

# August 15, 2018

# Long-Range Facilities Plan

Medford School District 549C



# Medford School District 549C

LONG RANGE FACILITY PLAN

TABLE OF CONTENTS	Page
MISSION STATEMENT	3
INTRODUCTION	3
CHAPTER 1 DISTRICT OVERVIEW A. District Overview	4
CHAPTER 2 DISTRICT EDUCATIONAL PROGRAM STANDARDS <ul> <li>A. District Educational Standards</li> <li>B. Special Educational Services</li> <li>C. Elementary Educational Program Standards</li> <li>D. Middle and High School Program Standards</li> <li>E. Support Services</li> </ul>	5
CHAPTER 3 FACILTIES PLANNING PROCESS A. Bond Facilities Planning Process: 2005 to 2007 B. Bond Funded Construction and Renovation Projects: 2007 to 2012 C. Facilities Planning Process: 2014 to 2018	7
CHAPTER 4 FACILITIES EVALUATIONS AND ASSESSMENTS	10
<ul><li>A. Healthy and Safe Schools Plan</li><li>B. Seismic Assessments, Grants &amp; Approved Projects</li></ul>	
CHAPTER 5 FACILITIES INVENTORY A. School Facilities B. Support Facility Inventory C. Modular Unit Inventory D. Buildings on Historical Registry	11
CHAPTER 6 SCHOOL CAPACITY A. Existing School Capacity 1. Determining Capacity B. Adjusted School Capacity to include Special Programs	14
CHAPTER 7 ENROLLMENT PROJECTIONS <ul> <li>A. District Growth Projections</li> <li>1. Johnson Reid-Demographic and Enrollment Forecasts</li> <li>2. City of Medford Population Projections</li> </ul> B. District Enrollment Forecast <ul> <li>1. District-Wide Forecast</li> </ul>	16
CHAPTER 8 FACILITIES NEEDS A. Future Capacity Requirements B. Meeting Increased Space Demands	17

- 1. Phase I: 1-5 years
- 2. Phase II: 5-10 years
- 3. Phase III: 10-20 years
- C. Future School Site Options
- D. Evaluating Potential School Sites

CHAPTER 9		CAPITAL FACILITIES FINANCING	23
Α.	vements for Existing Facilities		
В.	Capital Impro	vement Funding	
С.	New Construc	ction Funding	
СНАР	CONCLUSIONS AND RECOMMENDATIONS	25	
Α.	Future Capita	I Improvements for Existing Facilities	
В.	Site Acquisitio	on Recommendations	
	1. Efficiency		
	2. Siting Crit	eria	
	3. Property I	Purchase	
	4. Agency Re	eview	
LIST O	F FIGURES		
FIG	GURE 1	Medford School District 549C Boundaries	4
FIG	GURE 2	City of Medford-Candidate Urban Reserve	22
LIST O	F TABLES		
TA	BLE 5.1	Elementary Schools Inventory	11
TA	BLE 5.2	Middle Schools Inventory	12
TA	BLE 5.3	High Schools Inventory	12
TA	BLE 5.4	MSDEC – Main Building Inventory	12
TA	BLE 5.5	MSDEC – Annex / Gym Inventory	13
TA	BLE 6.1	School Capacity	14
TA	BLE 8.1	Capacity Requirements	17
TA	BLE 8.2	Schools Site Selection Criteria	20

#### APPENDICES

APPENDIX A	District Site Information
APPENDIX B	Demographic and Enrollment Forecast, Johnson Economics – January 2017

# **Medford School District 549C**

We are a premier school district that inspires remarkable achievement, and empowers students to succeed and contribute in a changing world. Our mission is to foster the talents and interests of a community of life-long learners through a meaningful education that challenges students to reach their unlimited potential.

# INTRODUCTION

The Medford School District is committed to provide safe, secure and comfortable schools that promote a learning environment for students, teachers, staff, parents and the community. The long-range facility plan was initially developed following new construction and renovations completed at all facilities funded from the community's approved 2006 Facilities Bond. The plan was updated and the Medford School District Board of Directors approved it on April 5, 2011, August 11, 2014 and August 15, 2018.

The facility plan assesses the state of the existing facilities in relation to the District's educational program standards, enrollment trends and forecast, site assessments, capital maintenance and improvement financing, and projected facility demands for the next 20 years. The goals of the long range facility plan are to ensure that the community support and investments in the District's facilities are honored, protected, and utilized in ways that best achieve the District's mission and vision and to anticipate future facility needs. A well-considered facility plan will also ensure that facilities are maintained and developed in a manner that contribute to the identity and well-being of community neighborhoods and general population. This is to be accomplished over a 20-year period in which enrollment is forecasted to increase by roughly 4,000 students in non-charter schools.

The plan includes conclusions and recommendations to provide for good stewardship of the existing capital facilities, ongoing monitoring for changes in population and educational needs, and strategies to respond to population growth and distribution through both program flexibility and facility readiness. The District will coordinate its long range facility plan with the City of Medford, Jacksonville, Central Point, Jackson County, and other agencies in order to succeed in its mission.

#### CHAPTER 1 DISTRICT OVERVIEW

#### A. District Overview

The Medford School District is the largest school district in Jackson County. The District's enrollment in the 2017-18 school year was approximately 14,000 students. The District's geographic area includes approximately 370 square miles extending from the southwest corner of the county to approximately three miles northeast of the City of Medford. Communities within the district include unincorporated Ruch, all of the City of Jacksonville, most of the City of Medford, a portion of the City of Central Point, and the rural areas in between. *(See,* Figure I). In all, the District owns and operates fourteen elementary schools, two middle schools, three high schools, and support facilities. The oldest facility was originally constructed in 1891, and the newest in 2010.

# Medford School District 549C District Boundaries (Figure 1)

# CHAPTER 2 DISTRICT EDUCATIONAL PROGRAM STANDARDS

The educational program standards establish the types of spaces needed at each school facility. The district developed the following program standards during the bond planning process in 2006, affirmed, and updated the standards with the development of this 2018 plan revision. Several district committees informed the process of affirming and updating the standards, including the 6<sup>th</sup> Grade Task Force, CTE Facilities Committee, Classroom Technology Integration Committee and the School Safety and Security Committee. The committees are described in Chapter 3, Section C of this document. The following educational standards have been adopted by the Medford School District:

#### A. District Educational Standards

- Core classroom space for all curriculum areas which includes space for group learning, directed instruction, and individual student work to meet the rigors set forth in state standards.
- High school and middle school science lab space that supports advanced coursework including water, sinks, gas, hoods, and safety equipment. Students must achieve rigorous state mandated science standards.
- High school and middle school Career Technical Education (CTE) workspace that supports advanced coursework including classroom space, computer labs, and adequate lab space for each specific area of study.
- Physical education space is needed for students to meet health and fitness standards. This includes covered areas, fields, tracks, gymnasiums, and other multi-use spaces.
- Technological competency is required for a Medford diploma for all students. Spaces must be allocated for technological equipment and applications in classrooms and specialty spaces.
- Art, music, and theater arts spaces are necessary to adequately meet the requirements of these programs.
- Library/media services (research, technology, collaboration) space for students to achieve the rigors in the core program. In an information-driven environment, student access to information through appropriately sized library/media spaces is essential.
- Extra-curricular activities need adequate space in order to safely support programs

# B. Special Educational Services

- Special Education Services are delivered at each of the schools within the district. Program standards and services vary in response to the requirements of students' individual education plans (IEP). Implementing each student's IEP often requires large and small specialty spaces provided by the district. Program standards change as a result of various external or internal influences. External influences include federal mandates and funding changes, and the introduction of new technological applications which meet the needs of students. Internal influences include increase in the number of students who experience disabilities, modifications to the program year, class size, grade configurations, and facility changes.
- Special populations receive additional support. Federal and State programs, including Title I, English Language Learners (ELL), and Special Education provide limited funding for facility space.
- Supplementary services in core academic areas (tutoring, on-line learning) and providing multiple
  pathways to prepare students for a broader range of post-secondary learning opportunities require
  additional spaces that have not been calculated in square footage allowance formulas.

#### C. ELEMENTARY EDUCATIONAL PROGRAM STANDARDS

The district's educational program standards affected by elementary school capacity include:

 Grades K-3 class size standard is not to exceed an average of 25 students per class, but will be affected by budget constraints.

- Grades 4-6 class size standard is not to exceed 30 students per class, but will be affected by budget constraints.
- Music will be provided in separate classrooms and/or performance needs.
- Space must be available to provide physical education instruction indoors during inclement weather.
- Special education services are provided in a self-contained classroom for some children, while others need highly specialized spaces to address their specific conditions.
- Specialty programs require instructional areas similar to regular classrooms. All elementary schools will have a media center, which includes space for the literature collection and technology.
- Computer labs will be available for all students at all schools and space for technology in the classroom will also be provided.

# D. MIDDLE AND HIGH SCHOOL PROGRAM STANDARDS

The district's educational programs affecting by middle school and high school capacity include:

- Grades 7-8 class sizes strive not to exceed 32 students per class, with the exception of physical education, band, orchestra and choir.
- High school grades 9-12 class sizes have various targets depending on a variety of program and safety needs. However, the district strives to meet an average of 32 students in the core classrooms with the exception of physical education, band, orchestra and choir.
- The middle and high school classroom utilization standard is set at a factor of 80% and 85% respectively (based on a regular school day).
- Special education services are provided in a self-contained classroom for some children, while others need highly specialized spaces to address their specific needs.
- Students will also be provided other programs in classrooms designated as follows:
  - Specialty rooms (computer labs, individual and large group study rooms, practice labs, production rooms, and art areas).
  - o Media Center
  - Specialized science labs for grades 7-12 will be available.
  - Career and Technical Education (CTE) requires specialized spaces suited to the curriculum including, but not limited to, 220 power, gas, water, flame and heat resistant surfaces, equipment storage, materials storage, and specialized safety and ventilation systems.
  - Space for physical education instruction must be provided for both indoor and outdoor instruction.

# E. SUPPORT SERVICES

Support services are essential to a quality educational program. Food service delivery, storage, and preparation all require specialized space. As student populations increase, considering extra space for food service is crucial to the overall planning of the facility. Facilities are required for administrative support services including:

- Superintendent, Human Resources, Business Office, Information Technology, Education Services, Federal Programs and Student Services departments. Meeting and storage space is also required for administration.
- Professional development space for teacher and support staff training.
- Facilities, Distribution Center, Publications, Network Telecom Services (NTS), Instructional Media Center (IMC) and administration space for Sodexo Food Service.

#### CHAPTER 3 FACILITIES PLANNING PROCESS

# A. Bond Facilities Planning Process: 2005 to 2007

The Medford School District first commissioned a Long-Range Facilities Committee in 2005 to study facility conditions and to make recommendations to the Board of Education regarding asset management, planning, and financing. The process included extensive community involvement to identify the most urgent facility issues at each campus and to determine what improvements were needed to support education services. Committee members toured every school, consulted with citizens, parents, teachers, and administrators; looked at enrollment trends; and worked with facilities experts. The Committee held public forums about building needs in every one of the District's schools, except Central Medford High School, plus one community level forum.

The data gathered through community engagement was refined to form a recommendation which was presented to the School Board on May 2, 2006. On June 6th of that year, the School Board by – unanimous vote – passed a motion to bring the facility bond to the community for a vote in the amount of **\$188,979,485**. In November 2006, voters approved Measure 15-73 to authorize the issuance of \$188.98 million to renovate, improve, and expand district school facilities. See, Appendix A for the complete project list.

The School Board also elected to co-locate its alternative high school, Education Service District special education programs, and the District's administration and support services at the old South Medford High site. After interest and premiums were added, the actual amount spent on bond-funded construction was just over \$200 million.

# B. Bond Funded Construction and Renovation Projects: 2007 to 2012

Refer to Appendix A for school construction and renovation information.

#### 2007

- New South Medford High School-Design and wetland mitigation started
- North Medford High School-Phase I of renovation completed
- Jackson Elementary School-Relocates students to Westside School and McLoughlin Middle School, design started for new facility
- Roosevelt Elementary School-Relocates students to Hoover Elementary School and Hedrick Middle School, design started for new facility
- Renovations completed at Abraham Lincoln Elementary School, Griffin Creek Elementary School, Hoover Elementary School, Jefferson Elementary, Kennedy Elementary School, Lone Pine Elementary School, and Oak Grove Elementary School.
- Washington Elementary School-Phase I completed-classrooms

#### 2008

- New South Medford High School-Construction started
- North Medford High School-Phase II of renovation completed
- Howard Elementary School-Renovation completed
- Renovations completed at Jacksonville Elementary School, Lone Pine Elementary School, Ruch Elementary School, Wilson Elementary School
- Washington Elementary School-Phase II completed-cafeteria/kitchen
- Oak Grove Elementary School-Construction started

# 2009

- New South Medford High School-Construction continued
- North Medford High School-Phase III of renovation (Media Center) completed

- Renovations completed at Hedrick Middle School, McLoughlin Middle School
- Construction completed at Lone Pine Elementary School and Oak Grove Elementary School

#### 2010

- Construction complete at Jackson Elementary School and Roosevelt Elementary School opened in January
- New South Medford High School-Opened in September to begin the school year
- North Medford High School-Final Renovation Phase was completed
- Central Medford High School-Opened in September at Medford School District Education Center (MSDEC)

#### 2011/12

- Medford School District Administration relocated into MSDEC
- Medford School District Support Services relocated into the MSDEC-Annex

# C. Facilities Planning Process 2014 – 2018 to Meet Identified Education Standards

Standard 1: Adequate Elementary and/or Middle School Teaching Stations

*Issue:* The District made a significant investment in full day kindergarten in advance of the 2015-16 school year and another significant investment to reduce elementary class size in 2015. These two major instructional improvements, along with organic growth of elementary aged student population in the District, has caused the District to use more of its elementary school teaching stations. One elementary school (Hoover) had approximately 750 students in 2017-18 school year and two other elementary schools (Griffin Creek and Lone Pine) had student populations near or in excess of 600 students in that same year. The District's cohort size, in particular for non-charter elementary aged students, has risen from about 950 per cohort to over 1,000 per cohort in the last few years.

*Community & Stakeholder Involvement:* The Superintendent appointed a 6<sup>th</sup> Grade Task Force, led by the District's Chief Academic Officer, to consider optimal education models for 6<sup>th</sup> grade students, such as schools containing students in grades ranging from the current K-6 model to either a 6-8 or K-8 model. The outcome of the committee work would help to determine the future facility needs. The committee was comprised of teachers, principals, a parent and other district personnel. The committee recommended moving to a K-5, 6-8, 9-12 model.

#### Standard 2: Career & Technical Education Program Growth

*Issue:* Measure 98 was implemented in 2017 and this action accelerated the District's preexisting desire to expand Career and Technical Education (CTE) offerings. The District currently offers programs of study or coursework in Business/Marketing, Culinary Arts, Automotive Services, Cabinet Making, Construction Technology, Early Childhood Education, Engineering and CAD, Computer Science/Programming/Video, Health Services, Law, Metals Manufacturing, Pre-Education, Robotics and limited offerings in Electrical and Plumbing.

*Community & Stakeholder Involvement:* The Superintendent engaged leaders from the local plumbing, electrical, and sheet metal unions to begin a dialogue about how the school district may grow these particular programs of study by expanding course offerings and potentially school facilities. District leadership, teachers, board members and community members visited CTE facilities in Grants Pass and Springfield in Oregon. The district created conceptual designs for potential CTE facilities at each high school based on input from these meetings, information obtained at the site visits and with input from teachers and administrators at South and North Medford High Schools. The District hosted a town hall style meeting

to solicit community input on the concepts and to gauge the desire of the community to expand such course offerings. Individuals engaged in the process described herein have formed to become the district's CTE Facilities Committee, which continues to meet.

The district works with Rogue Valley Transit District (RVTD) in order to advocate for alternative transportation services for high school students attending the local college and/or university and district personnel participate on transportation planning committees. The district works with Rogue Community College (RCC) and Southern Oregon University (SOU) to expand course offerings for high school students. These affiliations do not exclusively benefit the CTE area.

#### Standard 3: Classroom Technology Expansion & Integration

*Issue:* The Medford School District supports an educational environment that ensures every student has the necessary tools to succeed in education and in life. We believe that this includes digital literacy and full access to technology. Our recently articulated plan (Vision 2020) describes six areas for growth, one of which is "High Tech Learning."

Like many school districts, we have increased student access to learning provided on Chromebooks and this requires backend infrastructure and access to internet resources. We have been exploring ways to provide Chromebooks (or similar technology) to all students to augment their learning on and off campus. The devices, infrastructure and Wi-Fi hot spots away from school, especially for our most disadvantaged students, require a significant share of the district's budget each year.

*Community & Stakeholder Involvement:* The District's Chief Academic Officer led a series of meetings in 2016 to explore student and teacher resources in the area of technology. The committees were comprised of employees of the school district, school board members, parents and students. The committees convened roughly 17 times between 2016 and 2018.

