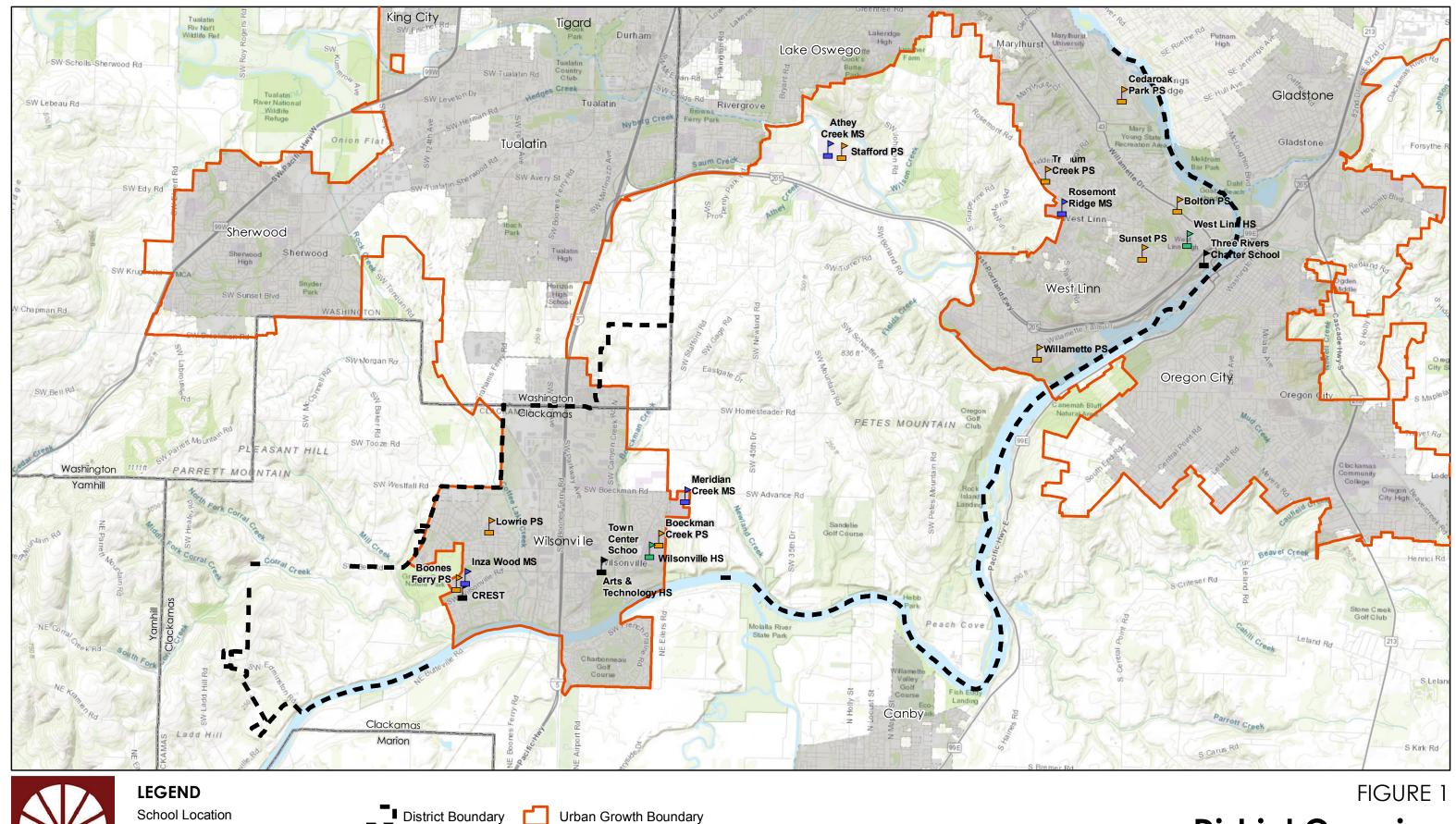
Ms. Kathy Ludwig September 24, 2018 Page 8

2017–22 births, which inform K classes beginning with the 2022–23 school, were projected based on a review of historic OHA zip code birth data throughout the District, forecasted population of females of child-bearing age throughout the District, and county and state trends in fertility (declining).

In terms of capture rate, the grade-specific rates computed from the 2017–18 student enrollment assessment are used. Also, as with the shorter-term projections, a 3-year average of grade progression ratios are enforced at the District level.

