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WEST LINN-WILSONVILLE SCHOOL DISTRICT

LONG RANGE PLAN

JANUARY 13, 2014

WEST LINN - WILSONVILLE SCHOOL DISTRICT LONG RANGE PLAN

ACKNOWLEDGEMENTS

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West Linn – Wilsonville Schools

To: Bill Rhoades, Superintendent
School Board

From: Long Range Planning Committee

Date: January 13, 2014

Subject: **Long Range Plan**
Resolution 2013-25

The "West Linn-Wilsonville School District-**Long Range Plan** dated January 13, 2014" is organized in three parts with Part A describing the values, themes and approaches that are the basis for facility planning. Part B identifies existing capacity, enrollment and growth using Fall 2013 demographic data, and Part C outlines the capital improvement planning process.

First created in 1996, this document represents the latest edition of the District's vision into the future as related to those facilities that will support quality education. At the Regular School Board meeting on September 12, 2011, on motion and unanimous vote, The Board requested an update of the 2008 Long Range Plan. Since that time the Long Range Planning Committee has met monthly with various revisions presented to the School Board at 18 public board meetings over the last 27 months. Upon adoption, the 2014 Long Range Plan will stand as a guiding document for future facility planning and decision-making.

Long Range Plan Adoption History

- Original Long Range School Facility Plan — April 15, 1996
- First Amendment — September 22, 2000
- Second Amendment — February 7, 2005
- Third Amendment — December 10, 2007
- Fourth Amendment — January 13, 2014 (pending approval)

The Long Range Planning Committee and staff recommend the Board adopt the January 13, 2014 Edition of the District Long Range Plan as submitted and recognized by Board Resolution 2013-25.

Department of Operations
503-673-7995 Fax 503-638-9143 • www.wlwv.k12.or.us
Location: 2755 SW Borland Road, Tualatin, Oregon 97062

West Linn-Wilsonville School District 3Jt

Administration Building

RESOLUTION 2013-25
Long-Term School Facilities Plan - Adoption of Amendment

RESOLUTION No. 2013-25

WHEREAS, the school board adopted a long-term School Facilities Plan for the district on April 15, 1996; and,

WHEREAS, the first, second and third amendments to the district's long-term School Facilities Plan were adopted by the school board on September 22, 2000, February 7, 2005 and December 10, 2007; and,

WHEREAS, the school board has reviewed and considered a fourth proposed amendment to the district's long-term School Facilities Plan; and,

WHEREAS, Oregon statutes allow a public school district, by resolution, to impose construction excise taxes on non-exempt new construction, provided that such district has first adopted a long-term School Facilities Plan.

Now, **THEREFORE, BE IT RESOLVED** that:

1. The West Linn-Wilsonville School Board hereby adopts, through this resolution, the fourth proposed amendment to the district's long-term School Facilities Plan; and

2. Until further amendment or other action of the school board, the district's long-term School Facilities Plan, as amended hereby, shall be current and effective for all purposes required or permitted under Oregon law.

Dated this **13th** day of **January, 2014**

Keith Steele

Chair, Board of Directors

Attest: District Clerk

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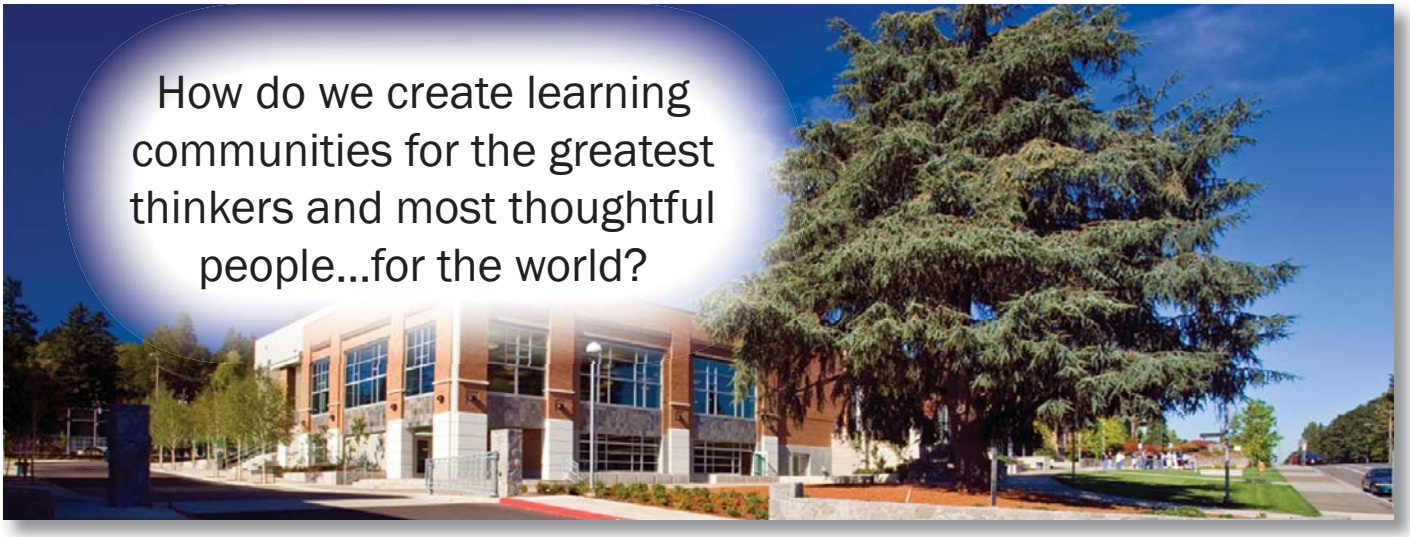

PURPOSE

Consistent with the West Linn-Wilsonville School District's mission question, "How do we create learning communities for the greatest thinkers and most thoughtful people…for the world?", the District engages in an on-going process to evaluate the ability of its facilities to enable quality education for the current and future students within the District.

The purpose of this Long Range Plan document is to provide a summary of the District's framework for facilities planning. The Long Range Plan includes three sections:

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

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

Section C:
Capital Improvements – Outlines the capital improvement planning process and identifies criteria for identifying future capital improvement projects.

Each section of the Long Range Plan builds off the previous section. The Framework for Excellence section details the educational values and programs that affect facility planning. The School Facilities section identifies school capacity based on the educational programs implemented in the District. The Capital Improvements section describes criteria for evaluating future capital improvement projects and the process for planning a capital improvement program.

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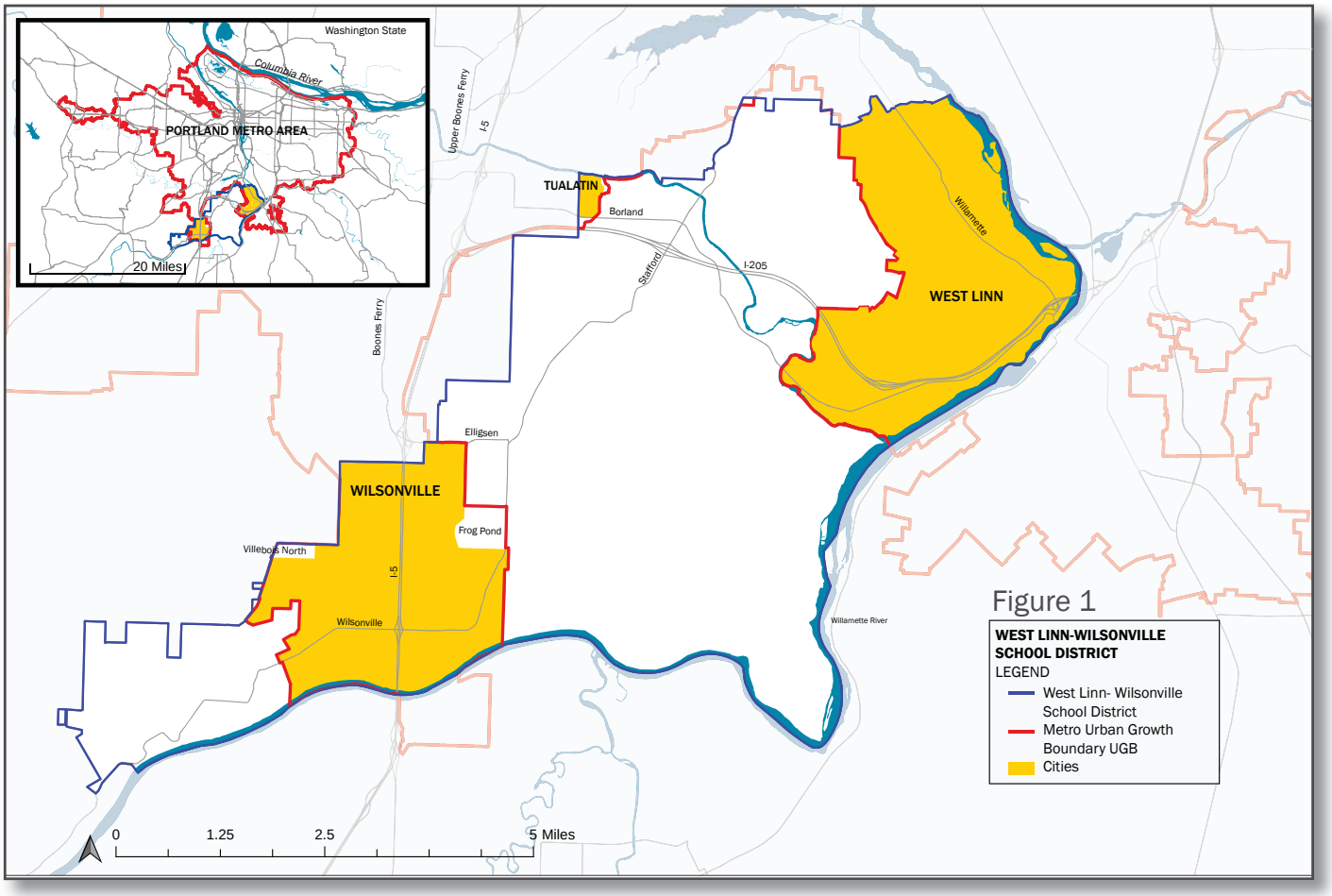

LONG RANGE PLAN HISTORY

The West Linn-Wilsonville School has a long-standing commitment to planning for the future and collaborating with the cities and counties within its boundaries. The first Long Range Plan, originally titled the Long Range School Facilities Plan, was finalized in 1996. It was the result of a joint planning effort between the District, the cities of West Linn and Wilsonville, and Clackamas County to address residential development in the District and related enrollment issues. An intergovernmental agreement (IGA) was approved by the participants. It called for improved planning coordination and it obligated the District to develop a facilities plan. The Long Range Plan has proved to be an enormously helpful tool to help guide the District in preparing for future student enrollment and school facilities needs. The plan was updated in 2000 and again in 2005. The Long Range Plan is developed by the Long Range Planning Committee and adopted by the School Board.

OVERVIEW OF THE DISTRICT

Location and Boundaries

The West Linn-Wilsonville School District is located in the southwestern portion of the Portland metropolitan area, encompassing approximately 42 square miles. Approximately 40% of the land within the district is urbanized, and 60% of the land is undeveloped or in agricultural/resource use. The District includes the entire city of West Linn, the majority of the city of Wilsonville, an unincorporated area of Clackamas County between the two cities, and minor portions of Washington County and the city of Tualatin. The majority of the county land is outside of the Portland metropolitan area's Urban Growth Boundary (UGB). Figure 1 above shows the District outlined in blue, with each city colored yellow and the UGB marked in red. The uncolored area within the District' blue boundary is unincorporated county.

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Clockwise from top left: Frog Pond 1876 - Willamette School 1912 - School bus fleet 1931 - Willamette class, year unidentified

HISTORY OF THE DISTRICT

Since its formation in 1933 through the consolidation of three smaller districts, the West Linn-Wilsonville School District has historically earned a reputation as one of the top academic performing public K-12 school districts in the state of Oregon. District patrons provide an unprecedented level of support for its schools as evidenced by very high volunteer rates at all schools, strong participation in local Parent Teacher Associations, enthusiastic support for the performing and visual arts, regular, unwavering commitment to school athletics, robust participation on various district-level committees, task force work groups, and the school board. The District is also historically successful in gaining community support for regular passage of local option funding initiatives and capital improvement bonds through broad community outreach and participation. The result is a progressive, high performing public school system with a deep commitment to, and connection with, the West Linn-Wilsonville community.

The District has seen a significant level of growth over the last twenty years, with a total enrollment of over 9,000 students in kindergarten through 12th grade (2013-2014). With the opening of two new primary schools in 2012, the District now operates nine primary schools, three middle schools, two comprehensive high schools, one alternative high school, and one charter school. District facilities are in excess of 1,400,000 square feet on over 350 acres of land.

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A Framework for Excellence

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INTRODUCTION

This section, Framework for Excellence, is the first of three sections that provide the framework for facilities planning, define the issues facing the District, and identify future facility needs and improvements. The three sections that collectively make up the District's Long Range Plan and provide the framework for school facility needs are:

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

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

Section C:
Capital Improvements – Outlines the capital improvement planning process and identifies criteria for identifying future capital improvement projects.

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DISTRICT MISSION

The result of the West Linn-Wilsonville community's dedication to "creating learning communities for the greatest thinkers and most thoughtful people…for the world", is a progressive, high performing public school system. In return for the community's dedication, the District maintains a deep commitment to serving its patrons efficiently and effectively. The West Linn–Wilsonville School District is one of the top academic performing public K-12 school districts in the state of Oregon. This reputation for excellence is the result of the teachers, staff and administrators in the District, dedicated students and parents, and long-time community support. Examples include:

- The West Linn-Wilsonville School district was honored by the College Board in 2011 and in 2012 by being one of two Oregon districts named to the second and third AP (Advanced Placement) Honor Roll. The honor recognizes increases in the number of students taking Advanced Placement classes and increases in the percentage of students achieving scores that qualify for advanced college credit. The District offers 26 AP courses and regularly recognizes students who achieve qualifying scores in multiple subject areas.
- In 2012, the West Linn-Wilsonville School District achieved the highest four-year cohort graduation rate (89%) for the 25 largest school districts in Oregon and a drop-out rate of 0.7%.
- Award winning performing arts, visual arts, and athletics in the schools receive enthusiastic support from the community.
- The CREST-Jane Goodall Science Symposium showcases District STEM education. The symposium allow students to conduct original research in science and engineering. Students compete at the local, state, and international level for scholarships and recognition.
- The Beauty and the Bridge Public Art project, completed in collaboration with the city of Wilsonville, exemplifies STEAM education with the intersection of art with science and engineering.
- Wilsonville High School Robotics team won the "Engineering Inspiration" award at the Autodesk Oregon Regional FIRST (For Inspiration and Recognition of Science and Technology) Robotics Competition earning them a spot at the world championships.
- Every school in the District has wellness and music programs.
- Full-day kindergarten is provided at all primary schools.
- A Farm-to-School Program that provides learning experiences for all students in the District.
- Science, Technology, Engineering and Mathematics (STEM) curriculum and enrichment opportunities at all grade levels.
- Broad community outreach and participation during the past 20 years has led to the successful passage of two local option funding initiatives and four capital improvement bonds.

This portion of the Long Range Plan provides a summary of the District's programs and ways in which its facilities enable the achievement of the District's mission.

Originally formed in 1933 through the consolidation of three smaller districts, the West Linn – Wilsonville School District 3JT encompasses approximately 42 square miles in the southwestern portion of the Portland metropolitan area.

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Vision and Values

The West Linn-Wilsonville School District is committed to excellence in education. We want a high-quality education for all our students – one that provides a personalized education for all students and affords all learners the opportunity to capitalize on strengths, work on challenges, and maximize potentials. This unyielding commitment to excellence has produced a public education system that is second to none in the state. As testimony to the District's commitment to excellence, the Oregon Department of Education rated all primary schools in the District "outstanding" for the 2010-11 school year.

The District creates learning communities that nurture a mindset for great thinking. In this environment we work to maximize human potential and enable all students to function successfully in a changing world through access to a high-quality education that:

1. Demonstrates personal and academic excellence.
2. Provides a personalized education to improve student performance.
3. Establishes community partnerships and expands the classroom beyond the school.
4. Creates a circle of support for each student.
5. Educates the whole person--intellectually, emotionally, physically, and ethically.
6. Integrates technology in daily learning.

SCHOOL BOARD COMMITMENT TO EXCELLENCE

The five-member West Linn-Wilsonville School Board is responsible for establishing educational goals that guide both the Board and staff in working together toward the continuing improvement of the District's educational program and lead to achieving the mission. The Board goals provide alignment and coherence throughout the organization. The Board goals for the 2013-14 school year are to:

1. Grow student achievement through the use of high leverage instructional strategies that raise rigor for all students while closing achievement gaps.
2. Align systems of accountability, assessment, and evaluation to support the West Linn-Wilsonville vision of excellence.
3. Conduct long-range capital improvement and financial planning through processes and practices that lead to long-term financial stability and sustainability and are responsive to community growth and student learning needs of the future.
4. Engage family and community partners in support of the district vision and values of excellence in education.
5. Implement systems of high quality professional growth and mentoring that establish safe learning environments and recognize the accomplishments of staff as they persist toward the achievement of rigorous learning goals.

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Citizen Committees

As part of the Board's dedication to involve the citizens and engage stakeholders within the District, the Board has established various citizen committees to assist them with oversight of the District. Two of these committees play a significant role in future planning for the District:

1. Long Range Planning Committee - a seven-member citizen committee responsible for guiding the development of the Long Range Plan, that provides a rational framework for evaluating and addressing future school facility needs as the West Linn and Wilsonville areas grow.
2. Budget Committee - a ten-member citizen committee responsible for reviewing the annual budget, gathering feedback from the community, and providing a recommendation to the School Board for adoption.

The Long Range Planning Committee and the Budget Committee study the issues and formulate options and recommendations for the School Board. These committees operate within the District policies and priorities. Ad hoc advisories are periodically created to study and provide input to specific projects.

In addition to these citizen committees, the West Linn-Wilsonville Education Foundation is a non-profit community-based organization with the mission "to secure funding to advance the School District's mission." The 25-member organization, comprised of parents, teachers and administrators, is committed to preserving teaching positions and supporting academic success throughout the District. The Foundation is currently the only nonprofit fundraising entity with the ability to fund additional teaching positions for the District. Individual school Parent Teacher Organizations support many enriching efforts at the schools but are limited by their bylaws in their ability to fund teaching positions within their individual school.

The District has a total enrollment of over 9,000 students in kindergarten through 12th grade. There currently are nine primary schools, three middle schools, two comprehensive high schools, one alternative high school and one charter school operated by the District.

EDUCATIONAL PROGRAMMING

The curriculum and instruction provided by the District is designed to educate the whole child, awaken the mind and encourage children and adults to go where questions lead. The District values a personalized education, where all children are important, and each child is educated one child at a time. Students develop a growth mindset allowing them to take on challenges while demonstrating performance character.

Classroom instruction is organized to lead students on a path to a substantial high school diploma providing students with college and career readiness. Thinking and problem solving are learned through the core skills of reading, writing, and mathematics. A rigorous, enriched education blends:

- Knowledge and Skills
- College and Career Readiness
- Engagement
- Cognitive Strategies
- Growth Mindset
- Performance Character

At the primary school level, there is an emphasis on instruction, the classroom environment for learning, and effective class size. Classroom education is enriched with physical education/wellness, music, library, world language, dual language, and programming for students with special needs.