#### Standard 4: Ongoing Site Security Improvements

*Issue:* There has been a nationwide increase in the number of "active shooter" incidents on school grounds. Our district periodically experiences incidents requiring lockdowns or lockout protocols. Our district has been on the forefront of adding physical barriers and cameras on all campuses and we continue to increase the frequency and types of training provided to staff and students. The district has prioritized the use of resources to improve site security, however new information and improved technology continue to emerge that would help the district make further improvements. It is an area for potential increased investment.

#### Community & Stakeholder Involvement:

The district holds monthly Security Meetings with the Medford Police Department, Jacksonville Police Department, Sherriff deputies, district staff, district board members and city officials. The purpose of the meeting is to review internal and external trends that are affecting or may affect student safety.

Medford school district officials and City of Medford officials meet quarterly to discuss potentially overlapping topics in the areas of district and city planning, facilities and facility usage, adjoining properties and property maintenance, student and staff safety, and policy changes.

# CHAPTER 4 FACILITIES EVALUATIONS AND ASSESSMENTS

The district has developed a Healthy and Safe Schools Plan as a guide to keep schools safe and inform facility needs. The assessments, evaluations and documents may be found on the Medford School District website in Facilities/Grounds Department page.

- Lead testing and mitigation
- Radon testing and mitigation
- Integrated Pest Management
- Asbestos
- Seismic upgrades

Link to the Facilities/Grounds Department page: <a href="https://www.medford.k12.or.us/Domain/85">https://www.medford.k12.or.us/Domain/85</a>

#### CHAPTER 5 FACILITIES INVENTORY

The facilities inventory establishes the baseline to determine the existing capacity and the space needs for additional future growth. This section provides an inventory of capital facilities owned and operated by the Medford School District 549C including schools and support facilities. Further detailed information is provided in Appendix A.

#### A. School Facilities

The District maintains fourteen elementary schools, two middle schools and three high schools. The elementary schools currently accommodate grades K-6, the middle schools accommodate primarily grades 7-8 and have five 6<sup>th</sup> grade classrooms know as 6<sup>th</sup> Grade Academy". The high schools accommodate grades 9-12. The exception is Ruch School which serves grades K-8. The following tables show the current capacity in relation to permanent capacity of existing schools.

Elementary	Location	Building	Teaching	Permanent	Oct 2017	Available Capacity
Abraham	2101 McLoughlin	Alea Sy. Ft.	Stations	Capacity	Emonnent	Capacity
Lincoln		62 128	22	507	524	72
Criffin	2420 Criffin Crook	05,456	25	397	524	75
Grinn Crook <sup>(1)</sup>	2450 GIIIIIII CIEEK	E0 120	26	667	507	70
Lleever		59,150	20	007	597	70
Hoover	2323 SISKIYOU	F2 C11	27	71 5	<b>CO</b> 0	17
	Boulevard	53,611	27	/15	698	17
Howard	286 Mace Road	59,530	23	579	458	121
Jackson	713 Summit					
	Avenue	55 <i>,</i> 804	17	460	418	42
Jacksonville	655 Hueners Lane					
	Jacksonville	57,561	20	507	438	69
Jefferson	333 Holmes Drive	52,943	19	505	489	16
Kennedy	2860 Keene Way	54,788	24	617	551	66
Lone Pine	3158 Lone Pine					
	Road	73,458	25	657	602	55
Oak Grove	2838 West Main					
	Street	59 <i>,</i> 355	22	585	495	90
Roosevelt	1212 Queen Anne					
	Avenue	51,002	18	457	436	21
Ruch	156 Upper					
	Applegate Road	34,590	11	297	186	111
Washington	610 Peach St.	58,146	18	480	410	70
Wilson	1400 Johnson	49,972	23	615	546	69
Total Available	Capacity	783,328	296	7,738	6,848	890

# Table 5.1 Elementary Schools Inventory

 Permanent capacity is calculated by multiplying the number of teaching stations times the students per classroom as defined in the educational standards,

\*\* Enrollment as of September 29, 2017, less estimated number of students who will attend 6<sup>th</sup> grade academy beginning in 2018/19.

<sup>(1)</sup> Four Classrooms were added at Griffin Creek Elementary School beginning in 2018/19.

# Table 5.2 Middle Schools Inventory

Middle Schools	Location	Building Area Sq. Ft.	Teaching Stations	Permanent Capacity	Oct 2017 Enrollment*	Available Capacity
Hedrick	1501 E.	158,990	47	1,253	1,124	129
	Jackson St.					
McLoughlin	320 W. 2 <sup>nd</sup>	161,072	43	1,146	931	215
	Street					
Total Available						
Capacity		320,062	90	2,339	2,055	344

\* Enrollment as of September 29, 2017, plus estimated number of students who will attend 6<sup>th</sup> grade academy beginning in 2018/19.

5 · · · · · · · · · · · · · · · · · · ·						
High	Location	Building Area	Teaching	Permanent	Oct 2017	Available
Schools		Sq. Ft.	Stations	Capacity*	Enrollment*	Capacity
North	1900 N.	234,121	70	1,784	1,734	50
	Keene Way					
South	1551	255,000	74	1,879	1,793	86
	Cunningham					
	Avenue					
MSDEC	815 Oakdale	251,721	40	1,008	282	726
	Ave.					
Total Available						
Capacity		740,842	184	4,671	3,809	862

Table 5.3 High Schools Inventory

\* Enrollment as of September 29, 2017.

#### B. Support Facility Inventory

Tables 5.5 and 5.6 identify space allocations for support services located at the Medford School District Education Center.

Space Use	Occupied Area (Square Feet)	Site Location
<b>Central Medford High School</b>	44,215	Main Building, First Floor
Administration	42,395	Main Building, Second Floor
Board Room /Conf. Rooms	12,641	Main Building, First Floor
Auditorium / Lobby	14,400	Main Building, First Floor
Leased / or Available for Lease	56,814	Main Building
Total Main Building	170,465	

# Table 5.4 Medford School District Education Center – Main Building Inventory

# Table 5.5 Medford School District Education Center – Annex / Gym Inventory

Space Use	Occupied Area (Square Feet)	Site Location	
Facilities	12,414	Annex	
Purchasing/Warehouse	11,364	Annex	
Network Telecom Services	6,221	Annex	
Instructional Media Center	5,100	Annex	
Publications	1,200	Annex	
Sodexo-Food Service	5,225	Annex	
Total Annex	41,524		
Gymnasiums (3)	16,241	Gym	

### C. MODULAR UNIT INVENTORY AND LIFE EXPECTANCY

The district has installed modular units at seven locations to accommodate enrollment growth or to provide room for third party providers.

- 8/94 Jefferson Elementary School
- 8/03 Oak Grove Elementary School
- 7/05 Ruch School
- 9/05 Jackson Elementary School
- 7/15 Jackson, Hoover, Lone Pine (2 units) and Wilson elementary schools

#### D. HISTORICAL BUILDINGS

The Medford School District has two (2) historic facilities. Washington Elementary School located at 610 South Peach Street in Medford is listed on the National Historic Registry. The school's construction in 1931 was a community response to the need for jobs during the Great Depression and the overburdening of school facilities by population growth. Medford Senior High School (now Central Medford High School and district facilities) located at 815 South Oakdale Avenue in Medford is listed within an historic district.

#### CHAPTER 6 SCHOOL CAPACITY

#### A. EXISTING SCHOOL CAPACITY

The existing school conditions and capacity were inventoried as part of the 2005 planning process and have been updated as recently as 2018.

In addition to student population, other factors such as collective bargaining agreements, government mandates, and community expectations affect classroom space requirements. Space is necessary for regular classrooms, the fine and performing arts, physical education, special education, Title I, tutorial support, technological applications, career and technical education programs, and computer labs. Space must be provided for common areas such as media centers, cafeterias, kitchens, auditoriums and parking. Space is needed for groups of students/staff to work together. The size of the property and city and county requirements may also limit the district's ability to use certain locations for expansion. Further, District leadership and the community expects all spaces to be well utilized during the school day and available after the school day for school and community use. Adding classrooms at some elementary locations may be limited by the size of the cafeteria and/or gym.

#### 1. Determining Capacity

Available capacity varies at each school and across the district. The district determined capacity at elementary schools on a classroom by classroom basis, including analysis of classrooms used for Special Education programs districtwide. At the middle and high schools, a utilization formula was used to determine facility capacity:

#### High Schools --- # teaching stations x class size x 80% utilization factor = Total Capacity Middle Schools --- # teaching stations x class size x 85% utilization factor = Total Capacity

The utilization factor is used to account for the amount of time a regular classroom is not occupied by students. An 85% factor is used at middle school because most middle school teachers teach 6 out of 7 periods a day, so 6/7 = 85.7%. We round down because some teachers with extra duties teach 5 out of 7 classes. An 80% factor is used in high school because teachers teach 4 out of 5 periods a day. The number of students per teaching station used to calculate capacity is 25 for K-3, 30 for 4-6 and 32 for grades 7-12.

Schools	Teaching Stations	Permanent Capacity	Oct 2017 Enrollment*	Available Capacity				
Elementary Schools	296	7,738	6,848	890				
Middle Schools	90	2,399	2,055	344				
High Schools	184	4,671	3,809	862				
Total Available Capacity	5701	14,808	12,712	2,096				

Table 6.1	
School Capacity	

\* Enrollment as of September 29, 2017.

#### B. ADJUSTMENTS TO SCHOOL CAPACITY TO INCLUDE SPECIAL PROGRAMS

Several schools partner with other agencies to provide student support services within the school. These partnerships are very beneficial for the community but also result in a reduction of available space. Adjustments were made to the tables above to account for special programs with lower enrollment and, in some cases, eliminate classrooms from inventory because the classroom is utilized for other purposes. Examples of internal and external programs that impact classroom inventory are below:

#### **INTERNAL PROGRAMS – ELEMENTARY**

- Abe Lincoln: 2 MAPS classrooms
- Griffin Creek: 2 MAPS classrooms
- Hoover: 1 FOCUS classrooms
- Howard: 2 STEPS classrooms
- Jackson: none
- Jacksonville: 2 MAPS classrooms
- Jefferson: none
- Kennedy: 2 MAPS classrooms
- Lone Pine: 1 FOCUS classroom
- Oak Grove: none
- Roosevelt: 2 MAPS classrooms
- Ruch: none
- Washington: none
- Wilson: none

#### **INTERNAL PROGRAMS – SECONDARY**

- Hedrick: 2 MAPS classrooms
- McLoughlin: 1 MAPS classroom; 1 FOCUS classroom
- MSDEC: 1 MAPS classroom; 2 STEPS Plus classrooms; 2 TRANSITION classrooms
- NMHS: 1 MAPS classroom
- SMHS: 1 MAPS classroom; 1 FOCUS classroom

#### COMMUNITY PARTNERS UTILIZING CLASSROOMS

- Jackson: Neighborhood Center in 1 modular classroom; Pre-school in 1 modular classroom and independent playground space; La Clinica in 2 modular classrooms
- Jefferson: Douglas County ESD in 2 modular classrooms
- Oak Grove: La Clinica in 2 modular classrooms
- Ruch: YMCA Pre-school present, but not utilizing a classroom
- Washington: Head Start in 1 classroom and independent playground space; La Clinica in 1 classroom behind the gym
- Wilson: Head Start in 1 classroom and independent playground space

MAPS = Multi Age Positive Supports

FOCUS = Focus on Choosing Useful Skills

STEPS = Specialized Training in Educational Program Services

#### CHAPTER 7 ENROLLMENT PROJECTIONS

#### A. District Growth Projections

#### 1. Johnson Reid- Demographic and Enrollment Forecasts

In 2016, the District engaged Johnson Reid, LLC, a land use economics firm, to develop population projections by school age group from 2016 through 2035. The study, attached as Appendix C, concludes as follows:

"Over the 20-year period, we forecast an increase of roughly 31,000 residents in the district, for an average annual growth rate of 1.55%. This rate of growth is somewhat lower than the 1.9% rate adopted in the City of Medford's Comprehensive Plan, but higher than the growth observed over the past 15 years. The student age population is expected to grow at a slightly slower rate (1.4%), adding 5,500 student-age residents."

See page 18 of Appendix B of the document prepared by Johnson Economics entitled, *Demographic and Enrollment Forecast Medford School District 549C 2016-2035*.

#### 2. City of Medford Population Projections

Johnson Economics, in the document referenced above, says, "Strong facilities planning should include coordination at the local and regional level. In 2010, roughly 83% of all households within the Medford School District were also located within the Medford Urban Growth Boundary. As such, anticipated changes in City of Medford policy are likely to affect the school district. In an effort toward regional coordination, this analysis relied heavily on planning efforts at the city level, namely recent updates to the City's Comprehensive Plan.

"In 2009, the City of Medford completed its periodic update of the economic element of its Comprehensive Plan for the 2010-2030 planning period. By statute, this process involved the development of an economic development strategy and adopting estimates of employment growth over a 20-year planning horizon. Before the recent recession lowered its economic base, the City was planning on accelerated economic growth over the next 20-years. The City's adopted economic forecast calls for an average annual growth rate of 1.7%, adding 30,000 new jobs over a 20-year period."

#### B. District Enrollment Forecast, Traditional vs. Charter Schools

The Johnson Economics document predicts that the Medford School District "Traditional Schools" will grow to 16,633 students by 2035. This is an increase of 3,921 students from 12,712 noted in Table 6.1. The grade band projections are as follows:

- K-6 9,360 students, up from 7,050 students in 2017/18

   Increase of 2,310 students
- 7-8 2,454 students up from 1,853 students in 2017/18

   Increase of 601 students
- 9-12 4,819 students up from 3,809 students in 2017/18

   Increase of 1,010

In the same study, Charter School enrollment will increase to roughly 2,075 students by the year 2035. Charter schools had 1,712 students enrolled in October of 2017. This is an increase of 363 students or over 21% growth.

See **FIGURE 27** on page 23 of Appendix B for growth by grade band and more traditional versus charter school enrollment forecast data.

## CHAPTER 8 FACILITY NEEDS

#### A. Future Capacity Requirements

The Medford School District currently has capacity to add an additional 890 students in Elementary (K-6) and 1,206 students grades 7-12. Table 8.1 shows the facility capacity needs over the next two decades.

Schools	Teaching Stations	Permanent Capacity	Projected 2025 Enrollment	Change in Capacity	Projected 2030 Enrollment	Change in Capacity	Projected 2035 Enrollment	Change in Capacity
Elementary	296	7,738	7,233	505	8,230	-492	9,360	-1,622
Schools								
Middle	90	2,399	2,015	384	2,153	246	2,454	-55
Schools								
High	184	4,671	4,521	150	4,302	369	4,819	-148
Schools								
Capacity	570	14,808	13,769	1,039	14,686	-123	16,633	-1825

Table 8.1 Capacity Requirements, not including Charter schools

#### B. MEETING INCREASED SPACE DEMANDS

#### 1. Phase I: 1-5 years

From Table 5.1 Elementary School Inventory, the district has one elementary school (Hoover) that meets or exceeds current district capacity limit and has two middle schools with about 1,000 students enrolled per school. The district has very few spaces for CTE offerings, especially for coursework in such areas as woodworking, electrical, plumbing, sheet metal, masonry, et.al. The district will also seek classroom space for the expansion of its online school as testing and certain courses will periodically require a classroom. The following options are available to address short-term capacity needs:

**OPTION 1:** Boundary adjustments to balance school capacities. Minor monetary costs.

**OPTION 2:** Add capacity for elementary age students by building individual classrooms or by adding modular units. There is district owned property available to add classrooms at Griffin Creek, Hoover, Jackson, Jefferson, Kennedy, Lone Pine, Oak Grove, Ruch, and Wilson. Howard may have space to add classrooms with an approved agreement from the City of Medford to access parkland. The cost to add a classroom (utilizing traditional construction) was approximately \$500,000 per classroom in 2018.

Add capacity for CTE facilities by adding new facilities to existing high school campuses or by converting existing classrooms into CTE classrooms. A freestanding CTE facility could be constructed at either NMHS, SMHS or at the site of the district's warehouse on Columbus Avenue.

**OPTION 3:** There are currently 200 6<sup>th</sup> grade students assigned to classes at the two middle schools in the district's 6<sup>th</sup> Grade Academy program. There is capacity available at the secondary schools to either relocate more elementary age students or to add or relocate special programs.