# **FIGURES**







School Location

Elementary School





Middle School



High School



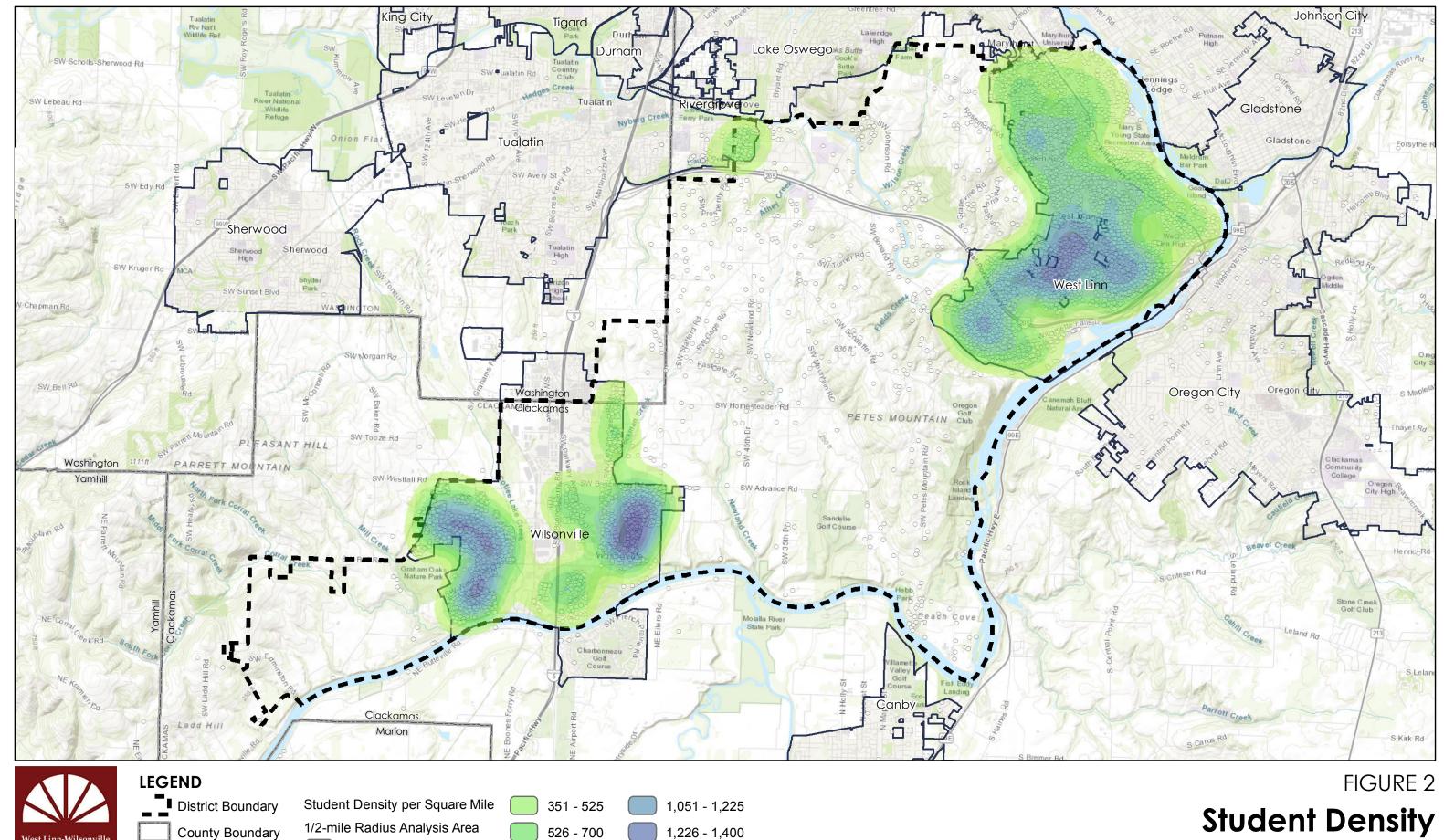
Non-Attendance Area School

County Boundary

Municipality

# **District Overview**







County Boundary

Municipality

Student Household

1/2-mile Radius Analysis Area

0 - 175

176 - 350

876 - 1,050

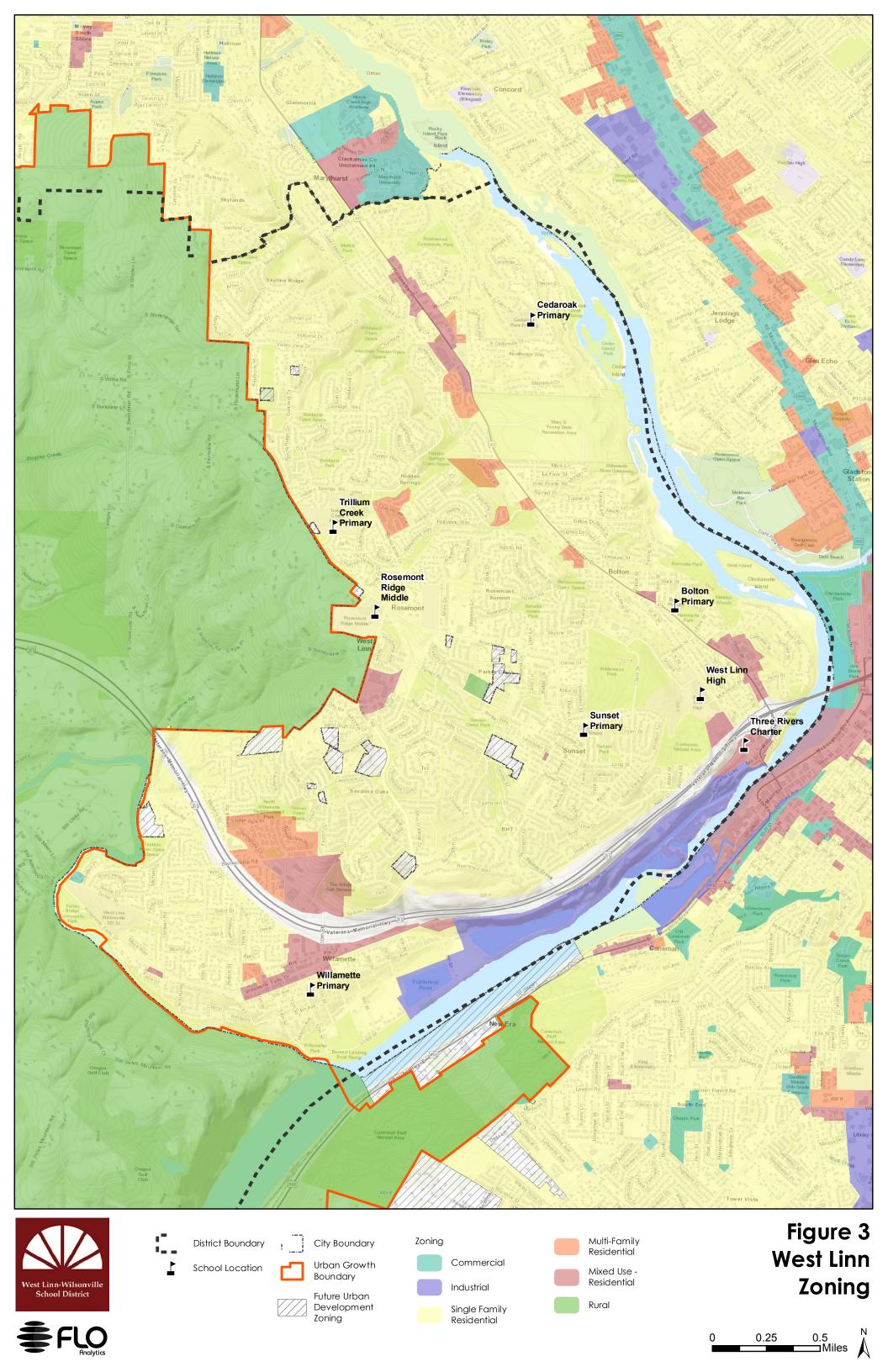
526 - 700

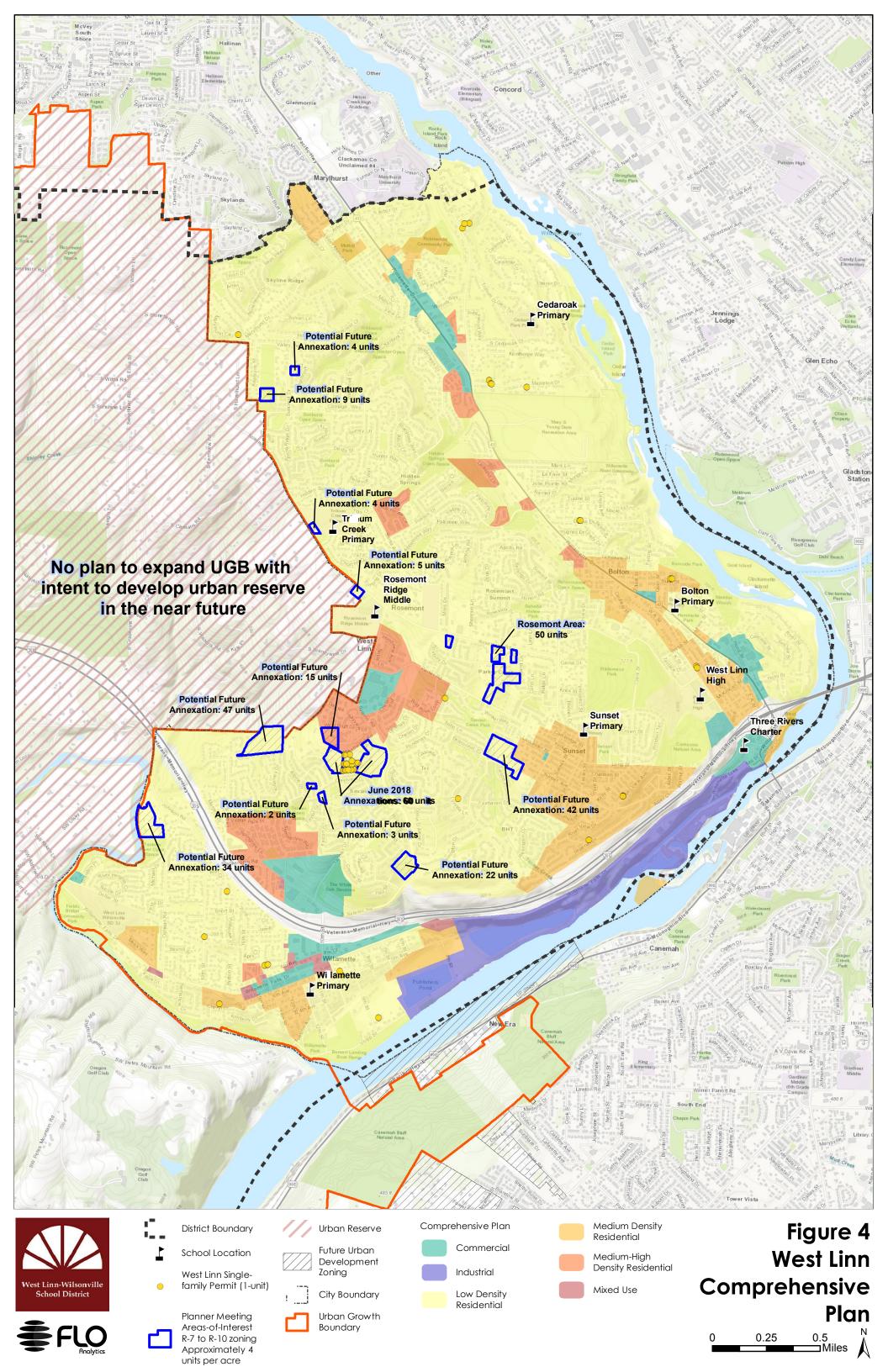
701 - 875

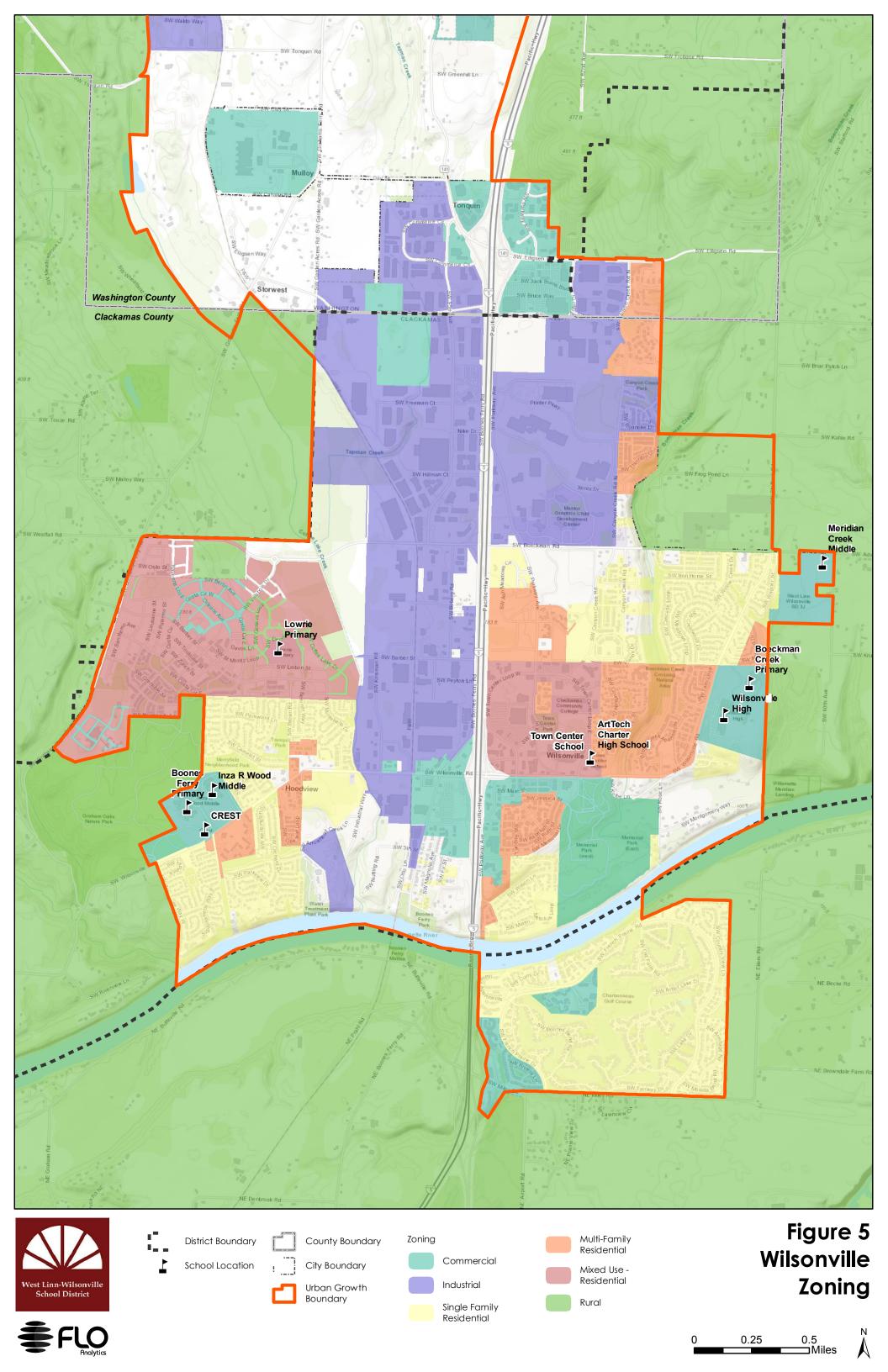
> 1,400

# **Student Density**









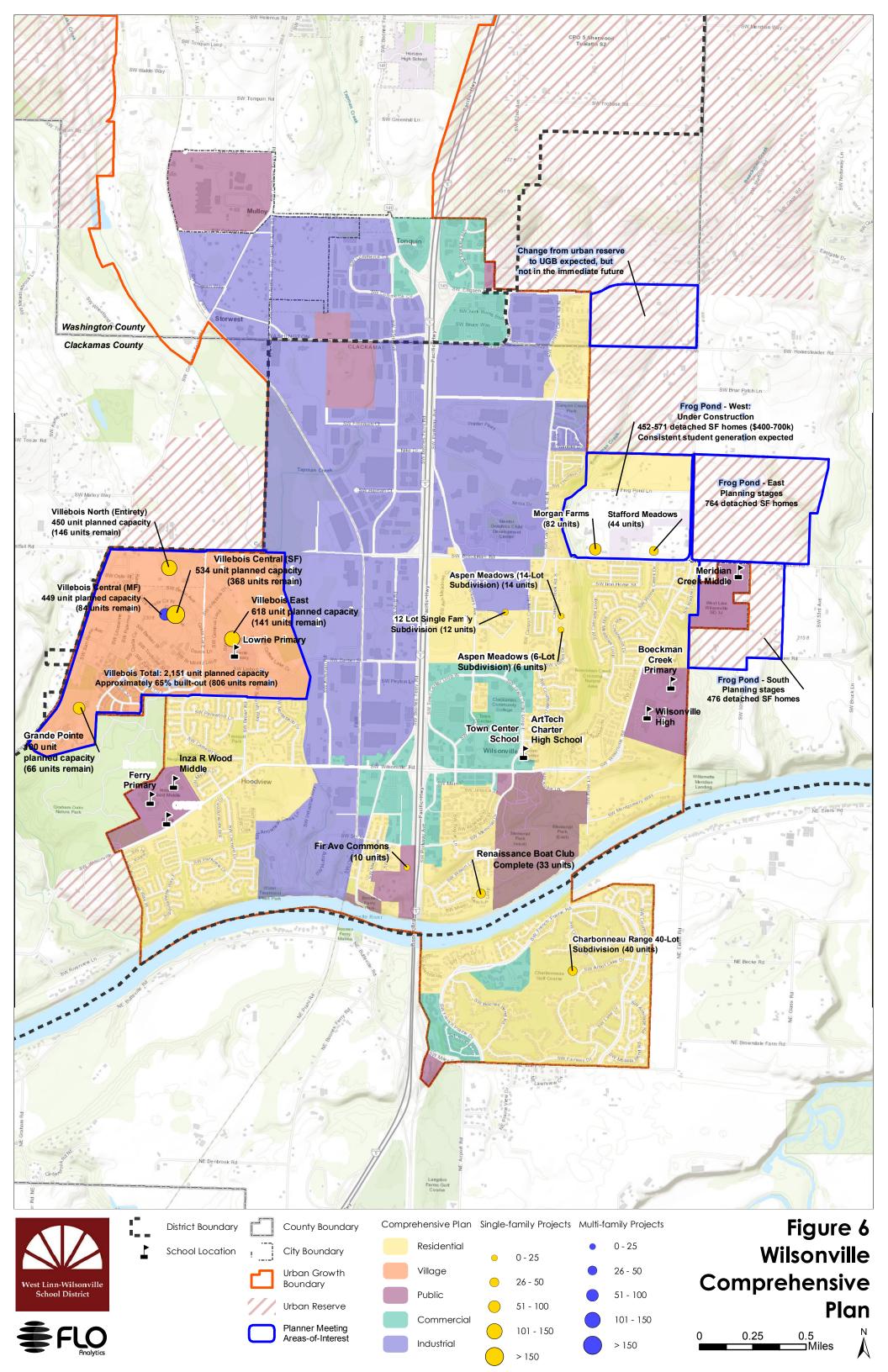
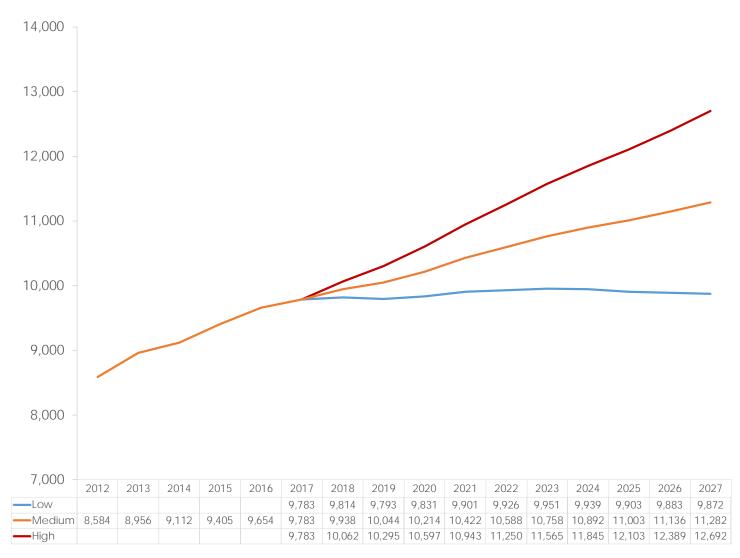
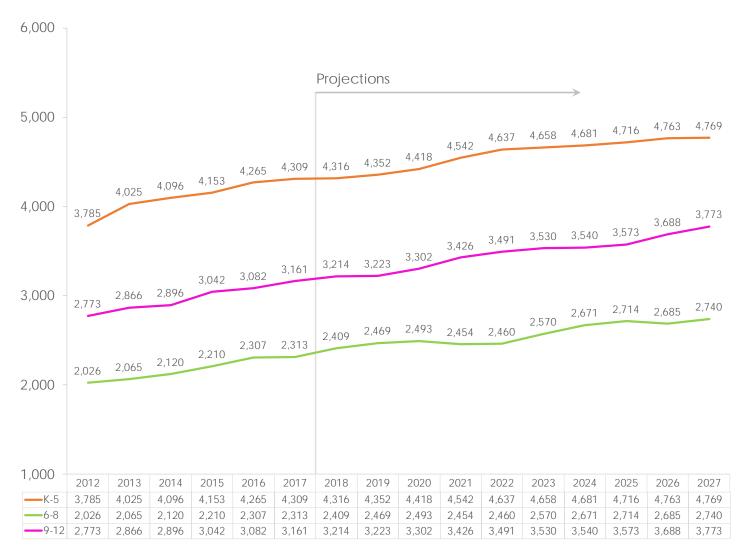


Figure 7 – Total District Building Attendance Enrollment Forecasts (Headcount) – Low, Medium (Preferred), and High-Growth Series



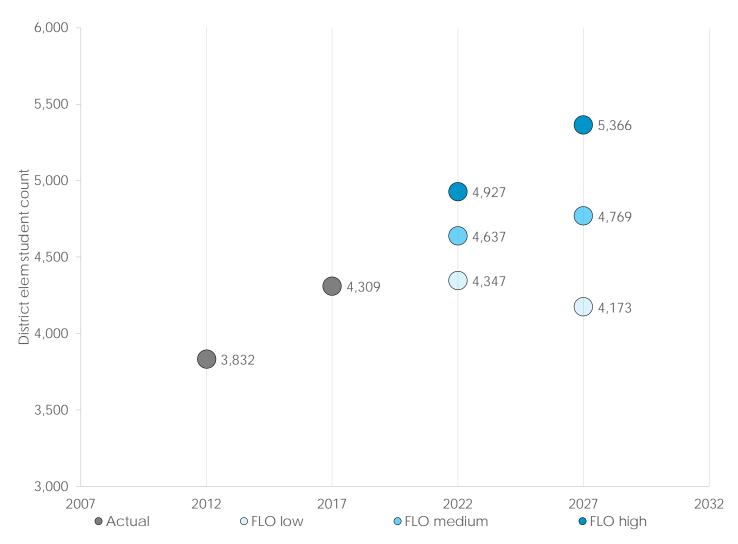
Total District October 1st building attendance enrollment forecasts (headcount) through 2027—low, medium, and high-growth series. Includes all schools except Three Rivers Charter, and students living both within and outside the District. Excludes PS.

Figure 8 – Building Attendance Enrollment Forecasts (Headcount) by Grade Group – Medium Growth Series (Preferred)



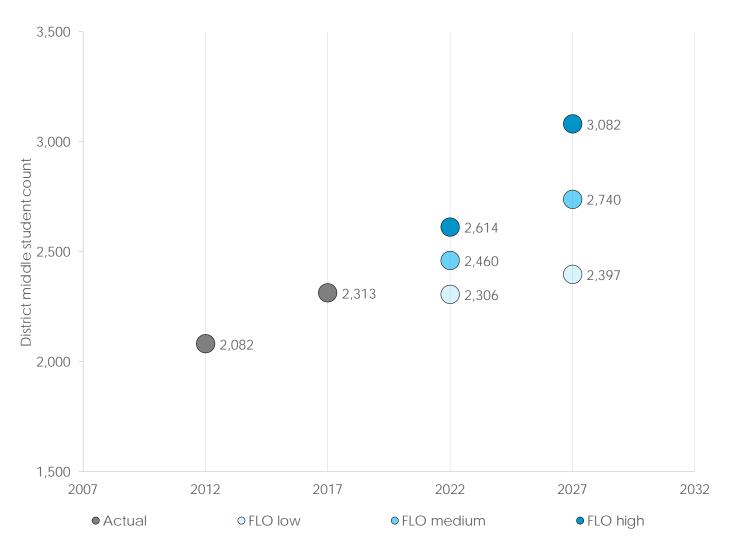
October 1st building attendance enrollment forecasts (headcount) through 2027 by grade group, medium-growth series. Includes all schools except Three Rivers Charter, and students living both within and outside the District. Excludes PS.

Figure 9 – Elementary School Building Attendance Enrollment Forecasts (Headcount) – Low, Medium (Preferred), and High-Growth Series



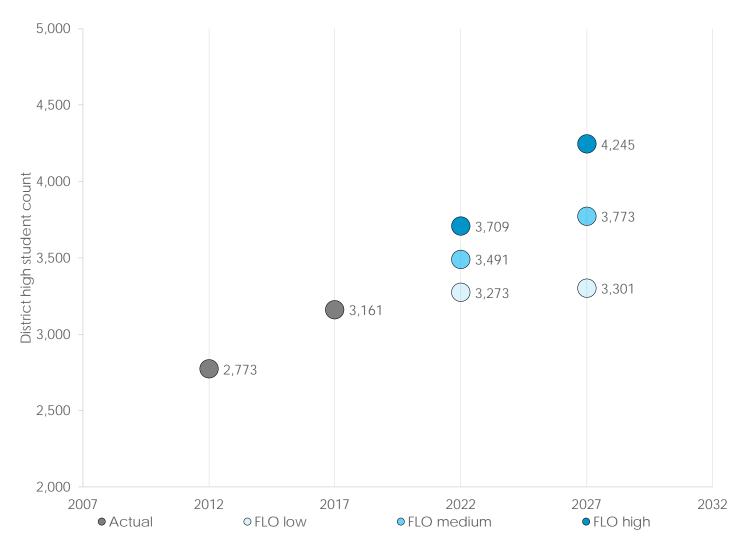
Elementary school October 1st building attendance enrollment forecasts (headcount) for 2022 and 2027—low, medium, and high-growth series. Includes all schools except Three Rivers Charter, and students living both within and outside the District. Excludes PS.