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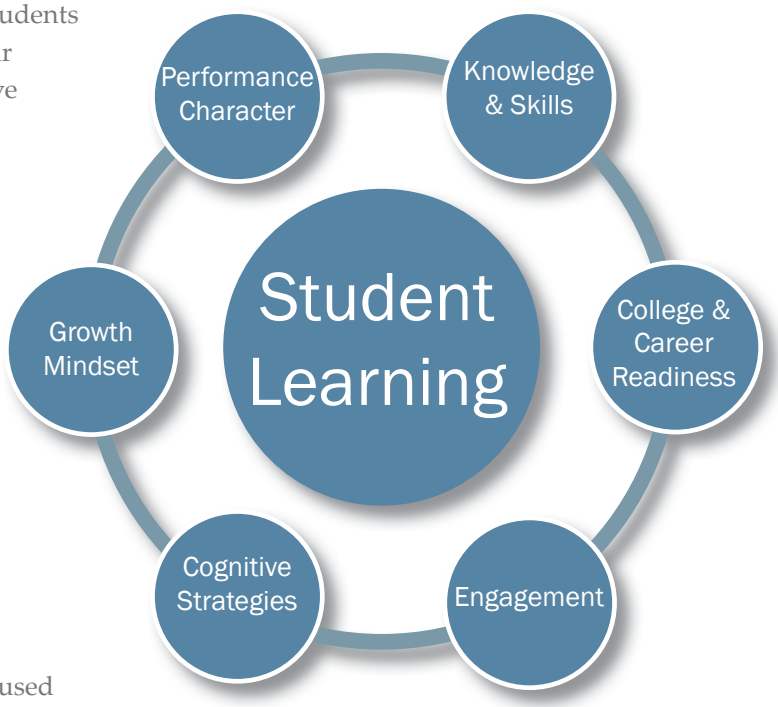
The middle school instructional program continues to prepare for achievement of the high school diploma by engaging children in rigorous reading, writing, mathematics, and science. As middle school students more fully participate in and take responsibility for their own learning and assessment, they practice the cognitive strategies for disciplinary thinking. They learn to think like mathematicians and scientists, practicing the discipline and persistence required to produce excellent thinking. They are asked to integrate their thinking as they approach complex real world problems.



At the high school level, even more options are available to support and develop advanced study. Greater independence results in a higher expectation that high school students pursue high quality thinking and performance to support their aspirations.

In addition to the curriculum offered at the primary, middle, and high schools, other program strategies are used by the District to create a collaborative, integrated approach that provides a high-quality education. Some programs impact the overall capacity of the schools because they require a deviation from standard classroom capacity, or require a separate facility. Other programs affect the footprint or architecture of the building or other facility or land needs, but not necessarily how many students can be served by a school. Regardless of their impact on the physical space, the following highlighted programs significantly enhance the overall quality of education offered to the students.

PROGRAMMING AFFECTING SCHOOL CAPACITY

Early Childhood Education

Research on the impact of early childhood education is compelling. It confirms what most parents and educators know from experience: a language rich, experience rich early childhood environment gives children the best place from which to launch successful school and life accomplishments. With this in mind, in 1997, the District developed an early childhood education program rooted in the understanding that young children learn by doing. The program currently serves approximately 130 children, ages one to four. Starting with the 2012-13 school year, the program has been located at Bolton, Boones Ferry, and Lowrie primary schools serving approximately 130 children per year. Each program has one or two designated classrooms with connections to outdoor learning space and access to a parent gathering/resource space. Because of the unique nature of preschool classrooms, both in terms of the interactive nature of the teaching and the physically small size of the students, these classrooms cannot be shared by other programs in the primary schools. This program serves Head Start qualified children as well as families who pay tuition for the program.

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All-Day Kindergarten

Early childhood education has a significant impact on lifetime learning and success in school. All-day kindergarten provides significant benefits by extending quality teaching time for young learners. Currently, all-day kindergarten is offered as a tuition-based program because full-day kindergarten programs are not yet state supported, nor funded. Students whose families qualify for free and reduced lunch, students who are learning English, and students who present a hardship are given a scholarship to all-day kindergarten. The tuition requirement will change with the 2015-16 school year when a new Oregon State law goes into effect. This law will cause school districts to be reimbursed on a full-weight basis for all-day kindergarten students.

The all-day kindergarten program is offered in all primary schools. Currently, approximately 377 of the District's kindergarten students, or approximately 63%, are enrolled in the all-day program. By fall 2015, the District will transition to offering all-day kindergarten programs at no additional cost to all students. Moving from half-day to all-day kindergarten presents a capacity issue in some primary schools. No longer will two classes (morning and afternoon) be able to share the same classroom, and additional classroom and instructional space will be necessary. Also, kindergarten classrooms tend to have unique needs due to the interactive nature of the teaching, with children moving around the classroom throughout the day, making it difficult to use kindergarten spaces for upper grades. All-day kindergarten has implications for transportation and food service as mid-day bus runs are eliminated and more children will need to be accommodated at lunch.

Open Enrollment

In the 2012-13 school year, a new Oregon state policy took effect to allow "open enrollment" between school districts. Under the new policy, the state funds follow the student to the preferred school district and the student is not required to pay tuition. School districts are allowed to cap the number of transfer students they will accept under the new policy, and must do so annually by March 1. Requests by students to change districts must be made by April 1. Once a request to transfer under open enrollment has been granted, it is granted for the educational life of the student. The School Board enacted an open enrollment process in 2012 and 2013 according to the state timelines. The District opened 180 seats to new students in all schools with the exception of Arts and Technology High School, Trillium Creek and Lowrie Primary Schools. The District enrolled 65 new students through the open enrollment program and 80 out-of-district students who were already attending West Linn-Wilsonville schools. The Board will have the option to reconsider open enrollment on an annual basis.

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Alternative Education

The purpose of the alternative education program is to continue students' progress toward achievement of a high school diploma when their needs are best met with a different program or new environment. The greatest needs for an alternative education fall into three categories:

- **Alternative School Setting** – For a variety of reasons, some students' instructional needs are better served in smaller, highly connected settings where there is strong community accountability as well as flexible structures, schedules, and strategies. Approximately 1% of our high school students fall into this group, lower than the national average. Arts and Technology High School is designed to serve these students.
- **Short Term Placement and Support** - Some students in our District have been expelled, suspended, or are unable for medical reasons to attend regular classroom based programs. These students need short term placements to support their continued learning, along with academic, social, emotional, or drug and alcohol counseling to bring them back on track to graduation or GED completion. The number of students participating in this program varies over the course of the year. Credit recovery courses, early bird classes, online learning, and summer school programs in the middle and high schools provide short term placement and support.
- **Post High** – the District is legally responsible to serve and support students who are ages 18 to 21 and have not yet received traditional high school diplomas, due to special needs. These students are typically identified for special education programs, which provide a wide range of support, and include transition to college or career. Currently, there are at least 25 students identified in this group who will be served in the Post High Program in the 2012-2013 school year.

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Arts and Technology High School

The Arts and Technology High School (ATHS) is an option school providing an alternative program for high school students. Arts and Technology students thrive in the small school/class size environment and unique course structure at ATHS. The environment and support provided at ATHS is credited with a graduating rate of 76% for the 2011 graduating class. Of those who graduated last year, half have entered college or the military. There are currently 105 students enrolled at ATHS, in grades 9-12. Arts and Technology High School will continue to serve approximately 100 students along with expanding the online and hybrid options for students.

Personalized Special Education

The value for a personalized education is clearly evident in the West Linn-Wilsonville District. Currently approximately 10% of our students in the district qualify for special education services with Individualized Education Programs (IEPs). These students are supported through the collaborative efforts of special and general education teachers, specialists, instructional assistants, administrators and parents. The specialized instruction needed for these students may occur in the general education setting or in separate classroom for part or all of the day, depending on the plan each IEP develops.

Resource programs offer a range of academic, language, social communication and behavioral services and placements. Programs focus on maintaining a collaborative team approach and a strong general education connection. One of the roles of the special education teacher is to collaborate with the general classroom teacher in areas such as teaching strategy, curriculum material, modified instruction and learning environment. Special education teachers also work directly with students in small groups either in a resource or general education classroom for a portion of the school day. Often this small group needs to occur in a quieter, less distracted setting than the general education classroom. Students served through the resource program may qualify for services under a number of eligibility categories, including specific learning disability, autism, emotional behavior disturbance, and other health impairment. Additional related services, such as Occupational Therapy (OT) and Physical Therapy (PT) are available based on individual student need in order to support students' access to their education. Transition services are available for eligible students ages 18-21, where the focus is on college and work readiness, enhancing self-advocacy, developing independent living skills, and connecting with the community, which present unique and important facility needs.

The district also offers more intensive programs and services that focus on instructional methods that support life skills, autism, behavior, academics, and/or job skills. Students with more intensive needs may be served in a special program classroom for some or all of their day, and may also be served in general education classrooms. Classroom sites are located throughout the district schools, and may include instructional classrooms and motor/sensory spaces. Therefore, a classroom designed to support 25-30 students may be occupied by ten or fewer students. Of course, we value the educational experience of each one of these children and support their access to equitable facilities throughout their day. This means when considering school capacity, we need to support the instructional spaces that accommodate very individualized needs at each building.

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PROGRAMMING AFFECTING FACILITY SIZE, DESIGN, AND NEEDS

The District believes school design should create a welcoming and nurturing environment for learning. Schools are a visible and daily symbol to students and teachers of the community's commitment to education. Schools that are well designed and maintained provide a supportive environment for learning and achievement.

In planning for new facilities, the District supports the following design recommendations:

- Design schools to support a variety of learning styles.
- Enhance learning by integrating technology.
- Foster a "small school" culture.
- Support neighborhood schools.
- Create schools as centers of community.
- Engage the public in the planning process.
- Make healthy, comfortable, and flexible learning spaces.
- Consider non-traditional options for school facilities and classrooms.

As the District continues to grow, new and remodeled school facilities will be created that express the values of our community and allow the best environment for teaching all children. In addition to the traditional auxiliary facility needs, such as administrative spaces, libraries, music rooms and gymnasiums to name a few, the following programs have implications for the size and design of future facilities.

World Languages

In an effort to increasingly connect students in the District with the world, a dual language Spanish program is offered beginning with kindergarten at Lowrie and Trillium Creek primary schools in 2012. The dual language classrooms operate alongside English language kindergarten classrooms. The dual language program will expand upward with the first class through grade 5. The dual language program operates in regular classrooms at each grade level. Students study 50% of their day in English and 50% in Spanish. The dual language program will be filled with each kindergarten class by lottery from students across the District. The dual language program is not open for open enrollment transfers. In addition, every primary school implemented a world language program K-5 in September 2012 studying either Spanish or Mandarin Chinese.

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Interactive/Technology-Rich Learning Environments

Our vision asks us to consider the power of integrating technology into our classroom learning environments. Our students are digital learners. Information is at everyone's fingertips and the effort required to obtain and synthesize information is far less than ever experienced by previous generations. Increasingly, students must have the ability to access information, to analyze it, to find meaning in it, to apply it to new situations, and to be flexible learners in the face of rapid change. Technology has enhanced the teacher's role as a learning facilitator in the classroom, and in many cases has empowered students as teachers as well as learners.

Classrooms are increasingly learning spaces in which a wide variety of activities are occurring simultaneously. Students are taking ownership of their learning as they are encouraged to explore their own questions through the guidance and wisdom of the classroom teacher. Technology provides greater means for teachers to skillfully engage and motivate students by personalizing their invitations to inquiry.

The ability to work in groups, and individually at times, is enhanced when large displays of information, data, graphs, multimedia, and more can be employed. When these displays can smoothly be employed serendipitously and without the need for wired connections, these opportunities become even more powerful collaborative learning experiences.

Students are increasingly using a wide variety of devices. No longer is a computer "tool" of choice. Increasingly, technology use is a personal choice. Choice of platform, form factor, and interactivity is expanding rapidly.

With greater access to electronic resources and tools, staff is also developing higher degrees of effectiveness outside of the classroom. Electronic means of completing tasks are becoming more paperless. Documents do not need to travel between parties and data does not need to be re-entered. This is not only environmentally friendly but also reduces error. With information in electronic form as its primary means, leaders are better able to probe and explore data that helps inform instruction and direct policy and practice.

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Learning Communities/Collaboration/The Library

The District supports collaboration among teachers and students at all levels. Teaming helps teachers provide a coherent and aligned program K-12 and classroom to classroom. The library is the center of collaboration and inquiry in the school.

The library lives at the heart of the school connecting children and teachers to research, inquiry, wonder, and delight. The influence of the library is experienced in the center, out to the porches, and into each classroom. The Teacher Librarian works throughout the school as a leader and a partner with classroom teachers. The Teacher Librarian brings ideas and resources to the planning process with teachers supporting the development of information and research skills in the context of classroom studies. The Teacher Librarian teaches alongside classroom teachers supporting inquiry that awakens curiosity, sustains passion, engages all learners, and culminates with learning and accomplishment. Learners are guided to hone skills of inquiry that will serve them in any question they might encounter.

The library is interactive, inviting, open, and fun. It is abuzz with activity. Small groups and individuals are working on projects that challenge their imaginations. Teachers and children are working together to sharpen questions, expand students' background knowledge, and connect with experts near and far.

The library is a living children's museum. Amazing, beautiful work is displayed in the library and throughout the school along with explanations, process notes, reflective templates, and further questions. Interactive displays invite children to engage in interesting questions of their time. Questions highlight and explore ethical considerations, intellectually challenging content, add depth and connections from one study to another, and challenge children to extend and practice performance character. Craftsmanship in thought, process and products is given an honored place in the school.

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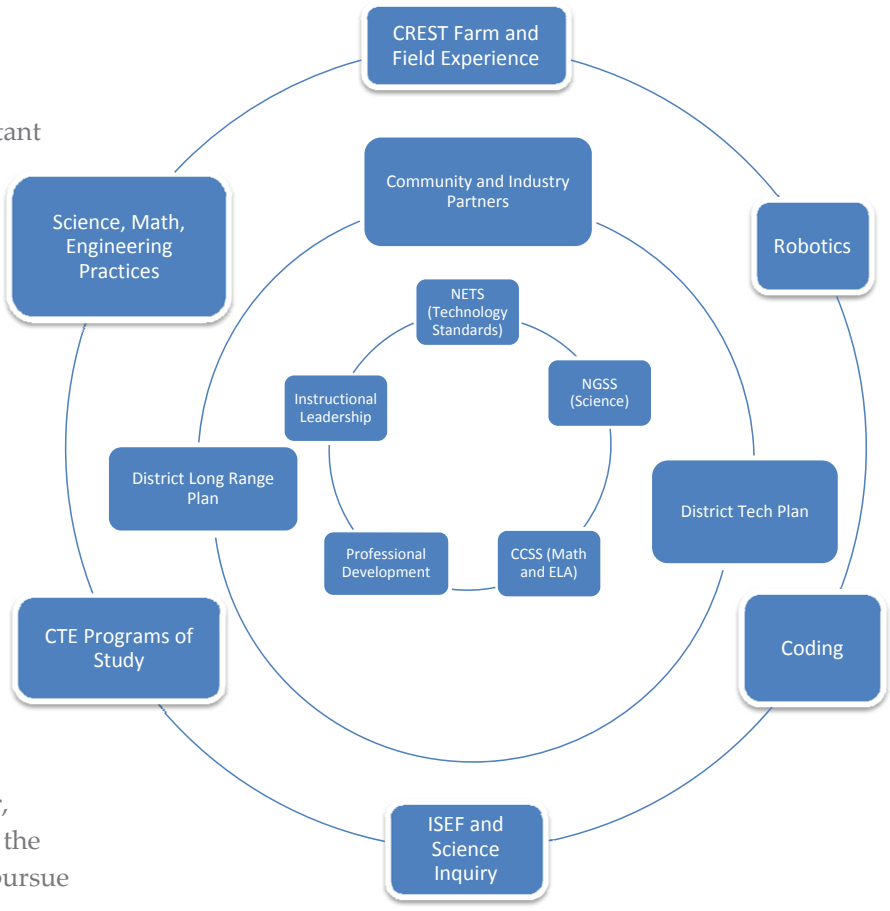
Science - Technology - Engineering - Math (STEM) Education

The West Linn-Wilsonville's learning communities of great thinkers will use science, technology, and mathematics to engineer solutions to problems for the world. STEM education supports the learning and development of essential and foundational skills and knowledge to support these learning communities of great thinkers and thoughtful global citizens. The District's STEM education initiative considers the following elements.

- **Best Practices and Instructional Leadership:** The District is exploring studio and lesson study models of professional development to support effective instructional improvement in mathematics and science across all levels. In this model, teachers work collaboratively to understand best instructional practices in their disciplines, deepen their understanding of state and national standards in content areas, and give and receive feedback to improve instructional practices and better integrate STEM disciplines to enhance student learning. These professional learning communities are essential to deepening our collective understanding about STEM education and how to create learning experiences for students.

- **K-12 STEM Experiences:** State and national standards in STEM disciplines provide important frameworks for best practices and the scope and sequence for content across the grade levels. Using these frameworks and curricular resources is important to develop integrated STEM education experiences for kids and to see commonalities between science, math, engineering and technology practices. The scope and sequence of K-12 experiences considers the diverse ways that students engage in STEM education and areas for further development. Current and future STEM experiences include in classroom and school day experiences, after school clubs, independent research projects, and summer and non school day experiences. While every student may not choose to enroll in a STEM related field of study or pursue a STEM career, all students will have the experiences to build the knowledge and skills in STEM disciplines to pursue those pathways if they choose.

- **Exemplars of STEM Education Programs.** The District has many exemplars of STEM education programs currently across the schools and grade levels. These programs and unique learning experiences for students integrate STEM disciplines in ways that provides hands-on, real world, and relevant learning experiences for students, often supported by community partners or STEM industry professionals. These exemplars set our work apart from other local initiatives and continue to inspire the development of additional STEM programs and experiences.



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- **Community Partners.** Fostering new and enhancing existing partnerships to support STEM education is important in collaborating around the development, funding, and mentorship for the District STEM education programs. The District currently works with Oregon Tech, Clackamas Community College, and Oregon State University Extension to provide dual credit offerings and support Oregon Department of Education's 40-40-20 initiatives. In addition, partnerships with METRO and the Cities of West Linn and Wilsonville support real world environmental and community based experiences. The District is part of the South METRO Salem STEM Partnership and the planning and efforts around supporting a regional "STEM Hub".

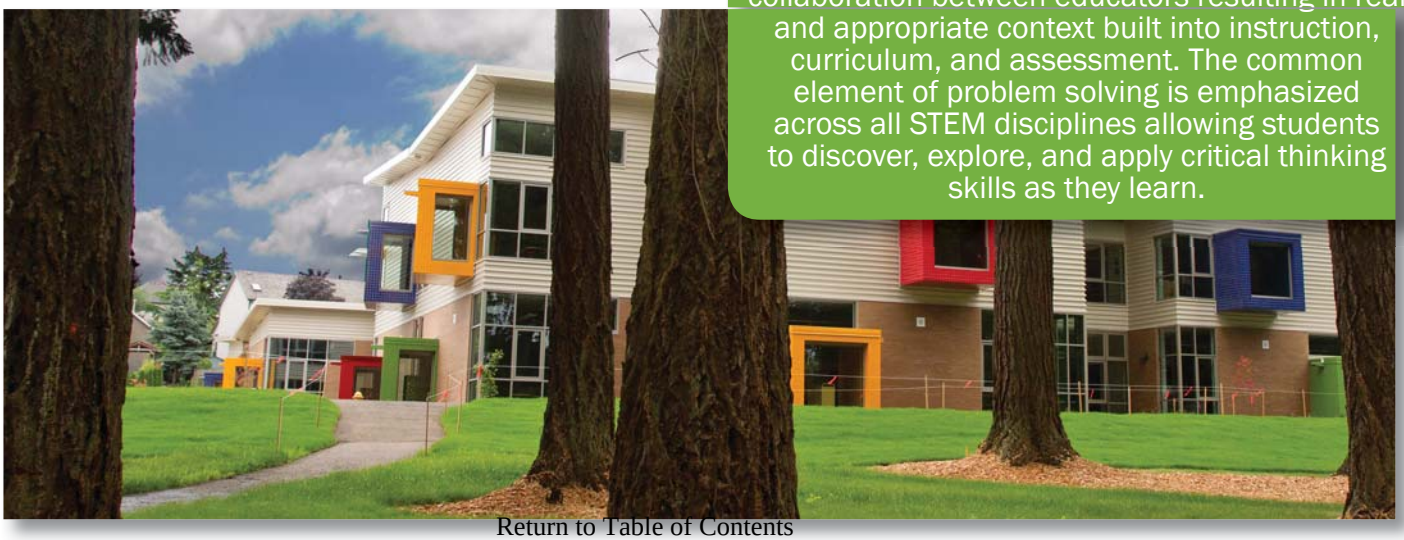
- **Career and College Readiness.** STEM experiences work to deepen student understanding of STEM disciplines while also providing opportunities to develop skills for both career and college readiness. This includes, but is not limited to, mentoring by industry professionals, internships with experts in STEM fields of study, and work experience in real world settings. Career and Technical Education (CTE) is also an important component of STEM experiences. CTE programs foster skills that are both relevant for STEM fields of study and career paths. The District is working to develop additional CTE programs that provide a unique approach to STEM education. A CTE program of study in sustainable agriculture achieves this by blending academic courses with real world farming experience.