#### 2. Phase II: 5-15 years

Within the 12 year horizon, the district projects there will be a need to increase capacity for additional elementary students, see Table 8.1. The middle schools and high schools should still have adequate capacity with only minor adjustments to accommodate specific program needs. The following options are available to address future capacity needs over the next 5-15 years:

- **OPTION 1:** To keep the current K-6 configuration, capacity will be required at the elementary level. Adding one new elementary school in east Medford will alleviate this need. This action will increase capacity by 500-600 students. This option would be practical if modular units from Phase I were to remain at school sites.
- **OPTION 2**: Continue to expand the 6<sup>th</sup> Grade Academy model whereby a fixed number of elementary aged students attend classes at the two middle school. There are approximately 200 6<sup>th</sup> grade students scheduled in the 6<sup>th</sup> Grade Academy in 2018.
- **OPTION 3:** To shift fully to a K-5 and 6-8 configuration, the capacity constraint would shift from the elementary schools to the middle schools. This will make it necessary to add at least one new middle school to accommodate the shift of the entire 6<sup>th</sup> grade class from the elementary schools to the middle schools. The 6<sup>th</sup> grade class cohort (not including charter schools) is projected to be 1,100 students by 2030. At the same time, the 7<sup>th</sup> and 8<sup>th</sup> grade cohorts are also expected to be 1,100 students per cohort. This option dictates that a new middle school must have the capacity to accommodate 1,100 students to meet the projected growth by 2030.
  - Renovating much of the MSDEC facility to accommodate a middle school will cost anywhere from \$5,000,000 to \$40,000,000 depending on the scope of the project.
  - b. A newly constructed middle school will cost approximately \$80,000,000.
- **OPTION 4:** Many of the district's locations have real estate available to construct additional classroom units to manage the increased capacity demands. The location of new construction would depend upon where the 6<sup>th</sup> grade cohort is educated and upon population growth trends by school location.
- **OPTION 5:** Shift to a 6-8 model and add two (2) new middle schools. This would drop the respective school sizes to approximately 825 students. (3,300 students in the 6-8 cohort divided by 4 = 825).

#### 3. Phase III: 15+ years

To meet the projected capacity demands in 2035, elementary and secondary school capacity growth will be required. Assuming no additional construction has occurred by then (either a new school construction or additional classrooms added) and assuming the district stays largely as a K-6, 7-8, 9-12 configuration, then elementary and high schools will be well beyond capacity and middle schools will be at capacity:

**OPTION 1:** If the K-6 configuration remained, three to four Elementary schools will be required. This would increase the elementary capacity by 1,500 to 2,400 students. Secondary sites could have capacity increased with building additions or modular units to accommodate student enrollment growth.

- **OPTION 2:** With a K-5 configuration, one additional elementary school, and adding classrooms on specific campuses will meet the need. A 6-8 and 9-12 configuration for secondary schools would require the addition of at least a third middle school. Assuming MSDEC is used as the third middle school, both high schools must accommodate about 600 more students each. Note that Figure 8.1 shows the MSDEC capacity of 1,008 students as part of the high school capacity. If that capacity is shifted to middle school, then the high school capacity drops from 4,671, less 1008 down to 3,633. By 2035, there will be over 4,800 high school aged students, meaning each school will need to add capacity for about 600 students.
- **OPTION 3:** With a K-5 configuration, two new elementary schools could be added instead of constructing additional classrooms on specific campuses. At least a third middle school will be required and some additional capacity will be required at the high schools as described in Option 2 above.

#### C. Future School Site Options

**MD-2 Property:** The District has a letter of Intent for a land donation of 20 acres located within an adopted Urban Reserve Area near Vilas Road and Crater Lake Avenue, See Figure 2. By being located in the urban reserve, it is more likely to be adopted into the Urban Growth Boundary. The location of this property meets the District's requirements for future school sites identified in Table 6.2. This property is large enough to fit either a future elementary or middle school.

The District has cooperated with the City and landowner to add the property to the urban growth boundary to provide additional capacity to meet further growth needs. An amendment to the existing urban growth boundary is expected by the end of 2018 or in 2019. The procedure would include a comprehensive plan amendment and zone change so that the site will be appropriately zoned. At that time, it will become district owned property.

**Property Purchase:** The Medford School District could seek to purchase land to meet the need for future school sites. The cost for a 10 acre plot to meet the standard for an elementary school within the existing Urban Growth Boundary could range between \$500,000 and \$1,000,000. The cost for a 20 acre lot to meet the recommended middle school standard within the Urban Growth Boundary would range between \$1,000,000 and \$2,000,000. Property located in the Urban Growth Boundary to meet future land needs is becoming very difficult to locate. Property located in the Urban Reserve Area to meet future land needs could be purchased at a lower cost but will still need to be incorporated into the Urban Growth Boundary.

The City of Medford has designated a future elementary school site on the Southeast Area Plan Map in a planned residential area to the east of North Phoenix Road and north of East Barnett Road. Although, the site has not yet been acquired by the District, the Southeast Plan provides for notification to and coordination with the District through a required Planned Unit Development review process as the area is built out. The district has also talked to other landowners with property scheduled to be annexed into the city upon approval of the city's urban growth boundary expansion who are interested in working with the district to find suitable school sites.

**Hull Road Property:** The property owner has pledged a gift of a 20 acre school site on the southwest quarter of the property to the District. The Hull Road property is located outside of the proposed Urban Growth Boundary amendment but is considered by the district to be an good location for a future school.

#### D. Evaluating Potential School Sites

Upon determining that there is a need for new facilities, a review of potential sites must consider many factors including health and safety, location, accessibility, environment, physical characteristics (soil and topography), acquisition and development costs (including utilities), and coordination with the local comprehensive plans. The criteria outlined in Table 6.2 below are designed to select sites that provide for both a safe and supportive environment for the instructional program and the learning process.

#### Table 8.2

# **School Site Selection Criteria**

Medford 549C Schools Site Selection Criteria							
Safety							
<ul> <li>If adjacent to or near arterial roadways, elementary school site must</li> </ul>	have adequate room on						
property to maintain sufficient setback conducive to good learning er	nvironment						
These factors must be availed.							
Within 1 500 foot of railroad tracks							
<ul> <li>Within 1,500 feet of famodu tracks</li> <li>Within airport approach overlay</li> </ul>							
<ul> <li>Crossed by high-voltage (500 KV) power lines</li> </ul>							
<ul> <li>Close to high processing lines for example natural gas, gasoline sower</li> </ul>	or water lines						
<ul> <li>Close to high-pressure lines, for example flatural gas, gasoline sewer</li> <li>Contaminants (toyics in the soil or groundwater, such as from landfill)</li> </ul>	chomical plants, refineries						
- Containmants/ toxics in the soli of groundwater, such as normanums	, chemical plants, refineries,						
<ul> <li>Close to high decided poise sources</li> </ul>	, etc.						
<ul> <li>Close to open-nit mining</li> </ul>							
<ul> <li>Close to open-pit mining</li> <li>On or poor a fault zone or active fault</li> </ul>							
<ul> <li>In a dam inundation area or 100-year flood plain</li> </ul>							
<ul> <li>Social hazards in the neighborhood, such as high incidence of crime a</li> </ul>	nd drug or alcohol abuse						
Location	darias (promotos houndarias						
- Excation conductive to allow for enricient and logical school area boun	montany schools one mile of						
middle schools, and 1.5 miles of high schools)	mentary schools, one mile of						
<ul> <li>Provimate to residential neighborhoods</li> </ul>							
<ul> <li>Safe walking areas can be provided</li> </ul>							
<ul> <li>Multiple street approaches available (3 frontages ideal)</li> </ul>							
<ul> <li>Ability to maintain at least a 200-foot setback of nearby farm and for</li> </ul>	est practices						
<ul> <li>Favorable orientation</li> </ul>							
Environment							
Desirable features include a variety of trees and plants or a wooded a	area for use in education						
programs such as biology or outdoor learning							
<ul> <li>Free from sources of noise that may impede the instructional process</li> </ul>							
<ul> <li>Free from air, water and soil pollution</li> </ul>							
<ul> <li>Provides aesthetic view from and of the site</li> </ul>							
<ul> <li>Compatible with the educational program</li> </ul>							
Soils							
<ul> <li>Proximity to faults or fault traces</li> </ul>							
<ul> <li>Stable subsurface and bearing capacity</li> </ul>							
<ul> <li>Danger of slides or liquefaction</li> </ul>							
<ul> <li>Positive drainage</li> </ul>							

# Medford 549C Schools Site Selection Criteria

#### Topography

- Generally level
- Flat sites preferred; If flat site unavailable, choose site with minimum need for major excavation
- Rock ledges or outcroppings
- Surface and subsurface drainage
- Level area for playfields

#### Size and Shape

- Length-to-width ratio does not exceed 2:1
- Sufficient open play area and open space
- Potential for expansion for future needs
- Area for adequate and separate bus loading and parking

#### Accessibility

- Obstacles such as crossings on major streets and intersections, narrow or winding streets, heavy traffic patterns
- Access and dispersal roads
- Natural obstacles such as grades or gullies
- Access for bus transportation
- Routing patterns for foot traffic
- Remote areas (with no sidewalks) where students walk to and from school
- Easily reachable by emergency response vehicles

#### **Public Services**

- Available and feasible at time of construction
- Fire and police protection, including fire water lines

Cost

- Reasonable costs for purchase of property, severance damages, relocation of residents and businesses, and legal fees
- Reasonable costs for site preparation including, but not limited to, drainage, parking, driveways, removal of existing buildings, and grading
- Environmental mitigation
- Reasonable maintenance costs

#### Availability

- On the market for sale or likely to be available
- Title clearance unencumbered
- Condemnation of buildings and relocation of residents to be avoided

# MAP IDENTIFYING MEDFORD'S PROPOSED URBAN GROWTH BOUNDARY (UGB) EXPANSION AREAS (Figure 2)



#### CHAPTER 9 CAPITAL FACILITIES FINANCING

#### A. Capital Improvements for Existing Facilities

Scheduled capital improvement projects include large projects that cannot be funded from the maintenance operating budget. These projects would include roof replacements, mechanical and electrical system upgrades, parking lot and sidewalk replacements, floor finish replacements, painting, sports fields and track replacements and building renovations.

The district spent on average, roughly \$5.6 million per year, on capital improvements between fiscal years 2015/16 and 2017/18. This includes projects in these categories: curriculum, facilities, music and computer hardware and infrastructure. There were unusually high expenditures over the three-year period for the implementation of full day kindergarten, adding classrooms at Griffin Creek Elementary School, replacing the turf at Spiegelberg Stadium, renovating a sports field at North Medford High School, and purchasing musical instruments. After adjusting for these unusual projects, on average, the district has spent \$4.3 million dollars a year on capital improvements. Ongoing support for capital improvements is necessary to maintain high quality facilities, appropriate curriculum, and adequate technology.

#### B. Capital Improvement Funding

The District has four primary sources of funding for anticipated capital improvements:

- I. *Construction Excise Tax:* On November 21, 2011, the School Board voted to implement a construction excise tax. The funds collected from this tax are currently being used to offset capital improvement costs. A portion of the proceeds could be applied to the annual capital improvement plan.
- 2. *Project Reserves:* An annual amount is transferred from the general fund into a facilities reserve account to fund the capital improvement plan.
- 3. *Established Revenue from Energy Incentive Grants:* The Oregon Department of Energy administers the SB 1 149 program. This program will provide the Medford School District an annual revenue stream of approximately \$200,000 to \$250,000 to reimburse the district for energy efficient projects that were funded from the 2006 Bond. This program is expected to sunset by 2030.
- 4. *Liquidation of Surplus Properties:* The district owns a warehouse on Columbus Avenue that is underutilized. The warehouse could be repurposed to relocate district services and free up space at MSDEC. It may also be liquidated to free up additional cash for capital needs.

#### C. New Construction Funding

The money to fund new construction can come from a new general obligation bond or other funding sources, as described above and with full faith and credit borrowing by the school district. General Obligation bonds are the typical financing vehicle used by public entities to fund construction of new schools or other large capital improvement projects. The District passed a \$188.9 million bond in November 2006 that funded renovations and new construction at all 19 sites and created the centralized support facility.

The Medford School District held four afterhours meeting to inform and seek input from the community on the district's plan to expand CTE options for students and to discuss the possibility of a general obligation bond to finance the expansion. The district held a town hall style meeting in its boardroom on February 7, 2018, primarily to seek community input on a potential CTE facility expansion plan and financing options. The district then held meetings on April 11, 18 and 26, one at each high school. At the meetings the district:

• Talked about the use of Measure 98 funds to expand CTE offerings,

- Outlined how expanded CTE offerings fit within the district's student pathways program,
- Presented details of potential CTE facilities to be constructed, one each, on the North and South Medford High School campuses,
- Outlined the potential cost of the CTE expansion plan,
- And outlined a potential financing option of the plan through a general obligation bond.

A general obligation bond is usually necessary for the purchase of land and subsequent construction of new schools and capacity expansion necessary to accommodate future growth in enrollment. The rate of enrollment growth will influence future facility demands. In the case of potential construction on the MD-2 site, the land donation eliminates the cost of purchasing the land, which is a tremendous benefit to the taxpayers of the district. Land costs and location are a consideration for construction of an elementary school (or schools) and/or the construction of a middle school.

## CHAPTER 10 CONCLUSIONS AND RECOMMENDATIONS

# A. Future Capital Improvements for Existing Facilities

Medford's existing facilities are in very good condition thanks to the bond-funded construction of the past several years. The focus since then has been on maintaining the facilities and performing timely preventative maintenance to preserve facility assets. The district will continue to have ongoing funding needs for necessary capital expenditures such as reroofing, painting, upgrading HVAC, etc. This will be key to keeping district facilities ready to support current and future students.

# B. Recommendations for Future Facilities

The student growth rate forecast is a good guideline. If the growth rate is substantially less than predicted, the need for additional capacity extends farther into the future. Conversely, spikes in enrollment could cause the district to accelerate its plan.

There is an immediate need to add Career and Technical Education (CTE) space. Since 2014, the district has added coursework in the CTE area in support of the expansion of its pathways model. There are very few CTE classroom and lab facilities for trade-related fields, such as electrical, plumbing, metals, carpentry and masonry. The recommendation here is to either convert existing space to become CTE classrooms (as available) and/or add CTE classrooms and lab space.

There is an immediate need to evaluate districtwide security needs, improve and upgrade as necessary.

With the projected growth rate, the District will look to add either an elementary school or a middle school within the next several years.

The District further recommends the following guidelines when considering expansion:

- 1. <u>Equity</u>: Student demographics, school size and student distribution are paramount in decisions on school locations and boundary decisions.
- 2. <u>Efficiency:</u> Over the past decade, the District has completed major renovation projects, new construction projects and has re-adapted existing facilities in substantive ways. Operating efficiency as well as energy conservation has become a leading objective in the district.
- 3. <u>Siting Criteria:</u> Adopt site selection criteria to provide critical guidance in advance of future needs.
- 4. <u>Property Purchase</u>: Coordinate with the owners of the donated and/or purchase sites to secure acquisition of property and to assure the site is appropriate for inclusion in the design plans for the District and community.
- 5. <u>Agency Review:</u> Continue to work with local agencies such as the City of Medford, City of Jacksonville, City of Central Point, and Jackson County to ensure growth and land locations are consistent with regional goals.



# **APPENDIX A – SITE INFORMATION**

# NORTH MEDFORD HIGH SCHOOL

1900 North Keene Way, Medford, OR 97504

# **CAMPUS INFORMATION**

Year of Original Construction	1967
Major Renovation	2007-2011
Site Size (acres)	61.31
Building Size (square feet)	234,121
Teaching Stations	70
Grades	9-12
Capacity	1,784



# CAMPUS ASSESSMENT

The overall condition of the campus improved significantly following the bond work. The renovation projects improved student safety and facility durability. In 2015, security fence/gates were installed across the front of the campus completing the building perimeter fencing. The site has inadequate Career and Technical Education (CTE) facilities and would benefit from an expansion to support the CTE pathway. There is one artificial turf field that was installed in 2008 that will need to be replaced eventually. The second story weight room has proved problematic. A ground floor weight room would be sufficient. The upper gym would also benefit from improved ADA access.

# **BOND CAMPUS IMPROVEMENTS**

Major renovations occurred between the years 2007-2011. The North campus bond renovations included revised space layouts, structural seismic upgrades, new siding, new roofing, mechanical system replacement, security upgrades, asbestos removal, parking lot upgrades, landscape upgrades, new flooring, and new interior finishes. New windows and skylights were also added to increase natural light in the interior spaces.

New construction on campus consisted of a new media center and three new classrooms. The previous media center was turned into a student commons area.

The final bond project on the North campus replaced the main gym wood floor in the summer of 2011.