Figure 10 - Middle School Building Attendance Enrollment Forecasts (Headcount) - Low, Medium (Preferred), and High-Growth Series

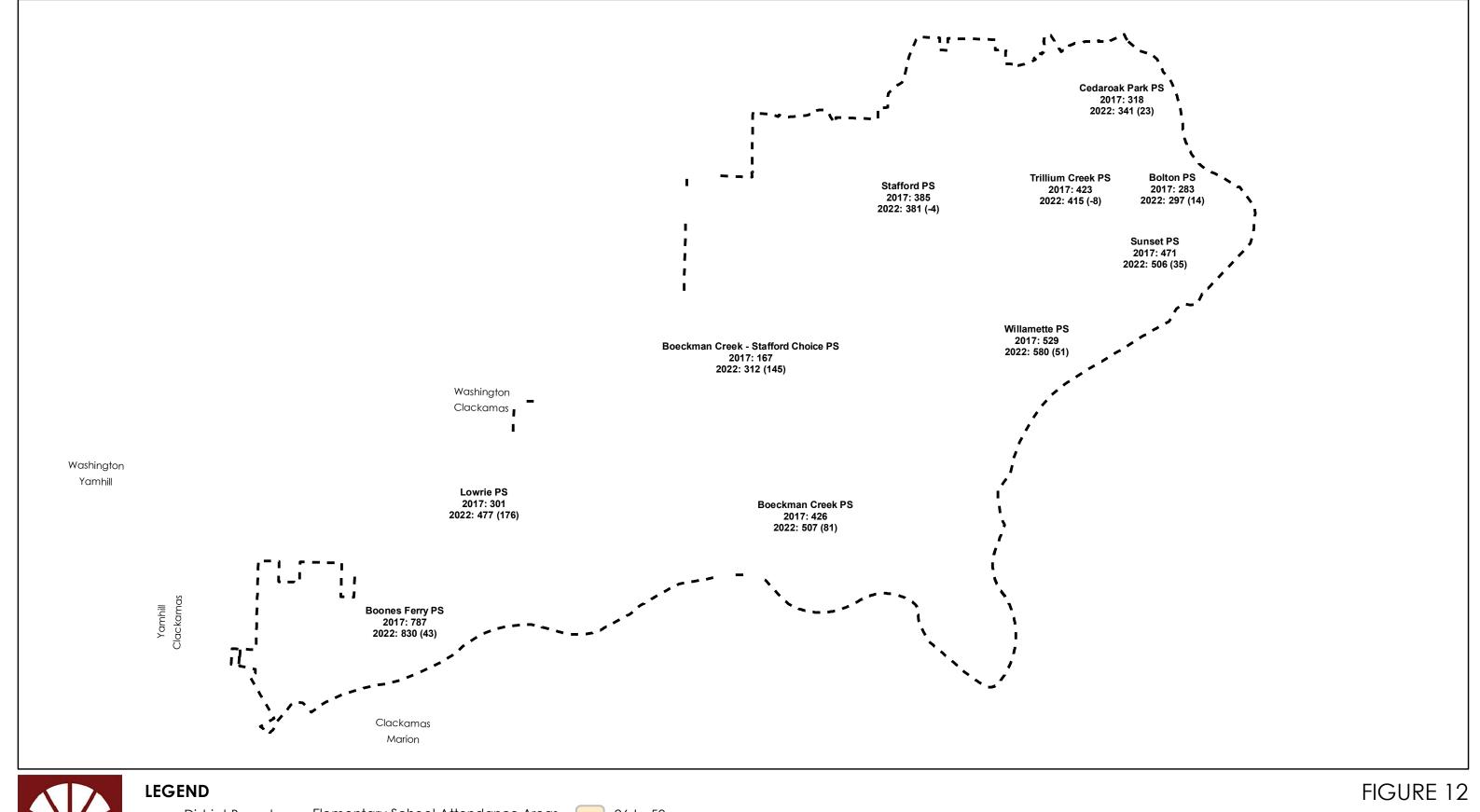


Middle school October 1st building attendance enrollment forecasts for 2022 and 2027—low, medium, and high-growth series. Includes all schools except Three Rivers Charter, and students living both within and outside the District.

Figure 11 - High School Building Attendance Enrollment Forecasts (Headcount) - Low, Medium (Preferred), and High-Growth Series



High school October 1st building attendance enrollment forecasts (headcount) for 2022 and 2027—low, medium, and high-growth series. Includes all schools, and students living both within and outside the District.



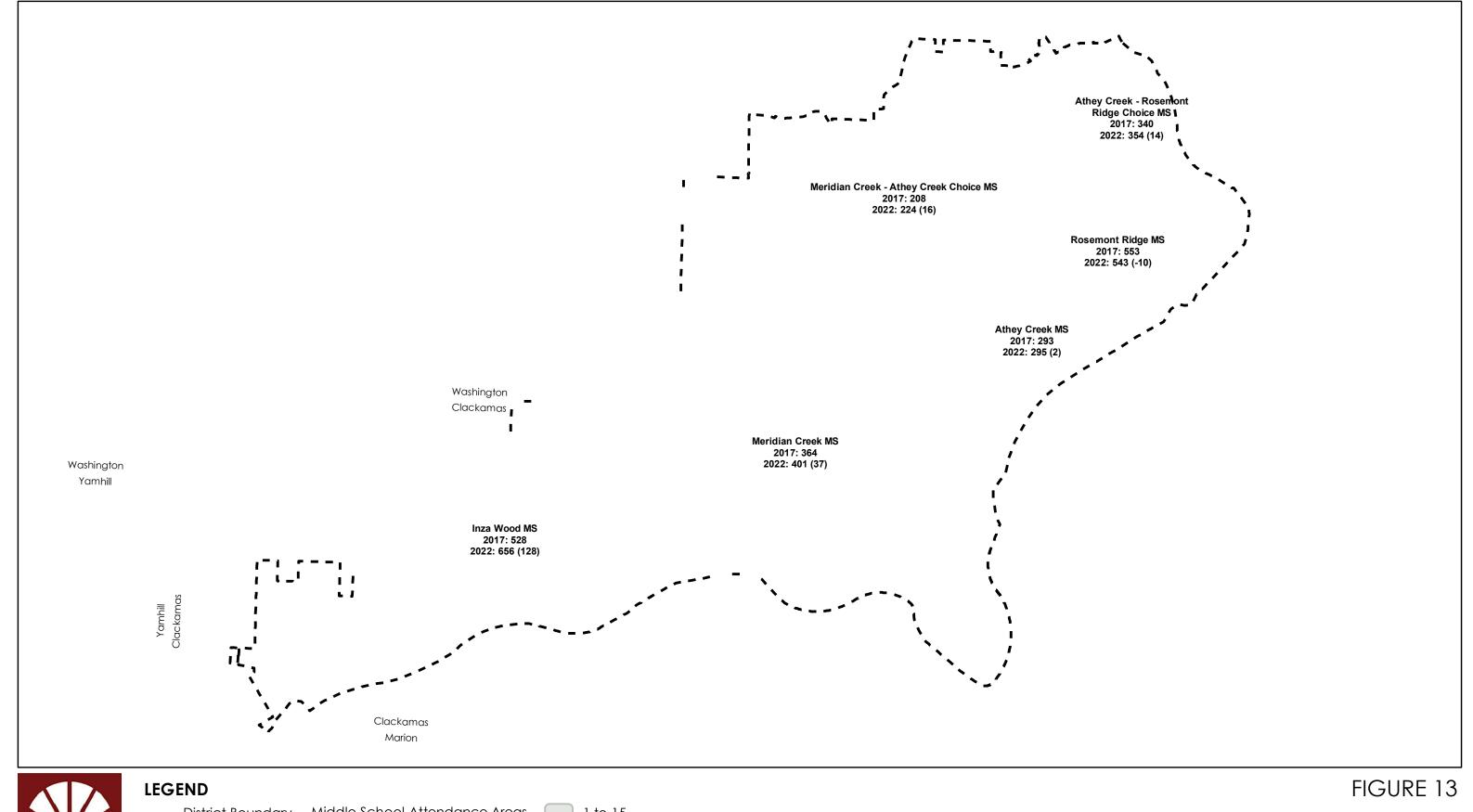




## \_ \_ District Boundary Elementary School Attendance Areas 26 to 50 Magnitude of Change County Boundary 51 to 100

**Elementary School Residence-based** 2017-22 Enrollment Forecasts





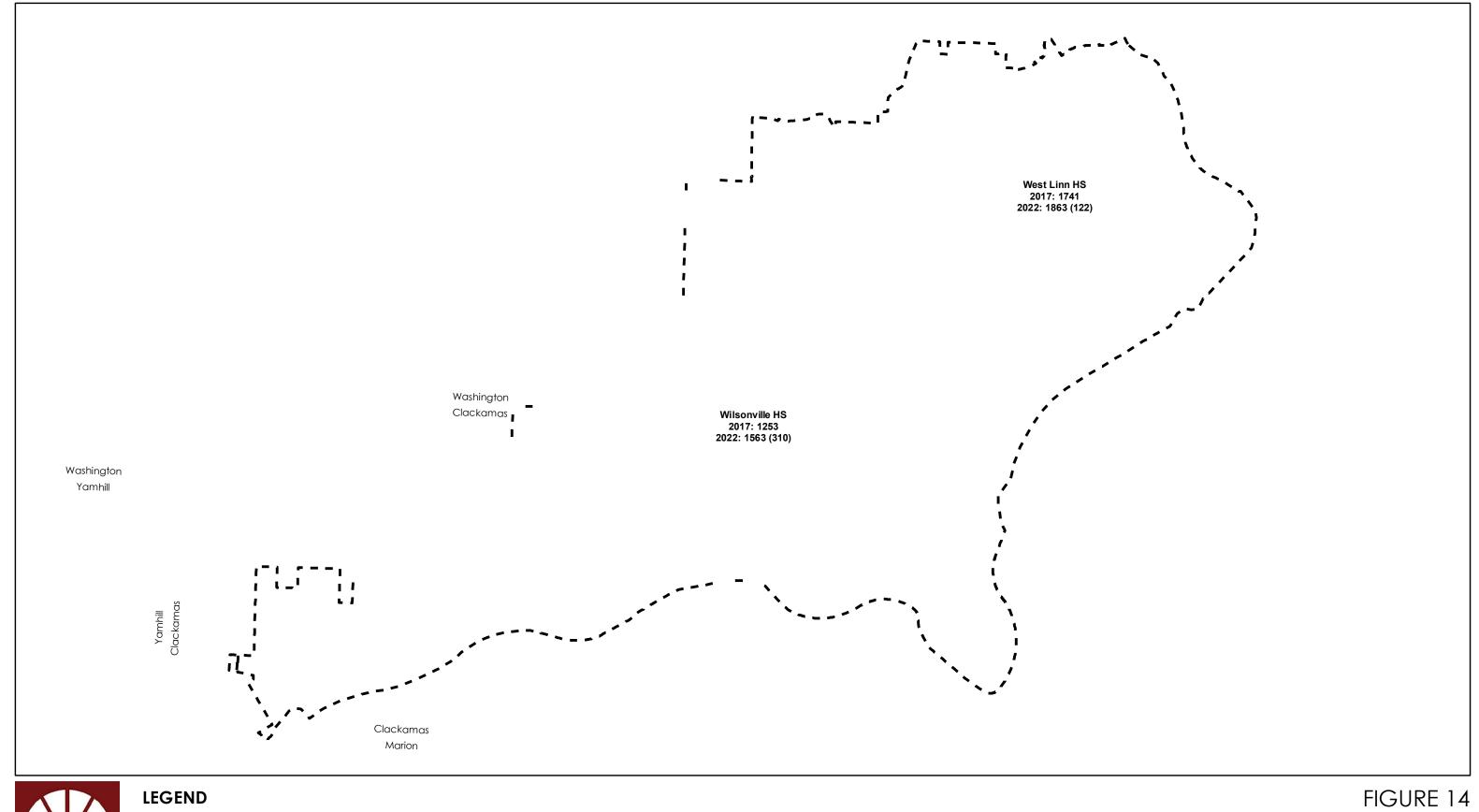


# LEGEND \_\_\_ District Boundary Middle School Attendance Areas 1 to 15 County Boundary Magnitude of Change 16 to 30 <= 0 > 30

# Middle School Residence-based 2017-22 Enrollment Forecasts



0 0.5 1 2 Miles





# \_ \_ District Boundary High School Attendance Areas County Boundary Magnitude of Change 0 to 125

**High School Residence-based 2017-22 Enrollment Forecasts** 



Figure 15 - Elementary School Attendance Area Residence-Based Forecasts by Grade (Headcount)

Boeckman Creek - Stafford Choice PS													
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
K	30	34	38	41	47	48	49	50	51	51	52		
1	25	36	40	44	48	51	53	55	56	59	57		
2	20	30	39	44	47	51	53	54	58	59	61		
3	23	24	36	45	49	52	54	57	57	63	64		
4	32	27	28	42	50	54	55	56	60	59	67		
5	37	38	33	33	49	56	57	58	59	64	61		
K-5	167	189	214	248	290	312	321	331	341	354	362		

Boeckmar	n Creek PS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	66	68	69	71	74	76	81	85	89	93	96
1	73	73	76	77	79	81	86	93	98	104	105
2	68	75	76	80	80	84	87	92	100	106	112
3	72	70	79	82	86	85	92	98	101	111	118
4	76	75	70	80	85	90	92	98	106	107	120
5	71	81	80	72	84	91	98	101	106	117	117
K-5	426	443	450	462	488	507	537	566	600	638	669

<b>Bolton PS</b>											
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	45	42	41	44	45	42	42	42	42	41	41
1	48	47	43	43	45	47	44	43	42	43	42
2	39	51	51	47	46	47	50	46	46	44	45
3	50	42	53	55	51	49	51	53	49	48	46
4	48	51	44	54	57	53	51	52	55	51	49
5	53	50	51	45	55	59	54	52	54	56	52
K-5	283	282	284	288	299	298	291	289	287	283	275

Figure 15 (cont.) - Elementary School Attendance Area Residence-Based Forecasts by Grade (Headcount)

2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
120	128	129	130	133	128	129	129	130	128	128
135	122	131	134	135	137	130	132	132	133	131
135	136	125	135	140	140	141	133	136	137	135
137	136	137	127	138	146	143	145	136	140	141
120	138	138	138	130	142	148	146	149	139	144
140	127	143	144	143	137	148	153	153	158	146
787	787	802	807	819	831	839	838	836	834	824
Doule DC										
2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	120 135 135 137 120 140	120     128       135     122       135     136       137     136       120     138       140     127       787     787	120       128       129         135       122       131         135       136       125         137       136       137         120       138       138         140       127       143         787       787       802	120     128     129     130       135     122     131     134       135     136     125     135       137     136     137     127       120     138     138     138       140     127     143     144       787     787     802     807	120       128       129       130       133         135       122       131       134       135         135       136       125       135       140         137       136       137       127       138         120       138       138       138       130         140       127       143       144       143         787       787       802       807       819	120       128       129       130       133       128         135       122       131       134       135       137         135       136       125       135       140       140         137       136       137       127       138       146         120       138       138       138       130       142         140       127       143       144       143       137         787       787       802       807       819       831	120       128       129       130       133       128       129         135       122       131       134       135       137       130         135       136       125       135       140       140       141         137       136       137       127       138       146       143         120       138       138       138       130       142       148         140       127       143       144       143       137       148         787       787       802       807       819       831       839	120       128       129       130       133       128       129       129         135       122       131       134       135       137       130       132         135       136       125       135       140       140       141       133         137       136       137       127       138       146       143       145         120       138       138       138       130       142       148       146         140       127       143       144       143       137       148       153         787       787       802       807       819       831       839       838	120       128       129       130       133       128       129       129       130         135       122       131       134       135       137       130       132       132         135       136       125       135       140       140       141       133       136         137       136       137       127       138       146       143       145       136         120       138       138       138       130       142       148       146       149         140       127       143       144       143       137       148       153       153         787       787       802       807       819       831       839       838       836	120       128       129       130       133       128       129       129       130       128         135       122       131       134       135       137       130       132       132       133         135       136       125       135       140       140       141       133       136       137         137       136       137       127       138       146       143       145       136       140         120       138       138       130       142       148       146       149       139         140       127       143       144       143       137       148       153       153       158         787       787       802       807       819       831       839       838       836       834

Cedaroak Park PS													
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027		
K	48	47	47	47	50	47	47	48	48	48	48		
1	59	54	53	52	55	51	51	52	52	54	53		
2	48	62	57	55	54	56	53	53	54	52	55		
3	47	54	69	63	61	59	62	59	57	59	56		
4	73	50	56	70	65	62	61	63	60	56	59		
5	43	74	53	57	71	66	64	62	64	60	55		
K-5	318	341	334	345	355	340	338	336	334	329	326		

Lowrie PS											
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	62	69	72	77	81	78	79	79	79	79	78
1	42	63	69	73	77	81	77	76	78	79	80
2	57	47	66	72	77	82	81	78	77	80	81
3	45	62	51	69	75	81	81	81	79	77	82
4	50	50	68	57	74	80	83	82	83	83	80
5	45	51	52	71	60	75	77	79	78	79	81
K-5	301	341	377	418	444	477	477	475	474	478	482

Figure 15 (cont.) - Elementary School Attendance Area Residence-Based Forecasts by Grade (Headcount)

Stafford PS											
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	54	54	55	53	55	53	53	54	54	53	53
1	55	60	59	60	58	62	60	59	60	60	58
2	52	57	62	61	61	62	63	63	60	64	64
3	69	56	61	66	64	65	66	67	68	63	69
4	69	71	58	63	69	66	67	67	69	72	65
5	86	72	75	62	67	73	71	71	70	73	77
K-5	385	370	370	364	374	381	380	380	381	385	387
Sunset PS											
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	67	63	64	68	72	68	68	69	69	68	68
1	71	79	75	77	80	85	81	79	79	79	77
2	87	76	83	81	84	87	89	85	82	82	86
3	79	87	77	83	83	87	87	90	87	81	82
4	76	82	90	81	86	88	91	89	94	91	82
5	91	81	87	95	88	91	94	97	94	100	97
K-5	471	468	476	485	492	506	510	509	504	501	492
Trillium Cre	ek PS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
к	53	54	55	57	61	59	59	59	59	58	57
1	67	58	59	60	63	68	63	62	63	64	63
2	75	69	62	63	65	68	71	67	64	67	69
3	82	74	70	66	66	69	68	73	69	65	69
4	69	85	78	76	73	74	73	73	80	75	70
5	77	71	83	78	76	77	75	73	73	82	77
K-5	423	411	408	399	405	414	410	407	408	412	406

Figure 15 (cont.) - Elementary School Attendance Area Residence-Based Forecasts by Grade (Headcount)

## Willamette PS

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	94	88	89	88	91	84	84	85	85	85	84
1	63	91	85	86	85	93	82	81	83	83	88
2	95	73	102	96	96	97	105	94	90	95	96
3	82	97	76	104	98	98	98	107	98	91	98
4	90	85	100	80	107	100	100	101	110	102	93
5	105	93	86	101	83	108	101	101	102	111	105
K-5	529	526	538	555	559	579	571	568	568	567	565

Annual elementary school attendance area residence-based forecasts by grade through 2027. Shown are 2017 actual counts of District students residing in each attendance area (October), as well as October 1st projections for each subsequent year. Excludes PS. By definition, the attendance area residence numbers do not include students living outside the District.