- **STEM Learning Spaces and Contexts.** The Center for Research in Environmental Sciences and Technologies (CREST) is well positioned to support this larger STEM education initiative through the lens of sustainability and the environment. Grounding STEM education experiences in the environment and the context of sustainable development reinforces our District's mission of supporting great thinkers for the world. The arts also provide an important context for STEM education. STEAM education provides opportunities to interpret information, thinking critically, and ground their thinking about art in math, science, engineering and technology practices. Facilities around the District support these unique and diverse learning experiences and contexts, providing not only the physical spaces, but also the tools and resources needed to support meaningful learning for students.

See the document titled, *STEM Endication and West Linn-Wilsonville K-12 Programs: An overview and framework for development* for additional information about STEM education in the District.

The Oregon STEM Education Initiative proposes the following as a new description of STEM Education:

An approach to teaching and lifelong learning that emphasizes the natural interconnectedness of the four separate STEM (science, technology, engineering and mathematics) disciplines. The connections are made explicit through collaboration between educators resulting in real and appropriate context built into instruction, curriculum, and assessment. The common element of problem solving is emphasized across all STEM disciplines allowing students to discover, explore, and apply critical thinking skills as they learn.



Sustainability

The District's sustainability initiative began with a desire to learn more about what sustainability means within the context of K-12 education. A leadership team worked together to consider how District departments and schools were already engaging education for sustainability curriculum and other components of the 3 "e's" (economy, environment, and equity) of sustainability. In addition, this work focused our thinking about how our community could continue to integrate the context of local and global sustainable development into student learning opportunities. While the District's work with sustainability began with a leadership team, it quickly embedded itself in the culture of the District and continues to gain traction at the building levels, within the curriculum and student learning, and in every District department. In support of this initiative, the 2008 Capital Bond program integrated themes of sustainability, both within the design and construction of Lowrie and Trillium Creek Primary Schools and other bond program projects. Partnerships with the Energy Trust of Oregon and Oregon Department of Energy's incentive programs resulted in the successful obtainment of available funds for sustainable building features integrated into the design and construction of numerous bond projects.

Education for sustainability continues to be an important piece of our District's culture and lens for our work in STEM education. Providing a context and lens through which students can apply STEM learning is important when engineering solutions to real world problems.

Green Schools Initiative:

A green school, also known as a high performance school, is a community facility that is designed, built, renovated, operated, or reused in an ecological and resource-efficient manner. Green schools protect occupant health, provide productive learning environments and spaces, connect students to the natural world, increase average daily attendance, reduce operating costs, improve teacher satisfaction and retention, and reduce impacts to the natural environment.

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The Center for Research in Environmental Sciences and Technologies (CREST)

The District's culture around sustainability and environmental stewardship supported the opening of The Center for Research in Environmental Sciences and Technologies (CREST) in 2001. CREST supports the diverse learning communities in the West Linn-Wilsonville School District. Place-based field experiences, garden-based and farm to school related education, and education for sustainability programs support the early develop of scientific inquiry and wondering about the world at the early elementary grades. More formalized inquiry fairs at the middle and high school levels continue to develop science inquiry in the schools. CREST also supports the District's affiliation to the Intel Science and Engineering Fair (ISEF) and students preparing research projects for that competition. CREST programs occur both during the school day, as well as throughout the summer and non-school calendar to provide learning opportunities for students throughout the year. Programs focus on schoolyard environments, independent student research, garden-based education, service learning and hands-on, and science inquiry. CREST staff support professional development and work with teachers to develop curriculum in the areas of science inquiry and Education for Sustainability. CREST programs support individualized learning, community partnerships, education of the "whole person," and foster a sense of place within students at all grade levels. Program goals include:

- To help students achieve science literacy and develop a lifelong appreciation for science and inquiry
- To foster a sense of wonder, understanding and stewardship for the natural world
- To increase personal wellness through connections to local food systems and outdoor activities
- To promote and inspire themes of sustainability through education and demonstrations
- To support teachers in instructional best practices for science and environmental education

CREST programs ground learning in STEM disciplines in the environment. By highlighting the threads of sustainability and providing an environmental context for learning, students across the grade levels deepen their understanding and the real world applications of STEM disciplines. Highlighting the connections between STEM education and real world, place based experiences deepens student understanding of topics such as sustainable agriculture, science inquiry, and engineering design.

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CREST Farm to School

The CREST Farm to School program illustrates how the District's mission question can play out in the fields of a working, educational farm. In 2009, a group of District administrators, teachers, staff, community members and students saw an opportunity to enhance District initiatives in wellness, sustainability, and inquiry by connecting the community and students to the land, nature, and local food systems. The CREST Farm to School program builds on the successful platform of garden-based education that teachers, students and staff have built within the District's culture and approaches to environmental curriculum and instruction over the years.

The CREST Farm to School program operates on an acre and a half of the District's Frog Pond Property. Existing site infrastructure includes a 3 bedroom residence and two pole barns. The program utilizes the residence, a small portion of the large barn, and the entire small barn to meet the needs of farm operations and the educational programs. Master planning efforts for the larger ten acre parcel, completed in 2011, considered the future use of facilities and space needed to support the programs, long term water sources, site access, community partnerships, funding sources, production targets, and the development of educational programming. Since this master planning effort, CREST has continued to expand the education programs to include summer internship opportunities for both middle and high school students, year round internships for high school students, school day programs that connect to the fifth grade science units of study, and high school courses that integrate components of sustainable agriculture into curricula.

The CREST Farm to School program is an exemplar within the District's STEM education program because of its innovative approach to providing real world and relevant learning experiences for students. The CREST Farm to School program provides a unique opportunity to engage students in field based science inquiry, principles of small business management, small farming practices, and studies about wellness, sustainability and local food systems. The farm provides a real world context for STEM education and fosters career and college readiness skills and experiences for students at all levels. Students improve their understanding of personal wellness and local food systems by tasting a variety of fruits and vegetables during nutrition lessons offered by CREST educators in cafeterias and classrooms. Future development of the Farm to School program contemplates the relationship between sustainable agriculture and Career and Technical Education (CTE), additional connections to STEM education, as well as the expansion of year round internship opportunities for students to develop additional college and career readiness skills.

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Robotics

Robotics programs within the District provide important STEM education experiences for students across the levels. Students experience foundational ideas and practices in science, technology, engineering and mathematics when they engage in the District's robotics program. Beginning at the primary level, all second grade students work with engineering design principles and experience authentic inquiry with the LEGO WeDo curriculum. Connected to Next Generation Science Standards, second grade classes explore programming, design problems and challenges, and the engineering design process. Building on these universal experiences, fourth and fifth grade students are able to participate in the FIRST LEGO League teams. These teams form through enrichment classes or after school clubs, working to solve problems commonly faced by scientists, as well as to build small LEGO robots. Continuing at the middle level, sixth through eighth grade students build on these foundational experiences and continue work and participation with FIRST LEGO League teams. These teams are supported by teachers, schools, and parents and prepare students for competitions. At the high school level, students from Wilsonville and West Linn High Schools combine forces on the District's FIRST Robotics Challenge team. With support from community partners, professional mentors, and a teacher advisor and coordinator, high school students have seen great success on the regional and national stage during these competitions. Through integrated learning in science, technology, engineering, mathematics, students design and build robots to meet certain criteria and functions for local and national competitions. The team's mission, Building Robots. Building People, reinforces how students and teachers see this experience as a unique opportunity for real world, leadership experiences through the deep understanding of STEM disciplines.

STEM Forward

Continuing to foster partnerships with local industries and professionals, engage teachers at all levels in professional development around robotics and engineering, and support robotics teams throughout the District is important to the sustained growth of these teams and programs. Robotics programs throughout the District connect to other salient components of the District's STEM education program, such as coding and programming. In addition, robotics connects to the District Technology Plan, which outlines how technology supports teaching and learning. In response to the increased interest in robotics by students, families, and community members, the District continues to explore how to continue to provide the tools, facilities, and resources that these programs need to ensure their successful development.

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B

School Facilities

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INTRODUCTION

This section, School Facilities, provides the framework for facilities planning, defines the issues facing the District, and identifies issues that will affect future facility needs and improvements. It is the second of three parts that collectively provide the framework for school facility needs:

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

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

Section C:
Capital Improvements – Outlines the capital improvement planning process and identifies criteria for identifying future capital improvement projects.

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Table 1
ESTIMATED HOUSING UNITS AND
ENROLLMENT BY JURISDICTION - 2010

Area	Housing Units	Enrollment
1 West Linn Area*	9,976	4,651
2 Stafford Basin Area (north of I-205)	921	361
3 Clackamas County (south of I-205)	1,995	714
4 Wilsonville Area	6,141	2,674
TOTAL	19,033	8,400
TOTAL excluding Three Rivers Charter School		8,298

** The West Linn area is not exactly the same as the incorporated city. The city of West Linn counted 10,217 housing units within its city limit in 2010.*

Figure 2

SNAPSHOT OF TODAY

Existing Development and Enrollment

The 2010 Census shows there are approximately 19,033 residences within the District with a total enrollment that same year of 8,400 students. The majority of residences and development is located within the cities, with the city of West Linn accounting for the largest share. For planning purposes, the District is divided into four geographic sub-areas (Figure 2). Table 1 summarizes the number of residential units (single and multi-family) and students by sub-area.

To evaluate enrollment information at the neighborhood level, the District has developed a GIS (Geographic Information System) mapping framework for tracking existing development and enrollment, location of students, and anticipating future enrollment. The mapping system is based upon 175 "study areas" that include discrete neighborhoods (Figure 2). These study areas are the building blocks for the attendance areas for primary, middle, and high schools. The District collects quarterly enrollment data for each of the schools. On September 30, 2013, the District had a total enrollment of 9,076 students in kindergarten through 12th grade. Enrollment has steadily increased across the District with some of the highest growth rates occurring in the 1990's. Enrollment for September 2013 is shown in Table 2.

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Table 2
2013 SCHOOL CAPACITY & ENROLLMENT

SCHOOL	CAPACITY (2013)	ENROLLMENT 9/30/13	AVAILABLE CAPACITY
PRIMARY			
Boeckman	479	541	-62
Boones Ferry	689	536	153
Lowrie	476	480	-4
Wilsonville Subtotal	1,644	1,557	87
Bolton	363	300	63
Cedaroak	407	320	87
Stafford	501	512	-11
Sunset	432	296	136
Willamette	501	549	-48
Trillium Creek	498	492	6
West Linn Subtotal	2,702	2,469	233
Primary Subtotal	4,346	4,026	320
MIDDLE			
Wood	640	715	-75
Athey Creek	624	637	-13
Rosemont Ridge	668	714	-46
Middle Subtotal	1,932	2,066	-134
HIGH			
Wilsonville	1,472	1,162	310
West Linn	1,748	1,612	136
Art Tech	86	105	-19
High School Subtotal	3,306	2,879	427
TOTAL	9,584	8,971	613
*Three Rivers Charter**	*100*	*105*	*-5*

* Not included as part of the District enrollment.

Existing Facilities

There are currently nine primary schools, three middle schools, two comprehensive high schools, one alternative high school, and one charter school operated by the District. Of the nine primary schools, two schools, Lowrie and Trillium Creek primary schools, are new facilities that opened in the fall of 2012. To better define the true educational capacity of each school, an evaluation of the facilities and programs was conducted in 2001, 2006, and 2013 to derive an accurate capacity figure for each school. The methodology for capacity adjustments is discussed in Exhibit A of the appendices. Educational capacities of the schools are updated as existing schools are expanded, remodeled, or as curriculum and special education programs change. Primary school capacities will change in 2015 when all kindergarten students will attend full-day classes. The current school capacities are shown in Table 2. For the 2013-14 school year, the primary schools are operating under capacity, and middle schools are operating over capacity. The high schools have room for additional enrollment growth. The opening of Lowrie and Trillium Creek primary schools for the 2012-13 school year, with a combined capacity of 974 students, alleviated the capacity shortfall at the primary level. Portable classrooms at Wood Middle School will remain to address the middle school capacity issue until permanent facilities are funded and constructed.

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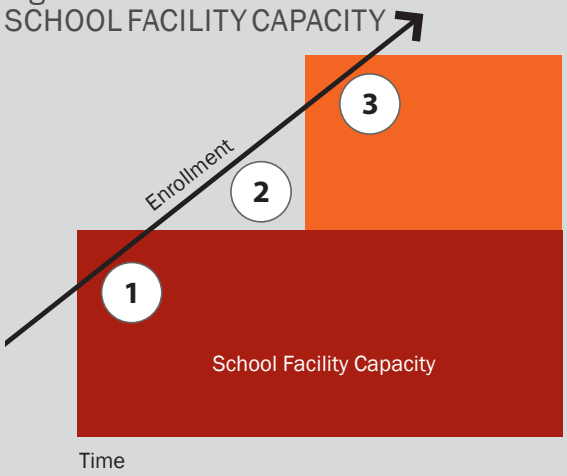
PLANNING FOR THE FUTURE

Efficient Provision of School Facilities

As noted earlier, the District has experienced a steady increase in enrollment over the past 20 years. To provide adequate school facilities for primary, middle, and high school students, the District received voter approval of school bond measures during this same period to construct new facilities and upgrade and maintain existing assets.

The District is committed to providing educational facilities in the most financially prudent manner possible. The key is to balance efficiency with maintaining quality educational environments. The District must balance steady enrollment growth with capacity, which must occur in distinct increments because new facilities, such as a new school or school addition, must be constructed at once, not incrementally. The graph in Figure 3 demonstrates the balance the District must maintain between enrollment growth and capacity.

Figure 3
SCHOOL FACILITY CAPACITY



1. As enrollment exceeds capacity, the District constructs one or more facilities to increase capacity. There is excess capacity following construction, but because of associated operating expenses, to be financially efficient, this extra capacity should not be too large.
2. After completion, the enrollment continues to increase and the capacity remains static. Eventually the extra capacity is absorbed, and the District is over capacity. Portable classrooms, larger class sizes, and other measures are used to accomodate students during this period.
3. Periodic capacity deficits are considered necessary, however, they soon need to be addressed with another increment of new capacity or serious overcrowding will result.

Potential Capacity Impacts of School Programs

In addition to the size of the facilities, school capacity is directly influenced by educational programs, such as early childhood education, all-day kindergarten, open enrollment, alternative education, Arts and Technology High School and personalized special needs education as described in Part A: Framework for Educational Excellence. The implementation of these programs has effectively changed the District's capacity because many of them have building space ramifications. For example, with half-day kindergarten, two classes can be accommodated using one classroom, but all-day kindergarten requires two classrooms to accommodate the same number of students. Improving educational programs may reduce school capacity. However, modest declines in capacity are outweighed by the improved educational results created by these programs.

Figure 4 illustrates how the enrollment has grown steadily and capacity has increased in increments when new schools or school expansions were completed. The capacity adjustment to accommodate educational programs decreased capacity in 2006. The capacity increase related to the addition of Lowrie and Trillium Creek primary schools is shown in 2012.

Figure 4
TOTAL ENROLLMENT VERSUS CAPACITY

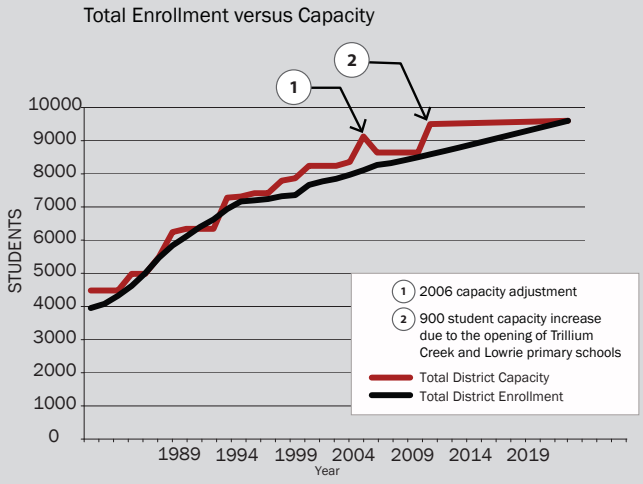


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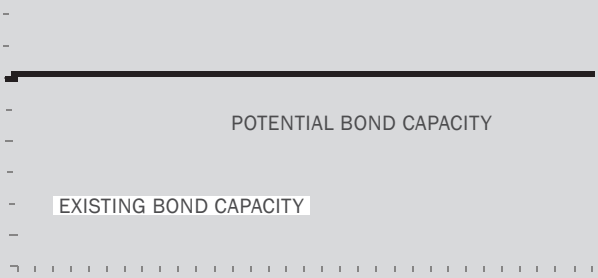
Figure 5
ANY PUBLIC SCHOOL DISTRICT
EXISTING VS. POTENTIAL BONDING CAPACITY



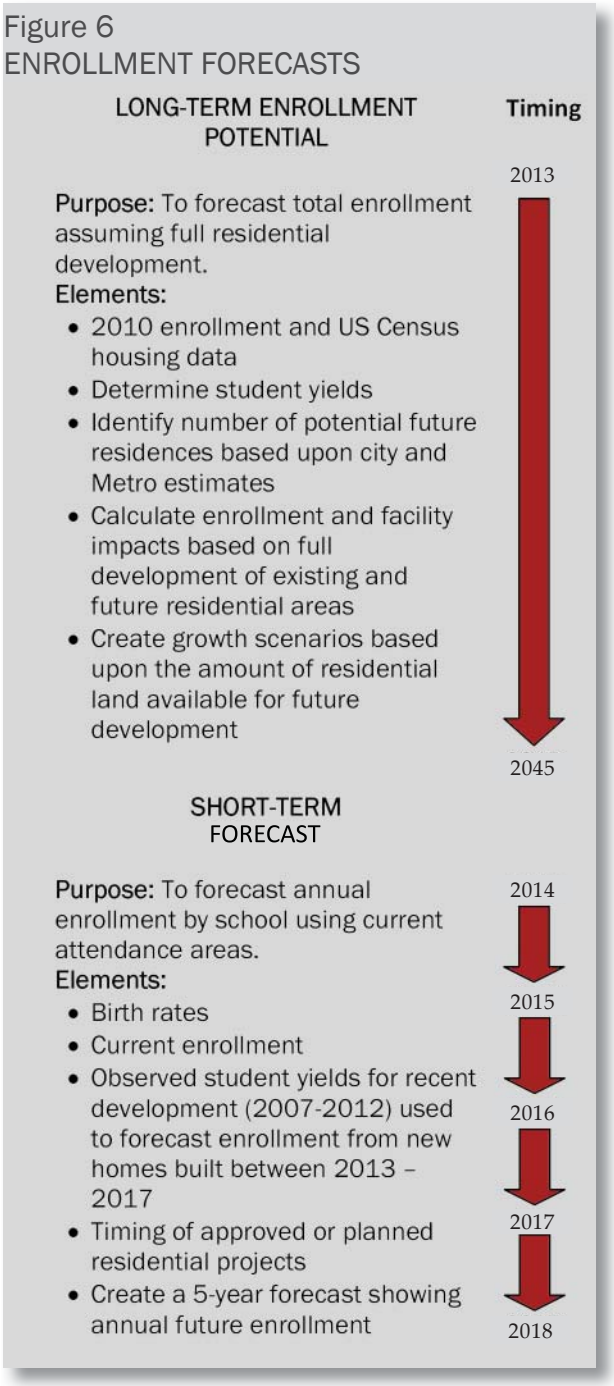
Potential Bonding Capacity

Since 2001, the District has held to its commitment to keep capital bond levies at or below $3.00 per $1,000 of assessed value at any given point in time. With previous bonds expiring in 2015, the LRPC sees an opportunity to present a capital bond to voters in the near future to continue the excellence in education the communities of Wilsonville and West Linn have come to expect.

Accommodating Future Enrollment Growth

Creating and maintaining a quality educational environment is constantly challenged by enrollment growth, which has increased by approximately 61% from 5,644 students in 1990 to 9,076 students in 2013. In addition to providing the capacity to give each and every student a superior education, the District must also maintain and upgrade existing facilities and constantly look for ways to improve educational programs and techniques.

Figure 6
ENROLLMENT FORECASTS



The District periodically evaluates demographic and land development trends assessing how they may affect enrollment and the ability of the schools to have the appropriate capacity to serve the students. These efforts involve understanding the potential enrollment impacts associated with full development of existing residential land within city limits and the Metro Urban Growth Boundary (UGB) as well as planned future expansion of the UGB and city limits. In addition to this long-term view of potential enrollment and associated facility needs, the District must also conduct short-term enrollment forecasts based upon the rate and location of new residential development for the next five years to respond to imminent enrollments demands. A summary of the purpose, elements, and timing associated with forecasts for long-term enrollment potential and short-term enrollment growth is provided in Figure 6. The long- and short-term evaluations are explained in the following sections: Long-Term Enrollment Potential and Short-Term Enrollment Forecasts.