# **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$33.5 Million <u>Source:</u> General Obligation Bond Proceeds and General Fund <u>Major Completion:</u> Fall 2010

# North Capital Improvements

2014 - Generator Set Replaced (\$41,000)
2014 - Exterior Painting Work (\$14,000)
2014 - Trash Compactor Installed (\$21,000)
North Capital Improvements

- 2014 Mat Lift in Gym/Mats Purchased (\$40,000)
- 2014 Purchased Pole Vault Pit Mats (\$18,000)
- 2014 Roof Coated/Science Building (\$56,000)
- 2015 Roof Coated/Graphic Arts (\$15,000)
- 2015 Varsity Soccer Field Replaced and JV Soccer Field Improvement (\$481,000)
- 2015 Softball Field Improvement (\$94,000)
- 2015 Culinary Arts Oven/Hood Installed (\$13,000)
- **2015** Main Office Remodel (\$30,000)
- 2015 Security Fence/Gates Installed Across the Campus Front (\$30,000)
- 2016 Planetarium Lighting Upgraded (\$37,000)
- 2016 Roof Coated/Fine Arts Building and Breezeway (\$20,000)
- 2016 CTE Equipment Installed (\$11,000)
- 2017 Replaced Gym and Theater Fire Sprinklers (\$33,000)
- 2017 Installed LED Lights in Upper Gym/Wrestling Room/Weight Room (\$40,000)
- 2017 Replaced Tennis Court Surface and Added Drainage (\$260,000)
- 2017 Auditorium Rigging Repairs (\$195,000)
- 2017 Built Additional Office (\$7,000)
- 2018 Additional Power Added To Metal Shop (\$7,000)
- 2018 Resurfaced Auditorium Stage (\$10,000)

# SOUTH MEDFORD HIGH SCHOOL

1551 Cunningham Lane, Medford, OR 97501

# **CAMPUS INFORMATION**

Construction Completion	2010
Site Size (acres)	38
Building Size (square feet)	255,000
Teaching Stations	74
Grades	9-12
Capacity	1,879



# CAMPUS ASSESSMENT

The new construction quality of the campus remains. There is no asbestos at South. The site does have inadequate Career and Technical Education (CTE) facilities and would benefit from an expansion to support the CTE pathway. The site has one artificial turf field installed in 2008 that will need to be replaced eventually. The second story weight room has proved problematic. A ground floor weight room would be sufficient. South still uses Spiegelberg stadium as their primary practice facility for football. If the MSDEC site were ever repurposed, some south athletic facilities would potentially require expansion.

# **BOND CAMPUS IMPROVEMENTS**

The new campus construction project includes a 255,000 sq. ft. building with a competition gym, auxiliary gym and a theater. The project also includes athletic fields with a track, tennis courts, baseball field, two softball fields, soccer field, and artificial turf at the football field. The campus is designed to be energy efficient with natural lighting and efficient mechanical systems. The campus is designed to be safe for students and has been constructed with durable materials.

# **CAMPUS INVESTMENT**

Bond Budget: \$79,800,000 Source: General Obligation Bond Proceeds Completion: Fall 2010

# South Capital Improvements

- 2014 Refinished Upper Gym Floor (\$9,000)
- 2014 Commercial Culinary Ovens (\$40,000)
- 2014 Irrigation System Central Control Node (\$6,000)
- 2015 Site Work for Power to Baseball/Softball Fields (\$11,000)
- 2015 Baseball Field Batting Cage Site work (\$15,000)
- 2016 Oven Hoods Upgraded (\$15,000)
- 2016 Power to Baseball/Softball Fields (\$15,000)
- 2017 Concrete Replacement/Lighting (\$73,000)
- 2017 Installed Netting on Softball Field to Block Foul Balls (\$35,000)

# South Capital Improvements

**2017** - Built Additional Office (\$10,000)

 - Blinds in All Offices along North Wall (\$6,000) – Graduation Stage (\$30,000)

# **MEDFORD SCHOOL DISTRICT EDUCATION CENTER (MSDEC)**

815 South Oakdale, Medford, OR 97501

# **CAMPUS INFORMATION**

Year of Original Construction	1931
Site Size (acres)	19.20
Building Size (square feet)	251,721
Classrooms	40
Grades	9-12
Capacity	1,088



# CAMPUS ASSESSMENT

This facility is a multi-story structure built 84 years ago. It previously served the community as Medford High School (1931-1967), Medford Mid High School (1967-1986), and South Medford High School (1986-2010). The campus contains asbestos and lead throughout. All hazardous materials are contained to prevent exposure. Interior finishes, flooring and painting are in fair to good condition. The building resides in the South Oakdale Historic District. All exterior changes have to be reviewed and approved by the Landmarks and Historic Preservation Commission. The building has been modified to house the district administration team and several other tenants in addition to the Central Alternative High School. The site would benefit from window and additional seismic upgrades, parking lot overlays and sidewalk/stair concrete replacement. The interior has some worn hallways and unfinished spaces. Spiegelberg stadium needs additional security features. The annex building houses the Facilities Department, Network Telecom Services (NTS), Instructional Media Center (IMC), Publications, and the Food Services department. Spiegelberg stadium turf was last replaced in 2015. The site does have have field space that could be utilized for building expansion and additional parking.

# **BOND CAMPUS IMPROVEMENTS**

The 2006 Bond Measure 15-73 provided an opportunity to preserve this community asset and to consolidate district support services on this campus. The main building and annex were renovated.

The athletic stadium, gym and athletic fields will be used for district and community events. The main building renovation was completed in 2011 and the annex renovation was completed in 2012.

# **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$5.7 million <u>Source:</u> General Obligation Bond Proceeds and from the liquidation of surplus properties. <u>Completion:</u> Spring 2012

# MSDEC Capital Improvements

2014 - Exterior Painting in Courtyards & Around Windows (\$33,000)

2014 - HVAC Installed In Central Computer Lab (\$16,000)

- 2014 Refinish Gym Floors MSDEC Upper/Main Gym Floor (\$27,000)
- 2014 Room 125 Renovated (\$22,000)
- 2014 Superintendent/Business Area Remodeled (\$25,000)
- 2014 Paint Booth Exhaust Fan Installed (\$5,000)
- 2014 Logos Classroom Project for Lease (\$55,000)
- 2014 Installed Mitsubishi Split System in IT (\$31,000)
- 2014 Installed Exhaust Fan Hood in Publications (\$7,000)
- 2015 Ramp Carpet Replaced/Restroom Upgraded To ADA Standard (\$6,000)
- 2015 Painting around Windows (\$28,000)
- 2015 Room 103 Upgraded For Science Classroom (\$15,000)
- 2015 Site Lighting Upgraded To LED Lights (\$154,000)
- 2015 Field Improvement/Garden Removed From Football Field (\$5,000)
- 2015 Spiegelberg/New Scoreboard Installed In the Stadium (\$162,000)
- 2015 Room 273 Remodeled (\$33,000)
- 2015 Sprinkler System Installed Above the Paint Booth (\$16,000)
- 2015 Spiegelberg Gates, Fire Extinguishers, Signage and Fence Upgraded (\$47,000)
- 2015 Spiegelberg Turf Replaced (\$505,000)
- 2015 Spiegelberg Emergency Egress Lighting Installed (\$101,000)
- 2016 Roof Coated Above Boiler Room (\$2,000)
- 2016 Annex Chiller Replaced (\$72,000)
- 2016 Painted/Replaced Window Frames on South Side (\$60,000)
- 2016 Finished Room 267/268 (\$36,000)
- 2016 Roof Coated On West Side of Spiegelberg Stadium (\$76,000)
- 2016 HVAC Installed For 267/268 and 265/266 (\$201,000)
- 2017 Fire Door Installed Upstairs In Main Gym Wrestling Room (\$13,000)
- 2018 HVAC Replaced In Room 103 (\$11,000)
- 2018 Resurfaced Auditorium Stage (\$12,000)
- 2018 Finished Painting around Window Frames (\$15,000)

# HEDRICK MIDDLE SCHOOL

1501 East Jackson Street, Medford, OR 97504

# **CAMPUS INFORMATION**

Year of Original Construction	1955
Site Size (acres)	11.00
Building Size (square feet)	158,990
Teaching Stations	47
Grades	6-8
Capacity	1,253



# CAMPUS ASSESSMENT

This facility is a two-story structure built more than 63 years ago. The building is structurally sound and received a major upgrade in 1996. Heating, ventilation and cooling systems are operational, but aging. Asbestos materials exists in the facility, but they are well contained. The building requires better general access to become compliant with the Americans with Disabilities Act (ADA). The campus does not provide adequate parking. Hedrick is one of the largest middle schools in the state with the current 7<sup>th</sup>-8<sup>th</sup> grade population. In 2018, four classes of sixth graders were moved onto the site increasing the demand on capacity. There is currently no security fence around the perimeter of the site. A front entrance security storefront was added in 2018 to improve security. The building automation system (BAS) is antiquated and needs to be replaced as well as the remaining steam boiler that services the gym.

# **BOND CAMPUS IMPROVEMENTS**

The facility received minor upgrades in the summer of 2009. Improvements included mechanical duct system, lighting, floor finishes, roofing, new bleachers, and painting. Asbestos was removed in open areas. Asbestos still does exist in the facility, but it is limited to non-exposed areas where the material can be safely contained.

# **CAMPUS INVESTMENT**

Bond Budget: \$1.8 Million Source: General Obligation Bond Proceeds Completion: Fall 2009

# Hedrick Capital Improvements

**2014** - Two of the Three Boilers Replaced (\$228,000)

- 2014 Track Resurfaced (\$80,000)
- 2014 Replaced Classroom Flooring (\$18,000)
- 2014 Trash Compactor Installed (\$14,000)
- 2014 Refinished Upper Gym Floor (\$8,000)
- 2014 Music Instrument Storage Cabinets Installed (\$8,000)
- 2015 Replaced Classroom Flooring (\$18,000)
- **2015** Wrestling Mats Re-surfaced (\$5,000)
- 2016 Roof Coated Above Main Building (\$199,000)

# Hedrick Capital Improvements

- **2016** Sidewalk Concrete Replaced (\$6,000)
- 2016 Replaced Classroom Flooring (\$26,000)
- 2016 SPED/Installed Time Out Room (\$13,000)
- 2016 Music Room Instrument Storage Cabinets Installed (\$20,000)
- 2018 Repaint Gym Floor Lines (\$2,000)
- **2018** 6<sup>th</sup> Grade Preparations (\$135,000)

# MCLOUGHLIN MIDDLE SCHOOL

320 West Second Street, Medford, OR 97501

# **CAMPUS INFORMATION**

Year of Original Construction	1926
Site Size (acres)	9.80
Building Size (square feet)	161,072
Teaching Stations	43
Grades	6-8
Capacity	1,146



# CAMPUS ASSESSMENT

This facility is a multi-story structure built more than 92 years ago. The building is structurally sound and received major system improvements with minor seismic upgrades in 1996. Heating, ventilating and cooling (HVAC) systems are aging but functional. Asbestos materials exist throughout the facility, but they are contained. The campus does not provide adequate parking. In 2015, a fence was installed across the front of the school to improve security. McLoughlin is one of the largest middle schools in the state with the current 7<sup>th</sup>-8<sup>th</sup> grade population. In 2018, three classes of sixth graders were moved onto the site increasing the demand on capacity.

# **BOND CAMPUS IMPROVEMENTS**

This facility received minor upgrades in the summer of 2009. Improvements included mechanical duct system, lighting, floor finishes, roofing, new bleachers, and painting. Asbestos was removed in open areas. Asbestos still does exist in the facility, but it is limited to non-exposed areas where the material can be safely contained. Due to its extremely poor condition and the high renovation costs, the annex was removed in the summer of 2011.

# **CAMPUS INVESTMENT**

Bond Budget: \$1.4 Million Source: General Obligation Bond Proceeds Completion: 2009

# McLoughlin Capital Improvements

- 2014 Replaced Classroom Flooring (\$13,000)
- 2014 Roof Replacement Northeast Corner (\$80,000)
- 2014 Track Re-Surfaced (\$71,000)
- 2014 Trash Compactor Installed (\$14,000)
- 2015 Front Security Fence Installed (\$75,000)
- 2015 Windows (x14) Replaced In Science Rooms (\$18,000)
- 2015 Replaced Classroom Flooring (\$14,000)
- 2015 Wrestling Mats Re-surfaced (\$5,000)
- 2016 Replaced Classroom Flooring (\$56,000)
- 2016 Music Room Instrument Storage Cabinets Installed (\$41,000)

# McLoughlin Capital Improvements

2016 - Roof Coated (\$75,000)
- **2017** Replaced Damaged Fence Sections (\$30,000)
- **2017** Cafeteria Floor Replaced (\$37,000)
- 2018 6th Grade Preparations in Room 230 (\$10,000)
- 2018 Remove Cupboards and Shelves along the Back Wall In Room 220 B
- **2018** Replaced Building Automation System (\$200,000)

#### ABRAHAM LINCOLN SCHOOL

3101 McLoughlin Drive, Medford, OR 97504

#### **CAMPUS INFORMATION**

Year of Original Construction	1996
Site Size (acres)	19.98
Building Size (square feet)	63,438
Available Teaching Stations	23
Grades	K-6
Capacity	597



#### CAMPUS ASSESSMENT

This facility is a single-story structure built in 1996. The building is structurally sound and requires only minimal improvements. Flooring and interior finishes are beginning to show wear and will need replaced in the near future. There is no asbestos on this site. A large campus could be considered for potential future expansion.

#### BOND CAMPUS IMPROVEMENTS

The exterior was painted in the summer of 2007 as part of the district bond building improvement plan. Site fencing was added in 2009 to improve campus security.

#### **CAMPUS INVESTMENT**

Bond Budget: \$120,000 for painting and site fencing Source: General Obligation Bond Proceeds Completion: 2009

## Abraham Lincoln Capital Improvements

**2015** - Roof Coated Above the Gym and Office (\$24,000)

2015 - SPED/Time Out Rooms Installed (\$13,000)

2015 - Playground Installed (\$64,000)

2017 - Installed HVAC in Two MDF Rooms on the Second Floor (\$17,000)

**2016** - Playground Installed (\$6,000)

2018 - Replaced Building Automation System (\$160,000)

#### **GRIFFIN CREEK SCHOOL**

2430 Griffin Creek Road, Medford, OR 97501

#### **CAMPUS INFORMATION**

Year of Original Construction Site Size (acres) Building Size (square feet) Available Teaching Stations Grades Capacity



## CAMPUS ASSESSMENT

This facility is a single story structure with the original building constructed over 116 years ago. The building was renovated in 2007. In 2017, the water supply for field irrigation was connected to City water to improve the consistency of the irrigation supply. In 2018, four additional classrooms were constructed on site to address capacity challenges and the north side staff parking lot was upgraded from gravel to asphalt. The main building was also seismically retrofitted to life safety standards with state seismic rehabilitation grant program funding. A window upgrade would benefit the site in the future. There is room for additional expansion if necessary. Overall, this site is in good condition.

#### **BOND CAMPUS IMPROVEMENTS**

In 2007, the site received new HVAC systems and controls to improve efficiency and comfort for learning. Flooring was replaced with easy-to-maintain durable material, the interior was refurbished and exterior was painted. The campus buildings were connected to city water, and the roof was replaced.

In the summer of 2009, additional fencing was added to improve school security. In the summer of 2010, an additional parking lot was added to improve safety.

#### **CAMPUS INVESTMENT**

Bond Budget: \$2.47 Million Source: General Obligation Bond Proceeds and General Fund Completion: 2009

#### **Griffin Creek Capital Improvements**

- 2014 Glass Panels in Media Center Installed (\$22,000)
- 2014 Concrete Sidewalks Added (\$16,000)
- 2015 Room 6 Electrical and Fencing Installed (\$8,000)
- 2016 Replaced 2 x HVAC Units (\$8,000)
- 2016 SPED/Time Out Room Installed (\$8,000)
- 2016 Boiler Replaced (\$16,000)
- 2017 Roof Coated Above Classrooms 21-25 (\$29,000)
- 2017 Field Irrigation Upgraded/Connected To City Water (\$97,000)

#### **Griffin Creek Capital Improvements**

**2018** - Four Additional Classrooms and Asphalt for Staff Parking Lot (\$1,777,600) **2018** - Seismic Upgrade (\$1,498,160)

#### HOOVER SCHOOL

2323 Siskiyou Boulevard, Medford, OR 97504

#### **CAMPUS INFORMATION**

Year of Original Construction	19
Site Size (acres)	7.
Building Size (square feet)	55,4
Available Teaching Stations	
Grades	K
Capacity	7



#### **CAMPUS ASSESSMENT**

This facility is a single story structure built 60 years ago. The building was renovated in 2007. Hoover is experiencing significant growth, which has placed a heavy demand on existing spaces at the site. As part of the full day kindergarten implementation in 2015, one modular with two additional classrooms was added to the site. The building was pit set with permanent infrastructure supporting it. The site will be seismically retrofitted to life safety standards with state seismic rehabilitation grant program funding in 2019. Adequate parking and the pick-up/drop off configuration are a challenge. There is limited space toward the back of the school for expansion if necessary. The site backs up to the city's Holmes Park. Even with sending some Hoover 6<sup>th</sup> grade students to the middle school, Hoover has exceeded its capacity.

#### **BOND CAMPUS IMPROVEMENTS**

The 2007 renovations included new HVAC systems and controls to improve efficiency and comfort for learning. The flooring was replaced with easy-to-maintain durable material, the interior was refurbished and the exterior was painted. Additional parking was added in 2008. Windows were replaced in 2009.