Figure 16 - Middle School Attendance Area Residence-Based Forecasts by Grade (Headcount)

# Athey Creek - Rosemont Ridge Choice MS

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6 7	106	103	128	109	106	128	132	122	118	120	118
7	110	111	111	133	114	111	135	140	127	122	124
8	124	115	112	115	132	115	114	137	142	127	122
6-8	340	329	351	357	352	354	381	398	387	370	364

# Athey Creek MS

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	98	110	98	91	105	89	114	105	104	106	116
7	103	105	116	105	95	110	96	121	109	108	110
8	92	107	108	118	107	96	111	99	124	109	107
6-8	293	322	323	314	308	295	321	326	337	322	333

# Inza Wood MS

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	176	196	187	201	223	210	218	228	234	234	243
7	174	186	206	194	205	230	216	224	229	234	236
8	178	186	203	223	208	216	242	229	237	238	241
6-8	528	568	595	617	636	656	677	681	701	706	720

# Meridian Creek - Athey Creek Choice MS

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	68	89	74	79	65	71	77	76	74	73	76
7	73	71	93	77	83	69	75	82	81	78	76
8	67	75	72	93	77	84	70	77	83	83	78
6-8	208	236	239	249	225	224	222	234	238	233	230

Figure 16 (cont.) - Middle School Attendance Area Residence-Based Forecasts by Grade (Headcount)

# Meridian Creek MS

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6 7	124	117	131	122	110	144	160	166	173	176	196
7	107	137	128	144	134	117	161	174	179	187	188
8	133	110	145	135	152	140	127	173	182	185	195
6-8	364	365	404	401	396	401	448	513	533	548	579

# Rosemont Ridge MS

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	174	175	160	176	179	174	180	180	178	174	193
7	192	184	183	170	182	187	186	194	192	188	183
8	187	195	186	184	174	182	190	190	200	196	190
6-8	553	554	530	530	536	542	556	564	570	558	566

Annual middle school attendance area residence-based forecasts by grade through 2027. Shown are 2017 actual counts of District students residing in each attendance area (October), as well as October 1st projections for each subsequent year. By definition, the attendance area residence numbers do not include students living outside the District.

Figure 17 - High School Attendance Area Residence-Based Forecasts by Grade (Headcount)

1,841

9-12

1,741

1,779

1,828

#### **West Linn HS** Grade

1,863

1,833

1,865

1,854

1,866

1,921

1,942

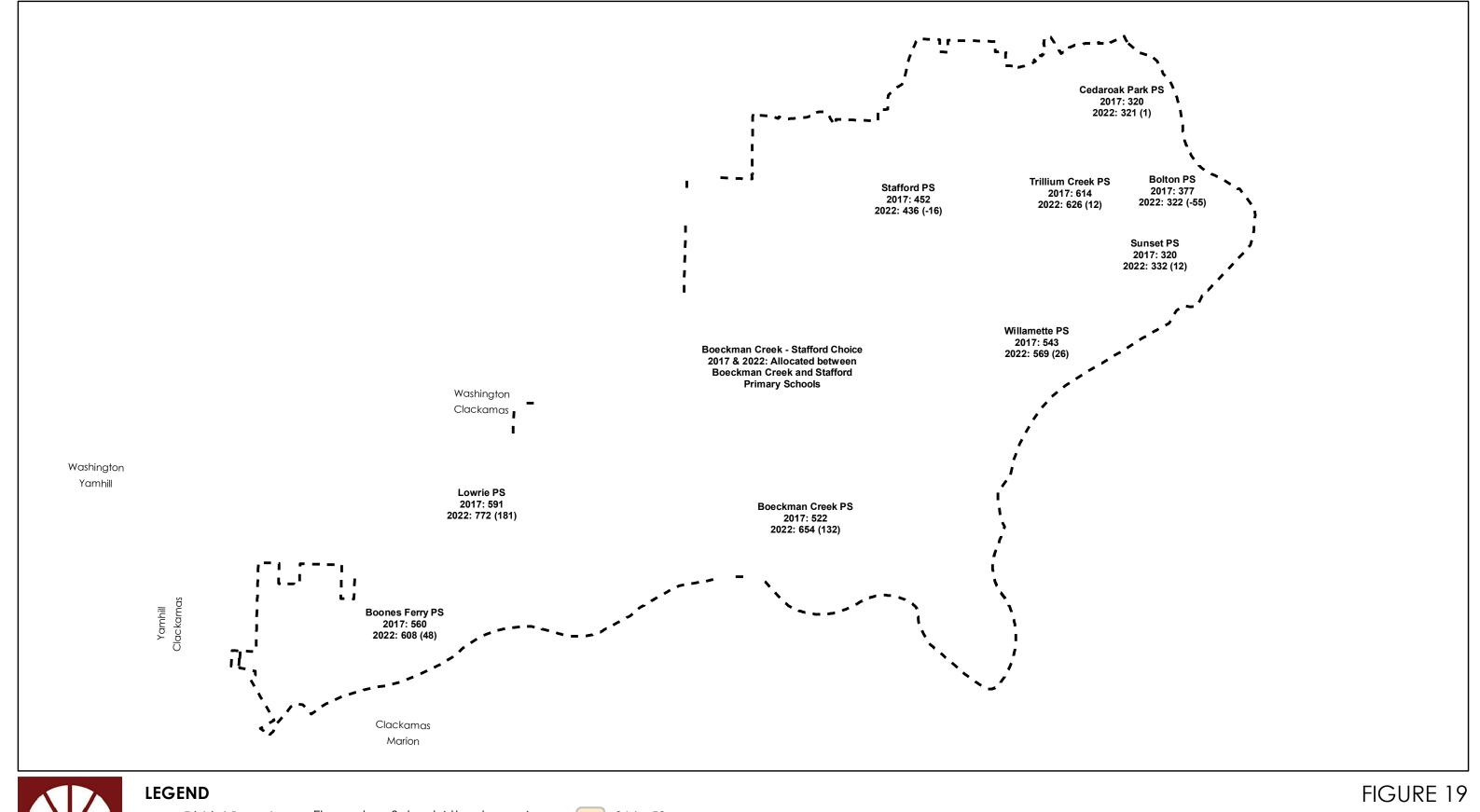
Wilsonville	HS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
9	325	354	337	399	417	414	413	411	453	475	473
10	294	316	344	328	394	414	402	401	404	446	464
11	325	290	311	339	325	397	408	397	396	405	446
12	309	338	302	324	354	338	412	424	413	411	426
9-12	1,253	1,298	1,294	1,390	1,491	1,563	1,636	1,633	1,666	1,738	1,809

Annual high school attendance area residence-based forecasts by grade through 2027. Shown are 2017 actual counts of District students residing in each attendance area (October), as well as October 1st projections for each subsequent year. By definition, the attendance area residence numbers do not include students living outside the District.

Figure 18 - District Grade Totals, Attendance Area Residence-Based Forecasts (Headcount)

	Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	K	639	647	659	676	708	685	692	699	705	704	705
	1	638	681	690	705	725	755	727	732	745	758	755
	2	676	674	723	732	750	774	795	765	767	786	804
	3	686	702	709	759	770	791	801	830	800	799	825
	4	682	693	708	721	774	787	797	805	843	813	807
	5	722	715	720	733	753	809	816	823	829	877	845
	6	725	769	757	755	767	794	859	855	858	861	920
	7	738	771	814	800	791	800	846	911	894	893	893
	8	759	768	806	847	830	813	834	884	949	917	912
	9	781	818	824	867	902	886	873	889	949	1,012	967
	10	736	758	795	802	844	878	861	848	863	925	984
	11	744	726	749	784	793	836	866	850	837	851	916
	12	733	773	755	778	817	825	869	901	883	870	884
	K-5	4,043	4,113	4,209	4,326	4,481	4,600	4,628	4,654	4,689	4,736	4,742
Residing in District	6-8	2,222	2,308	2,377	2,402	2,387	2,406	2,538	2,650	2,700	2,672	2,726
(Residence-Based	<u>9-12</u>	<u>2,994</u>	<u>3,077</u>	<u>3,122</u>	<u>3,231</u>	<u>3,356</u>	<u>3,426</u>	<u>3,469</u>	<u>3,487</u>	<u>3,532</u>	<u>3,658</u>	<u>3,752</u>
Forecasts)	K-12	9,259	9,497	9,708	9,959	10,223	10,432	10,636	10,791	10,922	11,066	11,220
0.1.482444	K-5	266	203	143	92	61	37	30	27	27	27	27
Out of District	6-8	91	101	92	91	68	54	32	20	14	14	14
(Included in Building	<u>9-12</u>	<u>167</u>	<u>137</u>	<u>101</u>	<u>71</u>	<u>70</u>	<u>66</u>	<u>60</u>	<u>53</u>	<u>41</u>	<u>29</u>	<u>21</u>
Attendance Forecasts)	K-12	524	441	336	255	199	156	122	100	81	70	62
	W E	4.000	4.047	4.050	4.440	4.540	4 (07	4.750	4.404	4.747	4.7/0	47/0
	K-5	4,309	4,316	4,352	4,418	4,542	4,637	4,658	4,681	4,716	4,763	4,769
Total Attendance	6-8	2,313	2,409	2,469	2,493	2,454	2,460	2,570	2,671	2,714	2,685	2,740
(Building Attendance	<u>9-12</u>	<u>3,161</u>	<u>3,214</u>	<u>3,223</u>	<u>3,302</u>	<u>3,426</u>	<u>3,491</u>	<u>3,530</u>	<u>3,540</u>	<u>3,573</u>	<u>3,688</u>	<u>3,773</u>
Forecasts)	K-12	9,783	9,938	10,044	10,214	10,422	10,588	10,758	10,892	11,003	11,136	11,282

Annual District attendance area residence forecasts grade totals through 2027. Shown are 2017 actual counts of District students residing in each attendance area (October), as well as October 1st projections for each subsequent year. By definition, the attendance area residence numbers do not include students living outside the District. Excludes PS and Three Rivers Charter.

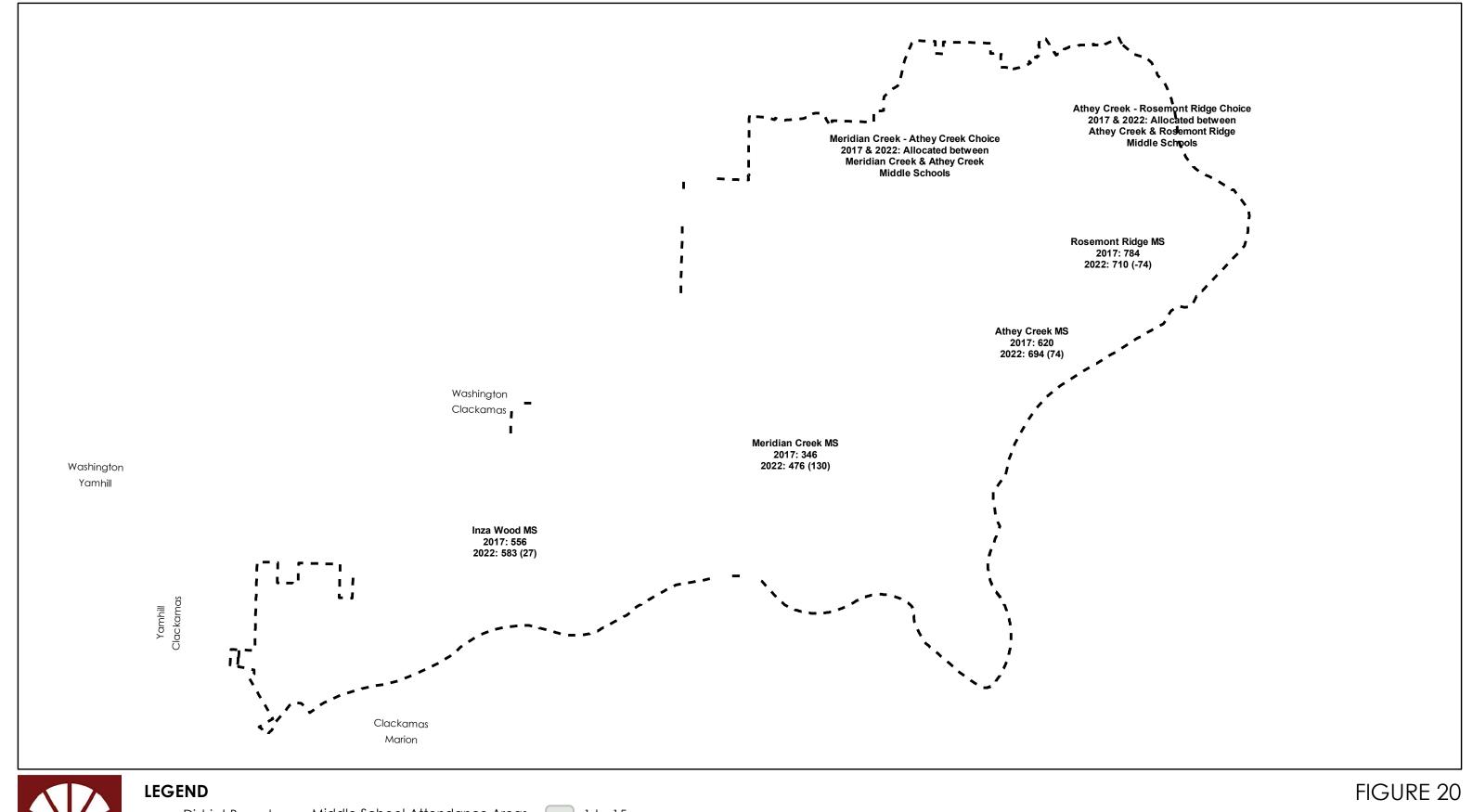




# 

Elementary School Building Attendance 2017-22 Enrollment Forecasts



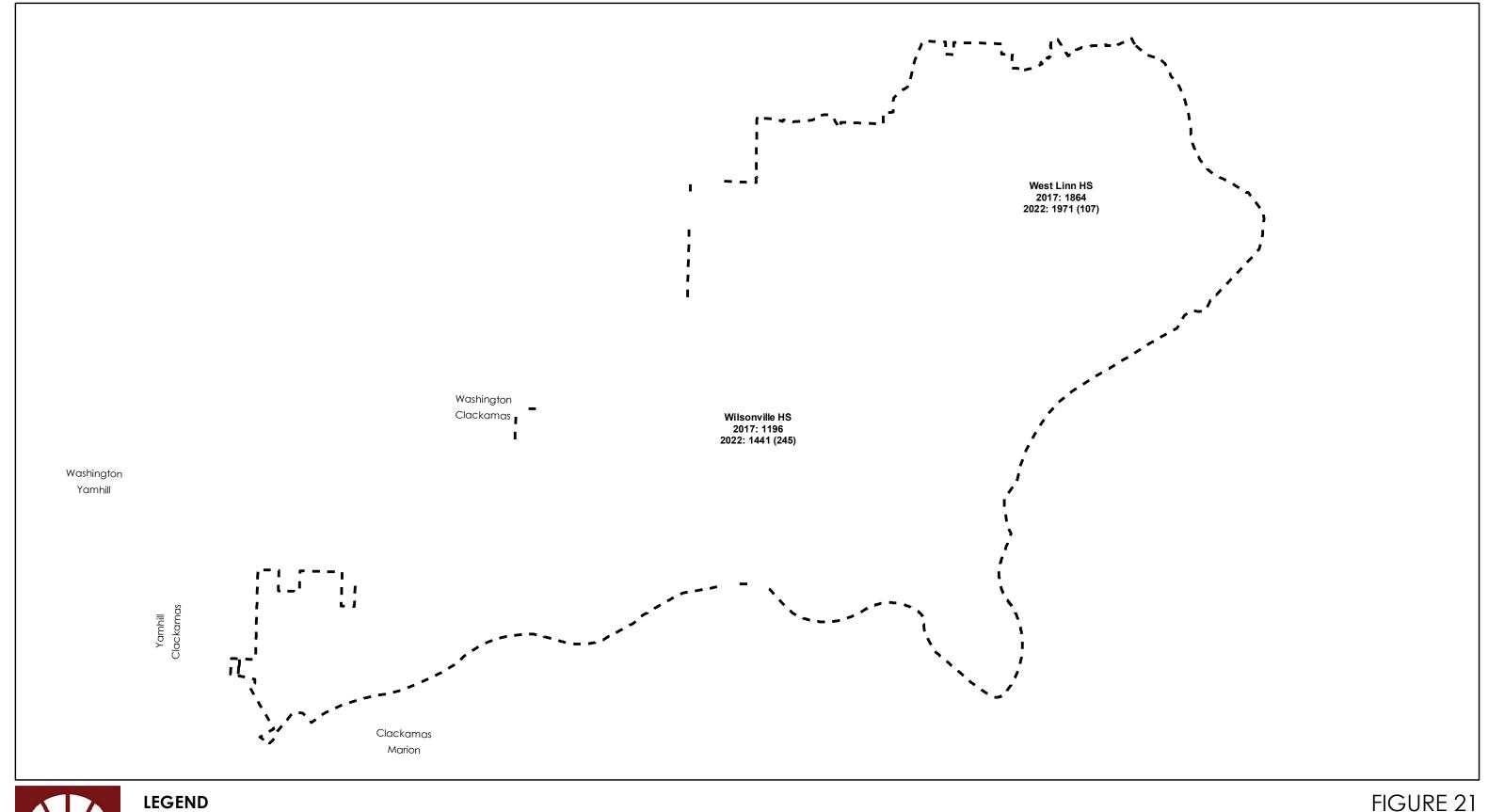




# 

# Middle School Building Attendance 2017-22 Enrollment Forecasts







# \_ \_ District Boundary

High School Attendance Areas

County Boundary Attn\_2017\_2022\_Change

0 to 125

FIGURE 21

**High School Building Attendance 2017-22 Enrollment Forecasts** 



Figure 22 - Elementary School Building Attendance Forecasts by Grade (Headcount)