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LONG TERM ENROLLMENT POTENTIAL

Long-term enrollment forecasts are used by the District to estimate facility needs. They rely on existing regional and local plans to understand what the District enrollment could be once defined areas for future residential development are fully developed. This planning analysis enables the District to anticipate future facility demands and secure necessary school sites and/or financing to continue to provide additional school capacity in a timely manner. The rate of development and enrollment change is very difficult to predict more than a few years ahead. Consequently, the long-term forecast is focused primarily on three elements: number of students per residence; number of potential future residences; and general timing for new residential development.

Understanding the number of students coming from all residences throughout the District is key to estimating the impact of future residential development. Data from 2010 is used because it is the most recent year where US Census data for the number of housing units (single and multiple family) and District enrollment are available. This data is summarized in Table 1.

To create an estimate of students per household, or "student yield", the 2010 District enrollment US Census housing count in Table 1 were compared to calculate student yields. The student yields for 2010 are assumed to remain constant for the purposes of estimating future enrollment as more residences are built within the District. The student yields for the four sub-areas in the District are summarized in Table 3.

The potential for new residential development within the current Urban Growth Boundary (UGB) and city limits is the second critical element to forecasting future development potential and enrollment. Areas within the UGB, including the cities of West Linn, Wilsonville, and Tualatin are planned for urban development. To provide a greater level of certainty regarding which areas may be eligible for future UGB expansion, Metro completed a process with local governments in 2010 to designate "urban reserves." These lands identify the locations where future UGB expansions can (urban reserves) and cannot (rural reserves) occur. Metro, in coordination with local governments, developed and adopted estimates in November 2012 for the residential development potential of these UGB expansion areas – several of which are located within the District. Any land brought into the UGB will come from areas designated as urban reserves. The estimated enrollment impact of the portions of the urban reserve areas within the District is summarized in Figure 7.

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Table 3
STUDENT YIELD FACTORS - 2010 ALL UNITS BY SUB-AREA

Grade Ranges	K-5	6-8	9-12	K-12
West Linn Sub-Area				
	0.21	0.11	0.15	0.47
Stafford Basin Sub-Area				
	0.17	0.10	0.12	0.39
Clackamas County Sub-Area				
	0.15	0.09	0.12	0.36
Wilsonville Sub-Area				
	0.20	0.10	0.13	0.44
District-wide Average				
	0.20	0.10	0.14	0.44

The third element considered is the general timing for expanding the UGB for urbanization. Following designation of urban and rural reserve areas in 2010, Metro considered potential expansion of the UGB. In 2011, Metro completed this review process, and no land in the West Linn-Wilsonville School District was added to the UGB. The next residential UGB evaluation for potential expansion, which is sponsored by Metro, is scheduled to occur in 2014-2016. In 2012, Metro reviewed the timing of when all designated urban reserves will likely be brought into the UGB based on the availability of public infrastructure and anticipated growth rates for the region. The time period considered extends to 2045. The Metro timing estimates for UGB expansion are used to form the District's long-term enrollment forecast and the growth scenarios described in the following section.

Growth Scenarios

Three long-term scenarios for future growth are considered. They are based upon adopted comprehensive plans and supporting information provided by the cities of West Linn, Wilsonville and Tualatin, Clackamas County, and Metro. The 2010 US Census was used to determine the number and general distribution of existing housing units. These scenarios provide a snapshot of how the District might change as additional development and redevelopment occurs within the current UGB and as urban reserve areas are brought into the UGB and fully urbanized.

Three scenarios are based on the following assumptions:

- The remaining undeveloped residential land within the existing UGB will develop to the maximum current density allowable.
- Primary school capcities will change in 2015 with full-day classes for all kindergarten students.
- The capacity for existing middle and high schools will remain constant. Existing guidelines for future new school sizes will also remain constant. The guidelines for new school sizes are: primary school - 450 to 550 students (or up to 800 with a campus design); middle school - 600 to 800 students; and high school 1,200 to 1,500± students.
- The ratio of school age children per residence will be consistent with 2010 student yield ratios calculated for all housing units by comparing the 2010 US Census for residential units with the 2010 enrollment (Tables 1 and 3). Considering all residences provides a good indicator of how many students to expect in the long-term across the District.
- The urban reserve areas brought into the UGB will be developed at densities assumed by Metro (typically 10 to 15 units per acre).

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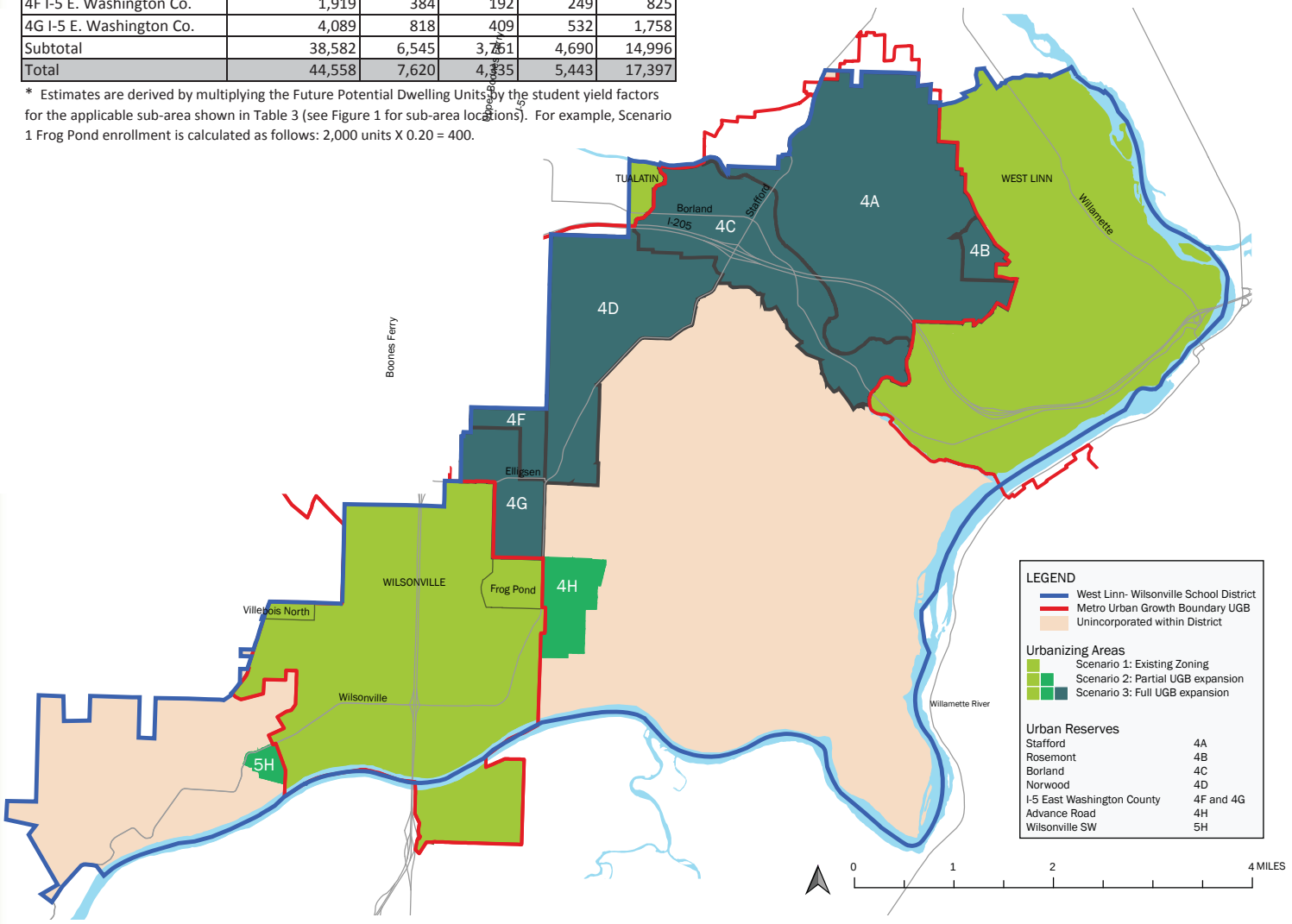
Figure 7

POTENTIAL ENROLLMENT OF FUTURE URBANIZED AREAS

Future Annexation of Urban Reserve Areas	Future Potential Dwelling Units	Future Enrollment Estimates*			
		Primary	Middle	High	Total
Scenario 1					
Frog Pond	2,000	400	200	260	860
Villebois North	976	195	98	127	420
Subtotal	2,976	595	298	387	1,280
Scenario 2					
4H Advance Road	2,400	360	216	288	864
5H Wilsonville Southwest	600	120	60	78	258
Subtotal	3,000	480	276	366	1,122
Scenario 3					
4A Stafford	15,456	2,628	1,546	1,855	6,028
4B Rosemont	1,200	204	120	144	468
4C Borland	6,200	1,054	620	744	2,418
4D Norwood	9,718	1,458	875	1,166	3,498
4F I-5 E. Washington Co.	1,919	384	192	249	825
4G I-5 E. Washington Co.	4,089	818	409	532	1,758
Subtotal	38,582	6,545	3,751	4,690	14,996
Total	44,558	7,620	4,335	5,443	17,397

* Estimates are derived by multiplying the Future Potential Dwelling Units by the student yield factors for the applicable sub-area shown in Table 3 (see Figure 1 for sub-area locations). For example, Scenario 1 Frog Pond enrollment is calculated as follows: 2,000 units X 0.20 = 400.



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GROWTH SCENARIOS

SCENARIO 1 - EXISTING ZONING WITHIN EXISTING UGB

Scenario 1 assumes no additional land is brought into the UGB, and all existing urban zoning designations remain in place (Figure 7). The majority of student enrollment anticipated as a result of residential development through 2018 (Table 6) is assumed to be within a few key areas within the Wilsonville city limit including Villebois Village and Brenchley Estates North and South. The remainder will be smaller redevelopment and infill projects. West Linn contains several smaller residential developments.

Two notable additions to these new units would be the Frog Pond area on the northwest corner of Boeckman Road and Stafford Road along with the northern portion of Villebois Village. Both of these areas are within the UGB, but have not been annexed. The northern portion of Villebois Village is part of the overall 2,300-unit master plan, and is simply awaiting annexation which will be initiated once development is imminent. Frog Pond is also within the UGB, and the city of Wilsonville is beginning a public process to develop a concept plan prior to annexation and development. The city expects this concept planning process to be complete for this area within the next two years. Preliminary city estimates suggest approximately 2,000 units once Frog Pond is fully redeveloped. All 2,300 residential units in Villebois Village are assumed to be built as part of Scenario 1.

SCENARIO 2 - EXISTING ZONING WITH EXISTING UGB, PLUS URBAN RESERVES MOST LIKELY TO COME INTO THE UGB WITHIN THE NEXT 5 TO 10 YEARS DEVELOPED AT URBAN DENSITIES

Scenario 2 includes the development estimated in Scenario 1, and adds the assumption that the urban reserves identified by Metro as having infrastructure available in the short-term will also be developed at urban densities (Figure 7). Only the Advance Road and Wilsonville Southwest urban reserve areas in Wilsonville have been identified as likely sites to be ready within the next five to ten years. Advance Road includes a 40-acre site adjacent to the Wilsonville city limit, which has been jointly planned by the City and District for a community park, primary school, and middle school. District staff coordinated with the City of Wilsonville and Metro to bring these 40 acres into the UGB in November 2013. These two areas are estimated to accommodate approximately 3,000 new housing units. Other than limited infill development and redevelopment, the change in residential units in West Linn is assumed to be minor.

SCENARIO 3 - EXISTING ZONING WITH EXISTING UGB, PLUS ALL URBAN RESERVES WITHIN THE DISTRICT BOUNDARIES DEVELOPED AT URBAN DENSITIES

Scenario 3 includes the development estimates in Scenario 2 and assumes that all remaining urban reserves are developed at urban densities (Figure 7). This includes land located in the north-central portion of the District with Stafford Basin/Borland Road representing the major areas involved. Several of the urban reserve areas are only partially within the District. All of these areas are estimated to yield almost 34,000 residential units. Metro anticipates that development in these urban reserve areas will not occur until around 2045. This amount of development would clearly have an enormous impact on enrollment. The challenges will encompass much more than school facilities, including governance and providing a wide range of urban services and facilities. The issues related to urbanization of these areas will continue to be evaluated by Metro and local government. Subsequent updates of this plan will need to revisit the magnitude and timing of residential development in Scenario 3.

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FUTURE SCHOOL NEEDS

Translating Residential Development into Enrollment Impact

The future development scenarios must be interpreted to estimate the enrollment impacts associated with each scenario. The number of estimated residential units is multiplied by the district-wide student yield factors presented in Table 3. Table 4 summarizes the district-wide future potential enrollment impact by school type. This information is then used to help identify the related school facilities necessary to accommodate future enrollment.

Table 4
FUTURE POTENTIAL SCHOOL FACILITY NEEDS SUMMARY

	Primary	Middle	High	Total
Existing Conditions				
2015 Educational Capacity*	4,082	1,932	3,306	9,320
2013 Enrollment (9/30/13)	4,026	2,066	2,879	8,971
Remaining Capacity	56	-134	427	349
Schools	9	3	3	15
Scenario 1: Existing Zoning & UGB				
Enrollment in addition to existing conditions	1,451	756	893	3,100
Total enrollment district-wide	5,477	2,822	3,772	12,071
Additional educational capacity needed once remaining capacity is utilized	1,395	890	466	2,751
Schools required in addition to existing conditions	2.8	1.3	0.3	4.4
Total schools required district-wide	11.8	4.3	3.3	19.4
Scenario 2: Existing Zoning & Expanded UGB (Advance Road)				
Enrollment in addition to Scenario 1	480	276	366	1,122
Total enrollment district-wide	5,957	3,098	4,138	13,193
Schools required in addition to Scenario 1	1.0	0.4	0.2	1.6
Total schools required district-wide	12.8	4.7	3.6	21.0
Scenario 3: Existing Zoning & UGB				
Enrollment in addition to Scenario 2	6,545	3,761	4,690	14,996
Total enrollment district-wide	12,502	6,859	8,828	28,189
Schools required in addition to Scenario 2	13.1	5.4	3.1	21.6
Total schools required district-wide	25.8	10.0	6.7	42.6

* Educational capacity changes only for primary schools due to full-day kindergarten.

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Enrollment Impact across the District

The student enrollment across the District for the three scenarios is not evenly distributed, and the concentration of students is expected to vary widely between sub-areas. In Scenario 1, the majority of the enrollment growth is forecast for the Wilsonville area with approximately 3,000 new students. West Linn is expected to see moderate growth with almost 500 new students, and the Stafford Basin and Clackamas sub-areas are anticipated to have insignificant enrollment gains.

For Scenario 2, enrollment growth is expected to be the strongest in the Wilsonville and Clackamas sub-areas with the development of the Advance Road and Wilsonville Southwest urban reserve areas, accounting for a potential of over 1,100 new students.

Scenario 3 would produce unprecedented enrollment growth totaling nearly 15,000 new potential students. Because of the uncertainty over the fate of the urban reserve areas and the distant horizon for their development, the potential enrollment and school facility impacts of Scenario 3 are not considered in the following evaluation of school facility needs. Scenario 3 should be revisited in future updates of the Long Range Plan.

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SHORT-TERM ENROLLMENT FORECASTS

Short-term forecasts are designed to help the District anticipate enrollment looking out five years into the future. Forecasts are based on recent demographic trends, existing residences, and approved residential developments. A short-term forecast was prepared in November 2013 by Davis Demographics and Planning (Exhibit B). The development data was created by interviewing city staff regarding approved residential developments and the timing for their completion, and the types of residences involved. As part of this analysis, a large sample of new housing units, built within the last seven years, was taken to estimate the average number of students generated by new (built between 2007-2013) single family detached, multi-family attached (e.g., townhouses, condos, and apartments). These student yield factors shown in Table 5 were used in the projections. It shows that single family, detached residences typically generate approximately one student for every two homes while four or more multi-family attached or apartment units produce one student. The student yield factors were applied to the number and types of anticipated new homes to forecast future enrollment. The short-term projection anticipates modest enrollment growth from 8,971 students in September 2013 to 9,900 students in 2018. Table 6 summarizes the results of the short-term forecast.

With the opening of Lowrie and Trillium Creek primary schools in September 2012, the primary school capacity is 4,346 students with approximately 4,000+ students to accommodate. Similarly, the high schools, with a capacity of 3,306 and an enrollment of approximately 2,900, will continue to be adequate. The primary problem will be the increasing enrollment pressure on middle schools, which is estimated to be over capacity by approximately 512 students in 2018.

Table 5
STUDENT YIELD FACTORS (students per household)
FALL 2013 PROJECTIONS

Grade Ranges	K-5	6-8	9-12	K-12
Single Family Detached Units (724 built*)				
Student Yield Factor	0.31	0.12	0.14	0.56
Multi-family Attached Units (475 built*)				
Student Yield Factor	0.10	0.05	0.06	0.21
Average				
Student Yield Factor	0.22	0.09	0.10	0.41

* From a sample of units built between 2007-2013

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Table 6
2013 SCHOOL CAPACITY & ENROLLMENT FORECAST

SCHOOL	CAPACITY		ENROLLMENT			PROJECTIONS*				
	2013	2015	2011	2012	2013	2014	2015	2016	2017	2018
PRIMARY										
Boeckman	479	457	631	555	541	541	508	489	464	439
Boones Ferry	689	645	823	531	536	608	596	599	609	598
Lowrie	476	432	0	407	480	574	668	753	819	898
Wilsonville Subtotal			1,454	1,493	1,557	1,722	1,772	1,841	1,892	1,935
WV Available Capacity	1,644	1,534		151	87	-78	-238	-307	-358	-401
Bolton	363	341	269	278	300	284	284	282	290	299
Cedaroak	407	385	413	318	320	311	301	293	287	294
Stafford	501	479	525	450	512	436	434	423	422	387
Sunset	432	410	409	285	296	409	407	394	398	402
Willamette	501	479	609	510	549	594	602	591	570	571
Trillium Creek	498	454	0	458	492	444	433	416	409	387
West Linn Subtotal			2,225	2,299	2,469	2,478	2,460	2,398	2,376	2,339
WL Available Capacity	2,702	2,548		403	233	224	88	150	172	209
Subtotal			3,679	3,792	4,026	4,201	4,233	4,239	4,268	4,274
Total Available Capacity (K-5)**	**4,346**	**4,082**		**554**	**320**	**145**	**-151**	**-157**	**-186**	**-192**
MIDDLE										
Wood			706	737	715	831	869	934	994	1,048
Avail. Capacity	640	640		-97	-75	-191	-229	-294	-354	-408
Athey Creek			602	607	637	584	570	608	624	677
Avail. Capacity	624	624		17	-13	40	54	17	0	-53
Rosemont Ridge			692	684	714	769	765	767	749	719
Avail. Capacity	668	668		-16	-46	-101	-97	-99	-81	-51
Subtotal			2,000	2,028	2,066	2,184	2,204	2,308	2,367	2,444
Total Available Capacity (6-8)	**1,932**	**1,932**		**-96**	**-134**	**-252**	**-272**	**-376**	**-435**	**-512**
HIGH										
Wilsonville	1,472	1,472	1,084	1,121	1,162	1,232	1,313	1,315	1,351	1,451
West Linn	1,748	1,748	1,506	1,553	1,612	1,555	1,609	1,604	1,632	1,626
Art Tech	86	86	86	105	105	105	105	105	105	105
Subtotal			2,676	2,779	2,879	2,891	3,027	3,024	3,088	3,182
Total Available Capacity (9-12)	**3,306**	**3,306**		**527**	**427**	**415**	**279**	**282**	**219**	**124**
TOTAL			8,355	8,599	8,971	9,276	9,464	9,571	9,722	9,900
Total Available Capacity (K-12)	**9,584**	**9,320**		**985**	**613**	**308**	**-144**	**-251**	**-402**	**-580**

* Projections assume that current school attendance areas remain unchanged.

** Assumes full-day kindergarten beginning in 2015.

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DISTRICT PROPERTIES

In anticipation of future school needs, the District has acquired several properties, which could potentially be used to accommodate new school facilities. The scenarios assume the District will use these available sites. Additional sites will need to be acquired, especially in Scenario 2. The properties owned by the District are shown in Table 7.