## **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$3.3 Million <u>Source:</u> General Obligation Bond Proceeds and General Fund <u>Completion:</u> 2009

#### **Hoover Capital Improvements**

- **2014** Siding Replaced (\$55,000)
- 2014 Exterior Painting (\$10,000)
- 2014 Concrete Walk Ways Replaced (\$10,000)
- 2015 1 x Modular/Two Classrooms Installed (\$330,000)
- 2015 Roof Coated Above Office (\$10,000)
- **2015** Added Holding Tank and Pump to Field Irrigation (\$15,000)
- 2015 Carpet Replaced In Computer Room (\$5,000)
- 2015 Linoleum Replaced In Room 54 (\$7,000)
- 2016 Sidewalk Concrete Replaced (\$62,000)

#### **Hoover Capital Improvements**

- 2017 Roof Coated Above Media Center, Gym, and Cafeteria (\$18,000)
- **2018** Gym Floor Replaced (\$60,000) **2018** Media Center Roof (\$20,000) **2019** Seismic Upgrade (\$1,498,345)

#### HOWARD SCHOOL

286 Mace Road, Medford, OR 97501

#### **CAMPUS INFORMATION**

Year of Original Construction Site Size (acres) Building Size (square feet) Available Teaching Stations Grades Capacity



#### CAMPUS ASSESSMENT

This facility is a single story structure built 46 years ago. The school site is limited in size. In 2018, the periphery buildings were seismically retrofitted to life safety standards with state seismic rehabilitation grant program funding. The gym was upgraded to immediate occupancy standards. The site is adjacent to the city's Howard Park. Overall, the building is in good condition.

#### **BOND CAMPUS IMPROVEMENTS**

In the summer of 2008, the building was renovated with new floor finishes and paint. In 2009, the boiler was replaced and the roof was replaced on the main building. In the summer of 2011, a fence was added on City property to secure the playground area.

#### **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$1.11 Million <u>Source:</u> General Obligation Bond Proceeds and General Fund <u>Completion:</u> 2009

#### **Howard Capital Improvements**

**2014** - Cleaned and Sealed Exterior Brick (\$10,000)

- 2014 East Parking Lot Asphalt Replaced (\$68,000)
- 2015 Roof Coated Above Quad Building (\$5,000)
- 2015 Filled In Planters (x6) On the East Side with Stamped Concrete (\$13,000)
- 2015 Filled In Large Group Room Floor (\$10,000)
- 2018 Chiller Replaced (\$80,000)
- 2018 Roof on the Main Building Coated (\$20,000)
- 2018 Seismic Upgrade (\$1,498,690)
- 2018 Parking Lot Overlay/Sidewalk/interior Courtyard Concrete (\$350,000)

#### JACKSON SCHOOL

713 Summit Avenue, Medford, OR 97501

#### **CAMPUS INFORMATION**

Year of Construction/Renovations	2009
Site Size (acres)	4.52
Building Size (square feet)	57,596
Available Teaching Stations	17
Grades	K-6
Capacity	460



## CAMPUS ASSESSMENT

The new construction quality of the campus remains. There is no asbestos remaining in the Jackson buildings. As part of the full day kindergarten implementation in 2015, one modular with two additional classrooms was added to the site. The building was pit set with permanent infrastructure supporting it. The site backs up to the district's warehouse property and sits adjacent to Jackson Park. La Clinica currently occupies a modular building on the site to operate a school based health clinic. There is room for expansion on the site; however, the site has limited parking available. The site is adjacent to Jackson City Park/Pool.

## **BOND CAMPUS IMPROVEMENTS**

The main building and gym were newly constructed in 2009. The 1949 addition, media center and cafeteria were newly renovated as well. The new construction and renovation project provided students with an air-conditioned learning environment, natural light and durable materials throughout the site.

#### **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$12.96 Million <u>Source:</u> General Obligation Bond Proceeds <u>Completion:</u> January 2010

#### Jackson Capital Improvements

2015 - 1 x Two-Classroom Modular Installed (\$372,000)

- 2015 Built Storage Shed Attached To the Building/Moved Bike Rack (\$21,000)
- 2016 Removed Bathroom and Tennis Court (\$11,000)

#### JACKSONVILLE SCHOOL

655 Hueners Lane, Jacksonville, OR 97530

#### **CAMPUS INFORMATION**

Year of Original Construction	1954
Site Size (acres)	10.25
Building Size (square feet)	57,561
Available Teaching Stations	20
Grades	K-6
Capacity	507



#### CAMPUS ASSESSMENT

This facility is a single story structure built over 64 years ago. Jacksonville has a very large parking lot area. The parking lot will need replaced in the near future, but needs to be phased. Phase I of the parking lot replacement was completed in 2017. There is room for some minor expansion on site; however, the cafeteria is small and at capacity. Additional security fencing was added along the back property line in 2018. Overall, the building is in good condition. The field is watered with Medford Irrigation District (MID) water.

#### **BOND CAMPUS IMPROVEMENTS**

In the summer of 2007, a sidewalk was added at the school exit road to provide students a safe route to school. This facility was renovated in the summer of 2008. Current HVAC systems had minor upgrades. Asbestos and other hazardous materials were removed or properly contained. Flooring was replaced and the building interior and exterior was repainted. In 2009, security fencing was added to part of the campus.

#### **CAMPUS INVESTMENT**

Bond Budget: \$915.000 Source: General Obligation Bond Proceeds and General Fund Completion: 2009

#### **Jacksonville Capital Improvements**

- 2014 Media Center HVAC Upgraded (\$53,000)
- 2014 Security Fencing Upgraded (\$10,000)
- 2014 Fire Sprinklers Repaired/Replaced (\$50,000)
- **2015** Sewer Pumps Replaced (\$17,000)
- 2015 HVAC Systems Replaced (\$32,000)
- 2015 SPED/Time Out Rooms Installed (\$5,000)
- **2015** Filled In Large Group Room Floor (\$11,000)
- **2016** Replaced 2 x HVAC Units (\$26,000)
- **2017** Replaced 2 x HVAC Units (\$35,000)
- 2017 Parking Lot Overlay for Alley and Part of the Main Parking Lot (\$198,000)
- **2018** Security Fencing (\$40,000)

#### JEFFERSON SCHOOL

333 Holmes Avenue, Medford, OR 97501

#### **CAMPUS INFORMATION**

Year of Original Construction	
Site Size (acres)	
Building Size (square feet)	Į
Available Teaching Stations	
Grades	
Capacity	



#### CAMPUS ASSESSMENT

This facility is a single story structure built over 63 years ago. The building was renovated in 2007. The Douglas County ESD currently occupies a modular on site. This is a large site with several acres of MSD land beyond the back fence that is utilized by the city as a park. In 2016, the parking lot was replaced and an ADA ramp was added to the front entrance. Across the street from Jefferson is the city's Fichtner Mainwaring Park. There is a significant amount of room for expansion at this site if necessary.

#### **BOND CAMPUS IMPROVEMENTS**

The 2007 renovation included new HVAC systems and controls to improve efficiency and comfort for learning. The flooring was replaced with easy-to-maintain durable material and the interior was refurbished. To improve site security corridors were added to connect the campus buildings. Site fencing was added in 2009 to improve campus security.

#### **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$4.64 Million <u>Source:</u> General Obligation Bond Proceeds and General Fund <u>Completion:</u> 2007

#### Jefferson Capital Improvements

2015 - Roof Coated Above Gym, Media Center and Rooms 18 and 20 (\$31,000)

2015 - HVAC Systems Replaced (\$13,000)

- 2016 Parking Lot Overlay/ADA Ramp Installed (\$223,000)
- 2016 Replaced Stage HVAC Unit (\$14,000)
- 2016 Concrete Sidewalk Replacement (\$34,000)
- 2016 Removal of Underground Storage Tank (\$18,000)
- 2018 Playground Installed (\$39,000)

#### **KENNEDY SCHOOL**

2860 N. Keene Way Drive, Medford, OR 97504

#### **CAMPUS INFORMATION**

Year of Original Construction	1
Site Size (acres)	1(
Building Size (square feet)	54,
Available Teaching Stations	
Grades	
Capacity	



#### CAMPUS ASSESSMENT

This facility is a single story structure built over 41 years ago. The building was recently renovated in 2007. The majority of the asphalt was replaced in 2015; however, the front asphalt for the bus drop off will need replaced in the near future. This site backs up to a city park. There is room for expansion on this site.

#### **BOND CAMPUS IMPROVEMENTS**

The 2007 renovations included new HVAC systems and controls to improve efficiency and comfort for learning. Flooring was replaced with easy-to-maintain durable materials. Site fencing was added in 2009 to improve campus security.

## **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$2.37 Million <u>Source:</u> General Obligation Bond Proceeds and General Fund <u>Completion:</u> 2007

#### Kennedy Capital Improvements

2014 - Front Security Fence Installed (\$24,000)

2014 - Roof Coated Above the Media Center and Rooms 28-29 (\$142,000)

2015 - Roof Coated Above Republic Hall and Loyalty Hall (\$54,000)

- 2015 Parking Lot Overlay and Playground Asphalt Replaced (\$195,000)
- 2015 Playground (\$27,000)
- 2016 Re-located Primary Playground Fence to Include Grass Field (\$4,000)
- 2017 Roof Coated Above Three Quads Vicinity of Main Office (\$98,000)
- **2017** Painted Exterior (\$10,000)
- 2018 Paved Small Basketball Court and Added Baskets (\$11,000)

#### LONE PINE SCHOOL

3158 Lone Pine Road, Medford, OR 97504

#### **CAMPUS INFORMATION**

Year of Original Construction	1926
Site Size (acres)	9.22
Building Size (square feet)	77,042
Available Teaching Stations	25
Grades	K-6
Capacity	657



## CAMPUS ASSESSMENT

This campus is still in very good condition following the new construction and full renovation of existing buildings in 2009. As part of the full day kindergarten implementation in 2015, two modular units with four additional classrooms were added to the site. The buildings was pit set with permanent infrastructure supporting them. The site is adjacent to a city park. There is room for expansion on this site.

#### BOND CAMPUS IMPROVEMENTS

Two newly constructed buildings were completed in 2009. Two classroom wings with the media center were fully renovated. The new construction and renovated buildings will provide students with a learning environment with natural day lighting, air conditioning and durable materials.

## **CAMPUS INVESTMENT**

Bond Budget: \$15 Million Source: General Obligation Bond Proceeds Completion: 2009

#### **Lone Pine Capital Improvements**

- 2014 Courtyard Concrete Installed/Security Door Added (\$29,000)
- 2015 2 x Modular Units/Four Additional Classrooms Installed (\$756,000)
- 2016 Roof Coated Above Classrooms 16-17 (\$17,000)
- 2017 Sidewalk Concrete Replaced (\$43,000)

#### **OAK GROVE SCHOOL**

2838 West Main Street, Medford, OR 97501

#### **CAMPUS INFORMATION**

Year of Original Construction	1891
Site Size (acres)	12.50
Building Size (square feet)	59,355
Available Teaching Stations	22
Grades	K-6
Capacity	585



#### CAMPUS ASSESSMENT

The original building was built in 1891 with an addition of eight classrooms in 1996. The campus is in very good condition with the new construction and full renovation of existing buildings in 2009. La Clinica currently occupies a modular building on the site to operate a school based health clinic. A track was added in 2018. There is room for expansion on site.

#### BOND CAMPUS IMPROVEMENTS

New construction replaced the existing gym and administration space. All remaining classrooms, cafeteria, and media center were fully renovated with new mechanical and electrical systems, windows, flooring, interior finishes, casework, and roofing. The new construction and renovation provides students with a learning environment with air conditioning and durable materials.

#### CAMPUS INVESTMENT

Bond Budget: \$10.1 Million Source: General Obligation Bond Proceeds Completion: 2009

#### **Oak Grove Capital Improvements**

2015 - Roof Coated Above Front Wing (\$31,000) 2016 - HVAC Installed In MDF Room (\$11,000) 2018 - Track Installation (\$34,000)

#### **ROOSEVELT SCHOOL**

1212 Queen Anne Avenue, Medford, OR 97504

#### **CAMPUS INFORMATION**

ear of Construction/	Renovations	200
te Size (acres)		4.5
uilding Size (square	e feet)	51,00
vailable Teaching S	tations	1
rades		K-
apacity		45
rades apacity	lations	ł 4



## CAMPUS ASSESSMENT

The new construction quality of the campus remains. The site has no off street parking available. There is no asbestos remaining in the Roosevelt buildings. The site does not have room for expansion.

## **BOND CAMPUS IMPROVEMENTS**

The main building and gym were newly constructed in 2009. The 1949 addition, media center and cafeteria were newly renovated. The new construction and renovation project provided students with an air-conditioned learning environment, natural light and durable materials.

## **CAMPUS INVESTMENT**

Bond Budget: \$13.15 Million Source: General Obligation Bond Proceeds Completion: January 2010

#### **Roosevelt Capital Improvements**

**2016** - SPED/Time Out Room Installed (\$4,000) **2018** - Replaced Irrigation Line (\$10,000)

#### **RUCH SCHOOL**

156 Upper Applegate Road, Jacksonville, OR 97530

#### **CAMPUS INFORMATION**

Year of Original Construction	1913
Site Size (acres)	11.86
Building Size (square feet)	34,590
Available Teaching Stations	11
Grades	K-6
Capacity	297



## CAMPUS ASSESSMENT

This facility is a single story structure. The original building is 105 years old. A modular building was added to replace structures that were in poor condition in 2005. In 2006, seismic upgrades were completed to the gym truss system. The majority of the site was seismically retrofitted to life safety standards with state seismic rehabilitation grant program funding in 2017. Unreinforced Masonry was addressed in the original building. The gym was upgraded to immediate occupancy standards. The site water supply is well based. Due to the well capacity, the fields have not been watered during the summer months in recent years. There is security fencing around the buildings, but not the whole site. A solar array was installed on the original building in 2018. There are several acres of land at the front of the school utilized as a nature area. Overall, the buildings are in good condition. There is room for expansion on this site.

## **BOND CAMPUS IMPROVEMENTS**

This facility was renovated in the summer of 2008. Current HVAC systems had minor upgrades. Asbestos and other hazardous materials were removed or properly contained. Flooring and other interior surfaces were replaced and renewed. The office was also reconfigured to improve security and day lighting.

## **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$1.24 Million <u>Source:</u> General Obligation Bond Proceeds and General Fund <u>Completion:</u> 2009

#### **Ruch Capital Improvements**

2014 - ADA Ramp Constructed (\$109,000)
2014 - HVAC Upgraded – 2 x Classrooms (\$12,000)
2015 - Roof Coated Above Media Center and Restroom (\$14,000)
2017 - Seismic Upgrade (\$1,477,100)
2017 - Roof Truss Reinforced For Solar Installation (\$12,000)
2017 - Gym Lighting Upgraded To LED Lights (\$8,000)
2018 - Solar Panels Installed (\$55,000)
2018 - Replace HVAC Units in Room 7 and 8 (\$25,000)

#### WASHINGTON SCHOOL

610 South Peach Street, Medford, OR 97501

#### **CAMPUS INFORMATION**

Year of Original Construction	1931
Site Size (acres)	6.42
Building Size (square feet)	58,146
Available Teaching Stations	18
Grades	K-6
Capacity	480



#### **CAMPUS ASSESSMENT**

This facility is a multi-story structure built more than 87 years ago. The building has been placed on the National Register of Historic Places. All exterior changes have to be reviewed and approved by the Landmarks and Historic Preservation Commission. Head Start occupies a classroom and playground space on site. La Clinica currently occupies space in the back of the gym to operate a school based health clinic.

Overall, the site is in good condition.

#### **BOND CAMPUS IMPROVEMENTS**

This facility was significantly renovated in 2007, which included the construction of a new cafeteria. The renovations included new HVAC systems and controls to improve efficiency and comfort for learning. The flooring was replaced with easy-to-maintain durable materials; the interior was refurbished and painted. An elevator, front ramp and restroom upgrades have improved school accessibility. Additional parking and security fencing was added to the school in the summer of 2008.