		-	•			_					
Boeckman	Creek PS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	85	86	89	92	98	100	104	108	112	115	118
1	89	91	96	99	103	106	111	118	123	129	129
2	83	92	95	101	103	109	113	116	126	131	137
3	91	85	98	103	109	111	117	124	126	138	144
4	81	89	83	99	106	112	115	120	129	129	145
5	93	101	97	89	108	116	123	127	131	143	141
K-5	522	543	559	584	627	654	683	713	747	786	815
Dalton DC											
Bolton PS	0047	0040	0040	0000	0004	0000	0000	0004	0005	0007	2027
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	40	48	47	48	49	46	46	46	45	45	44
1	69	54	50	49	50	51	48	47	47	48	47
2	65	66	57	53	51	52	54	51	50	49	50
3	71	58	66	60	56	54	55	57	53	52	51
4	67	69	57	64	61	56	54	55	58	54	52
5	65	67	67	57	64	63	58	56	57	59	55
K-5	377	363	344	331	331	322	315	312	310	307	299
Boones Fer	ry PS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	91	94	95	96	98	94	95	95	96	95	95
1	99	91	96	98	99	101	96	97	98	99	97
, 1	00	100	00	00	100	100	101	00	100	101	100

Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	91	94	95	96	98	94	95	95	96	95	95
1	99	91	96	98	99	101	96	97	98	99	97
2	92	103	92	99	103	103	104	98	100	101	100
3	101	103	103	94	102	107	105	107	100	103	104
4	88	103	100	100	93	102	105	104	107	100	103
5	89	98	108	107	106	101	109	112	112	116	108
K-5	560	591	595	594	601	608	613	613	613	613	607

Figure 22 (cont.) - Elementary School Building Attendance Forecasts by Grade (Headcount)

Cedaroak	Park PS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	41	45	45	45	47	44	44	45	45	45	45
1	62	52	50	49	51	49	48	49	49	50	50
2	47	61	54	52	51	53	51	50	51	49	52
3	51	54	66	60	57	55	58	56	54	55	53
4	73	53	55	67	61	58	57	59	57	54	55
5	46	72	55	56	68	62	60	58	60	57	53
K-5	320	337	325	329	335	321	318	316	315	310	307
Lowrie PS											
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	98	111	115	121	127	124	125	126	127	126	126
1	84	104	114	119	125	130	125	126	128	131	130
2	110	92	109	119	126	132	132	128	129	133	134
3	90	104	98	114	124	133	133	134	131	132	138
4	102	95	112	106	121	131	136	135	138	136	137
5	107	94	97	114	109	123	129	132	132	137	135
K-5	591	600	644	692	731	772	779	781	785	794	800
Stafford PS											
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
К	62	63	64	62	65	63	64	64	65	64	64
1	60	69	69	70	68	72	70	70	72	72	70
2	62	69	72	71	72	73	75	74	72	76	77
3	84	68	73	76	75	76	77	79	79	77	82
4	78	77	62	68	72	71	71	72	75	76	72
5	106	82	83	69	76	80	79	79	79	83	86
K-5	452	427	423	416	428	436	436	438	442	448	452

Figure 22 (cont.) - Elementary School Building Attendance Forecasts by Grade (Headcount)

Sunset PS											
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Κ	55	43	43	46	49	46	46	46	47	46	46
1	54	53	51	52	54	57	54	53	53	53	52
2	59	52	56	55	56	58	60	57	55	55	58
3	57	60	53	56	56	58	58	61	58	54	55
4	43	55	59	54	56	57	59	58	61	59	53
5	52	50	54	58	53	55	57	58	57	61	59
K-5	320	313	316	320	324	332	334	333	330	328	323
Trillium Cre	ek PS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	83	83	84	87	93	89	89	89	89	88	88
1	97	93	92	93	97	103	97	95	97	98	96
2	105	102	99	98	101	105	109	103	99	102	105
3	114	109	105	104	103	106	106	112	106	100	105
4	105	116	112	109	110	110	110	110	118	111	104
5	110	104	115	112	111	114	112	110	110	120	114
K-5	614	608	607	604	614	626	622	619	619	620	612
Willamette	PS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
K	90	87	88	87	89	83	83	84	84	84	84
1	64	91	85	86	85	92	83	81	83	83	88
2	95	78	101	95	96	96	103	94	90	94	96
3	84	99	80	103	97	97	98	105	97	91	98
4	100	87	98	81	102	97	96	97	106	99	90
5	110	94	89	99	84	104	98	98	99	108	102
K-5	543	536	541	550	553	569	561	559	559	559	557

Annual elementary school building attendance forecasts by grade through 2027. Shown are 2017 October 1st counts by building and grade of students attending District schools, as well as October 1st projections for each subsequent year. Includes all buildings except Three Rivers Charter, and students living both within and outside the District. Excludes PS students.

Figure 23 - Middle School Building Attendance Forecasts by Grade (Headcount)

Athey Cree	ek MS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	189	265	237	230	226	220	248	236	233	234	251
7	217	219	271	244	236	232	232	261	246	241	241
8	214	231	227	276	250	242	240	242	273	254	247
6-8	620	715	735	751	712	694	720	740	752	729	740
Inza Wood	IMS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	178	174	166	178	198	186	194	203	208	208	216
7	177	194	183	173	183	204	192	199	204	208	209
8	201	191	209	198	185	192	215	204	211	211	214
6-8	556	558	558	549	565	583	601	606	623	627	640
Meridian C	Creek MS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	135	155	158	150	134	163	173	179	185	188	208
7	108	131	168	173	165	145	183	192	197	204	206
8	103	113	136	171	178	168	153	193	200	202	211
6-8	346	399	462	494	476	476	509	564	582	595	624
Rosemont	Ridge MS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6	248	222	230	228	228	241	250	242	237	236	250
7	273	251	231	238	233	234	253	263	251	244	241
8	263	266	255	237	242	235	241	259	272	257	248

Annual middle school building attendance forecasts by grade through 2027. Shown are 2017 October 1st counts by building and grade of students attending District schools, as well as October 1st projections for each subsequent year. Includes all buildings except Three Rivers Charter, and students living both within and outside the District.

Figure 24 - High School Building Attendance Forecasts by Grade (Headcount)

West Linn H	IS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
9	494	500	521	504	527	510	498	512	533	572	531
10	471	470	476	497	477	497	487	475	484	507	547
11	454	464	458	464	486	461	485	475	464	468	494
12	445	467	476	471	479	502	476	499	490	479	477
9-12	1,864	1,900	1,930	1,936	1,968	1,971	1,946	1,962	1,971	2,025	2,049
Wilsonville	HS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
9	313	342	328	379	402	395	393	387	426	444	441
10	296	302	324	311	367	389	375	373	374	412	427
11	309	278	288	311	299	360	374	362	360	365	403
12	278	311	273	286	311	297	362	376	363	361	373
9-12	1,196	1,234	1,214	1,286	1,378	1,441	1,504	1,498	1,522	1,583	1,644
Arts & Tech	nology HS										
Grade	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
9	0	0	0	0	0	0	0	0	0	0	0
10	15	14	14	14	14	14	14	14	14	14	14
11	26	25	25	25	25	25	25	25	25	25	25
12	33	40	40	40	40	40	40	40	40	40	40
9-12	74	80	80	80	80	80	80	80	80	80	80

Annual high school building attendance forecasts by grade through 2027. Shown are 2017 October 1st counts by building and grade of students attending District schools, as well as October 1st projections for each subsequent year. Includes all buildings, and students living both within and outside the District.

Figure 25 - District-Wide Birth Factors

2018 K =	102.6%	of 2017 K
2019 K =	105.0%	of 2017 K
2020 K =	104.5%	of 2017 K
2021 K =	109.5%	of 2017 K
2022 K =	106.3%	of 2017 K

<u>District-Wide Birth Factors</u>

2023 K = 107.7% of 2017 K

2024 K = 109.1% of 2017 K

2025 K = 110.5% of 2017 K

2026 K = 110.5% of 2017 K

2027 K = 111.1% of 2017 K

Incoming K estimates were calculated by gathering birth data for the District's three main zip codes (97062, 97068, and 97070) and applying expecting capture rates. Shown here are annual comparisons by percent to the Fall 2017 K class (born in 2012) as the base year. As of this time, birth data is only available through 2016; birth factors for 2022-2027 are the product of forecasting assumptions.

Figure 26 – Student Yield Factors Used for New Housing Development

Single-Family (SF) Units											
Grade Groups	K-5	6-8	9-12	K-12							
Student Yield Factor	0.285	0.111	0.125	0.521							

Multi-Family (MF) Units								
Grade Groups K-5 6-8 9-12 K-12								
Student Yield Factor	0.111	0.055	0.071	0.237				

Overall average student yield factors used by FLO for these enrollment forecasts. Factors used for each development were approximated at the neighborhood level by looking at existing student ratios (per SF and MF unit) in all housing units for each of those neighborhoods, and adjusting those ratios using development-specific information provided by planners, as well as educated assumptions about trends specific to new development.

Figure 27 – 2017-2018 Elementary School Enrollment Patterns Residence-Attendance Matrix

Attendance Area	Residence Count	Boeckman Creek PS	Bolton PS	Boones Ferry PS	Cedaroak Park PS	Lowrie PS	Stafford PS	Sunset PS	Trillium Creek PS	Willamette PS	Three Rivers Charter	Non- Residence Attendance Total	Transfer Out Rates
Boeckman Creek PS	426	352	1	10	0	34	18	0	3	4	4	74	17.4%
Bolton PS	283	0	236	0	7	0	3	6	24	5	2	47	16.6%
Boones Ferry PS	787	47	3	492	0	235	6	0	1	0	3	295	37.5%
Cedaroak Park PS	318	0	12	0	262	1	2	1	35	2	3	56	17.6%
Lowrie PS	301	5	0	15	0	277	1	0	0	0	3	24	8.0%
Stafford PS	385	1	4	0	8	0	326	1	22	16	7	59	15.3%
Sunset PS	471	0	18	1	9	2	6	288	120	18	9	183	38.9%
Trillium Creek PS	423	0	12	0	8	1	9	9	374	4	6	49	11.6%
Willamette PS	529	0	4	0	1	0	14	6	35	463	6	66	12.5%
Boeckman Creek - Stafford Choice	167	90	2	5	0	39	24	0	0	3	4	167	100.0%
K-5 Subtotals	4,090	495	292	523	295	589	409	311	614	515	47		
Out of District	266	26	93	40	26	0	41	9	0	31	0		
K-5 Totals	4,356	521	385	563	321	589	450	320	614	546	47		
Attending Non-Resident Total	1,286	169	149	71	59	312	124	32	240	83	47		
Percentage	31.4%	34.1%	51.0%	13.6%	20.0%	53.0%	30.3%	10.3%	39.1%	16.1%			

All values based on the 10/10/2017 Student Information System.

Residence counts are based on current attendance area boundaries, as of the 2018-19 school year.

Figure 28 – 2017-2018 Middle School Enrollment Patterns Residence-Attendance Matrix

Attendance Area	Residence Count	Athey Creek MS	Inza Wood MS	Meridian Creek MS	Rosemont Ridge MS	Three Rivers Charter	Non- Residence Attendance Total	Transfer Out Rates
Athey Creek MS	293	262	1	4	17	9	31	10.6%
Inza Wood MS	528	6	464	54	1	3	64	12.1%
Meridian Creek MS	364	31	66	253	2	12	111	30.5%
Rosemont Ridge MS	553	85	1	0	440	27	113	20.4%
Athey Creek - Rosemont Ridge Choice	340	32	1	0	298	9	340	100.0%
Meridian Creek - Athey Creek Choice	208	176	0	16	11	5	208	100.0%
K-5 Subtotals	2,286	592	533	327	769	65		
Out of District	91	30	25	22	14	0		
K-5 Totals	2,377	622	558	349	783	65		
Attending Non-Resident Total	958	360	94	96	343	65		
Percentage	41.9%	60.8%	17.6%	29.4%	44.6%			

All values based on the 10/10/2017 Student Information System.

Residence counts are based on current attendance area boundaries, as of the 2018-19 school year.

Figure 29 – 2017-2018 High School Enrollment Patterns Residence-Attendance Matrix

Attendance Area	Residence Count	West Linn HS	Wilsonville HS	Arts Technology HS	Non- Residence Attendance Total	Transfer Out Rates
West Linn HS	1,741	1,671	33	37	70	4.0%
Wilsonville HS	1,253	110	1,088	55	165	13.2%
K-5 Subtotals	2,994	1,781	1,121	92		
Out of District	167	83	81	3		
K-5 Totals	3,161	1,864	1,202	95		
Attending Non-Resident	402	193	114	95		
Percentage	13.4%	10.8%	10.2%			

All values based on the 10/10/2017 Student Information System.

Residence counts are based on current attendance area boundaries, as of the 2018-19 school year.



# Long Range Plan - 2018 Update

The District currently operates nine primary schools, four middle schools, two comprehensive high schools, one alternative high school, and one charter school. The last evaluation of the building capacity of each school was conducted in 2013. In 2014 District voters approved a Capital Improvement Bond that funded additions, improvements, and new facilities, changing the capacity of many school locations. Specifically, Meridian Creek Middle School is a new facility that opened in the fall of 2017 and Sunset Primary school is a new replacement facility that also opened in the fall of 2017. Major remodel and expansion projects took place at four primary schools (Trillium Creek, Lowrie, Bolton, and Boeckman), one middle school (Wood), and both comprehensive high schools.

Since the 2013 capacity analysis, the educational programs offered by the District have evolved in response to various research-based initiatives, state/federal requirements, and local program investments. The programs that effect capacity are outlined in the Long Range Plan.

During the Fall of 2018, the District has worked to revise the Long Range Plan. This effort involves an update to all three parts of the plan:

Part A: Framework for Excellence – Describes the values, themes, and educational needs and approaches that are the basis of facility planning and operational decisions.

Part B: School Facilities – Identifies the existing school capacity, potential growth, and educational trends and factors that could impact future facility needs.

Part C: Capital Improvements – Outlines the capital improvement planning process and provides a link between the Long Range Plan and future capital improvement projects that are identified by the Capital Improvement Program.

# **District Building Capacity**

Long Range Facility Planning requires knowledge of the student capacity that each school can safely, effectively, and efficiently accommodate. The capacity analysis conducted in the fall of 2018 is based on the size of teaching spaces and number of students the spaces can support. This square foot-per-student ratio is derived through an analysis of many factors: national and regional standards, preferred class size, class schedules, academic programs, and District planning priorities.