All of the District properties are available for future school use. As the enrollment and attendance area picture changes with future expansion of the UGB, the District may need to sell a property holding in favor of another more suitable location. However, the appropriateness of using any of the sites should be subject to a detailed review of the site selection criteria prior to committing a specific site for school use. The availability of school sites between 10 to 50 acres is very limited due to development that has occurred and the UGB, which prevents urban growth, including schools, on rural and resource lands. The constrained number of possible sites will often make it impractical for the District to construct new schools on or near an "ideal" location. In addition, future expansions of the UGB may cause significant shifts in future attendance areas and ideal school locations. Because of this uncertain future, it will be critical for the District to evaluate its land holdings for their value as future school sites. The District will work closely with local governments and property owners in the planning and development of these areas.

Table 7
SCHOOL DISTRICT PROPERTIES

Property	Total Acreage	Location
Dollar Street	23 acres	Between Dollar Street and Willamette Falls Drive in West Linn
Oppenlander	15.6 acres	North Side of Rosemont Road in West Linn
Frog Pond	25 acres	NW of Stafford and Boeckman Roads in Wilsonville
Advance Road	30 acres	South side of Advance Road immedietaly east of Wilsonville city limit in Wilsonville

District staff coordinated with the city of Wilsonville and Metro to bring the Advance Road property within the Urban Growth Boundary in November 2013.

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ACCOMMODATING SCHOOL FACILITY NEEDS

Short-Term: School Facility Needs

The short-term enrollment forecast in Table 6 illustrates what the District should expect over the next five years. As noted above, the most acute capacity problems will be associated with middle schools, which are currently operating above capacity. However, this forecast also indicates that primary school enrollment will probably need to be redistributed between schools to allow all primary schools to operate within their capacity limits.

Long-Term: Scenario 1

Looking beyond the next five years, the majority of the Scenario 1 enrollment growth (3,000 + students) is expected from the Wilsonville sub-area. West Linn will contribute almost another 500 students. Very little enrollment growth is expected from the other sub-areas.

Based on communication with Metro and local governments, full development of this scenario, which includes the enrollment growth estimated in the short-term forecast, could be anticipated between 2020 and 2030. Assuming that existing capacity is fully utilized before building new school capacity, a total of four new schools will be necessary. In addition, Sunset Primary School is ending its useful life and must ultimately be replaced for a total of five new schools. The need for new schools will occur gradually over this time period. The most pressing need will be to construct the planned middle school on the Advance Road property and to replace Sunset Primary with a new school on the same site. The Advance Road urban reserve area is not planned to be included in the UGB for some time. However, the District worked with Metro and the city of Wilsonville to bring the school site into the UGB November 2013. The District will need to continue to work with the city of Wilsonville to annex the property into the City in order to develop that site. The Arts and Technology High School is operating in a leased building, and a new facility must be found within the next several years. A summary of the primary, middle, and high school needs for Scenario 1 is provided in Table 8.

Table 8
SCENARIO 1 FUTURE POTENTIAL SCHOOL FACILITY NEEDS

	2015 Capacity	Additional Capacity Needed	New Schools	Location and Approximate Timing
Primary Schools	4,082	1,395	3.8	Replace Sunset - 2016 Frog Pond - 2020-2025 Advance Road - 2020-2025 Portables may be needed when Scenario 1 approaches full development.
Middle Schools	1,932	890	1.3	Advance Road - 2016 Portables may be needed when Scenario 1 approaches full development (2020-2025).
High Schools	3,306	466	0.3	Establish a new location for Arts and Technology High School - 2016 Portables may be needed when Scenario 1 approaches full development (2020-2025).
Total	9,320	2,751	5.4	

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Long-Term: Scenario 2

The majority of the enrollment growth (over 1,100 students) is expected from the Clackamas County sub-area near Wilsonville around the Advance Road site. The Wilsonville sub-area will also see growth due primarily to the Wilsonville Southwest urban reserve area. West Linn and Stafford Basin sub-areas will contribute very little additional enrollment.

Based on communication with Metro and local governments, full development of this scenario could be anticipated between 2025 and 2040. Assuming that existing capacity is fully utilized before building new school capacity, a total of 1.6 new schools will be necessary. Perhaps most significant will be the probable need for a third high school. Scenario 1 is expected to exceed the capacity of the three existing high schools (including the Arts and Technology High School), but probably not enough to justify building a fourth school. However, the additional enrollment expected from Scenario 2 should create the need for a new facility. A summary of the primary, middle, and high school needs for Scenario 2 is provided in Table 9.

Table 9
SCENARIO 2 FUTURE POTENTIAL SCHOOL FACILITY NEEDS

	Additional Capacity Needed	New Schools	Location and Approximate Timing
Primary Schools	480	1.0	New facility to accommodate over capacity situation with full development of Scenario 1 (2030).
Middle Schools	276	0.4	New facility to accommodate over capacity situation with full development of Scenario 1 (2030).
High Schools	366	0.2	New facility to accommodate over capacity situation with full development of Scenario 1 (2025).
Total	1,122	1.6	

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NEXT STEPS

The short-term enrollment forecast coupled with a longer-term evaluation of what potential lies ahead are essential for proactive planning and being prepared for future district needs. Our understanding of current enrollment, capacity, and short-term enrollment growth highlight the immediate needs for additional middle school capacity, replacement of Sunset Primary School, and finding a permanent home for the Arts and Technology High School. The long-term estimates, by their very nature, are not as clearly defined, and the timing for new facilities is only generally understood. Future influences, such as the economy, household demographics, and evolving educational programs, will influence the ultimate timing of these long-term facility needs. The District must continuously monitor future facility needs. Several "next steps" should be followed between now and the next update of the Long Range Plan:

- Monitor the effect of open enrollment on facility capacity and needs. This program began in September 2012, and it will take some time to understand how it will impact the District.
- Evaluate the potential impact of all-day kindergarten on primary school capacity as it shifts from an optional to a standard program.
- Prepare a 5-year short-term enrollment forecast annually to enable the District to proactively anticipate future enrollment and related capacity issues.
- Continue coordination with the City of Wilsonville regarding the planning and development for Frog Pond and north Villebois.
- Monitor the urban reserves planning being conducted by Metro in coordination with local governments.

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C

Capital Improvements

INTRODUCTION

This section, Capital Improvements, is the third and final section of the Long Range Plan, and describes criteria for evaluating future capital improvement projects and the process for planning a capital improvement program. The three sections that collectively make up the District's Long Range Plan and provide the framework for school facility needs are:

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

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

Section C:
Capital Improvements – Outlines the capital improvement planning process and identifies criteria for identifying future capital improvement projects.

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CAPITAL IMPROVEMENT PROGRAM (CIP) HISTORY

District residents have approved Capital Improvement Program (CIP) bond measures in 1979, 1988, 1989, 1992, 1997, 2002, and 2008. This pre-planned sequence of smaller bonds (rather than less frequent large bonds) has enabled the District to successfully balance ongoing maintenance, needed facility improvements, and expanding enrollment and capacity in a way that minimizes public debt and provides lasting solutions in real time.

The last CIP bond measure, passed in 2008, represents the most recent step toward fulfilling the District's Long Range Plan first envisioned over 20 years ago. Highlights of the bond included: construction of new libraries and kitchens at existing schools; various athletic field improvements; new technology district-wide; total renovation of the district administration building and technology hub center; and construction of a new primary school in West Linn and a new primary school in Wilsonville. The bond provided additional square footage in excess of 135,000 square feet to district facilities, as well as contributing to the local economy during an unprecedented local/regional/national economic downturn.

The District's CIP is based on an over-arching strategy to "capitalize" general fund expenses by incorporating bond planning and spending with daily facility management. This allows regularly occurring bond eligible expenses to be incorporated into the CIP thus preserving general fund monies. Over the bond's 5-year period, including bond eligible expenses in the CIP has freed up over $6-million in expenses that otherwise would have been paid by the general fund. As a result, more annual resources are available for classroom instruction.

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LINKING THE LONG RANGE PLAN AND THE CIP

Aided by the Long Range Plan, the CIP has successfully managed both growth and life cycle replacement in the District over the last 20 years. Long Range Plan recommendations have been folded into the District's CIP as specific school projects since the Plan's inception:

- In the mid 1990s, there was a need for middle school capacity. The 1997 bond responded to this need with the construction of Rosemont Ridge Middle School which opened in 1999.
- Similarly, an aging Wilsonville Primary School and growing primary level enrollment in Wilsonville prompted the construction of Boones Ferry Primary which opened fall 2001.
- The next greatest need identified by the Long Range Plan was overcrowding at the high school level. As part of the CIP, in 2000 and 2005, both West Linn High and Wilsonville High received needed upgrades and additions to complete their master planned potential.
- The 2008 bond focus was on primary school crowding which has been eliminated well into the future by the opening of Lowrie Primary School in Wilsonville and Trillium Creek Primary School in West Linn in the fall of 2012.
- Each consecutive capital bond program over the past decades has included funding for land to accommodate future planned growth, money for instructional technology and funding to minimize/eliminate deferred maintenance to the extent possible. This attention to future risk has proven to be instrumental in preparing successive school boards with the tools needed to maximize classroom instruction while being able to respond effectively to meet facility needs.

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CAPITAL IMPROVEMENT PROGRAM PROCESS

School Board Direction

The School Board is committed to engaging stakeholders in strategic planning and decision making. Part of this commitment is the appointment of the citizen Long Range Planning Committee (LRPC), which has been charged with continually examining existing functional needs stemming from aging facilities, expected student population growth, and education program equity for all students. Under Board direction, the LRPC used the Long Range Plan to make recommendations for the 2008 Capital Bond Program. After the 2013 update of the Plan, the Board may again ask the LRPC to review the needs of the District and recommend projects for inclusion in the next CIP.

Identification of Facility Needs

Consistent with the District's progressive planning mindset, the School Board has consistently provided guidance for long term capital needs through thoughtfully created and prioritized Board Goals. Since the summer of 2011 the Board has given priority to forward planning and facility stewardship by adopting the following goals over the last three years:

- 2011/12 Board Goal #2 states; "Continue to manage bond projects for maximum value, and review, revise, and update the District's Long Range Facilities Plan."
- 2012/13 Board Goal #3 states; "Manage facilities and long range planning to optimize the student learning environment and the stewardship of assets."
- 2013/14 Board Goal #3 states; "Conduct long-range capital improvement and financial planning through processes and practices that lead to long-term financial stability and sustainability and are responsive to community growth and student learning needs of the future."

As District enrollment increases, and life-cycle replacement schedules narrow, the Board has provided more detail and direction to the Long Range Planning Committee with the following:

1. Review the West Linn-Wilsonville School District Long Range Plan with a specific focus on determining the impact of Villebois growth and potential growth in the Stafford Basin area as well as "infill" development in West Linn and Wilsonville;
2. Develop a list of potential projects/capital items, which could be included in the next bond issue;
3. Develop possible strategies for a future bond issue; and
4. Re-calibrate student capacity at all schools.

Throughout this study, the LRPC arranged interviews with Board members, administration, principals, building administrators, classified employees, certified employees, the District Safety Committee, the District Facility Use Fee Review Committee, the District Technology Stewardship Committee, and the District's land-use planner, architect, and mechanical/electrical engineer.

The 2014 edition of the Long Range Plan recognizes the value of community involvement in developing long term vision and positive outcome through collaboration between patrons, the Long Range Planning Committee and the School Board.

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Project Evaluation Criteria

Following the District's vision themes, the Operations Department staff routinely canvass the District to determine the current state of existing facilities and perceived near-term (five year) needs. To weigh this information, several evaluation criteria have been developed. Each criterion has unique relevance to District goals and the CIP:

- **Growth:** Primarily related to student enrollment increases; also program and staff growth and expanded offerings.
- **Equity:** The notion that every patron's child should enjoy the same educational experience regardless of which school in the District they attend.
- **Teaching and Learning:** School facilities must be designed and have adequate capacity to accommodate successful educational programs, including special education, and early childhood development.
- **Health and Wellness:** New state and federal mandates require a health and wellness policy. The District adopted this new policy in 2006. It impacts health curriculum, physical education and food service.

- **Energy Conservation:** Technological advances in mechanical and electrical systems provide significant savings in annual operating costs.
- **Sustainability:** The CIP assumes all projects will be environmentally friendly and sustainable to the greatest extent feasible. The District recognizes that green buildings make a positive impact on the health and environment of children, as well as reduces operating expenses, and helps to create a sustainable community.
- **Safety & Security:** Prioritized responsibility paramount to all other operational details. Includes hazardous material management and abatement.
- **Technology:** Recognition that today's education requires knowledge and skill acquired through use of computer and electronic technology. Also relates to how the District carries out instruction and business responsibilities.
- **Stewardship:** The strong community support experienced over many years has provided the District with some of the finest public education facilities in the state. Stewardship contemplates measures needed to protect these investments, including capital-level maintenance and life cycle replacement.

In addition, the supplemental criteria regarding community partnerships and community athletics affect all CIP themes. These projects will provide the District with the ability to respond proactively to opportunities that arise to enable the District to continue to provide quality facilities in efficient ways.

- **Community Partnerships:** Joint ventures with in-district groups to further the District's mission and empower community interests to the benefit of all. Category of opportunity at School Board discretion.
- **Community Athletics:** Limitations on District-sponsored athletics has caused significant growth in community sponsored athletic offerings. District facilities remain the primary venue for all organized sports in the District. The community expects the District will construct and maintain athletic facilities as required.

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CIP TIMING AND SEQUENCE

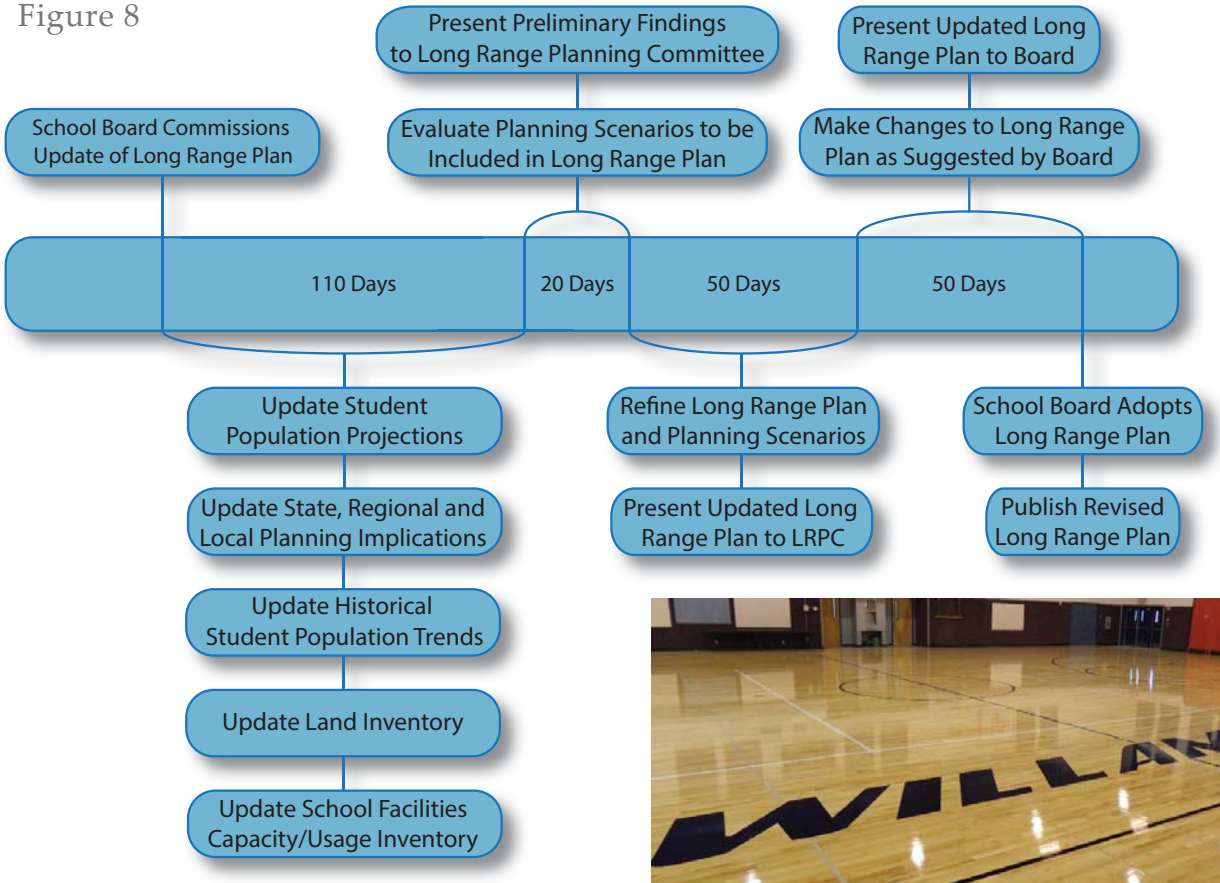
While only the School Board can initiate and implement a Capital Bond election, the LRPC remains engaged year-round in examining facility needs and contemplating next steps. One component of this on-going stewardship is recognition of the process the District has historically established leading up to successful passage and funding of Capital Bond Programs.

This process and timeline is designed to solicit interest and feedback from internal and external stakeholders throughout the District in a very measured, deliberate and inclusive way. Over time District staff, students, parents, and patrons are introduced to the facility needs of the District with increasing detail, building consensus, and purpose toward successful funding outcomes.

Updating the Long Range Plan

The process of assessing the need for a Capital Bond Program is initiated when the School Board commissions an update of the Long Range Plan. District staff then gather the latest data and projections for student population, facility needs and land inventory. This information allows staff to develop a draft revision of the Long Range Plan. This draft is then reviewed with the LRPC, refined, and presented again for approval. The approved Long Range Plan is then presented to the School Board for final review, changes and adoption.

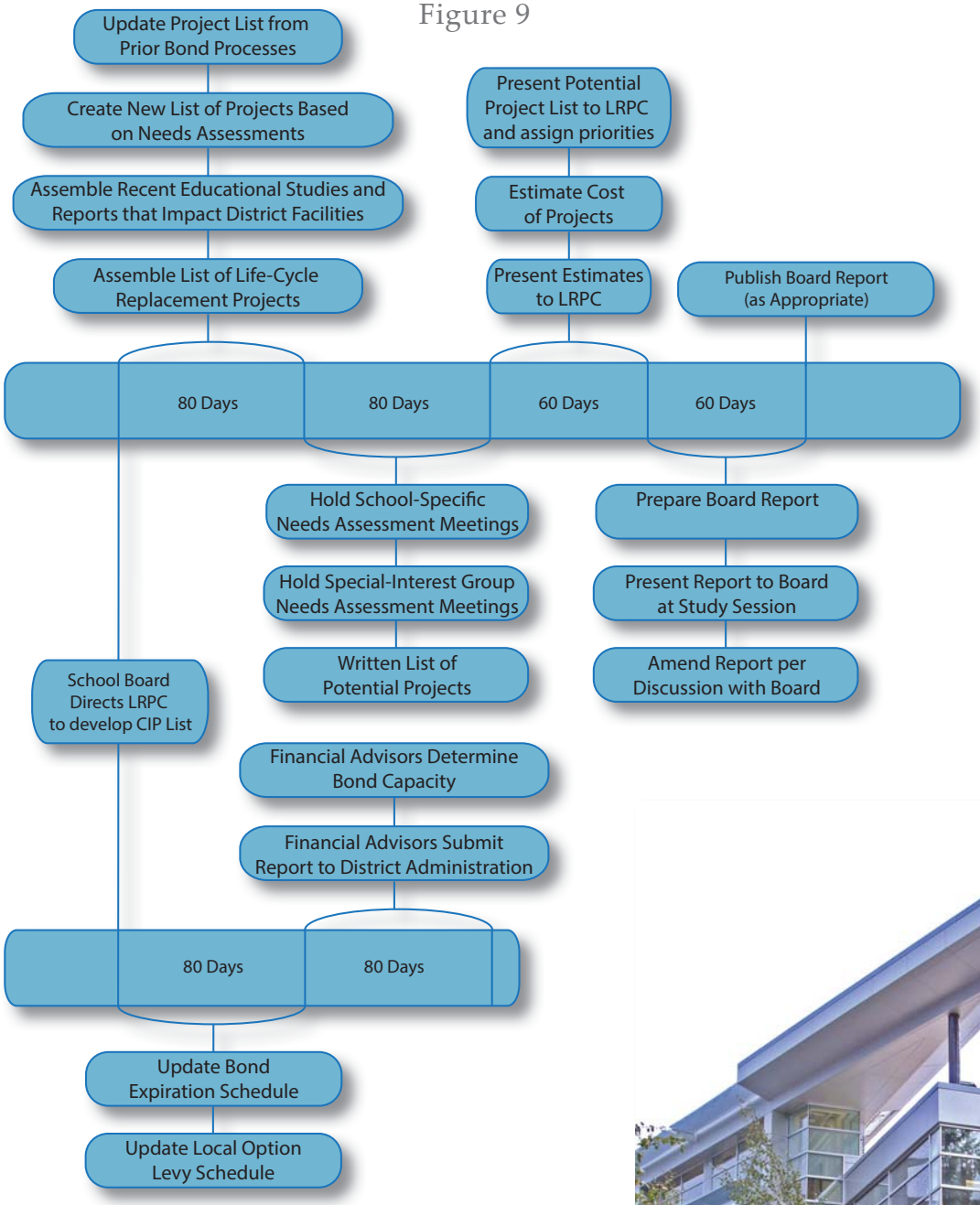
Figure 8



Developing a New CIP

If the updated Long Range Plan demonstrates the need for significant capital improvements the School Board directs the LRPC to develop a new CIP. Improvements added to the new list include legitimate uncompleted projects from prior bond processes and projects discovered over time that await funding. Additional projects may be identified based on impacts to facilities due to enrollment projections, educational program changes and "needs assessment" meetings with each school and special-interest groups to discuss desired improvements. This list, and associated conceptual cost estimates, are brought to the LRPC for review and inclusion on the capital improvement list. Amendments are made to the CIP based on discussion with the School Board, after which, the new CIP is published.