#### **CAMPUS INVESTMENT**

<u>Bond Budget:</u> \$7.02 Million <u>Source:</u> General Obligation Bond Proceeds <u>Completion:</u> 2009

#### Washington Capital Improvements

- 2011 Main Building Seismic Upgrade (\$270,000)
- 2014 Trash Compactor Installed (\$14,000)
- 2015 Playground (\$2,354)
- 2015 Roof Coated Above Rooms 10, 11, and 12 (\$21,000)
- 2015 Installed Insulation Underneath School (\$30,000)
- 2016 Playground (\$16,000)
- 2016 Parking Lot Overlay/Sidewalk Concrete Replaced/Lighting Added (\$163,000)

#### WILSON SCHOOL

1400 Johnson Street. Medford. OR 97504

#### **CAMPUS INFORMATION**

Year of Original Construction	1958
Site Size (acres)	10.56
Building Size (square feet)	52,660
Available Teaching Stations	23
Grades	K-6
Capacity	615



#### CAMPUS ASSESSMENT

The facility is a single-story structure built more than 60 years ago. As part of the full day kindergarten implementation in 2015, one modular with three additional classrooms was added to the site. The building was pit set with permanent infrastructure supporting it. The cafeteria space was also expanded in 2015 to support the current capacity. Head Start occupies a classroom and playground space on site. The district also has a co-use agreement with the city and a local Montessori school to utilize the site's fields. The site could benefit from a front office remodel to improve the functionality of the space. Overall, the buildings are in good condition and structurally sound.

#### BOND CAMPUS IMPROVEMENTS

This facility was significantly renovated in 2008. It received new HVAC systems and controls to improve efficiency and comfort for learning. Flooring was replaced with easy-to-maintain durable material, the interior was refurbished and exterior was painted.

#### **CAMPUS INVESTMENT**

Bond Budget: \$3.5 Million Source: General Obligation Bond Proceeds and General Fund Completion: 2008

#### Wilson Capital Improvements

- 2015 1 x Three-Classroom Modular Installed (\$492,000)
- 2015 Cafeteria Expanded (\$446,000)
- 2015 Sidewalk Concrete Replaced (\$42,000)
- 2015 Parking Lot Fence Expanded (\$7,000)
- **2015** Playground (\$11,000)
- 2016 Roof Coated Above the Breezeway/Drains Added (\$10,000)
- 2018 Playground Installed (\$25,000)
- 2018 Roofing Dry Rot Repair/Coating

#### MASLOW PROJECT

500 Monroe St., Medford, OR 97501

#### SITE INFORMATION

Year of Original Construction	19
Site Size (acres)	
Building Size (square feet)	6,0



#### SITE ASSESSMENT

This is a single story structure built more than 66 years ago. Asbestos material exists throughout the facility, but it is contained. The building requires better general access to become compliant with the Americans with Disabilities Act (ADA). The back open parking lot is aging and will require work in the near future. Part of the parking area remains unpaved and requires constant upkeep for weed maintenance. The roof is out of warranty with an ample amount of moss build up; however, it shows no signs of leaking. The HVAC system operates poorly. When the roof is replaced, it may be prudent to consider abating the asbestos and replacing the HVAC system concurrently.

#### SITE IMPROVEMENTS

There has been minimal investment while the building remains occupied.

#### SITE INVESTMENT

This site is currently being leased by Maslow Project, a nonprofit organization service homeless youth. Tenant improvements to the building included exterior painting, HVAC upgrades, interior finishes and new flooring.

## **DISTRIBUTION CENTER**

750 N. Columbus Ave., Medford, OR

#### SITE INFORMATION

1959 Year of Original Construction Site Size (acres) Building Size (square feet) 18.083



#### SITE ASSESSMENT

The main building is a single story warehouse. The property is adjacent to Jackson school. A large standalone freezer, located 4' to the south of the warehouse, was installed in 2018. A storage building is attached to the side of the warehouse. Two additional outbuildings buildings serve as carports - one with a concrete floor & rear walls and the other open on both ends. There is a large gravel parking lot and an ample amount of open area for outdoor storage. Food Services uses the site for dry storage as well as the freezer space. The building is used to store a variety of items and the outdoor space serves as a staging area. The site is available to liquidate; however, the district would need to acquire a significant amount of additional storage space before releasing the property. This site has two access points – one off of Columbus Avenue and one via the alley coming from West Jackson. This site could benefit from additional security measures and has room for expansion.

1

#### SITE IMPROVEMENTS

No work was done on the warehouse during the bond.

#### SITE INVESTMENT

2

## **Distribution Center Capital Improvements**

**2014** - Roof Coated Above the Warehouse (\$49,000)

2018 - New Freezer Installed (\$250,000)

Appendix B



# DEMOGRAPHIC AND ENROLLMENT FORECAST

## MEDFORD SCHOOL DISTRICT 549C 2016 – 2035

PREPARED BY JOHNSON ECONOMICS JANUARY 2017



## TABLE OF CONTENTS

١.	INTRODUCTION	2
н.	POPULATION AND HOUSING TRENDS	3
III.	BIRTHS TRENDS, FERTILITY, AND MIGRATION	5
IV.	ENROLLMENT TRENDS	8
ν.	ENROLLMENT FORECAST	12
	COHORT-COMPONENT POPULATION MODEL ENROLLMENT MODEL	12 18
VI.	ENROLLMENT FORECAST BY SCHOOL	24
	Factors Affecting ESAA Capture/Allocation	24
	RESULTS OF THE ESAA ENROLLMENT ALLOCATION	30
VII.	CONCLUSION	35



#### I. INTRODUCTION

JOHNSON ECONOMICS has been retained by the Medford School District to prepare a demographic analysis and develop enrollment forecasts for the 2015-2035 period. This analysis represents an update to the forecasts developed by JOHNSON ECONOMICS (then JOHNSON REID) in 2011, which covered the 2010-2030 period.

The purpose of this forecast is to inform the Medford School District's long range planning process. The School District serves a large geographic area reaching from the California and Josephine County borders to Central Point. It is the largest school district in Jackson County, encompassing 41% of the county population. Nearly 14,000 students were enrolled within the district as of fall 2015.

#### METHODOLOGICAL APPROACH

This analysis makes use of a range of informative parameters, including historical enrollment data, demographic estimates, employment data, and geocoded housing and land data. The methodology produces a district-wide enrollment forecast by grade level for the 2015-2035 period, by five-year increments. We then evaluate characteristics within the district's 14 Elementary School Attendance Areas (ESAAs) in order to forecast enrollment within each school boundary. Factors informing this "top down" allocation include recent birth trends, migration trends, demographic characteristics, housing characteristics, development trends, and existing development capacity. The objective of this process is to determine the "path of growth" likely to be realized geographically throughout the school district.

#### DATA SOURCES AND ISSUES

Demographic data form a central part of the analysis. The forecasts developed in 2011 utilized data from the 2010 Census, which is based on a large sample size and thus produces reliable estimates within small geographies. The present analysis is largely based on 2015 estimates (single-year) from the Census Bureau's American Community Survey (ACS). The ACS is produced by adjusting decennial census estimates through annual sampling of a relatively small portion of the population. Because of the small sample size and the time that has lapsed since 2010, these estimates have relatively wide margins of error for smaller geographies. Additional data distortion is evident for the 2010-2015 period due to the effects of the 2008-09 recession. Upheaval in the housing market appears to have caused a general underreporting in the ACS, likely reflecting that many households lived in temporary housing situations following the recession.

Because of the issues with the ACS, we have made adjustments to ACS population estimates when establishing 2015 base year estimates. Birth counts for the 2011-2015 period sourced from the Oregon Health Administration (OHA) have been used to adjust population estimates for the 0-4-year cohort. Enrollment data has been used to adjust the school-age population as well as the parent-age population, based on relationships observed in the 2010 Census. The older population has not been adjusted, as it has no direct impact on future enrollment.

Note also that the 2015 ACS data has only been employed on the school district level, and not for smaller geographies like ESAAs, where the margins of error are wider. Demographic trends evaluated in the process of allocating district-level estimates to individual ESAAs are primarily derived from the 2000 and 2010 decennial census, though birth and enrollment trends have been evaluated on the ESAA level through 2015. Non-demographic trends, like housing construction and development capacity, has also been evaluated on the ESAA level. Further details on data and methodology are included throughout this report.



## **II.** POPULATION AND HOUSING TRENDS

Based on the Census Bureau's estimates, the population within the Medford School District grew by an estimated 3,700 individuals between 2010 and 2015, for an average annual growth rate of 1.0%. However, as noted in the introduction, underreporting in the ACS survey appears to have caused the 2015 population to be underestimated. This is indicated by enrollment data. While enrollment in the district increased by 1,300 students over the five-year period, the ACS indicates that the school-age population grew by only 560. Our adjusted estimates for the 2015 population indicate that the population within the district increased by around 7,300 since 2010, for a 1.7% average annual growth rate.<sup>1</sup> In comparison, enrollment exhibited average annual growth of 2.0% over the period. The estimated population growth represents an acceleration relative to the previous decade.

#### FIGURE 1: POPULATION GROWTH, JACKSON COUNTY AND MEDFORD S.D. (2000-2015)

		Population	AA	GR	
Geography	2000	2010	2015	'00-'10	'10-'15
Jackson County	181,269	203,340	212,567	1.2%	0.9%
Medford S.D.	76,725	84,498	91,807 <sup>1</sup>	1.0%	1.7%

SOURCE: U.S. Census Bureau, Johnson Economics

The school age population (age 5-18) grew by an estimated 1,600 individuals within the school district over the 2010-2015 period, based on our adjusted estimates. This translates into average annual growth of 2.0%, and represents a reversal of the trend observed over the 2000-2010 period, when the school age population exhibited a slight decline. Unadjusted ACS estimates on the county level indicate a decline in the school age population, continuing the trend observed over the previous decade.

FIGURE 2: GROWTH IN SCHOOL AGE POPULATION.	JACKSON COUNTY AND MEDFORD S.D.	2010-2015)

		2010		_	2015		'10-'15	
	Total School Age		School Age	Total	Total School Age		School Age Pop	
Geography	Population	Population	Share	Population	Population	Share	AAGR	
Jackson County	203,340	35,036	17.2%	212,567	34,011	16.0%	-0.6%	
Medford S.D. <sup>1</sup>	84,498	15,404	18.2%	91,807	17,025	18.5%	2.0%	

SOURCE: U.S. Census Bureau, Johnson Economics

The recent strong increase in the student population within the school district, following a decline in the previous decade, can largely be explained by economic and housing-related factors. The declines in the previous decade began concurrently with the onset of the housing boom, where accelerated housing values appear to have driven family households to more affordable locations. This is indicated by accelerated growth rates in neighboring jurisdictions, specifically Central Point and Eagle Point. Secondly, in the second half of the decade, the economic recession caused a slowdown in in-migration. During the current economic expansion, job growth and relatively affordable family housing have again attracted families to the school district. This has been accommodated by a recovery in housing production and a shift toward more affordable homes.

<sup>&</sup>lt;sup>1</sup> Adjustments to the 2015 ACS estimates are based on birth counts within the district over the 2011-2015 period (applied to the 0-4-year cohort), and enrollment numbers in 2015, which are used to adjust the school-age population based on 2010 attendance ratios. The parent-age population was also adjusted to account for the enrollment increase, based on 2010 parent-child ratios at different age levels. County-wide figures have not been adjusted.



The strongest growth within the district's population is currently taking place in the 65-69 age segment, which represents the cusp of the baby boomer wave. Growth in this segment reflects in-migration (particularly from California) as well as the aging of the existing population. As shown in the following chart, the baby boomer wave has more than doubled the population within the 65-69 segment between 2000 and 2015. More moderate growth has taken place in the early family-age segment (25-34) and among children. The strongest decline since 2010 is observed in the college-age segment (20-24).





SOURCE: U.S. Census Bureau

Growth in households and housing units exceeded general population growth in the district during the prior decade, due to excessive spec home production and lenient lending standards that encouraged new household formation. During the downturn, home construction was greatly reduced, and many households were forced to fold in with friends and family, leading to a large amount of vacant housing in the district. Over the past five years, renewed in-migration and household formation have absorbed much of the vacant supply, and created demand for new housing. Still, at around 250 units per year, new production remains well below pre-recession levels.







## III. BIRTHS TRENDS, FERTILITY, AND MIGRATION

The number of births that occur annually within a given geography is a function of the number of females in "child bearing years" (age 15-44) and the rate at which those women have children (fertility rate). The following table provides a summary of current fertility rates in Jackson County and the Medford School District.

Geography/	Total	Female Pop in	Child Bearing Age		Fertility	Total Fertility
Year	Population	Bearing Years 1/	Female Share	Births	Rate 2/	Rate (TFR) 3/
<u>2000</u>						
Jackson County	181,269	35,630	19.7%	2,045	57.4	1.86
Medford S.D.	76,725	15,354	20.0%	963	62.7	1.96
2015						
2015						
Jackson County	212,567	38,088	17.9%	2,392	62.8	1.85
Medford S.D.	91,807	16,185	17.6%	1,175	72.6	2.22

#### FIGURE 5: FEMALE POPULATION IN CHILD BEARING YEARS AND FERTILITY RATES, MEDFORD SCHOOL DISTRICT AND JACKSON COUNTY (2000-2015)

1/ Female population age 15-44

2/ Births per 1,000 child bearing females

3/ Total Fertility Rate (TFR) equals the average number of lifetime children per woman

SOURCE: U.S. Census Bureau, Oregon Heath Authority, and Johnson Economics

Over the past 15 years, the number of women in the district in their child bearing years has grown modestly, from 15,354 to 16,185. The concentration of this demographic segment has decreased from 20.0% to 17.6%, in line with countywide trends. Though there has been only moderate growth in this segment over the past fifteen years (+5%), there has been a strong increase in births (+22%), indicating an increase in fertility. All told, the fertility rate in the district has increased from 62.7 births per 1,000 mothers in 2000 to 72.6 in 2015. The total fertility rate, equal to an estimation of the total number of children a woman will have in her lifetime, has also increased considerably. Both measures remain well above the countywide averages.

Two factors can explain the growth in these rates. First, the district saw a 65% increase in the Hispanic population over the 2000-2010 period. Hispanic households tend to have much higher fertility rates than the general population. Secondly, the trend for women to delay having their first child into their late 20s and early 30s has played into the district's demographic composition of having a higher proportion of women age 25-34.

Over the past ten years, the number of births in the district has fluctuated from year-to-year. There was a strong increase during the pre-recession boom, with the annual birth count climbing by 200 between 2005 and 2007 – a 20% increase. The number of annual births declined in the wake of the housing crisis and ensuing recession, for thereafter to increase again as the recovery began to take hold after 2012. In 2015, 1,175 births were recorded in the school district, on par with the 2008 level and 10% above the 2012 low point. Births recorded over the past five years will serve as a basis for our estimates of Kindergarten enrollment in our near-term forecast.





FIGURE 6: NUMBER OF BIRTHS, MEDFORD SCHOOL DISTRICT (2005-2015)

Our forecast model in Section V will use age-specific fertility rates to estimate future birth rates. Age-specific fertility rates are expressed as the number of births per 1,000 females in a given age cohort. For example, over the 2011-2015 period, there was an average of 288 births per year to mothers in the 20-24 age cohort within the school district. Highlighted in Figure 7, we observe that fertility rates in the school district have increased in every age group since 2000 with the exception of 15-19-year-olds. Our forecast assumes age-specific rates will continue their current trend for the first five years of the forecast before leveling off at stabilized rates.



FIGURE 7: AGE SPECIFIC FERTILITY RATES, JACKSON COUNTY AND MEDFORD SCHOOL DISTRICT, (2000-2015)

SOURCE: Oregon Health Authority, U.S. Census Bureau, JOHNSON ECONOMICS

SOURCE: Oregon Health Authority



Total population growth in any given geography is a function of two main variables, natural increase and net-migration. The first element, natural increase, is simply the reconciliation of the number of births and deaths over a given time period. Migration however, requires further analytical effort, as measures of the net flow of the population, particularly by age cohort, are rarely available at the local level. However, census data can be used to estimate migration by age group in the district.

In order to estimate migration rates, we begin with population estimates by age and sex from 2000 and 2015. We then age in place the population of one cohort into the next, applying age specific survival rates to each group. Using a hypothetical example, in 2010, assume 1,000 residents age 40-44 are aged or "survived" to become 987 residents age 45-49 in 2015. This is what we would expect absent any migration effects. We can also observe that in 2005 we have a known population 1,200 residents age 45-49. By reconciling our actual population counts with "survived" estimates, we approximate the net-migration that occurred during the five-year period, 213 in the case of our example.

The process above is repeated for every age and sex cohort through 2015. The residual provides estimates of migration by age cohort, which we in turn convert to a migration rate, expressed per 1,000 residents.



FIGURE 8: AGE-SPECIFIC POPULATION CHANGE FROM NET-MIGRATION, MEDFORD SCHOOL DISTRICT (2000-2015)

SOURCE: U.S. Census Bureau, JOHNSON ECONOMICS

The chart above is supportive of our intuitive knowledge of population dynamics in the Medford area. The region has consistently exhibited negative net-migration in the college-age segment, as people leave to pursue education elsewhere. The large influx of residents over the age of 80 is reflective of Medford's concentration of assisted living opportunities. We estimate that roughly 11,600 more residents moved into the district than out of it over the past 15 years. This converts to a total net-migration rate of 10.1 persons per 1,000 residents. The figure above will serve as baseline "structural" migration rates in our forecast analysis.