During September/October 2018, several meetings were held with District operational and administrative staff to discuss how each building was being used. Floor plans of each building were developed that identify each space and assign the current use. The area of these spaces was calculated and square-foot-per-student (sf/student) ratio applied to determine the overall building capacity. Different ratios were used for primary, middle, and high schools due to the different building and educational functions at each level. The sf/student needed is a factor of the types of spaces used for teaching. Therefore at middle and high schools a different ratio is used to calculate the capacity of some teaching spaces due to their particular program needs. For instance, the area needed to safely accommodate a student in a PE class held in the gym is much larger than in a history classroom. The high school buildings had more of these



type of large teaching spaces: gymnasiums, black box theaters to teach drama classes, weight rooms for PE class, etc. Although primary schools have gymnasiums, they were not considered an additional teaching space because students remain within their class groupings and attend PE as a support program. In other words, if one first grade class goes to Music, their classroom is left empty. Due to middle and high school schedules, it is possible to have every classroom in full attendance at the same time as PE spaces. As a result, the sf/student ratio is lowest at primary school buildings and highest at high school buildings.

It is also important to recognize that not all teaching spaces in the schools are included in the capacity calculation. At the primary school level, one classroom is a designated preschool room. Preschool is currently offered as a tuition-based optional program for resident children, and the current and future enrollment projections are based on populations of students that are between Kindergarten and 12<sup>th</sup> grade. Therefore, preschool-aged students are not included in the overall K-12 capacity of the District. Additionally, one classroom in primary, middle, and high school buildings is designated as a special education support space. The District's special education program maintains a fully integrated population of students at all levels, but uses one room in each building to provide additional support or instruction to students as needed. Further explanation of these programs and their facility needs are provided in the Long Range Plan.

Below is a list of the sf/student ratios used to calculate building capacity:

Primary Schools 37.5 sf/student

Middle Schools 40.6 sf/student

High Schools 46.2 sf/student

# Conclusion

District building capacity was first studied in 2006 then updated in 2013, 2015, and 2018. Over this 12 year period changes in capacity occur due, in part, to construction. Two new primary schools were opened in 2012, and one new middle school in 2017. Major renovations and additions to schools provide additional teaching and support spaces. Changes in capacity also occur due to calculation methodology. In the 2006, 2013, and 2015 analysis, building capacity was calculated using a class size and room utilization method. In the 2018 analysis, capacity has been calculated using a square-foot-per-student ratio. Although class size and room use were a factor in developing the correct ratio, the analysis resulted in slightly different capacity numbers for each facility. The advantages of calculating building capacity using the sf/student ratio is that, once the ratios are established, they can easily be used to calculate the number of spaces needed in new construction in order to serve a specified population.

It is important to recognize that building capacity is a planning tool used by the District to assist in comparing current enrollment and the needs projected by future growth. It is not an indication of the quality of the educational environment or programs provided at each school. Principals and teachers assess the needs of each student and use the building in very unique ways to provide a high quality learning environment while considering enrollment, transfers, schedules, staff availability, and district-wide program balance. As is the practice of every public school, actual students attending any given school will routinely fluctuate. This analysis is done concurrent to a demographic and enrollment projection report. Together, these documents are used by the District to understand the facility needs and plan for capital improvement projects.



# **District-Wide Capacity Analysis**

West Linn - Wilsonville School District

Last Updated: Oct. 18, 2018

	School Name	Current Enrollment (2018/19 year)	Building Capacity	Available Capacity	Projected 2022 Enrollment *	Projected 2022 Available Capacity	Projected 10-year Enrollment *	Projected 10-year Available Capacity
	Boeckman Creek	550	550	0	654	-104	815	-265
	Bolton	345	475	130	322	153	299	176
	Boones Ferry	610	775	165	608	167	607	168
	Cedar Oak Park	291	500	209	321	179	307	193
	Lowrie	571	575	4	772	-197	800	-225
	Stafford	433	525	92	436	89	452	73
<u> </u>	Sunset	345	425	80	332	93	323	102
<u>.</u>	Trillium Creek	583	575	-8	626	-51	612	-37
ڄ	Willamette	518	525	7	569	-44	557	-32
	Total Primary Enrollment	4246	4,925	679	4,640	285	4,772	153
	Athey Creek	702	669	-33	694	-25	740	-71
<u>a</u>	Inza Wood	532	691	159	583	108	640	51
Middle	Meridian Creek	414	490	76	476	14	624	-134
Σ	Rosemont Ridge	743	714	-29	710	4	739	-25
	Total Middle School	2391	2,563	172	2,463		2,743	180
	West Linn	1,865	1,730	-135	1,971	-241	2,049	-319
듄	Wilsonville	1,223	1,345	122	1,441	-96	1,644	-299
宝	Arts & Technology	111	**		80		80	
	Total High School	3,199	3,075	13	3,492	337	3,773	618
	Three Rivers Charter	112	**					

Total Enrollment 19784



<sup>\*</sup>Projected Enrollment values based on Demographic Report by FLO Analytics using 2017/18 enrollment numbers. Values will be updated based on 2018/2019 enrollment when available.

<sup>\*\*</sup>Arts & Technology High School and Three Rivers Charter are not included in Building Capacity Analysis



# West Linn-Wilsonville School District Superintendent's High School Study Group Final Report



West Linn-Wilsonville School District 2018-19

# Table of Contents

Summary and Purpose	2
Components of the Study	2
Study Group Guiding Questions	2
Study Group Participants (20)	3
High School Process and Timeline	3
Historical Perspective: Current High School Programs	4
West Linn High School:	4
Wilsonville High School:	4
Arts and Technology High School:	4
What does today's high school student look like as a learner?	5
High School Study Group Tour Summaries:	6
Center for Advance Learning	6
Beaverton Health and Science High School:	8
Beaverton High School	9
Henrietta Lacks Health and Bioscience High School:	11
North Creek High School	14
Overall findings from high school tours:	15
Community Feedback	16
Student Feedback (Survey Data)	17
Student Feedback (Focus Groups)	18
Arts and Technology High School (7 students, made up of juniors and seniors)	18
West Linn High School (14 students made up of juniors and seniors)	18
Wilsonville High School (6 students comprised of juniors and seniors)	19
WLWV Alumni Feedback (Survey Data)	19
Parent Feedback (Focus Group Forum)	20
Teacher Summit with Diana Laufenberg	21
Summary of Themes from Surveys and Focus Groups	22
Findings	23
Research/Texts	23

# Summary and Purpose

With the West Linn-Wilsonville School District fast-approaching 10,000 students K-12, the District continues to think about growth and future school needs. With 1,870 students at West Linn High School, nearly 1,200 at Wilsonville High and 90 at Arts and Technology High School, the possibility for future high school learning spaces may be on the horizon. As evolving high school programming precedes and informs instructional practices and learning spaces, it is time to engage the community in high school program and design considerations.

A Superintendent's Study Group was formed for the purpose of exploring the need and range of possibilities for current and future high school program design and learning spaces. This report focuses on instruction and programming in high schools. While the Study Group toured high school facilities throughout the Northwest, the emphasis of this study was less about the type of buildings that might facilitate future high school learning, and more about the type of learning and high school design options that would meet the needs of our students.

This report summarizes the key understandings generated from our study and informs the Superintendent who, in turn, will share the findings with the School Board and Long Range Planning Committee.

# Components of the Study

Our study included four components:

- 1) Research that describes optimal current and future learning experiences for high school students as they prepare for college, career, and beyond.
- 2) Visit alternative and innovative high school program designs in and outside Oregon.
- 3) Collect data from our district's high school students, alumni students, and parents regarding current, past, and future high school learning experiences, and what is believed to be essential to a high school program design.
- 4) Examine current and future demographic data and enrollment trends that inform learning space needs.

# Study Group Guiding Questions

We strongly believe in the quality and effectiveness of our high school programs, but how can we improve the opportunities we provide for our high school students?

How do we provide a high school education that simultaneously prepares students for both college and career, regardless of which path they choose following their K-12 careers?

Does high school in the future look different than our current model, and how can we position ourselves to stay on the cutting edge, ensuring we're providing the best high school experience possible for our students?

# Study Group Participants (20)

Saskia Dresler, Principal of Arts and Technology High School

Will Lee, Teacher from Arts and Technology High School

Emily Plotnick, Parent from Arts and Technology High School

Dan Schumaker, Principal of Wilsonville High School

Christopher Shotola-Hardt, Teacher from Wilsonville High School

Christy Thompson, Parent from Wilsonville High School

Kevin Mills, Principal from West Linn High School

Stacy Erickson, Teacher from West Linn High School

Nicole Hsiao, Parent from West Linn High School

Caitlin Klenz, Assistant Principal from Athey Creek Middle School

Grady Nelson, Long Range Planning Committee Member

Tim Woodley, Director of Operations

Curtis Nelson, Chief Information Officer

Mayra Gomez, Director of College and Career Readiness

Aaron Downs, Assistant Superintendent of Secondary Schools

Barb Soisson, Assistant Superintendent of Teaching and Learning

Jennifer Spencer-Iiams, Assistant Superintendent of Student Services

David Pryor, Assistant Superintendent of Primary Schools

Andrew Kilstrom, Director of Communications

Kathy Ludwig, Superintendent, Co-facilitator of High School Study

Karina Ruiz, BRIC Principal Architect, Co-facilitator of High School Study

# **High School Process and Timeline**

October 26 — Purpose and Setting the Stage

November 27 — Generation Z; Special Guest Karina Ruiz, Architect

**December 5** — Study Group Members tour Center for Advanced Learning

**December 8** — North Creek High School Skype Virtual Tour

**December 11** — Study Group Members tour Beaverton Health and Science School

**December 11** — Study Group Members tour Beaverton High School

December 13 — Study Group tours Henrietta Lacks Health and Bioscience High School

January 23 — Research and Study; Debriefing High School Tours

February 28 — Looking at WLWV student trends; current high school structures

March 19 — Reflecting on Student Voice/Survey Data

April 28 — High School Study Teacher Summit with Diana Laufenberg

May 4 — Study Group meets with Arts and Technology Student Focus Group

May 9 — Study Group meets with West Linn High School Student Focus Group

May 17 — Study Group meets with Wilsonville High School Student Focus Group

May 28 — Study Group Hosts Parent Forum

May 29 — Final High School Study Debrief; Looking Ahead to the Future

**TBD** — The High School Study Group will host a business and industry forum in Fall, 2018

# Historical Perspective: Current High School Programs

The Study Group started their year-long study by first reflecting on West Linn-Wilsonville's existing high schools and the programs that students currently participate in at West Linn, Wilsonville, and Arts and Technology high schools.

West Linn High School: Originally built in 1920, with portions of the first building remaining until the late 1990s, West Linn High School was the district's first high school. Major renovations included a new entryway and commons area in 1992, a north classroom wing and administration renovation in 2000, a new gymnasium, cafeteria/kitchen, weight room, dance studio, and performing arts center in 2005, and a revitalized '700' building in 2016. The West Linn High School Master Plan was created in the late 90s and early 2000s, describing the building's capacity at approximately 1,850. Enrollment was 1,547 in 2013, growing by more than 300 students in the past four years. West Linn High School has 68 teaching stations, more than 20 Advanced Placement courses, and more than 100 different course offerings. WLHS fields teams for 21 different sports, girls and boys, and has close to 40 different clubs. Programs include those such as band, choir, mock trial, drama, culinary arts, journalism, computer science, International Science and Engineering Fair, and Youth Transition Program. West Linn High School posted a graduation rate of 97.2 percent in 2016-17, which was second in the State of Oregon.

Wilsonville High School: While the District purchased the site that holds Boeckman Creek and Wilsonville High School in the 1960s, Wilsonville High School wasn't constructed until 1995. The original school was built for 750 students, with a planned buildout to 1,500 that took place in the mid-2000s. Like West Linn High School, Wilsonville's school site is maxed out with little room for added classroom space, but still has a Performing Arts Center like WLHS's planned for the future. Enrollment sits at 1,203 as of Sept. 30, 2017, leaving room for some 200-plus students. Wilsonville High School has 58 teaching stations with an educational capacity of roughly 1,450. Similar to WLHS, Wilsonville High has more than 100 different course offerings, includes proximity to SMART Transit for easy transportation, and offers more than 20 AP courses in areas of English, math, science, social studies, world language, and the arts. Wilsonville High has more than 20 clubs, like the MeCha Club, as well as band, choir, drama, robotics, ISEF, leadership, yearbook, and broadcast journalism. Wilsonville High School posted a graduation rate of 96.3 percent in 2016-17, which was third in the State of Oregon.

Arts and Technology High School: Arts and Technology High School, or Art Tech High School, originated as a charter school in 2004, when the District leased a building located on Wilsonville Road. Following a District Study on Alternative Education in 2008, Art Tech transitioned into a District high school in its fourth year, eventually moving to its current location across the street from Wilsonville City Hall. West Linn-Wilsonville currently leases the building and property. The school has 10 certified staff, 2 counselors, 1 resource teacher, and 1 TOSA. Art Tech's class sizes hover around 10 students with an emphasis on individualized learning. Art Tech houses the District's Adult Transition Program and Youth Transition Program, and focuses on Career Technical Education (CTE) and college and career readiness. Enrollment draws nearly equally

from West Linn and Wilsonville, with unique course offerings such as printmaking, rock band, and college and career readiness. Art Tech also utilizes community partnerships and skill-building opportunities with programs at World of Speed (automotive) and CREST Headquarters (agriculture/farming).

# What does today's high school student look like as a learner?

BRIC Principal Architect, Karina Ruiz, served as co-facilitator of the High School Study. Early in the Study, she provided the Study Group with an introduction to Generation Z and how students are evolving as learners. A nationally recognized architect who specializes in school facilities with an emphasis on program integration, Ruiz identified what the next generation of learners looks like, as well as the challenges and obstacles schools will need to overcome in coming years.

Recent research indicates that education today is preparing students for jobs that don't yet exist, using technologies that haven't yet been invented, in order to solve problems that we don't yet know are problems.

The High School Study Group learned that, according to a 2015 study, 70 percent of teens are currently working entrepreneurial jobs, 60 percent expect to have multiple jobs by the time they are 30, and 75 percent of teens believe they can get a good education in ways other than going to college. That being said, 66 percent of teens still plan to attend college. Of those surveyed, 42 percent of students say they intend to work for themselves and 58 percent say that their parents are their best friend. Of note, 48 percent of students surveyed felt hopeful about their future, 34 percent felt stuck, and 18 percent felt discouraged about the future.

The Study Group learned that students become less and less engaged in their schooling as they progress through the public K-12 system. A 2015 Gallup Poll Survey found that 74 percent of fifth-graders felt engaged in school compared to just 34 percent of seniors. Study Group members also learned about the implications of teaching and learning, and what recent research shows is most important. Problem-solving, transfer and application of information, interpersonal relationships, managing change and learning agility, and soft skills that global economy expects of our workforce are vital to our current learners. Personalized learning is similarly important, allowing students to learn at their own pace, learning content that is relevant to them, with rigor determined by evidence of students' ability.

The Study Group also reviewed the International Center for Leadership in Education's Rigor Relevance Framework, which shows that application and adaptation of knowledge and information is how students are now taught, which is a shift from previous teaching methods that instead led to the acquisition and assimilation of knowledge.

The High School Study Group analyzed how these shifts in teaching and learning are being implemented in schools throughout the world through virtual tours led by Ruiz. The High School Study Group explored the Missouri Innovation Campus, Colorado Academy Upper School, Park Hill LEAD Innovation Studio, Civic High School, Pathways Innovation Center, and Orestad

Gymnasium (high school) in Copenhagen, Denmark. Members noted the varying facilities and how they lent themselves to the innovative learning and various program designs.

# High School Study Group Tour Summaries:

Members of the High School Study Group toured a diverse set of standout high schools across the Northwest, to learn about various high school models, gaining inspiration and ideas for what West Linn-Wilsonville could consider into the future.

# Center for Advance Learning *Enrollment:* Roughly 450

### School Overview:

The Center for Advanced Learning (CAL) is a two-year charter school for juniors and seniors. The School welcomes students from Reynolds School District, Gresham-Barlow School District, and Centennial School District, with Gresham-Barlow acting as the home school district. In partnership with Mt. Hood Community College, students choose one of five study areas to engage in during their junior and senior year. The five areas are: Computer Information Systems; Dental Health Science; Digital Media and Design; Mechanical Engineering and Manufacturing; and Medical Health Science.

The school has 20 teachers who come from local high schools, Mt Hood Community College, and regional businesses. Students spend half their day at their area high school and the other half at CAL. Students earn nearly one college year of transferable credits during their two years at CAL while simultaneously completing all requirements for their high school diploma.