Figure 9



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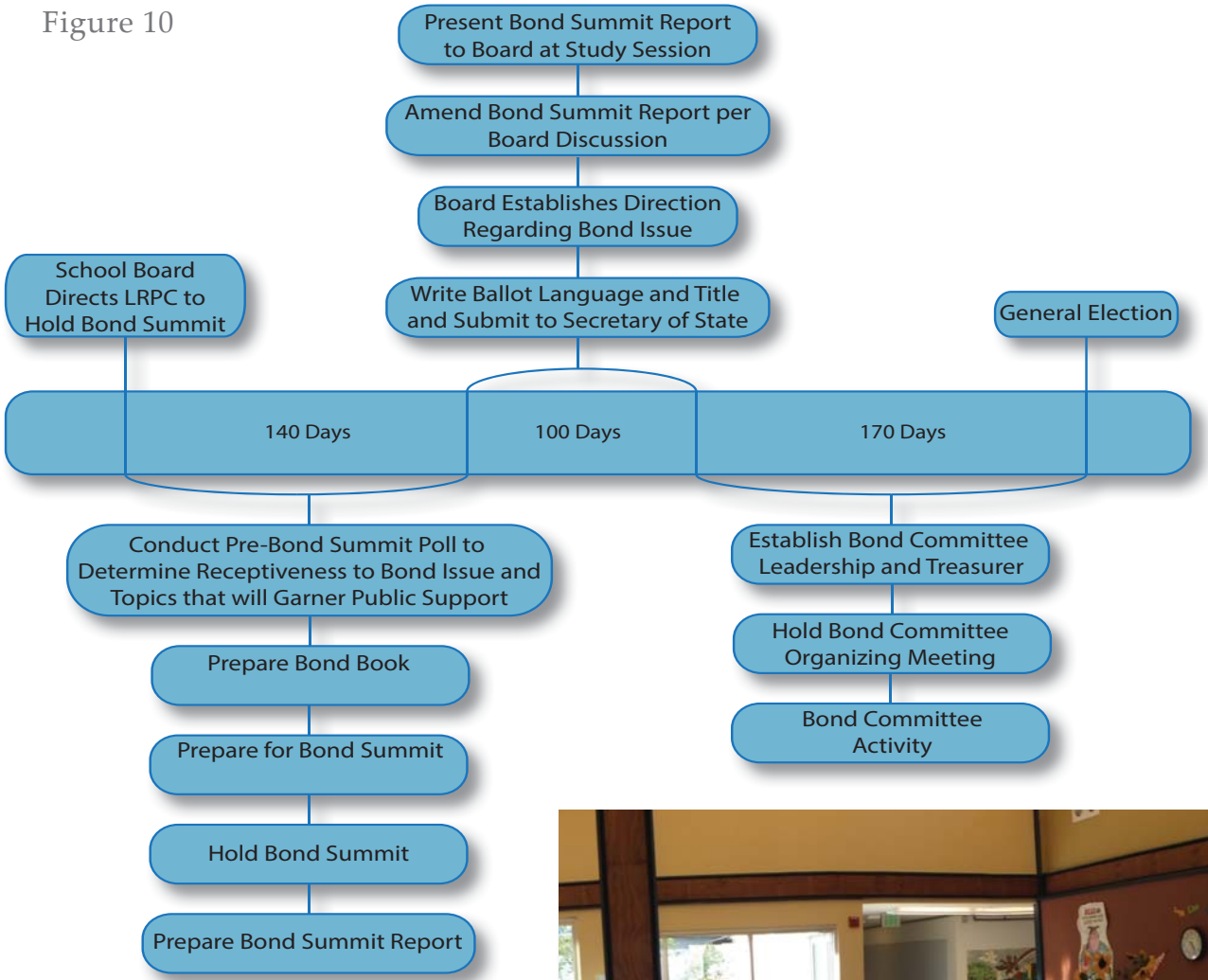
Bond Summit and General Election

In response to the published CIP, the School Board may direct the LRPC to hold a bond summit. The purpose of the bond summit is to provide stakeholders an opportunity to discuss the facility needs of the District and to voice preferences for what needs should be prioritized in the event of a bond election. After the bond summit, staff prepares a report of the findings which is brought to the School Board for review. The amended report is then used as the basis for determining direction regarding a bond issue. If the School Board decides to proceed with a bond measure, the languge is drafted and submitted to county election officials. A bond committee is then established and the election process proceeds towards the vote.

Figure 10



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CAPITAL IMPROVEMENTS

Part C of the District Long Range Plan provides recognition that physical improvements to District facilities is necessary for the advancement of the school district in reaching its goals for quality instruction and learning for all children. This section also makes a strong connection between those instructional goals and the built environment. There is plenty of data (Exhibit C) to confirm that safe, efficient, modern facilities contribute significantly to student achievement and community satisfaction.

While this section does not list specific projects that may be included in a Capital Improvement Program, it does provide appropriate background and a legitimate process by which important capital work can be processed, prioritized, funded and implemented.

West Linn-Wilsonville School District is committed to proactively engaging our community stakeholders in understanding long-term and short-term capital needs of the District. A companion document entitled "Capital Improvement Program", provides background, motivation and detail as related to the immediate capital needs of the District based on this 2014 Long Range Plan.

In general, that document is created as described below and will be utilized as a resource for future planning:

CAPITAL IMPROVEMENT PROGRAM

A capital improvement program (CIP) is a five-year plan for financing major public assets based on District-adopted master plans, goals and policies. The purpose of a CIP is to match scarce financial resources with the capital needs of a growing school-community and to preserve or enhance existing capital assets to provide efficient district services.

A CIP provides many benefits:

- Allows for a systematic evaluation of all potential projects at the same time.
- The ability to stabilize debt and consolidate projects to reduce borrowing costs.
- Serves as a public relations and education program development tool.
- A focus on preserving the school District's infrastructure while ensuring the efficient use of public funds.
- An opportunity to foster cooperation among departments and an ability to inform other units of government of the entity's priorities.

Development of a CIP that will insure sound fiscal and capital planning requires effective leadership and the involvement and cooperation of all community stakeholders. For that reason, the District School Board and Long Range Planning Committee actively work every day toward responsible leadership and decision-making for the future of West Linn-Wilsonville schools.

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Exhibit A

WEST LINN-WILSONVILLE SCHOOL DISTRICT
LONG RANGE PLAN
MAY 3, 2013

LONG RANGE PLAN-2013 UPDATE PROCESS

The last review and update to West Linn-Wilsonville School District building education capacity was completed in 2006. In 2008 District voters approved a Capital Bond that funded additions, improvements and new facilities to be constructed at many district schools. Specifically two new primary schools were added as well as major library addition/remodels at Cedaroak Park, Stafford and Bolton Primary schools. In response to this work all district primary level boundaries were adjusted to accommodate nine primary schools in 2012 with the new Lowrie Primary in Wilsonville, and Trillium Creek Primary, West Linn opening Fall 2012.

Over this same period of time, the educational program within the District has evolved in response to various research based initiatives, state/federal requirements and local education program investments.

During 2012/13 the District Long Range Planning Committee has worked to revise and update the District Long Range Plan. This effort involved a reformat of the long-range plan into three parts:

Part A: Framework for Educational Excellence – Describes the values, themes and educational needs and approaches that are the basis of facility planning and maintenance 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 identifies future capital improvement projects.

The most recent effort to update the Long Range Plan has been an update to Part B with a focus on District Educational Capacity.

DISTRICT EDUCATIONAL CAPACITY

Strictly defined, the district educational capacity is an answer to the question; "Given district academic programs delivered under the best conditions, how many students can district schools safely, effectively and efficiently accommodate?"

Factors that influence this answer are; preferred class size, class schedules, school building configuration, instructional space size, special room/building

accommodations and academic program. Secondary, is consideration of the following:

Porches	Libraries	Tech Labs
Special Education	All-Day Kindergarten	Pre-School
Half-day Kindergarten	STEM	Robotics
Blends	Science Labs	Lunch Service
After-School Care	Music	Art
Resource Rooms	Staff Rooms	Learning Gardens
Outdoor Classrooms	Playgrounds	Storage
Prep Space	Meeting Space	Self-Contained Classrooms
World Language	Life Learning	ESD Classrooms
ELL Classrooms	Counseling Space	Dual Language

To determine the preferred education capacity for each building, during March/April 2013, meetings were held with each individual principal at each school to discuss how each building was being used. Floor plans of each building were utilized to identify each space and assign the current use. Principals discussed class schedule and routine along with the unique offerings at each school that influenced their decisions regarding necessary space, timing and adjacency based on the school day.

Each floor plan included a chart to recognize essential spaces, specific programs and teaching stations. The district has historically used a preferred class size based on type of instruction and grade level.

Traditionally, the district has set the following for class size:

- K-3 22-students/regular classroom
- 4-8 25-students/regular classroom
- 9-12 27.5-students/regular classroom

These numbers matched against teaching station count to calculate an exact number of students that each space can accommodate under preferred conditions. These values totaled equate to the educational capacity of each individual school.

Also, it's important to recognize that not all spaces have a fixed occupancy load. For example, each primary school has set aside one classroom for preschool. This is one teaching station, yet because preschool is a tuition based program that resident children attend during the class day, the occupancy count is -0- because these students are "non-typical" and are not recognized as being included in district-reported enrollment numbers reported to the State Department of Education.

Similar spaces at the primary level are those support classrooms (teaching stations) where students rotate throughout the day such as music, art, gym, World Language, etc., yet do not add to the building capacity calculation.

The following working example of a primary school demonstrates the process:

	Teaching Stations	Students per Station	Building Capacity	
~~Half-Day Pre-School~~				
✓ Full-Day Pre-School	1	0		
✓ Half-Day Kindergarten	1	22	44	22
✓✓ Full-Day Kindergarten	2	22	44	
Grade 1-3	9	22	198	
Grade 4-5	8	25	200	
✓ ~~Self-Contained~~ LL	1	15	15	
✓ Resource	1	0		
✓ World Lang	1	0		
✓ Gym	1	0		
✓ Music	1	0		
Art				
Special Ed Suite				
Totals	26		501	479

Each of the building levels (Primary, Middle and High) have unique criteria to establish total building capacity.

<u>Primary Level</u>
In general, primary level schools use a "home room" arrangement where students are assigned one teacher in one classroom where most of the instructional day is spent. During the day, students go to lunch, recess, PE, music, world language or various other support spaces for a short period of time. These spaces are teaching stations yet because they serve the entire building they have a capacity of -0-.

Each primary school in the school district is assigned space for preschool, world language, resource classroom and special ed classroom(s). Three primary schools have ESD Classrooms (special use by Clackamas County Education Service District). Some schools have "porches" that provide space for small gatherings, special projects and art. For schools without porches, existing regular classrooms are used for these purposes. In some older schools, spaces that could be classrooms are used for important functions such as group learning, staff rooms, computer labs, testing classrooms, book/resource rooms. And in some cases, a space may be of an odd size or configuration or at a location where if absolutely necessary it could be a

classroom yet is best suited for inventory, instructional material storage or simply teacher work space. Given this description, district primary schools operate at 77% of total occupancy capacity (all spaces occupied 100% of the time)

NOTE: <u>All-day Kindergarten</u>: For 2013 and 2014 the district offers full-day kindergarten and half-day kindergarten. The impact to educational capacity is that with half-day kindergarten, two classes of different students can occupy the same classroom on any given day. So instead of a classroom serving 22 kindergarten students, with half-day sessions, the same classroom can serve 44 students. In 2015 all-day kindergarten will be the only offering, thus, each school that now uses one classroom for two sessions will need an additional classroom to accommodate the same number of students. The result is the loss district-wide of 9 classrooms (one at each primary school) which in turn reduces educational capacity.

<u>Middle Level</u>

At the district 6-7-8 schools, classrooms are set aside by subject with a teacher assigned to each core class. Students rotate from class to class based on grade level, content and schedule. Each middle school has typical teaching stations that provide regular classrooms, self-contained classroom, resource room, gym(s), choir, drama, band, art, stage and other support spaces.

Unlike primary, middle schools have instructional spaces attended by all students at different times during the day. At the middle level, building usage and efficiency is a function of class schedule. The result is that not all teaching stations are occupied 100% of the time during a school day. Therefore simple calculations of counting teaching stations based on occupants and adding them together would produce incorrect capacity. Rather, given schedules and usage, all three middle schools function at about 80% of their total occupancy capacity (3% more "efficient" than primary)

<u>High Level</u>

The two district high schools are extraordinary contemporary learning campuses that function similar to the middle level yet operate at approximately 93% of their total occupancy capacity. As with middle schools, this is a function of class schedules where students travel from teaching station to teaching station throughout the day.

West Linn High has 68 teaching stations with an education capacity of 1740 students. Wilsonville High has 58 teaching stations with a capacity of 1472. As noted, these capacity numbers are a function of class schedule. Art Tech High School is a unique district school that occupies a small campus with no calculated capacity but rather, exists with an enrollment cap that is responsive to individual student need.

CONCLUSION

District educational capacity was last established in 2006 and again in 2013 with the following general adjustment.

	2006	2013	2015 w/all day kindergarten
Primary	3316	4346	4082
Middle	1932	1932	1932
High	w/o Art Tech 3220	w/ Art Tech 3306	3306
Total	**8464**	**9584**	**9320**

The table (above) shows district capacity in 2006 with 7 primary schools; capacity in 2013 with 9 primary schools and capacity in 2015 when all day kindergarten is introduced.

Change(s) occurred due to construction of two new primary schools and renovation/remodel to several other primary schools. Also, the introduction of World Language at the primary level requires the set-aside of one classroom at each primary school for that purpose. Finally, the introduction of all-day kindergarten in 2015 will cause a decrease in primary school capacity.

Middle and high school capacity remains unchanged except for the addition of 78-students at Art Tech (unaccounted in 2006).

In general, district educational capacity is simply a number to assist the district in planning attendance boundaries and provides a comparison against true enrollment. It is also extremely important as a tool to understand when additional classroom space may be needed as compared to enrollment projections.

In reality, the district serves the students that show up every day. Principals and teachers assess the needs of these students and use each building in very unique ways to provide a high quality learning environment based on grade-level 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 above and below the published building education capacity. As sustained enrollment increases above the preferred capacity, pressure to add more permanent classrooms increases.

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Exhibit B

5-Year Projections by "Residence" for the West Linn-Wilsonville School District

(Based on Fall 2013/2014 K-12 Student Data)

The West Linn-Wilsonville School District (WLWSD, or the District) has requested Davis Demographics & Planning, Inc. (DDP) to assist in preparing a District-wide enrollment forecast based upon student residence. The projected student enrollments generated by DDP cover a five-year period that are based upon the actual Fall 2013 student enrollment figures. The projections conducted by DDP were calculated at the smallest level possible, the Study Area. The WLWSD has been broken up into 177 individual "study areas." No study area straddles two District attendance areas. Therefore, the projected number of students in each of the District's current attendance areas are derived by the simple addition of all of the study areas that comprise that particular region. The District-wide projections is the summary of all 177 study areas.

The concept of running projections at the "study area" level is ideal for a school district that plans on re-adjusting its current attendance areas. This then gives the District the ability to determine a variety of new attendance area scenarios and know approximately what the future number of students will be living in the proposed areas.

A variety of factors go into the calculation of the "study area" projections. These components include the following: (1) examining the current and planned residential development over the next seven years; (2) calculating Student Yield Factors to apply to this new development; (3) determining birth factors for this District area; and (4) calculating Mobility Factors, which examine the in/out migration of students within existing housing units (this factor, for example, takes the "resale" of units into account).

SOURCES OF DATA

Historical Enrollment:	Obtained verified K-12 student data files downloaded by the District to DDP for each October from Fall 2010 to Fall 2013.
Housing Information:	Obtained by DDP through information provided by District staff. In addition to data provided by city and county planning departments, various site visists were made and certain developers were contacted. The use of aerial imagery and county parcel data in a GIS format were also used in this process.
Birth Data: (used for estimating incoming Kindergarten)	Live birth counts for the West Linn-Wisonville area (by zipcode) were obtained from the State of Oregon, Center for Health Statistics Department.

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METHODOLOGY

1. Graduate 12th grade: move up other grades.

2. New residential development information was gathered by District staff by contacting city and county planners, site visits and individual developers. A listing of all residential development (by Study Area) used in these projections can be found in the enclosed Residential Development Summary Report. The use of aerial imagery and county parcel data in a GIS format were also used in this process.

3. Student Yield Factors were calculated for by geographically linking assessor parcel data with student data. These rates were organized by using the District's predominant grade configurations (K-5, 6-8 and 9-12). The Student Yield Factors used in these projections were a result of a large sampling of residential units built within the District's boundaries over the past seven years (2007-2013). The use of aerial imagery and county parcel data in a GIS format were also used in this process.

STUDENT YIELD FACTORS USED IN THE FALL 2013 PROJECTIONS
(from a large sampling of units built between 2007-2013)

Single-Family Detached (SFD) Units [850 units built]				
Grade Ranges	K-5	6-8	9-12	K-12
Student Yield Factor	0.307	0.120	0.135	0.562

Multi-Family Units [605 units built] **[apartments, condos, townhouses, etc.]**				
Grade Ranges	K-5	6-8	9-12	K-12
Student Yield Factor	0.096	0.048	0.061	0.205

4. Incoming Kindergarten estimates were calculated by gathering live birth counts by the District's three main zipcodes (97062, 97068 and 97070) and annual comparisons were made to the Fall 2012 Kindergarten class as the base year.

District-Wide Birth Factors
2014 K = 97.4% of 2013 K
2015 K = 87.6% of 2013 K
2016 K = 85.7% of 2013 K
2017 K = 90.0% of 2013 K
2018 K = 90.0% of 2013 K

5. Modify enrollment further by using student Mobility Factors as follows:

Mobility refers to the in-out migration of students from existing housing. This variable reflects the percentage of students progressing through the grade ranges. The Mobility Factors help account for the following trends occurring throughout the District: existing housing resales, foreclosures, apartment migration and high school dropout rates. Student counts for each study area are available for the last four school years (Fall 2010 through Fall 2013). A sample of 150 study areas (from a total of 177) were chosen within the District's boundaries that had no new residential development over the last five years. The Mobility Factors were conducted at the current primary school attendance boundary level. There was a total of 21 study areas were chosen from the Boeckman Creek Primary attendance area; 8 study areas from the Bolton Primary attendance area; 18 from the Boones Ferry Primary area; 10 study areas from Cedar Oak Primary's area; 11 from the Lowrie Primary area; 28 from the Stafford Primary area; 9 from the Sunset Primary

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boundary; 19 from Trillium Creek Primary area; 17 from the Willamette Primary Attendance Area and 9 study areas in the Stafford/Boeckman Option area were chosen for this study. The Mobility Factors that show no net increases or decreases (zero change in the number of students) over time is represented by a factor of 1.00 (blue). A net student loss is represented by a factor less than 1.00 (red) and a net gain by a factor greater than 1.00 (green).