## **IV.** ENROLLMENT TRENDS

The Medford School District has seen a robust increase in K-12 enrollment since 2009, reflecting a combination of strong in-migration and rising fertility rates in the existing population. The pre-recession birth boom has also had an impact, as these children have reached school age over the past five years. The growth reversed the declines that took place in most of the previous decade, when children born during the booming 1990's were gradually being graduated out of the education system.



FIGURE 9: TOTAL FALL ENROLLMENT AND ENROLLMENT BY GRADE LEVEL, MEDFORD SCHOOL DISTRICT (2005-2015)

					En	rollment \	⁄ear					2005	-2015
Grade	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Δ	AAGR
К	923	856	897	896	904	1,025	962	1055	1050	1058	1099	176	1.8%
1	941	988	920	933	940	1,003	1038	1005	1131	1122	1131	190	1.9%
2	904	916	984	900	904	939	1013	1067	1066	1130	1133	229	2.3%
3	906	901	908	1,022	876	961	971	1032	1093	1062	1145	239	2.4%
4	978	926	911	919	1,004	928	955	978	1072	1062	1055	77	0.8%
5	955	988	944	944	881	1,061	960	976	1017	1078	1083	128	1.3%
6	947	961	967	930	923	899	1039	946	988	991	1085	138	1.4%
7	908	909	937	960	901	925	927	1069	958	1003	980	72	0.8%
8	969	907	900	933	948	929	929	960	1080	964	1009	40	0.4%
9	1,069	997	914	901	953	1,003	977	1003	972	1098	988	-81	-0.8%
10	1,090	1,055	1,000	923	914	962	992	1009	1019	966	1099	9	0.1%
11	942	1,057	1,013	934	876	896	970	1003	998	986	965	23	0.2%
12	1,006	1,004	1,088	1,006	1,017	1,008	1018	1084	1130	1108	1064	58	0.6%
Total	12,538	12,465	12,383	12,201	12,041	12,539	12,751	13,187	13,574	13,628	13,836	1,298	1.0%
K-6	6,554	6,536	6,531	6,544	6,432	6,816	6,938	7,059	7,417	7,503	7,731	1,177	1.7%
7-8	1,877	1,816	1,837	1,893	1,849	1,854	1,856	2,029	2,038	1,967	1,989	112	0.6%
19-12	4,107	4,113	4,015	3,764	3,760	3,869	3,957	4,099	4,119	4,158	4,116	9	0.0%

SOURCE: Oregon Department of Education

Between 2005 and 2009, the high school level was responsible for most of the enrollment decline, while moderate decline took place at the elementary level, and the middle school level was largely stagnant. Since 2009, all grade levels have seen growth. However, the elementary level has by far added the greatest number of students in absolute terms (+1,299), expanding its enrollment by 20% - twice the rate of the middle and high school levels.



Public charter schools have accounted for much of the enrollment growth over the past 10 years. The first such school to be chartered in Medford was Madrone Trail, in 2007. Three additional public charter schools have since been started within the district, with total enrollment growing to 1,500 students by 2015. Enrollment at traditional public schools fell by 450 students between 2005 and 2010, but has since recorded an increase of around 250 students. Public charter schools accounted for 11% of total enrollment within the Medford School District in 2015.





Geographically within the district, the steepest enrollment declines over the past ten years have come among the north schools, concentrated on the middle and high school levels. North Medford High has lost roughly 240 students over this period, while Hedrick Middle School has lost nearly 80 students. On the elementary level, the north schools have seen an increase of 165 students, which can largely be attributed to expansion at Hoover, while the south schools have added roughly 90 students. The steepest enrollment declines on the elementary level have taken place at Howard (-82 students).





SOURCE: Oregon Department of Education





SOURCE: Oregon Department of Education

In Section V of this analysis, we convert forecasts of the student-age population to forecasts of enrollment in the district using two inputs, student capture rates and grade progression ratios. The capture rate is simply the ratio of public school enrollment to grade-level population. (For grade-level population, kindergarten-age population is assumed to be equal to mid-year population of five-year-old children.)

The following chart exhibits estimated public school capture rates for 2015. The rates tend to fluctuate from year to year. For comparison, we have included rates from 2010. For both years, the total enrollment capture for the district was in the 87-88% range. In other words, 12-13% of the resident student population is either home schooled, attend schools in other districts, or attend private schools. For modeling purposes, we use a reconciliation of 2010 and 2015 rates. Note that the capture rates are subject to estimation errors in the underlying population estimates.

		11001			
	2015	2015 Pop.	2015	2010	
Grade	Enrollment	By Grade	Capture	Capture	K
К	1,099	1,263	87%	95%	
1	1,131	1,203	94%	94%	
2	1,133	1,273	89%	88%	
3	1,145	1,272	90%	90%	
4	1,055	1,199	88%	83%	
5	1,083	1,217	89%	97%	
6	1,085	1,262	86%	83%	8
7	980	1,167	84%	83%	9
8	1,009	1,201	84%	83%	10 2015
9	988	1,147	86%	89%	11 2010
10	1,099	1,276	86%	86%	12
11	965	1,163	83%	80%	50% 60% 70% 80% 90% 100%
12	1,064	1,209	88%	89%	Chudent Centure Date
Total:	13,836	15,851	87%	88%	Student Capture Rate

FIGURE 12: ESTIMATED PUBLIC SCHOOL CAPTURE RATES (2015)

SOURCE: U.S. Census Bureau, Oregon Department of Education, JOHNSON ECONOMICS



The second forecasting tool we utilize is grade progression ratios (GPRs). A grade progression ratio is simply the share of students in any given grade that move into the next progressive grade. For example, in 2014 there were  $1,122 \ 1^{st}$  grade students enrolled in the district. In 2015 there were  $1,133 \ 2^{nd}$  grade students enrolled, resulting in a GPR of 1.01. A GPR of 1.00 indicates a stable progression, where the number students moving out of the district, dropping out of school, or attending private school is equal to the number of new students moving into the district or entering school from private or home school. In our analysis, we use multi-year averages in our forecast application.

#### FIGURE 13: ANNUAL GRADE PROGRESSION RATIOS, MEDFORD SCHOOL DISTRICT (2005-2015)

											•		
		ANNUAL GRADE PROGRESSION RATIOS										10-year	15-year
Grade	'05-'06	'06-'07	'07-'08	'08-'09	'09-'10	'10-'11	'11-'12	'12-'13	'13-'14	'14-'15	Avg GPR	Avg GPR	Avg GPR
1	1.07	1.07	1.04	1.05	1.11	1.01	1.04	1.07	1.07	1.07	1.07	1.06	1.06
2	0.97	1.00	0.98	0.97	1.00	1.01	1.03	1.06	1.00	1.01	1.02	1.00	1.00
3	1.00	0.99	1.04	0.97	1.06	1.03	1.02	1.02	1.00	1.01	1.01	1.01	1.01
4	1.02	1.01	1.01	0.98	1.06	0.99	1.01	1.04	0.97	0.99	1.00	1.01	1.01
5	1.01	1.02	1.04	0.96	1.06	1.03	1.02	1.04	1.01	1.02	1.02	1.02	1.02
6	1.01	0.98	0.99	0.98	1.02	0.98	0.99	1.01	0.97	1.01	1.00	0.99	0.99
7	0.96	0.98	0.99	0.97	1.00	1.03	1.03	1.01	1.02	0.99	1.01	1.00	1.00
8	1.00	0.99	1.00	0.99	1.03	1.00	1.04	1.01	1.01	1.01	1.01	1.01	1.01
9	1.03	1.01	1.00	1.02	1.06	1.05	1.08	1.01	1.02	1.02	1.02	1.03	1.04
10	0.99	1.00	1.01	1.01	1.01	0.99	1.03	1.02	0.99	1.00	1.00	1.01	1.00
11	0.97	0.96	0.93	0.95	0.98	1.01	1.01	0.99	0.97	1.00	0.99	0.98	0.97
12	1.07	1.03	0.99	1.09	1.15	1.14	1.12	1.13	1.11	1.08	1.11	1.09	1.09

SOURCE: Oregon Department of Education, JOHNSON ECONOMICS



## V. ENROLLMENT FORECAST

There are two fundamental inputs to enrollment growth. First, the natural change in the student population resulting from births in the existing population; and second, enrollment growth resulting from net-migrants both bringing existing children into the district and adding to the potential volume of new births.

JOHNSON ECONOMICS has developed a demographically driven enrollment model that takes into account the natural change in the existing population as well as migration impacts. The model, which follows the standard cohort-component approach, segments the population by age and sex, and ages the population year-by-year by via survival rates. New births and migration impacts are added based on age-specific fertility rates and migration rates. The migration rates, in turn, are informed by historical migration rates as well as anticipated future job growth.

As indicated in the previous section, the conversion from population estimates to enrollment estimates is performed through a reconciliation of two methodologies. The first conversion applies historical public-school capture rates to the projected school-age population ("capture rate approach"). The second conversion relies on the same capture-rate estimates for kindergarten enrollment, but estimates enrollment in all other grades based on the historical relationship to the prior year's enrollment in the respective grades immediately below ("grade progression approach").

The grade progression approach is typically preferred for near-term forecasts, when existing enrollment provides a reliable basis for projecting future class sizes. However, this approach does not fully take into account the future impact of migration on enrollment in grades 1 through 12, as the historical grade progression ratios inherently assume a continuation of past migration patterns. We therefore prefer the capture rate approach for long-term projections. Our forecasts will incorporate both forecasts, giving weight to the grade progression approach over the near term and the capture rate approach over the long term.

#### **COHORT-COMPONENT POPULATION MODEL**

The Cohort-Component Model forecasts the future population by age and sex simply by surviving the existing population in each age/sex cohort, adding the estimated number of births in the current year, and adding anticipated migration via anticipated age/sex-specific migration rates.

#### SURVIVING THE POPULATION

The first analytical step, "surviving", relies on assumptions of mortality by age and sex. Because timely local data is rarely available, and survival rates remain relatively constant across geographic regions at younger cohorts, we utilize national data from 2013.



FIGURE 14: FIVE-YEAR SURVIVAL RATES BY AGE AND SEX COHORT, UNITED STATES (2013)



SOURCE: Oregon Health Authority

These survival rates indicate each age/sex cohort's propensity to survive into the next five-year age cohort. For example, in 2015 there were 2,955 males aged 5-9 years in the Medford School District. Under the assumptions in the previous chart, 2,952 are expected to survive into the 10-14 age cohort. Excluding any migration impacts, this would become the new population base in 2015 for 10-14 year-old males. Because survival rates are very high among both student age and child bearing age mothers, survival rates have very little impact on the underlying enrollment forecast.

#### **BIRTHING THE POPULATION**

The second analytical step involves adding the estimated number of annual births to the population of each subsequent year. For this process, we utilize district-specific assumptions of fertility rates discussed in Section III above. The following example displays birth estimates for 2016 calculated from our projection of the female population in child bearing age in 2016 and our age-specific fertility rate assumptions within the Medford School District (based on extrapolated historical fertility trends). Taken together, we assume that females age 15-44 in the school district will have around 1,200 babies in 2016. These births are then distributed by the natural sex ratio at birth<sup>2</sup> and added to the district population, for thereafter to be subjected to rates of survival and migration just as the remainder of the population.

Mother's	Female	Fertility	Estimated
Age	Population	Rate	Births
15-19	3,029	16.7	51
20-24	2,345	142.7	335
25-29	2,758	122.0	336
30-34	2,993	102.8	308
35-39	2,864	51.8	148
40-44	2,488	11.3	28
TOTAL	16,478	73.2	1,206

SOURCE: Oregon Health Authority, U.S. Census Bureau, Јоннѕон Есономіся

<sup>&</sup>lt;sup>2</sup> The natural sex ratio at birth in the United States is approximately 1.05 males for every female.



#### **MIGRATION IMPACTS**

In our analysis, we consider migration to be a function of livability, reflected in long-term structural migration, and employment-driven migration. The latter is discussed below. First we evaluate the impacts of structural migration trends exhibited in the existing population. For this analysis, we revisit Section III above, which identifies observed migration trends over the past 15 years.





SOURCE: U.S. Census Bureau, JOHNSON ECONOMICS

#### **Structural Migration**

The total migration rate in the district is estimated to 10.1 persons per 1,000 residents. This is the annual average over the 2000-2015 period. In our component-migration model, we apply age- and sex-specific migration rates in Figure 16 to population levels to reflect structural migration. Continuing our example, our assumed net-migration rate for 35-39-year-old females is 14.6 persons per 1,000 residents. In other words, we expect that in any given year, a net 14.6 females age 35-39 will move into the district for every 1,000 existing female residents in this cohort. In 2015 there were an estimated 2,834 females age 35-39 living in the district. Therefore, over the five-year period we would expect roughly 200 net-new female residents in the 35-39 age cohort as a result of migration.

#### **Employment-Driven Migration**

In addition to structural migration, we forecast additional net-new migration among highly mobile demographic segments in response to anticipated economic growth in the coming years, as adopted in the City of Medford Comprehensive Plan. Local economic growth attracts new residents to the area, which in turn leads to additional enrollment growth. JOHNSON ECONOMICS models this impact on the basis of projected job growth in excess of the average annual rate of job growth observed over the 2000-2015 period. Our forecast model relies on the job growth assumptions adopted by the City of Medford in the Comprehensive Plan.



#### City of Medford Comprehensive Plan

Strong facilities planning should include coordination at the local and regional level. In 2010, roughly 83% of all households within the Medford School District were also located within the Medford Urban Growth Boundary. As such, anticipated changes in City of Medford policy are likely to be observed within the district. In an effort toward regional coordination, this analysis relied heavily on planning efforts at the city level, namely recent updates to the City's Comprehensive Plan.

In 2009 the City of Medford completed its periodic update of the economic element of its Comprehensive Plan for the 2010-2030 planning period. By statute, this process involved the development of an economic development strategy and adopting estimates of employment growth over a 20-year planning horizon. Before the recent recession lowered its economic base, the City was planning on accelerated economic growth over the next 20-years. The adopted economic forecast calls for an average annual growth rate of 1.7%, adding 30,000 new jobs over a 20-year period. These job growth assumptions have been adopted in our migration forecast model.

#### Labor Migration Model

Our labor migration model is predicated on the fact that where economic expansion occurs, population growth typically follows. Further, this characteristic is a particularly important element for enrollment forecasting as the most "mobile" demographic segments, with the ability to move for employment opportunities, also have the highest propensity to be parents. In the analysis that follows, we document forecasted economic growth adopted by the City of Medford, calculate residual resident labor demand supported by economic growth, and translate findings into likely labor-driven migration above and beyond migration rates observed over the recent past.

#### Forecasted Employment Growth

In the Comprehensive Plan, the City of Medford has adopted an employment projection with an average annual employment growth rate of 1.7% annually for the 2008-2028 period. Extrapolating this growth through 2035 indicates roughly 34,000 net new jobs within the Medford UGB over the next 20-years.





SOURCE: City of Medford, JOHNSON ECONOMICS



However, not all employment growth is likely to be filled by residents of the school district. According to the U.S. Census Bureau's Local Employment Dynamics program, an estimated 47% of School District residents worked in Medford<sup>3</sup> in 2014. We allowed this ratio to trend to an average 60% rate on the margin given the on-going trend toward urbanization in the region. Reconciling these figures, we estimate a need for roughly 20,000 net new workforce participants over the 20-year period as a result of planned economic growth in the region.

#### Estimated Labor Force Growth

In light of the preceding analysis, we can forecast the future workforce balance under existing migration assumptions. The existing and forecasted working-age population is stratified by age-specific labor force participation rates to arrive at an estimate of the future labor force. This exercise reveals that, without additional labor in-migration, the future local labor force will age and become considerably less productive. Moreover, we forecast labor force growth of only 6,400 workers over the 20-year period under existing fertility, mortality, and migration trends. When reconciled with the City's adopted employment forecast, we have a shortfall of roughly 14,000 workers. Assuming that the City's employment forecasts are realized, either a drastic increase in labor force participation or additional net-migration growth<sup>4</sup> will be required to meet anticipated workforce needs.