### Other CAL facts/information:

• The school's four core values are: Challenge, Creativity, Innovation, and Relevance.

- Students complete a capstone project in their chosen area at the conclusion of their two-year CAL career.
- According to the CAL website, "CAL programs are designed to help students become professional, ethically-driven collaborators and problem-solvers in the 21<sup>st</sup> Century workforce. ... Each student's education is enriched by college-level coursework, hands-on learning, diverse program offerings, and internships."

### To be accepted into the charter school, students must be able to:

Actively explore new ideas, pose questions about their meaning, significance, and implications.

- Recognize patterns and deviations from previously learned patterns.
- Appreciate abstraction and generalization revealed within a subject area.
- Be willing to be challenged as part of the learning process.
- Contribute to and benefit from group problem-solving activities and takes responsibility for own learning.
- Persevere when faced with time-consuming or complex tasks.
- Produce valid oral, written, and/or symbolic arguments to support a position or conclusion.
- Be convinced that effort is an important component of success in any subject area.
- Have completed two years of high school Math and English. For Health Sciences Program: two years of Science (Biology & Chemistry preferred).

# High School Study takeaways form CAL tour:

High School study members who toured the Center for Advanced Learning noted the innovation of the school. Learning spaces very much resembled maker spaces that some WLWV schools enjoy, with state-of-the-art equipment. Each pathway also closely resembled a professional workplace, giving students a sense of what it would be like to enter the workforce in each field. The two medical pathways resembled real medical facilities, providing students with hands-on opportunities in addition to classroom learning. The digital media and design lab had top-of-the line computers and design programs, with projects that remind one of assignments students would receive if working for a journalism publication, design company, or digital media platform.

Students were already working on capstone projects, which are designed to provide real-world experience for the pathway of choice. That includes student-created design magazines, student-coded programs, manufactured materials aimed to solve real-world problems, and simulated medical procedures complete with research papers among other projects.

Study Group members also noted the level of engagement they saw from students in the classroom. Members toured all five pathways, getting brief opportunities to speak with teachers and students. CAL noted that the five pathways (dental health science, digital media and design, mechanical engineering and manufacturing, medical health science, and computer information systems) were selected based largely on available resources as well as student interest. Each pathway requires expert instructors and resources, which were somewhat limiting factors but

also helped narrow down focus and planning. Students are encouraged to stick with their chosen pathway through graduation, so it was important that students knew the scope and differences in each pathway before selection.

Study Group members also noted that the program mirrored a college. Students who are at CAL elected to be there, and they are given sizeable amounts of independence and responsibility in managing their time there.

Of particular note was the concept of a charter school that combines three distinct school districts. Because students spend half of their school day at their district-specific high school, CAL has to be centrally located. Districts are responsible for providing their own busing, with many students choosing to drive themselves. Despite coming from three different districts, CAL administration reported some sense of school unity and belonging. Having a strong sense of purpose and relevance has kept students engaged and excited to learn, according to administration.

# Beaverton Health and Science High School:



Enrollment: Roughly 700 School overview:

HS2 opened in 2007 and has just over 700 students in grades 6-12. HS2 is a Science, Technology, Engineering, and Mathematics (STEM) school that offers college credit courses at the high school level in engineering, math, Spanish, and writing. Students apply for HS2 if they wish to attend and are accepted based on a lottery system.

The school's mission is to "Prepare students for college success through a highly relevant health- and sciences-based educational experience in a small school environment that fosters

student identity, commitment, and support. The Health and Science High School will act as a community access point for health and science education, serving students and families and ensuring the inclusion of the diverse community within the Beaverton School District." Using the Expeditionary Learning Model, the school's goals include:

- 1. Students will be college-ready upon graduation.
- 2. Students will demonstrate advanced critical thinking and communications skills.

- 3. Students will have taken responsibility for their learning, have confidence and take the opportunity to achieve their full potential.
- 4. Students and staff will create a collaborative and extended learning environment.
- 5. Staff will continue as learners as we recognize and celebrate individual growth and achievement for students and staff.

### Dual Credit:

HS2 offers many classes that include dual credit, including biology, health, human body systems, medical interventions, biomedical innovations, and chemistry through a partnership with Oregon Tech (Oregon Institute of Technology). Pre-calculus is offered through PCC, and Spanish 201, Spanish 202, Spanish 203, Calculus, and Writing 121 are offered through the Portland State Challenge Link program. Dual Credit courses actually enroll students in college courses and hold them to the same expectation as all other college students.

# Internships:

The HS2 Internship Program connects every student with opportunities to explore potential career paths through meaningful partnerships with businesses, agencies, and individuals. Internship partners include American Red Cross, Cedar House Media, Kaiser Permanente, Mentor Graphics, Oregon Department of Transportation, and Tualatin Valley Fire and Rescue.

# High School Study Group takeaways from HS2 Tour:

The study group observed that the programming and instruction at HS2 was innovative and "fresh."

The school's equipment and student-available resources closely resemble what one might find in a current-day hospital or medical facility. Students receive hands-on training amidst their classroom learning, which correlates to internships that students are required to participate in. Community partnerships are vital in providing students with nearby opportunities to get real-world experience. Proximity, commitment, and reliability have been crucial to making HS2 and its model sustainable.

Administration said the school communicates extensively to students in other Beaverton middle schools and high schools, encouraging a diverse student group to apply for the school. HS2 has provided opportunities for many students who might not have received these types of experiences, serving as inspiration while increasing graduation rates and other assessment measures. Students are able to participate in extra-curricular activities through other BSD high schools, yet still feel strongly connected to their peers at HS2.

Study Group members noted that students have the opportunity to change their pathway track in between their junior and senior year, providing flexibility for students.

Beaverton High School *Enrollment:* 1.700

### Student/School Breakdown:

Beaverton High School had enrollment of 1,704 in 2015-16. Of those, 45 percent of students were economically disadvantaged, 31 percent were English Language Learners, and 16 percent students with an Individualized Education Plan (IEP).

According to the Beaverton School District website, 87 percent of their 2016 graduates attended college directly after graduation (48 percent of graduates attended 4-year colleges while 39 percent attended community college). Of the remaining 13 percent of graduates, 2 percent attended technical/vocational schools, 4 percent joined the military, and 5 percent went straight into the workforce.

### Building History:

Beaverton High School, originally called Beaverton Public School, first opened in 1875, with additions and renovations made in 1885, 1902 and 1910. The school was completely rebuilt in 1916, and while there have been multiple renovations since then, the original building still stands. It is the oldest public high school in the state of Oregon that is in its original location and building.

# School philosophy/course offerings:

According to BHS's website, "We strive to create technology-rich, student-centered, and inquiry-based education. Our facilities are being refurbished to offer learning spaces that foster curiosity, flexible thinking, and cooperation."

The school currently boasts three established "Pathways" and two developing Pathways. The three established pathways are digital media, health careers, and marketing. Students are required to complete 2 credits for digital media, 3-4 credits for health careers, and 5 credits for marketing. Courses in those Pathways include options like computer animation, sports and event marketing, personal finance, nurse assisting, introduction to business, video journalism, and health careersclinic. Of the two developing Pathways (engineering and education), engineering requires 4 credits and education is still being designed. Just under a quarter of Beaverton High School students are enrolled in the Pathway program.

BHS Career	EDUCATION	ENGINEERING	DIGITAL MEDIA	HEALTH CAREERS	MARKETING
PATHWAYS	Developing Pathways		Established Pathways		
Required Lower-Level Courses	Child Development (1.0) Required Credits: 1.0	*Engineering 1 (1.0) Required Credits: 1.0	*Graphic Design 1 (0.5) Photography 1 (0.5) *Web Design (0.5) Required Credits: 1.5	Introduction to Health Careers-ELL (1.0) *Anatomy & Physiology (1.0) *Health Careers 1 (1.0) Required Credits: 2.0	*Computer Apps/ MS Office (0.5) *Introduction to Business/ BA 101 (0.5) *Marketing 1 (1.0) Required Credits: 2.0
Required Upper-Level Courses	Advanced Child Development (1.0) Coming in 2019-2020! Required Credits: 1.0	+Engineering 2 (1.0) Engineering 3 (1.0) Required Credits: 2.0	*Graphic Design 2 (0.5) Required Credits: 0.5	*Advanced Health Careers-Core (1.0)     *Advanced Health Careers-Clinic (1.0)     *Nurse Assisting 1 (1.0) Required Credits: 1.0 or 2.0	*Marketing 2 (1.0)  *Marketing Seminar/ BA 205 (1.0)  Required Credits: 2.0
Electives	ТВА	*Drafting & Design/ CADD 1 (0.5) *Drafting & Design/ CADD 2 (0.5)  Comp. Programming 1 (0.5) Comp. Programming 2 (0.5)  Required Credits: 1.0	*Computer Apps/ MS Office (0.5) Computer Animation (0.5) Photography 2 (0.5) Video Journalism (0.5)	NONE	*Digital Mktg (1.0) *Mktg Management (1.0) *Sports & Event Mktg (1.0) *Personal Finance/ FIN 218 (0.5) *Graphic Design 1 (0.5) Required Credits: 1.0
Total Required Credits	TBA	4	2	3 or 4	5
All pathways include a culminating experience. *Dual-credit course +AP course					

High School Study Group takeaways from Beaverton High School tour:

Members noted that the integration of pathways into a traditional, comprehensive high school. Administration encourages students of all background and ability to participate. Administration also noted that the correlation between academic success and students engaged in Pathways (state test scores and graduation rates among others) was high compared to the BHS school averages.

Administration said that Pathways took some time to establish early on as students familiarized themselves, and programs became established. Initial transition of staffing and program was a challenge but has since stabilized. Student participation has been consistent since the inception.

Study Group members were able to compare Beaverton High's Pathways to those at HS2 and CAL. At BHS, students receive hands-on, real-world experiences, but maintain a schedule similar to their peers who aren't enrolled in a Pathway.

### Henrietta Lacks Health and Bioscience High School:

Established: 2013

Current Enrollment: 589

#### Overview:

Henrietta Lacks Health and Bioscience High School, part of the Evergreen School District, serves grades 9-12 and was funded in part by various hospitals, clinics, and research facilities throughout Vancouver. Students choose from one of four program areas, and also participate in job shadows and internships during their junior and senior year. The four programs of study

include Nursing and Patient Services, Biomedical Engineering, Pharmacology, and Biotechnology.

## Excerpt from an article published by The Columbian right before the school opened:

"The 60,000-square-foot building was designed by LSW Architects and constructed by Skanska USA. If needed, an additional 20,000 square feet may be added later. Its high-tech design is apparent both inside and out. Two levels of solar panels on the south side will help provide power. The floors on the first level are polished concrete, and in the student commons the floor is heated for comfort.

Students will learn real-world nursing skills in the four-bed nursing station, complete with a simulated, interactive robot patient called SimMan. A simulation pharmacy and well-equipped laboratories will provide more hands-on learning. The library, called the research lab, will be stocked with a combination of electronic books and traditional paper textbooks.

HeLa isn't a traditional high school. It won't have sports teams, so instead of a large gym, the school has a fitness room where students will learn lifelong fitness using resistance training, mats, Pilates and medicine balls. There won't be a marching band or pep band, but a scaled-down music program may offer orchestra or symphony.

The first school year, the student body will consist of about 125 freshmen and 125 sophomores. The next two years, 125 freshmen will be added each year, so that 500 students eventually will be enrolled there. Students interested in attending the school completed an application and are being chosen via a lottery system from the district's comprehensive high schools, with an equal number of students coming from each school.

Classes will be integrated to create an overall focus on health and biosciences, Tumelty said. As an example, she said in English class, students will use informational texts and literature that are science-based.

"The goal is for students to see the connections between the disciplines so that they get a better view of how the real world works," Tumelty said. "Teachers will be working on creating these connections in authentic ways for students."

Freshmen and sophomores will take anatomy and physiology along with chemistry and biology "to give them a really good base in science," said Elisabeth Harrington, the district's director of curriculum and instruction. Before they enter their junior year, students will have to choose one of five pathways: nursing and patient care; health informatics (data processing); biomedical engineering; pharmacy; or biotechnology.

"In the first two years, as they're doing A&P, there will be a heavy emphasis on medical terminology," Harrington said. "Once they've picked their pathway, as juniors they'll partner with PeaceHealth with job shadowing opportunities. Seniors will have internships at PeaceHealth.""



CREDIT: The Columbian

#### High School Study Group takeaways from HeLa:

Members noted that, of the schools toured, Henrietta Lacks most closely resembled what it's like to work in the professional world. Facilities mimic hospitals, pharmacies, and medical facilities today, which is especially beneficial when students leave for their nearby internships.

An example is the pharmacy learning center within HeLa, which includes a simulated pharmacy in the classroom. Look-a-like vitamins, antibiotics, and other pills in pharmacy bottles) are organized like they would be in an actual pharmacy, as students learn about prescription drugs, medical terminology, and the inter-workings of pharmacies.

Like HS2, HeLa communicates extensively about its program to students in other district high schools, building awareness of the opportunities it presents students. HeLa administrators meet with middle school and high school students every year to share the career pathways their school provides while encouraging parents to learn more. Administration says these meetings and outreach time-consuming, but result in a strong student enrollment.

HeLa students spend their entire day at the options high school, meaning HeLa provides core programming in addition to pathway courses. They also provide as many electives as possible — those electives that students would expect at a comprehensive high school — which has meant creative scheduling.

Administration noted that it takes a unique commitment from teachers to teach at a school like HeLa. The scheduling structure means teachers have to teach a variety of subjects. Finding staff that embraces the culture and uniqueness of a school like HeLa has been a priority.

Of note, all students are bused or driven by parents. There is no student parking allowed on campus or on nearby neighborhood streets.

North Creek High School *Enrollment:* Roughly 1,600

*School Breakdown:* North Creek High School is a comprehensive high school located in Bothell, Washington. The building was built to accommodate 1,600-plus students. 2017-18 was the first year of operation with reported enrollment of 1,275. Enrollment is expected to jump to 1,700 in the 2018-19 school year.

*Building Layout:* There are two two-story academic buildings with classrooms on all levels. The third building houses the gym, commons, choral/instrumental music classrooms and practice spaces, performance venue and class/open practice space, two health classrooms, yoga/aerobics room, weight room, art rooms, and an engineering class with a computer lab. While the school offers STEM courses, it is not considered a STEM school.

What makes North Creek High School unique: The building was constructed with a flexible and innovative design, which aids project-based and problem-based learning. Learning is meant to extend beyond the physical classroom and throughout the entire school and campus, giving students real-world knowledge and skills.

The school wants to be known as an "ultra-green learning community" for environmental sustainability. The building and grounds utilize geothermal energy harvesting, rain gardens, natural lighting, and storm water management, which science classes routinely study and monitor by extending their learning outside of the classroom.

The school utilizes a variety of classroom sizes and learning spaces. The school includes "Collaboration Cubes" in the hallways, as well as larger group learning spaces. The Collaboration Cubes can be used for group work and meeting areas. Classrooms were constructed to promote student collaboration, with a glass wall that can be removed to open up the fourth wall of the classroom into the hallway. Classrooms have a flat panel display instead of white board and projector, which is also intended to help teaming and project-based learning.

Outside the school structure, students and staff can access technological resources for outside laboratory study of surrounding wetlands and habitats. Classrooms aren't designed by department, they're largely interchangeable, so that the school is free-flowing. There's a teacher-planning room on every floor to encourage teacher collaboration, as well. The school enjoys a two-floor library/innovation center, which includes a large windowed area and deck, so students can study outside.

#### High School Study takeaways from North Creek High School:

The school does not have defined pathways, but does have an emphasis on facility and how facility impacts programming, collaboration, and student learning. The building is state-of-the

art, with every wall, staircase, and classroom intentionally placed to maximize student learning. The facility and its landscaping was also planned with environment in mind, for both efficiency and sustainability. Study Group members noted that, through an online virtual tour, the learning spaces integrate and overlap to increase collaboration between students.

Planning for North Creek High School involved both community and students from the onset. Because the school implemented a schedule that was completely new to the district, parents and students were surveyed to look for improvements. Everything from start and end times was discussed, with community input not only gathered but considered as well. Students were tasked with finding the school mascot and colors, giving the greater community and student body a sense of school spirit and ownership before it even opened for the first day of school.

Administration noted that staff transitioning to a new school is often a challenge, as the school is unique. The classrooms are designed to encourage more student activity and discussion rather than a teacher lecture format. Each classroom has a glass wall that looks out into hallway learning spaces, promoting transparency of teaching and learning.

In its first year, administration says staff and students both have adapted to the layout of the school, and their sense is that peer collaboration is taking part on a daily basis. They attribute this to both the building and a shift in culture.