When the data is available, the typical method that DDP uses to calculate Mobility Factors is using four consecutive years of mapped student data which results in three years of change and then average it out to even out any anomalies. A comparison was made for the Fall 2010 K student population to the Fall 2011 1st grade students within a specific study area. This comparison was also conducted for the following pairings: Fall 2011 & Fall 2012 and the Fall 2012 & Fall 2013 school-years. In addition, middle school and high school grades were also looked at in this manner (all transitions from Kindergarten through 12th grade).

Student Mobility Factors

(used in the Fall 2013 Projections)

"3 Years of Change" (Using Fall 2010 through Fall 2013 students)

West Linn-Wilsonville SD Mobility (Using Fall 2010 through Fall 2013 Student Data)

(Excluding Study Areas that Have Had Development and Ones that Contain Low Student Counts)

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	City
Boeckman Creek Primary	1.057	0.927	1.027	1.009	1.017	0.935	0.965	1.000	0.996	1.036	0.996	1.067	W
Bolton Primary	1.239	1.057	0.985	1.016	1.051	1.007	0.985	1.066	0.988	0.988	0.994	1.023	WL
Boones Ferry Primary	1.033	0.972	0.983	0.944	0.996	1.018	1.014	0.969	1.066	0.993	0.963	1.062	W
Cedaroak Primary	1.091	0.942	1.054	1.043	1.006	0.982	1.006	1.018	0.912	1.000	0.917	1.052	WL
Lowrie Primary	1.039	1.056	1.084	1.011	0.962	1.000	1.000	1.012	1.000	0.989	0.868	1.082	W
Stafford/Boeckman Choice*	1.300	0.963	1.037	0.900	0.931	1.032	1.139	1.070	0.909	1.075	0.958	1.041	W
Stafford Primary	1.155	1.084	1.055	1.099	1.054	1.032	1.000	1.031	1.032	0.947	1.000	0.940	WL
Sunset Primary	1.267	1.063	1.058	1.022	1.071	0.995	0.990	1.064	1.030	1.010	0.951	1.044	WL
Trillium Creek Primary	1.247	1.015	1.061	1.009	0.974	1.025	1.012	0.990	0.967	0.977	0.971	1.016	WL
Willamette Primary	1.182	1.063	1.057	1.000	1.076	1.007	1.087	1.028	0.986	0.959	0.996	0.915	WL

** The Boeckman Creek Primary Mobility Factors were used for the Choice area due to too small a sample size*

6. Each of the 177 Study Areas are then projected out over the next five years (Fall 2014 through Fall 2018). From these study areas, individual Attendance Area reports are generated (see enclosed Attendance Area and Study Area Projections). Please refer to the attached map (11" X 17") to see the individual study area locations as well as determining the study areas that comprise each Attendance Area.

These projections are based on where the students live and where they should be attending school. DDP uses the actual location of where the students reside, as opposed to their school of enrollment, in order to provide the most accurate depiction of where future schools (if necessary) should be located. The concept of running projections at the "study area" level is ideal for a school district that plans on re-adjusting its current attendance areas. The best way to plan for future schools is to know where the next group of students will be coming from, not necessarily which school they are currently attending.

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FIVE-YEAR RESIDENTIAL DEVELOPMENT SUMMARY REPORT

Total SFD = 1,520 **Total MFA = 591** **Total APT = 234** **Total All Units = 2,345**

Study Area	YEAR 1 10/15/2013 - 10/14/2014 SFD	MFA	APT	YEAR 2 10/15/2014 - 10/14/2015 SFD	MFA	APT	YEAR 3 10/15/2015 - 10/14/2016 SFD	MFA	APT	YEAR 4 10/15/2016 - 10/14/2017 SFD	MFA	APT	YEAR 5 10/15/2017 - 10/14/2018 SFD	MFA	APT
116B	0	0	0	3	0	0	4	0	0	0	0	0	0	0	0
147	0	0	0	5	0	0	6	0	0	0	0	0	0	0	0
151	0	0	0	5	0	0	6	0	0	0	0	0	0	0	0
155	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
332	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0
426	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
428	0	0	0	0	0	0	0	0	0	50	0	0	150	0	0
430	107	0	0	60	0	0	80	0	0	75	0	0	70	0	0
432	40	0	0	147	0	0	153	0	0	134	0	0	68	0	0
436	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
437	0	80	0	0	91	0	0	100	0	0	100	0	0	220	0
438	40	0	0	40	0	0	30	0	0	0	0	0	0	0	0
444	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
446	16	0	234	20	0	0	0	0	0	0	0	0	0	0	0
468	8	0	0	30	0	0	30	0	0	30	0	0	15	0	0
484	5	0	0	10	0	0	11	0	0	7	0	0	0	0	0
Units	279	80	234	322	91	0	320	100	0	296	100	0	303	220	0
Types	SFD	MFA	APT	SFD	MFA	APT	SFD	MFA	APT	SFD	MFA	APT	SFD	MFA	APT
Totals	**2013/2014 =**		**593**	**2014/2015 =**		**413**	**2015/2016 =**		**420**	**2016/2017 =**		**396**	**2017/2018 =**		**523**

Study Area	All Units/Types Years 1 - 5	Elementary	Middle	High
116B	7	Bolton Primary	Rosemont Ridge Middle	West Linn High
147	11	Trillium Creek Primary	Rosemont Ridge Middle	West Linn High
151	11	Trillium Creek Primary	Rosemont Ridge Middle	West Linn High
155	6	Trillium Creek Primary	Rosemont Ridge Middle	West Linn High
332	5	Stafford Boeckman Choice Zone	Inza R Wood Middle	Wilsonville High
426	16	Lowrie Primary	Inza R Wood Middle	Wilsonville High
428	200	Lowrie Primary	Inza R Wood Middle	Wilsonville High
430	392	Lowrie Primary	Inza R Wood Middle	Wilsonville High
432	542	Lowrie Primary	Inza R Wood Middle	Wilsonville High
436	20	Lowrie Primary	Inza R Wood Middle	Wilsonville High
437	591	Lowrie Primary	Inza R Wood Middle	Wilsonville High
438	110	Lowrie Primary	Inza R Wood Middle	Wilsonville High
444	18	Boones Ferry Primary	Inza R Wood Middle	Wilsonville High
446	270	Lowrie Primary	Inza R Wood Middle	Wilsonville High
468	113	Boones Ferry Primary	Inza R Wood Middle	Wilsonville High
484	33	Boones Ferry Primary	Inza R Wood Middle	Wilsonville High
Units	2,345			
Types				
Totals	All Units (1-5)			

Last updated November 2013

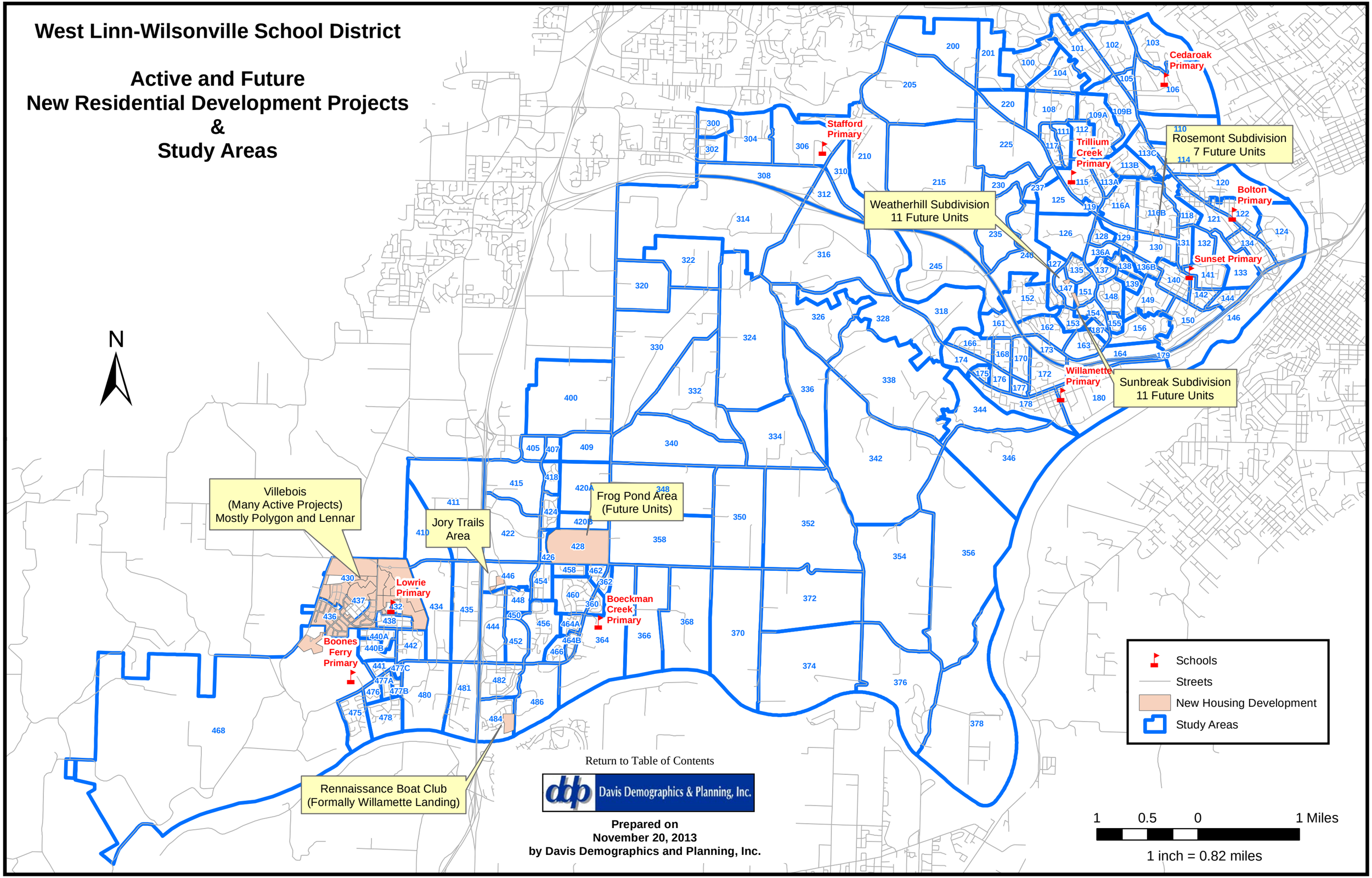
Notes about this summary report:

1. The phasing schedules on this page are based upon estimated dates of occupancy.
2. Includes Approved and Tentative maps plus proposed and potential development.
3. Summary only includes units that may be occupied in the five year timeframe of the projections.
4. Based upon data gathered from September 2013-Novmber 2013 and may not reflect recent changes.
5. The information for this summary was gathered by conversations with individual developers, sales offices, district staff and city and county officials.

Contact/Owner/ Developer	Project/Area	Study Areas	Total Units	Type Units	Left to Build	Comments
CONTACT CITY OF WEST LINN	ROSEMONT SUBDIVISION	116B	7	SFD	ALL	Project recently approved / could begin late 2014 per City Planner
CONTACT CITY OF WEST LINN	WEATHERHILL SUBDIVISION	147	11	SFD	ALL	Project recently approved / could begin late 2014 per City Planner
CONTACT CITY OF WEST LINN	SUNBREAK SUBDIVISION	151	11	SFD	ALL	Project recently approved / could begin late 2014 per City Planner
JT SMITH/CRANDALL	THE VINEYARD	155	29	SFD	6	21 of 29 units are occupied / part of "Street of Dreams" / almost done / built quickly
CONTACT DISTRICT	EASTGATE DR & NEWLAND RD	332	17	SFD	5	Large homes on large lots / 12 occupied / 2 more years? / building slowly
SPECTRUM DEVELOPMENT	COPPER CREEK	426	26	SFD	16	10 of 26 units occupied / to be done by Fall 2014
CONTACT CITY OF WILSONVILLE	FROG POND AREA	428	700-1000	SFD	ALL	Very large project in the early planning stages with City / could have 1st occ in 4-5 yrs
CONTACT CITY OF WILSONVILLE	SAP N	430	225	SFD	ALL	Original developer went bankrupt / High end SFD / To begin in 2016?
POLYGON HOMES/CITY	TONQUIN WOODS 2A	430	82	SFD	32	50 of 92 units occupied / all to be done in 2014
POLYGON HOMES/CITY	TONQUIN WOODS 2B	430	60	SFD	ALL	All units should be built and occupied by the end of 2014
POLYGON HOMES/CITY	ZION PROPERTY	430	85	SFD	ALL	To start in 2014 and take 2 years to buildout
POLYGON HOMES/CITY	ZION PROPERTY	430	40	SFD	ALL	To start in 2017 and be done sometime in 2018 / may start sooner
POLYGON HOMES/CITY	ZION PROPERTY	430	10	SFD	ALL	To start in 2016 and be done sometime in 2017 / may start sooner
LENNAR HOMES	RETHERFORD MEADOWS	432	87	SFD	ALL	Lennar just purchased / 1st occupants in 2014 through 2017 / maybe faster
UNKNOWN OWNER	PART OF VILLEBOIS	432	225	SFD	ALL	Hilly terrain / a while before anything may be built / estimated 2016 as start time
POLYGON HOMES/CITY	TONQUIN MEADOWS-LUND	432	60	SFD	ALL	Expected to start sometime in 2015 and done in 2016?
POLYGON HOMES/CITY	TONQUIN MEADOWS-LUND	432	57	SFD	ALL	Expected to start sometime in 2016 and done in 2017?
POLYGON HOMES/CITY	TONQUIN MEADOWS-LUND	432	93	SFD	ALL	Expected to start sometime in 2014 and 2 years to build?
POLYGON HOMES/CITY	TONQUIN MEADOWS NO.2-FASANO	432	13	SFD	ALL	Expected to start sometime in 2017 and done in 2018?
POLYGON HOMES/CITY	TONQUIN MEADOWS NO.2-FASANO	432	43	SFD	ALL	Expected to start sometime in 2014 and done in 2015?
POLYGON HOMES/CITY	TONQUIN MEADOWS NO.2-FASANO	432	39	SFD	ALL	Expected to start sometime in 2015 and done in 2016?
ARBOR - SAP S / LENNAR	VILLEBOIS	436	375	SFD	20	355 of 375 units are now occupied / Should be completed in 2014
POLYGON HOMES/CITY	ZION PROPERTY	437	21	SFD	ALL	Expected to start sometime in 2014 and done in 2015?
ARBOR SOLD TO POLYGON?	VILLEBOIS	437	600	MFA	540	60 of 600 built as of Nov. 2013 / May be a mix of condos and apartments
LENNAR HOMES	MIRAVAL @ VILLEBOIS	437	127	MFA	30	97 of 127 Built / done in 2014? ? DDP Best guess estimate on phasing
LEGEND @ VILLEBOIS (MATRIX)	SAP E PDP1	438	190	SFD	110	80 of 190 are occupied / Matrix still building / picked up pace / done in 2016?
POLYGON HOMES/CITY	JORY TRAILS @ THE GROVE	444	30	SFD	18	12 of 30 units built and occupied / all done sometime in 2014
HOLLAND PARTNER GROUP	THE TERRENE APARTMENTS	446	288	APT	234	216 of 288 units built, but only 25% occupancy / rest of units done by end of 2013
HOLLAND PARTNER GROUP	JORY TRAILS @ THE GROVE	446	27	SFD	ALL	Developer just submitting plans / may start Summer 2014 and all done by end of 2015
RENAISSANCE HOMES	JORY TRAILS @ THE GROVE	446	9	SFD	ALL	Could start in 2014 and all done sometime in 2015 / larger homes and lots
POLYGON HOMES/CITY	FORMER LIVING ENRICHMENT CTR	468	113	SFD	ALL	May start in 2014 and take up to four years to build
RENAISSANCE HOMES	RENAISSANCE BOAT CLUB	484	33	SFD	ALL	Formally Willamette Landing / larger homes and lots / to start in 2014 thru 2016

West Linn-Wilsonville School District

Active and Future New Residential Development Projects & Study Areas



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Davis Demographics & Planning, Inc.

Prepared on
November 20, 2013
by Davis Demographics and Planning, Inc.

"Draft" District Wide Projections by "Residence"

Projection Date 10/15/2013

		Actual	Projected Student Counts				
		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018
	K	571	574.4	527.0	525.3	557.9	568.6
	1	658	664.6	665.6	611.3	607.3	645.6
	2	636	686.9	694.1	695.7	639.6	638.1
	3	677	681.9	733.4	741.5	742.5	686.8
	4	687	703.3	705.9	757.8	763.9	767.0
	5	671	716.6	733.8	734.3	783.8	792.4
	6	645	688.8	733.7	751.6	749.9	803.9
	7	736	671.1	713.1	757.1	774.6	776.4
	8	692	766.5	698.8	741.5	784.1	805.5
	9	676	707.2	779.3	709.6	752.9	797.9
	10	714	683.8	712.0	784.3	713.6	758.8
	11	633	701.9	670.4	696.6	761.6	695.2
	12	709	663.1	730.6	698.2	724.4	795.2
	K-5	3,900	4,027.7	4,059.8	4,065.9	4,095.0	4,098.5
	6-8	2,073	2,126.4	2,145.6	2,250.2	2,308.6	2,385.8
	9-12	2,732	2,756.0	2,892.3	2,888.7	2,952.5	3,047.1
Sub Total:	K-12	8,705	8,910.1	9,097.7	9,204.8	9,356.1	9,531.4
Out-of-District:	K-5	173	173.0	173.0	173.0	173.0	173.0
	6-8	58	58.0	58.0	58.0	58.0	58.0
	9-12	141	141.0	141.0	141.0	141.0	141.0
	K-12	372	372.0	372.0	372.0	372.0	372.0
Unmatched:	K-5	2	2.0	2.0	2.0	2.0	2.0
	6-8	0	0.0	0.0	0.0	0.0	0.0
	9-12	1	1.0	1.0	1.0	1.0	1.0
	K-12	3	3.0	3.0	3.0	3.0	3.0
Totals:	**K-5**	**4,075**	**4,202.7**	**4,234.8**	**4,240.9**	**4,270.0**	**4,273.5**
	6-8	**2,131**	**2,184.4**	**2,203.6**	**2,308.2**	**2,366.6**	**2,443.8**
	9-12	**2,874**	**2,898.0**	**3,034.3**	**3,030.7**	**3,094.5**	**3,189.1**
	K-12	**9,080**	**9,285.1**	**9,472.7**	**9,579.8**	**9,731.1**	**9,906.4**

	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018
K-5 Annual Change:		127.7	32.1	6.1	29.1	3.5
6-8 Annual Change:		53.4	19.2	104.6	58.4	77.2
9-12 Annual Change:		24.0	136.3	-3.6	63.8	94.6
K-12 Annual Change:		205.1	187.6	107.1	151.3	175.3

The above projections are based upon a student data file provided to DDP by the WLWSD representing mid-October 2013.

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121 Pre-K students were given to DDP in the original student data file and were excluded from the above projections.