### OOverall findings from high school tours:

High School Study Group members reported that the innovation of nearby high schools is inspiring, and that implementation of various ideas and program components can occur in WLWV both short-term and long-term.

The High School Study Group made the following observations:

- 1. There's opportunity for increased real-world and hands-on learning in the West Linn-Wilsonville School District.
- 2. Career Pathways or increased Career Technical Education (CTE) courses such as those witnessed at other schools could aid in preparing students for career.
- 3. Many of the high schools have become skilled at integrated internship and dual credit opportunities into their programming and high school schedule.
- 4. Programming should drive facility, and not the other way around.
- 5. The high schools that were toured are doing an impressive job of partnering with local industry to provide real-world and career-based educational opportunities for students. Industry experiences provide students with work experience while introducing them to careers they might not otherwise consider.
- 6. Students learn many skills through pathway programs that prepare them for college as well, including time management, problem-solving, the application of knowledge, and study skills among others.
- 7. High student engagement was evident at each visited school. There is value in providing pathway opportunities to better connect students to their learning and promote lifelong learners as well as a growth mindset.
- 8. Scheduling varied at visited schools. How might the district think outside the box, long-term, to provide increased flexibility and options for students? Nontraditional schedules

- could maximize learning opportunities, providing increased equity for all students. Evening classes or weekend classes might be worth considering in the future.
- 9. There was an emphasis and evidence of both student collaboration and teacher collaboration as well as flexibility.
- 10. A large amount of project-based learning is taking place at the various high schools, building communication and teamwork skills that are vital in the workplace.

#### Community Feedback

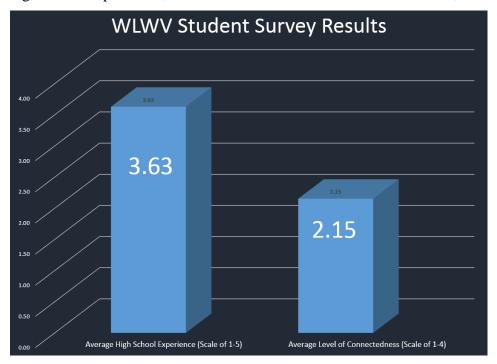
On January 12, Superintendent Dr. Kathy Ludwig hosted a joint meeting of the West Linn and Wilsonville Rotaries, giving a presentation describing Generation Z and innovative high school designs. The gathering was an opportunity to lead together, engaging the broader community in thinking about how high schools have evolved, relevant learning experiences, and how communities could partner with school districts. Rotary members were asked to discuss what skills they believed high school students should be learning to be best prepared for the job force, while brainstorming how high school could better integrate and collaborate with the community.

Recommendations and wonderings from Rotary members included:

- 1. More **STEM education** and opportunity for ALL students.
- 2. Introduce **STEM education** at a younger age not just middle school and high school.
- 3. **Technical skills and vocational education** is oftentimes just as important as academic knowledge.
- 4. **Connecting local professionals** to schools in areas such as medical and business industries.
- 5. **Mentorship programs**, providing students with professional networks in the community while introducing students to the workforce.
- 6. Grow **partnerships with local colleges** such as Clackamas Community College and Oregon Tech.
- 7. **Leverage opportunities in high-tech** with local companies such as Mentor Graphics and FLIR.
- 8. Provide **real-world education** around topics such as financial literacy while building "soft" skills.
- 9. Build in "career pathways" such as health/wellness, entrepreneurship, and marketing.

### Student Feedback (Survey Data)

To gather student input, more than 100 juniors and seniors were surveyed about their current high school experiences, what has been beneficial to them as learners, and what areas of their



high school experience could be improved.

The following is summarized feedback from those surveys.

- On a scale of 1-5, with 1 being poor and 5 being outstanding, surveyed students reported an **average high school** experience of 3.63.
- On a scale of 1-4, the average for **coursework connectedness** was reported at 2.15.
- Many students asked for **increased hands-on learning opportunities** and courses that prepared them for specific careers.
- Students reported that they feel prepared for **college**, but not necessarily for their **future**. They reported feeling unprepared for living on their own and traversing life after high school.
- Choice was very important to students. Many responses showed desire for more **flexibility in the high school schedule** and increased chances to study subjects interesting and relevant to students.
- Students reported a desire for **increased collaborative time** and more project-based learning as opposed to lectures and tests.
- Students expressed a desire for more **control over schedule** and less restriction by "bells" and rigidness.
- **Journalism, computer science, STEM, and the arts** were all classes that students mentioned as being particularly helpful or engaging.
- Students report that they have too much on their plates. Students reported that **less homework and school-related stress** would help students succeed.
- Multiple students asked for **more options** for evening and weekend classes.

• Students said the pressures of high school can be significant, and that **increased mental** health resources would be beneficial.

### Student Feedback (Focus Groups)

Following student survey data, the High School Study Group met individually with student focus groups from West Linn High School, Wilsonville High School, and Arts and Technology High School. Students were asked about their current high school experience; what parts of their school day are relevant to what they want to do after high school; how prepared they feel for both college and career; what changes they would make to their school and schedule; what they like about their school and schedule; and any other thoughts or feedback they might have. The following are summaries of those discussions.

#### Arts and Technology High School (7 students, made up of juniors and seniors)

- Strong desire for courses focused on **real-world skills**, including financial literacy, culinary arts, computer science, and engineering among others.
- Students report that **smaller class sizes** enhance learning and the classroom experience.
- Extra support is pivotal for students with learning disabilities.
- Desire for **increased one-on-one time** with teachers.
- Less homework would allow students to participate in additional extra-curricular
  activities and also allow for recuperation after long school days. Workloads feel
  unmanageable at times.
- **Flexibility in course selection** improves engagement and makes students feel more connected to their learning.
- **Individualized learning targets** increase student confidence and likelihood of sticking with challenging material.

### West Linn High School (14 students made up of juniors and seniors)

- **Flexibility in course selection** improves engagement and increases student connection to their learning.
- Student desire for courses focused on **real-world skills**. Financial Literacy was a unanimous and strongly-suggested course offering.
- **Schedule flexibility** the ability to attend evening or weekend classes would benefit students in a variety of ways, allowing for real-world working and internship opportunities while providing more time for homework and extra-curricular activities.
- Students felt **overworked** and therefore disengaged at times. Students did, however, report a slight decrease in workload in recent years, as teachers have increased communication with one another and made efforts not to overload students.
- Students report an increase in **activity-based and project-based learning**, but unanimously asked for more in all subjects.
- Students value the support system in place but see a benefit in **increased mental health** resources.

- Students desire increased counseling in finding career-based trades and internships following high school graduation. Students report strong counseling supports for college exploration, but not career-based exploration.
- Students prefer **shorter class periods** as opposed to longer class periods.
- Students report strong interest in **internship opportunities** for class credit as well as Career Pathway Programs.

#### Wilsonville High School (6 students comprised of juniors and seniors)

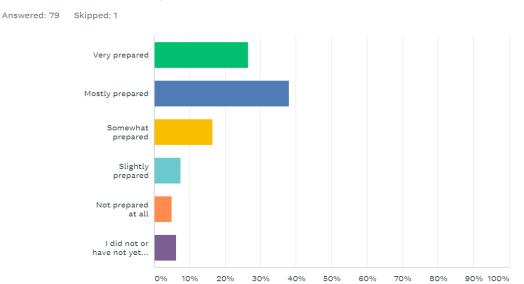
- Strong desire for **real-world skills and knowledge**, particularly in financial literacy.
- Strong interest in **internship opportunities** for credit. Students' main concern would be transportation.
- Strong interest in **CTE Pathways** depending on Pathway options.
- Students report that **rigid credit requirements** are limiting in their course selection. Students felt they **miss out on many learning opportunities** they would take advantage of if their schedule allowed.
- Strong support for **project-based learning**.
- Students felt **overworked with homework**, which negatively affects engagement during the school day.
- Desire for core courses to be made more relevant in terms of **real-world application**.
- Students report indifference to their current class schedule, but recommend a **free period** during the week to get caught up on school work.

#### WLWV Alumni Feedback (Survey Data)

The High School Study Group also sought feedback from recent West Linn-Wilsonville alumni. To hear from past high school students, 80 alumni from the past 10 years were surveyed. Alumni were found via email and social media. Of the 80 responses, 49 graduated from West Linn High School and 31 graduated from Wilsonville High School. The following is a summary of those

#### survey results:

If you attended college after high school, how prepared did you feel from an academic standpoint?



- Reported **high school experience** was an average of 3.89 out of 5.
- Alumni reported feeling **prepared for college** (65 percent reported feeling mostly prepared or very prepared). Only 48 percent of alumni reported feeling mostly or extremely **prepared for the workforce**, however.
- **Time management** was the most widely reported skill that alumni felt they lacked following graduation.
- Students reported that high school coursework felt more **connected to their career** following high school graduation than during their high school experience. Alumni recorded an average connectedness of 3.46 out of 5, with 1 being not at all connected and 5 being very connected.
- **Strong interest in internship opportunities.** Of 78 responders, 59 percent reported they would have been very interested, and 28 percent reported they would have been interested depending on the internship.
- Even stronger interest in Career Pathways. Of 80 responders, 73 percent reported that they would have participated, and 25 percent reported they would have depending on the options.
- **Financial Literacy** was the No. 1 offering alumni would have added to their high school experience. Of 69 responses, 47 alumni noted financial literacy. Other suggested courses included professional writing, workplace behavior, culinary, and computer science.
- Alumni suggested counseling resources for career in addition to college counseling and resources.

#### Parent Feedback (Focus Group Forum)

The High School Study Group engaged parents in discussion around high school. The Study Group hosted a Parent Focus Group on May 28, inviting all parents in the district to provide

input, ask questions about the study, and learn about their students as learners. Approximately 20 parents attended. Karina Ruiz introduced parents to Generation Z, answered questions, and Superintendent Dr. Kathy Ludwig provided an overview of the High School Study to date. In groups, parents shared their experiences and observations from their children while providing input on what they would want to see in future high school structure and programming. Parent feedback was also solicited via email, with



12 parents providing in-depth thoughts and input. The following is summarized feedback from West Linn-Wilsonville parents:

- Parents noted their students are oftentimes **overworked** and "drained."
- Parents value the **integration of learning** so that students **learn to apply knowledge** in a variety of settings.
- Strong desire for embedding **cultural awareness education** into the school day.
- Parents noted that increased emphasis and attention to the transition from middle school to high school would accelerate student growth and ensure success.
- "Life Skills" are pivotal in today's society as families have less time to teach students at home.
- Strong desire for **increased low-stakes learning** to decrease stress levels of students.
- Strong interest in **internship opportunities** for students.
- Appreciation for increased hands-on and project-based learning in the classroom.
- Parents greatly value West Linn-Wilsonville's **strong arts and sports programs**, but want to increase student **exposure to the professional world**.
- Openness to an **outside-the-box schedule** for students who would excel with night or weekend course offerings. Also a reported openness to a year-long schedule.
- Interest and desire to learn more about Career Pathways and CTE.
- Parents strongly value small class sizes and one-on-one learning opportunities with teachers.

### Teacher Summit with Diana Laufenberg

On April 28, West Linn-Wilsonville teachers were invited to participate in a High School Summit with Guest Speaker Diana Laufenberg — a nationally known keynote speaker on transforming high schools and founder of Inquiry Schools. Laufenberg led the morning of learning, introducing teachers to some of the cutting-edge education taking place in high schools across the nation before garnering teacher feedback for the High School Study Group to consider. Teachers then reflected on their own teaching philosophies and methods, learning new

techniques, while envisioning possibilities for the future in West Linn-Wilsonville as well. The following is summarized teacher feedback from the Summit:

- Desire to review and rethink **the high school schedule** to provide more student choice and teacher collaboration.
- Increased partnership with local universities and industry-based organizations.
- Teachers felt a need to **increase career-based learning** instead of catering to future college students.
- Consider teaching models and structures that include **individualized student learning** that is feasible in reaching every student.
- Exploration of moving away from College Board and the GPA model.
- Interest in increased course options and Career Pathways.
- Rethink homework to promote student health and mental wellness.
- Desire for **increased collaboration** between the middle and high school levels.
- Teachers note a need to **improve the ninth grade transitional experience** for students.

### Summary of Themes from Surveys and Focus Groups

A number of common themes emerged from students, parents, and teachers. While each identified group brought a unique in response to survey questions, there were many reoccurring threads. Those themes include:

- Strong interest in Career Pathways and credit-based Internship opportunities.
- Future exploration of the high school schedule.
- Decrease outside-of-school student workloads (i.e. homework).
- Emphasis on skills-based and project-based classroom learning.
- Adding course offerings and course flexibility for students.
- Improve transition from eighth grade to ninth grade.
- Increased career counseling and resources as well as mental health supports.
- Emphasis on one-on-one learning opportunities with teachers.

# **Learning Space Needs**

The high school study originally included a fourth component, "examine current and future demographic data and enrollment trends that inform learning space needs." Because the School Board and school district contracted with a different demographer, the data and trends were unavailable during the year of this study. Therefore, this group did not engage in any analysis or conversation regarding learning space needs.

### **Findings**

The High School Study Group acknowledges the district's current high school programming and graduation outcomes to be particularly strong; and, encourages district leadership and staff to continue striving towards improvement, innovation, and unprecedented outcomes.

Based on the research, visitations, and surveys conducted through this study, the High School Study Group offers these findings, which hopefully will serve as key information to guide current and future program decisions, learning models, and facility designs for our community's high school students.

**Finding One:** High school students value relationships with their teachers and peers, being known and being connected to their school community in at least one or many ways.

**Finding Two:** Current high school students communicate that their academic and co-curricular activities and responsibilities contribute to a degree of stress.

**Finding Three:** CTE and career-based opportunities that expand business and industry partnerships and include internships/externships for high school students are of high interest.

**Finding Four:** Rethinking or adjusting the high school schedule to expand upon current course offerings throughout the day, as well as outside the typical school day, increases student choice while maintaining a priority for teacher collaboration.

**Finding Five:** Teaching models and structures that promote flexibility of class size; expanded course offerings; access to real-world models, artifacts, and application of learning; and differentiated instruction are highly valued by students, teachers, and parents.

**Finding Six:** Future high school learning spaces should be designed to promote student-centered learning experiences, accommodate program priorities, support instructional best practices, and facilitate teacher collaboration.

#### Research/Texts

In addition to primary research, the High School Study Group reviewed research on high school program and design, Generation Z, model facilities, and ways to maximize student engagement. Those texts, articles, and research studies include:

- 1. Conley, David T. College and Career Ready: Helping All Students Succeed beyond High School. Jossey-Bass, 2010.
- 2. Corrigan, Paul T. "Preparing Students For What We Can't Prepare Them For." *Teaching & Learning in Higher Ed.*, 23 Dec. 2013, teachingandlearninginhighered.org/2013/07/15/preparing-students-for-what-we-cant-prepare-them-for/.
- 3. Gallup, Inc. "2015 Gallup Student Poll -- Overall Report." *Gallup.com*, 6 Jan. 2016, www.gallupstudentpoll.com/188036/2015-gallup-student-poll-overall-report.aspx.

- 4. June 16, 2017; "Decoding Deeper Learning in the Classroom." *Hewlett Foundation*, 16 June 2017, www.hewlett.org/decoding-deeper-learning-in-the-classroom/.
- 5. "Learning from Student Voice: College & Career Readiness 2017." *YouthTruth*, youthtruthsurvey.org/college-career-readiness-2017/.
- 6. Lichtman, Grant. *Moving the Rock: Seven Levers We Can Press to Transform Education*. Jossey-Bass, 2017.
- 7. Nair, Prakash. *Blueprint for Tomorrow: Redesigning Schools for Student-Centered Learning*. Harvard Education Press, 2017.
- 8. "New Vancouver High School Will Focus on Health, Bioscience." *The Columbian*, 22 Feb. 2013, www.columbian.com/news/2013/feb/23/vancouver-high-school-focus-health-bioscience/.
- 9. "Our Philosophy." *ICLE | The Rigor Relevance Framework*, www.leadered.com/our-philosophy/rigor-relevance-framework.php.
- 10. Oymak, Ceylan. "High School Students' Views on Who Influences Their Thinking about Education and Careers." *Stats in Brief U.S. Department of Education*, Jan. 2018.
- 11. Pamplin Media Group. "What's Missing from the Lake Oswego School District Bond?" *Https://Joomlakave.com*, 28 Dec. 2017, pamplinmedia.com/lor/108-education/382454-269605-whats-missing-from-the-lake-oswego-school-district-bond.
- 12. "The Power of Unlearning"; learningscapes2017.a4le.org; Michelle Chavey, Jamie Dial; Park Hill School District; 2015.