Fall 2013/2014 K-5 (Elementary School) Attendance Matrix

"Open Enrollment" Patterns

SCHOOL OF RESIDENCE (BASED ON CURRENT ATTENDANCE AREAS) — Attendance Area	K-5 Students	SCHOOL OF ATTENDANCE (CODE): Boeckman Creek Primary (BCPS)	Bolton Primary (BOLPS)	Boones Ferry Primary (BFPS)	Cedaroak Primary (CPPS)	Lowrie Primary (LPS)	Stafford Primary (STAFPS)	Sunset Primary (SUNPS)	Trillium Creek Primary (TCPS)	Willamette Primary (WILPS)	Three Rivers Charter School (3RCS)	Undefined	Transfer Out Rates
Boeckman Creek Primary	**489**	**420**	0	16	0	15	19	0	2	7	9	1	14.1%
Bolton Primary	**238**	0	**198**	1	9	0	6	7	14	1	2	0	16.8%
Boones Ferry Primary	**571**	38	0	**451**	0	73	3	0	0	3	1	2	**21.0%**
Cedaroak Primary	**303**	0	10	2	**264**	0	3	0	17	3	3	1	12.9%
Lowrie Primary	**439**	6	0	41	0	**383**	6	0	1	2	0	0	12.8%
Stafford Primary	**367**	0	1	1	6	0	**337**	0	17	3	2	0	8.2%
Sunset Primary	**405**	0	22	0	12	0	7	**271**	59	15	17	2	**33.1%**
Trillium Creek Primary	**442**	0	19	0	17	0	23	8	**349**	21	5	0	**21.0%**
Willamette Primary	**575**	0	5	0	5	1	58	3	27	**473**	3	0	17.7%
Stafford / Boeckman Choice Zone	**70**	43	0	0	0	3	19	0	2	3	0	0	- -
K-5 Sub-Totals:	**3,899**	**507**	**255**	**512**	**313**	**475**	**481**	**289**	**488**	**531**	**42**	**6**	
Out of District:	**173**	31	41	28	8	2	33	9	3	18	0	0	
Pre-K Students:	**121**	0	59	32	0	30	0	0	0	0	0	0	
Unmatched:	**2**	0	0	0	0	0	0	0	0	1	1	0	
K-5 Totals:	**4,195**	**538**	**355**	**572**	**321**	**507**	**514**	**298**	**491**	**550**	**43**	**6**	
# Enrolled, But Not Living in Attendance Area:	**827**	**118**	**98**	**89**	**57**	**94**	**171**	**16**	**110**	**34**	**34**	**6**	
Open Enrollment %:	**21.2%**	**23.3%**	**38.4%**	**17.4%**	**18.2%**	**19.8%**	**35.6%**	**5.5%**	**22.5%**	**6.4%**	**- -**	**- -**	
	District-wide												

The above data is based upon a database download provided to DDP by the WLWSD representing enrollment around mid-October 2013.

= Large grouping of students attending a school outside of their assigned area.

21.2% = Transfer In or Out rates greater than 20%.

Fall 2013/2014 9-12 (High School) Attendance Matrix

"Open Enrollment" Patterns

SCHOOL OF RESIDENCE / CURRENT ATTENDANCE AREA

Attendance Area	9-12 Students	SCHOOL OF ATTENDANCE: West Linn HS	Wilsonville HS	Art Tech Charter HS	Transfer Out Rates
West Linn High School	**1,547**	**1,465**	42	40	5.3%
Wilsonville High School	**1,183**	98	**1,026**	59	13.3%
9-12 Sub Totals:	**2,730**	**1,563**	**1,068**	**99**	
Out of District:	**141**	43	92	6	
Unmatched	**1**	0	1	0	
9-12 Totals:	**2,731**	**1,606**	**1,161**	**105**	
# Enrolled, But Not Living in Attendance Area:	**141**	**98**	**43**	**- -**	
Open Enrollment %:	**5.2%**	**6.3%**	**4.0%**	**N/A**	
	District-wide				

The above data is based upon a database download provided to DDP by the WLWSD representing enrollment around the mid-October 2013.

= Large grouping of students attending a school outside of their assigned area.

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Fall 2013/2014 6-8 (Middle School) Attendance Matrix

"Open Enrollment" Patterns

SCHOOL OF RESIDENCE / CURRENT ATTENDANCE AREA

Attendance Area	6-8 Students	SCHOOL OF ATTENDANCE: Athey Creek MS	Inza R Wood MS	Rosemont MS	Three Creek Charter School	Undefined	Transfers Out Rate
Athey Creek Middle School	**559**	**487**	2	54	16	0	12.9%
Inza R. Wood Middle School	**752**	49	**688**	3	11	1	8.5%
Rosemont Ridge Middle School	**761**	74	3	**649**	35	0	14.7%
6-8 Sub Totals:	**2,072**	**610**	**693**	**706**	**62**	**1**	
Out of District:	**58**	23	23	12	0	0	
6-8 Totals:	**2,130**	**633**	**716**	**718**	**62**	**1**	
# Enrolled Not Living in Attendance Area:	**243**	**146**	**28**	**69**	**- -**	**- -**	
Open Enrollment %:	**11.7%**	**23.9%**	**4.0%**	**9.8%**	**N/A**	**N/A**	
	District-wide						

The above data is based upon a database download provided to DDP by the WLWUSD representing enrollment around mid-October 2013.

= Large grouping of students attending a school outside of their assigned area.

21.2% = Transfer In or Out rates greater than 20%.

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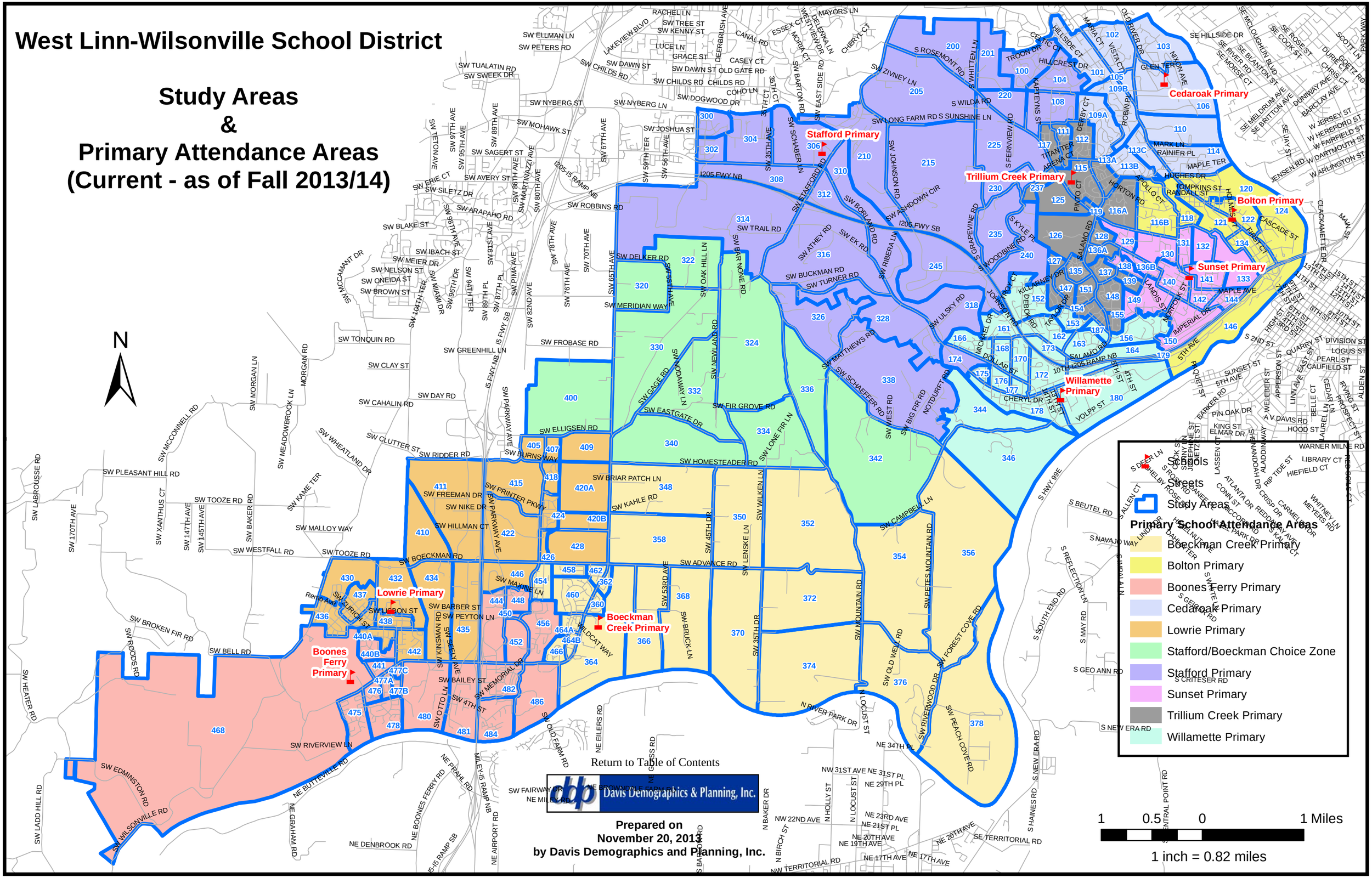
West Linn-Wilsonville School District

Study Areas & Primary Attendance Areas (Current - as of Fall 2013/14)



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Prepared on
November 20, 2013
by Davis Demographics and Planning, Inc.

Exhibit C

Study proves classroom design really does matter

New evidence confirms link between classroom environment and pupil performance

New research has revealed that classroom design has a significant impact on the academic performance of primary school children.

Infographic

In a pilot study by the University of Salford and architects, Nightingale Associates, it was found that the classroom environment can affect a child's academic progress over a year by as much as 25%.

The yearlong pilot study was carried out in seven Blackpool LEA primary schools. 34 classrooms with differing learning environments and age groups took part.

The study took two lines of enquiry. The first was to collect data from 751 pupils, such as their age, gender and performance level in maths, reading and writing at the start and end of an academic year.

The second evaluated the holistic classroom environment, taking into account different design parameters such as classroom orientation, natural light and noise, temperature and air quality. Other issues such as flexibility of space, storage facilities and organisation, as well as use of colour were evaluated.

This holistic assessment includes both classroom design and use factors to identify what constitutes an effective learning environment.

Notably, 73% of the variation in pupil performance driven at the class level can be explained by the building environment factors measured in this study.

Current findings suggest that placing an average pupil in the least effective, rather than the most effective classroom environment could affect their learning progress by as much as the average improvement across one year.

Professor Peter Barrett, School of the Built Environment, University of Salford said: "It has long been known that various aspects of the built environment impact on people in buildings, but this is the first time a holistic assessment has been made that successfully links the overall impact directly to learning rates in schools. The impact identified is in fact greater than we imagined and the Salford team is looking forward to building on these clear results".

The pilot study was commissioned by THiNK, the research and development team at Nightingale Associates. The practice will use these initial findings to inform their designs and work with schools undertaking refurbishment or build new projects to maximise their investment in the learning environment.

Design Research Lead, Caroline Paradise from Nightingale Associates, said: "We are excited by these early findings which suggest that the classroom plays an important role in pupil performance. This will

support designers and educators in targeting investment in school buildings to where it will have the most impact, whether new build or refurbishment."

Through these promising findings, the study will continue for another 18 months and cover another 20 schools in different areas of the UK. This study is being funded by the Engineering and Physical Sciences Research Council (EPSRC).

The findings are in reference to a study sample of 751 pupils in Blackpool LEA. Pupil performance was measured against statistics for all the participants and all data captured maintained pupil anonymity.

The study took place over one academic year, between September 2011 and June 2012.

The results have been accepted in an international peer reviewed journal: the permanent link is http://dx.doi.org/10.1016/j.buildenv.2012.09.016 [P.S.Barrett, Y. Zhang, J. Moffat and K.Kobbacy (2012). "An holistic, multi-level analysis identifying the impact of classroom design on pupils' learning." *Building and Environment*.]

Infographic produced by Nightingale Associates.

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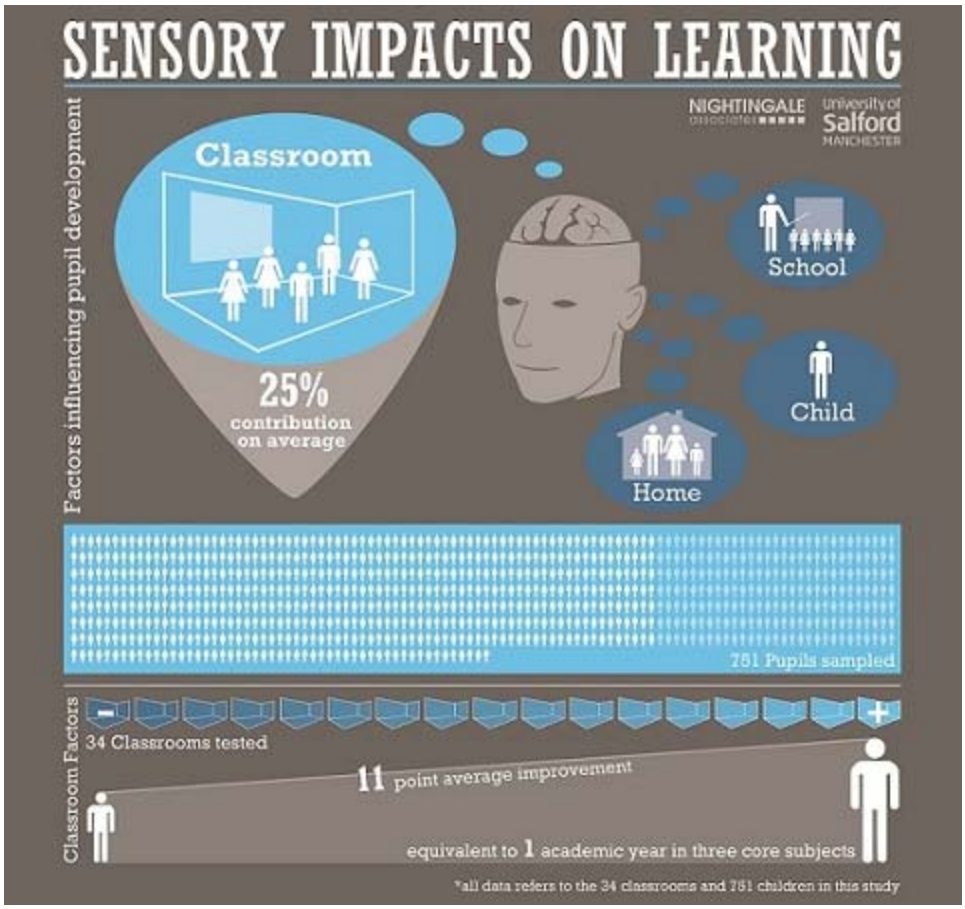

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Final Report:
Sensory Impacts on Learning

A study carried out in collaboration with Nightingale Associates

Not for publication

Professor Peter Barrett
Dr Yufan Zhang
Dr Joanna Moffatt
Professor Khairy Kobbacy

All of the School of the Built Environment, University of Salford

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Acknowledgements

This project has been supported from several directions. Much of the work in general, and the first part of this particular activity, started within the Salford Centre for Research and Innovation in the Built Environment (SCRI), which was funded by EPSRC as an IMRC (grant ref EP/E001882/1). Prior to this particular project activity, collaboration with Manchester City Council informed the development of the underpinning ideas.

Subsequent to that initial work Nightingale Associates funded more focused work and facilitated the link to Blackpool Council. Nightingales have been very helpful beyond this in terms of providing a sounding board for the developing plans for the project and by providing a practical view on the emerging results. Blackpool's support has been vital in terms of advice on educational measures as well as carrying out very practical activities to work with the schools in accessing the pupil data.

EPSRC has funded the HEAD project (grant ref EP/J015709/1) and this is the vehicle through which this body of work has been brought to this point and will be taken forward over the next 18 months to explore further the questions this initial work has raised.

Without all of this support this project would not have been possible and, as the project team, we would like to take this opportunity to express our appreciation for it.

Professor Peter Barrett
August 2012

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Executive Summary

At a general level this study has taken a multi-dimensional, holistic view of the built environment within which humans live and work and sought to discover its impacts on human well-being and performance. This is a complex and current issue, with no consensus currently as to the relative importance of internal environmental quality (IEQ) factors for overall satisfaction.

More specifically, the aim of the study was: to explore if there is any evidence for demonstrable impacts of *school* building design on the learning rates of pupils in primary schools. This is a powerful focus, given the availability of human performance metrics, the fact the pupils spend most of their time in one classroom and the societal importance of maximising pupils' performance.

Hypotheses as to positive impacts on learning were developed for ten design parameters within a framework of three design principles. These were tested using data collected on 751 pupils from 34 varied classrooms in seven different schools. The analysis employed a multi-level statistical modelling approach as this could reflect the "nested" structure of the data (pupil in class). This enables the unmeasured "pupil effects" and "class effects" to be partitioned as residuals at each level, so avoiding misleading results owing to the overestimation of significance that a simple regression analysis would deliver.

Overall, the model explains 51% of the variability in the learning improvements of the pupils, over the course of a year. However, its explanatory power is asymmetrical across the levels of "pupil" and "class". The multilevel approach identified a 73% reduction in the random error at the "class" level, linked entirely to the design parameters in the model. Thus, only a relatively small random error remains at this level. As the "class" level of analysis is the focus of this study, the high level of explanation attaching to the design parameters is of great interest.

Six of the original ten built environment "design parameters" were identified as being particularly influential in the multi-level model. The six parameters are: colour (18%), choice (10%), connection (26%), complexity (17%), flexibility (17%) and light (12%), with their proportionate influence (summing to 100%) indicated in brackets. It is interesting to note that there is a relatively even spread of influence across all six factors. This resonates with the notion that the impact of an environment on a user is a composite response via all their senses. There is a fairly even mix of aspects that are either design-related or mainly use-related, indicating that both designers and users have significant opportunities to take these findings into account in their choices about classroom spaces. This leaves a significant "design" challenge to resolve competing requirements, but this study gives examples of "good" and "bad" spaces for each of the six parameters.

By fixing all the variables at their average values, except for the environmental factors, the model was used to predict the weighted progress (pupil's learning progression), owing to the environmental factors only. This in effect took an average pupil with an average teacher and placed them in each of the thirty-two classrooms studied. Comparing the "worst" and "best" classrooms, the environmental factors alone were found to have an impact of 11 points learning progression, summed across three subjects. This suggests that placing the same pupil in the "best" rather than the "worst" classroom would have an impact on their learning that equates to the typical progress of a pupil over one year (11 points). Using the range in pupils' improvement in this data set, it was also possible to estimate the proportionate impact of the environmental factors on learning progression, in the context of all influences together. This scaled at a 25% contribution on average.

It should be remembered that we are looking at the spaces in functional terms, focusing entirely on the impact of the differences between spaces on the academic performance of the pupils. In this

context it can be seen that parameters to do with the design principle of *"individualisation"* are prominent. Here the issue of connection (way-finding) has raised some surprising issues compared with prevalent theory, but these can be seen to make sense if a pupil's perspective is taken.

Addressing the principle of *"appropriate level of stimulation"* for learning is also important and raises the issue of functional requirements versus aesthetic preferences. Young pupils may like exciting spaces, however, to learn it would seem they need relatively ordered spaces, but with a reasonable degree of interest.

In the area of the principle of *"naturalness"*, only the parameter of light remained in the multi-level model, and even this was quite a complex relationship between a desire for light, a dislike of glare and the importance of good artificial lighting. Indeed it was very commonly observed that blinds were closed to facilitate the use of whiteboards and projectors. All of the other environmental factors were found to be individually significant, but are not in the model mainly because, with this data set, they are quite extensively correlated with other design parameters, albeit at a low level. The effect of this is that these factors were "competed out" of the regression analysis. At a practical level it could be that air quality is less evident because it was found to be almost universally *poor* based on CO_2 spot checks in the classrooms. At the other extreme, it could be that temperature and sound (as "one vote veto" factors) are important but did not rise to the top of the analysis as they simply have to be addressed by users and so are not allowed to get very poor in practice.

The study to date has involved a limited number of pupils in a particular area, with a focus solely on their academic performance. Clearly more work is needed. That said, this study has provided important insights into the impacts of built environment factors on the learning progress of pupils. In the process it has also challenged the research team in various respects and much has been learnt that can be factored into future studies. A summary of the main design parameters critical to a good learning environment is given in the table below.

Design Principle	Design parameter		Good classroom features
Naturalness	Light	◆	Classroom receives natural light from more than one orientation. And (or) natural light can penetrate into the south windows.
		◆	Classroom has high quality and quantity of the electrical lightings.
		■	The space adjacent to the window is clear without obstruction.
Individualisation	Choice	◆	Classroom has high-quality and purpose-designed Furniture Fixture & Equipment (FF&E)
		◆	Interesting (shape and colour) and ergonomic tables and chairs.
	Flexibility	◆■	More zones can allow varied learning activities at the same time.
		◆■	The teacher can easily change the space configuration.
	Connection	◆	Wide corridor can ease the movement.
		■	The pathway has clear way-finding characteristics.
Stimulation, appropriate level of	Complexity	◆	Big building area can provide diverse opportunities for alternative learning activities.
		■	With regard to the display and decoration, classroom needs to be designed with a quiet visual environment, balanced with a certain level of complexity.
	Colour	■	Warm colour is welcomed in senior grade's classrooms while cool colour in junior grades, as long as it is bright.
		■◆	Colour of the wall, carpet, furniture and display can all contribute to the colour scheme of a classroom. However, it's the room colour (wall and floor) that plays the most important role.

◆ design-related classroom features
■ usage-related classroom features
 future study is needed to pursue its positive characteristics.