FIGURE 18: LABOR FORCE GROWTH UNDER EXISTING MIGRATION TRENDS, MEDFORD SCHOOL DISTRICT (201	.5-2035)
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		Labor Fo	orce Age P	opulation		Participation	Estimated Labor Force				
Age	2015	2020	2025	2030	2035	Rate (2014)	2015	2020	2025	2030	2035
16-19	4,819	5,085	5,584	5,471	5,616	34.0%	1,638	1,729	1,899	1,860	1,909
20-24	4,319	5,591	5,799	6,401	6,203	70.8%	3 <i>,</i> 058	3,958	4,106	4,532	4,392
25-29	6,054	4,472	5,696	5,934	6,545	81.2%	4,916	3,632	4,625	4,819	5,315
30-34	5,676	6,210	4,651	5,817	6,095	81.2%	4,609	5,042	3,776	4,724	4,949
35-39	5,595	6,082	6,651	5,146	6,189	82.2%	4,599	5,000	5,467	4,230	5,087
40-44	5,044	5,747	6,249	6,831	5,361	82.2%	4,146	4,724	5,137	5,615	4,407
45-49	6,300	5,551	6,177	6,732	7,358	79.6%	5,014	4,419	4,917	5,359	5,857
50-54	6,087	6,493	5,774	6,357	6,931	79.6%	4,845	5,168	4,596	5,060	5,517
55-59	6,201	6,271	6,670	5,984	6,533	71.4%	4,428	4,477	4,762	4,272	4,664
60-64	5,353	5 <i>,</i> 899	5,942	6,329	5,660	55.8%	2,987	3,292	3,315	3,532	3,158
65-69	6,130	6,090	6 <i>,</i> 584	6,716	7,106	31.6%	1,937	1,924	2,081	2,122	2,246
70-74	3,536	5,730	5,723	6,178	6,305	18.9%	668	1,083	1,082	1,168	1,192
75-79	2,650	3,253	5,227	5,298	5,705	11.3%	299	368	591	599	645
80+	4,772	6,344	8,209	11,462	14,358	2.0%	95	127	164	229	287
Total:	72,535	78,817	84,933	90,658	95,964		43,240	44,942	46,517	48,121	49,624
Share of La	borforce	Age 55 or o	older				24%	25%	26%	25%	25%
Share of La	borforce	Peak Prod	uctive Yea	rs (25-54):			65%	62%	61%	62%	63%

SOURCE: U.S. Census Bureau, U.S. Bureau of Labor Statistics, JOHNSON ECONOMICS

#### Labor Force Driven Migration

In light of figures 17 and 18, we calculate the additional number of people likely to take up residence in the district as a function of economic growth. Assuming the district's capture of future labor-driven residents and stability in labor force participation, we estimate future employment-driven migration in the vicinity of 20,000 residents over the 20-year period. Further, we allocate this migration across each demographic segment. We begin with the distribution of workers within the existing labor force, and shift the allocation

<sup>&</sup>lt;sup>3</sup> Actual count was 40% within the City of Medford. Johnson Economics revised this figure by the ratio of employment inside and outside of the UGB, plus workers not counted due to the lack of unemployment insurance.

<sup>&</sup>lt;sup>4</sup> Or a combination of both. This analysis assumes static labor force participation rates (2014 data), which tend to be relatively stable over time.


slightly to reflect the likelihood of the most mobile cohorts to migrate for employment. Figure 19 presents our distribution of employment-driven migration by cohort.



FIGURE 19: DISTRIBUTION OF EMPLOYMENT-DRIVEN MIGRATION, MEDFORD SCHOOL DISTRICT (2015-2035)

SOURCE: U.S. Bureau of Labor Statistics, JOHNSON ECONOMICS

# School-Age Children of New Migrants

While the results in Figure 19 demonstrate the likely impacts of economic growth on the working age population, it does not reflect the school-age population associated with new migrants. The segments that dominate employment migration are also the segments have the highest propensity to be parents, and these will bring their existing children into the district as well as contribute to additional births. To approximate the distribution of children associated with migrating workers, we utilize an age-specific total fertility rate methodology. In other words, we assume that migrating mothers have the same propensity in each stage of their life to have children as the existing population. This is likely a conservative assumption as the recent trend has been that migrants have higher fertility rates.

FIGURE 20: PROPE	NSITY OF MIGRA	TING <b>F</b> EMALES	TO HAVE CHI	ldren <b>, M</b> edf	ORD SCHOOL	DISTRICT
			Child'	s Age		
Mother's Age	0-4	5-9	10-14	15-19	20-24	25+
15-19	0.015	0.000	0.000	0.000	0.000	0.000
20-24	0.141	0.015	0.000	0.000	0.000	0.000
25-29	0.124	0.141	0.015	0.000	0.000	0.000
30-34	0.114	0.124	0.141	0.015	0.000	0.000
35-39	0.055	0.114	0.124	0.141	0.015	0.000
40-44	0.012	0.055	0.114	0.124	0.141	0.015
45-49	0.000	0.012	0.055	0.114	0.124	0.141
50-54	0.000	0.000	0.012	0.055	0.114	0.124

SOURCE: Oregon Health Authority, U.S. Census Bureau, JOHNSON ECONOMICS

Throughout the 20-year period, this model translates into roughly 65 to 90 children age 5-17 migrating to the district with their parents every year. This represents the impact of employment migration on the student age population; not on enrollment.



# **DISTRICT-WIDE POPULATION FORECAST**

The analytical tasks presented above combine to produce a forecast of the district population over the 20year period. For simplicity, our model only considers the population aged zero to 80 years<sup>5</sup>. Over the 20year period, we forecast an increase of roughly 31,000 residents in the district, for an average annual growth rate of 1.55%. This rate of growth is somewhat lower than the 1.9% rate adopted in the City of Medford's Comprehensive Plan, but higher than the growth observed over the past 15 years. The student age population is expected to grow at a slightly slower rate (1.4%), adding 5,500 student-age residents.





SOURCE: JOHNSON ECONOMICS

# **ENROLLMENT MODEL**

As explained in the introduction to this section, our enrollment forecasts are derived from our forecasts of the student-age population via a reconciliation of two methods: the grade progression approach and the capture rate approach. In order to take advantage of the strengths of each of these approaches, we base our final enrollment projections on a weighted average of the two models, giving weight to the grade progression approach over the short term and the capture rate approach over the long-term.

# **GRADE PROGRESSION APPROACH**

Under the grade progression approach, we first estimate kindergarten enrollment by applying capture rates to the population of five-year-olds. Once captured into the enrollment pool, students are progressed through the system using grade progression ratios (GPRs). Our analysis utilizes historical three-year average

<sup>&</sup>lt;sup>5</sup> Available data from the Census, Oregon Health Authority, etc. aggregate the 80+ population into one group. We do not program the dynamics of this segment due to its limited impact on enrollment.



GPRs for the first forecast year, and gradually trends the GPRs toward 15-year averages. The kindergarten capture rate is assumed to be 87%, which is in line with our historical estimate for 2015. (See following regarding the unusually high kindergarten capture rate observed in 2010.)

			A		3-year	10-year	15-year						
Grade	'05-'06	'06-'07	'07-'08	'08-'09	'09-'10	'10-'11	'11-'12	'12-'13	'13-'14	'14-'15	Avg GPR	Avg GPR	Avg GPR
1	1.07	1.07	1.04	1.05	1.11	1.01	1.04	1.07	1.07	1.07	1.07	1.06	1.06
2	0.97	1.00	0.98	0.97	1.00	1.01	1.03	1.06	1.00	1.01	1.02	1.00	1.00
3	1.00	0.99	1.04	0.97	1.06	1.03	1.02	1.02	1.00	1.01	1.01	1.01	1.01
4	1.02	1.01	1.01	0.98	1.06	0.99	1.01	1.04	0.97	0.99	1.00	1.01	1.01
5	1.01	1.02	1.04	0.96	1.06	1.03	1.02	1.04	1.01	1.02	1.02	1.02	1.02
6	1.01	0.98	0.99	0.98	1.02	0.98	0.99	1.01	0.97	1.01	1.00	0.99	0.99
7	0.96	0.98	0.99	0.97	1.00	1.03	1.03	1.01	1.02	0.99	1.01	1.00	1.00
8	1.00	0.99	1.00	0.99	1.03	1.00	1.04	1.01	1.01	1.01	1.01	1.01	1.01
9	1.03	1.01	1.00	1.02	1.06	1.05	1.08	1.01	1.02	1.02	1.02	1.03	1.04
10	0.99	1.00	1.01	1.01	1.01	0.99	1.03	1.02	0.99	1.00	1.00	1.01	1.00
11	0.97	0.96	0.93	0.95	0.98	1.01	1.01	0.99	0.97	1.00	0.99	0.98	0.97
12	1.07	1.03	0.99	1.09	1.15	1.14	1.12	1.13	1.11	1.08	1.11	1.09	1.09

FIGURE 22: HISTORICAL GRADE PROGRESSION RATIOS, MEDFORD SCHOOL DISTRICT (2006-2015)

SOURCE: Oregon Department of Education, JOHNSON ECONOMICS

For example, based on births in 2015 and anticipated mortality and migration over the next five years, our model indicates that there will be 1,195 five-year-olds within the Medford School District in 2020. The grade progression model captures these at an 87% rate, yielding an estimated kindergarten class of 1,040 students in 2020. This kindergarten class is progressed through each grade by the assumed GPR for each grade, yielding an estimate of 1,255 high-school seniors in 2032. When applied, the GPR model yields the results summarized in Figure 23, indicating enrollment growth of 4,900 students over the next 20 years.

FIGURE 23: ENROLLME	NT FOREC	AST BY GRADE LEVEL, GRADE P		Model,						
М	MEDFORD SCHOOL DISTRICT (2015-2035)									

	ACTUAL ENROLLMENT*						FOI	RECAST E	NROLLM	ENT*	2015	5-2025	2025	-2035	2015	-2035
Grade	2010	2011	2012	2013	2014	2015	2020	2025	2030	2035	Δ	AAGR	Δ	AAGR	Δ	AAGR
Births	1,148	1,106	1,070	1,110	1,140	1,175	1,352	1,542	1,753	1,875						
К	1,025	962	1,055	1,050	1,058	1,099	1,040	1,192	1,359	1,543	93	0.8%	351	2.6%	444	1.7%
1	1,003	1,038	1,005	1,131	1,122	1,131	1,089	1,230	1,407	1,595	99	0.8%	365	2.6%	464	1.7%
2	939	1,013	1,067	1,066	1,130	1,133	1,084	1,194	1,359	1,550	61	0.5%	356	2.6%	417	1.6%
3	961	971	1,032	1,093	1,062	1,145	1,116	1,178	1,344	1,529	33	0.3%	351	2.6%	384	1.5%
4	928	955	978	1,072	1,062	1,055	1,183	1,160	1,320	1,506	105	1.0%	346	2.6%	451	1.8%
5	1,061	960	976	1,017	1,078	1,083	1,241	1,156	1,307	1,490	73	0.7%	335	2.6%	407	1.6%
6	899	1,039	946	988	991	1,085	1,191	1,128	1,258	1,438	43	0.4%	310	2.5%	353	1.4%
7	925	927	1,069	958	1,003	980	1,168	1,110	1,221	1,390	130	1.3%	280	2.3%	410	1.8%
8	929	929	960	1,080	964	1,009	1,177	1,137	1,196	1,364	128	1.2%	228	1.8%	355	1.5%
9	1,003	977	1,003	972	1,098	988	1,113	1,242	1,208	1,374	254	2.3%	133	1.0%	386	1.7%
10	962	992	1,009	1,019	966	1,099	1,121	1,282	1,187	1,342	183	1.6%	60	0.5%	243	1.0%
11	896	970	1,003	998	986	965	1,103	1,204	1,138	1,268	239	2.2%	64	0.5%	303	1.4%
12	1,008	1,018	1,084	1,130	1,108	1,064	1,089	1,287	1,223	1,345	223	1.9%	59	0.4%	281	1.2%
Total	12,539	12,751	13,187	13,574	13,628	13,836	14,716	15,499	16,526	18,737	1,663	1.1%	3,238	1.9%	4,901	1.5%
К-6	6,816	6,938	7,059	7,417	7,503	7,731	7,944	8,238	9,354	10,652	507	0.6%	2,414	2.6%	2,921	1.6%
7-8	1,854	1,856	2,029	2,038	1,967	1,989	2,345	2,247	2,417	2,755	258	1.2%	508	2.1%	766	1.6%
9-12	3,869	3,957	4,099	4,119	4,158	4,116	4,426	5,014	4,755	5,330	898	2.0%	316	0.6%	1,214	1.3%



### CAPTURE RATE APPROACH

The capture rate approach estimates enrollment based on the anticipated student-age population at each grade level in any given year, regardless of prior-year enrollment at lower grades. The share of the student-age population that will attend public school tends to vary by grade level, as illustrated by the historical rates for the Medford School District displayed below.

Note that capture rates are less reliable than GPRs, as population estimates are based on surveys rather than actual counts, as is the case with enrollment. The 95% kindergarten capture rate in 2010 is particularly problematic, as it is out-of-line with typical kindergarten attendance and does not square with the typical 1<sup>st</sup> grade GPR in the Medford School District. It is likely a function of the upheaval in the housing market and the economic downturn around the time of the 2010 census, which has caused noise in the census data in many places. Inflated capture rates may have been caused by an underreporting of the population due to households in temporary living arrangements not participating in the survey.

The capture rates assumed in our enrollment forecasts represent a reconciliation of the historical rates calculated for 2010 and 2015. The reconciliation process was conducted manually in order to eliminate outlier values. For the kindergarten capture rate, we relied solely on the 2015 estimate, which is in line with the typical 1<sup>st</sup> grade GPR within the school district. This assumption was also used to estimate kindergarten capture in the grade progression model.

	2015	2015 Pop.	2015	2010	Assumed
Grade	Enrollment	By Grade	Capture	Capture	Future Capture
К	1,099	1,263	87%	95%	87%
1	1,131	1,203	94%	94%	93%
2	1,133	1,273	89%	88%	90%
3	1,145	1,272	90%	90%	89%
4	1,055	1,199	88%	83%	88%
5	1,083	1,217	89%	97%	90%
6	1,085	1,262	86%	83%	87%
7	980	1,167	84%	83%	84%
8	1,009	1,201	84%	83%	85%
9	988	1,147	86%	89%	86%
10	1,099	1,276	86%	86%	87%
11	965	1,163	83%	80%	84%
12	1,064	1,209	88%	89%	89%
Total:	13,836	15,851	87%	88%	88%

#### FIGURE 24: ASSUMED PUBLIC-SCHOOL CAPTURE RATES, MEDFORD SCHOOL DISTRICT

SOURCE: U.S. Census Bureau, Oregon Department of Education, JOHNSON ECONOMICS

When the assumed capture rates are applied to the projected student-age population, we arrive at the enrollment projections presented on the following page. The projections indicate a total increase of roughly 4,600 students over the coming 20 years; 300 less than was estimated with the grade progression model. The difference is primarily found in the near-term projections, largely due to historical GPRs from the recent past being used for near term projections in the grade progression model. Historical GPRs from the recent past reflect a period of stronger job growth and in-migration than is assumed in the population projections that inform the capture rate model.



#### FIGURE 25: ENROLLMENT FORECAST BY GRADE LEVEL, CAPTURE RATE MODEL, MEDFORD SCHOOL DISTRICT (2015-2035)

		AC	TUAL EN	IROLLME	NT		FO	RECAST E	NROLLN	IENT	2015	-2025	2025	-2035	2015	-2035
Grade	2010	2011	2012	2013	2014	2015	2020	2025	2030	2035	Δ	AAGR	Δ	AAGR	Δ	AAGR
Births	1,148	1,141	1,225	1,182	1,146	1,148	1,352	1,542	1,753	1,875						
К	1,025	962	1,055	1,050	1,058	1,099	1,040	1,192	1,359	1,543	93	0.8%	351	2.6%	444	1.7%
1	1,003	1,038	1,005	1,131	1,122	1,131	1,102	1,249	1,430	1,620	118	1.0%	371	2.6%	489	1.8%
2	939	1,013	1,067	1,066	1,130	1,133	1,059	1,186	1,356	1,545	53	0.5%	359	2.7%	412	1.6%
3	961	971	1,032	1,093	1,062	1,145	1,073	1,150	1,321	1,503	5	0.0%	353	2.7%	358	1.4%
4	928	955	978	1,072	1,062	1,055	1,125	1,118	1,283	1,464	63	0.6%	346	2.7%	409	1.7%
5	1,061	960	976	1,017	1,078	1,083	1,198	1,138	1,295	1,483	55	0.5%	345	2.7%	400	1.6%
6	899	1,039	946	988	991	1,085	1,110	1,098	1,229	1,410	13	0.1%	311	2.5%	325	1.3%
7	925	927	1,069	958	1,003	980	1,132	1,063	1,167	1,335	83	0.8%	272	2.3%	355	1.6%
8	929	929	960	1,080	964	1,009	1,137	1,105	1,155	1,325	96	0.9%	220	1.8%	316	1.4%
9	1,003	977	1,003	972	1,098	988	1,101	1,199	1,160	1,329	211	2.0%	130	1.0%	341	1.5%
10	962	992	1,009	1,019	966	1,099	1,127	1,253	1,171	1,323	154	1.3%	70	0.5%	224	0.9%
11	896	970	1,003	998	986	965	1,126	1,166	1,134	1,263	201	1.9%	97	0.8%	298	1.4%
12	1,008	1,018	1,084	1,130	1,108	1,064	1,113	1,297	1,211	1,323	233	2.0%	26	0.2%	259	1.1%
Total	12,539	12,751	13,187	13,574	13,628	13,836	14,443	15,213	16,273	18,465	1,377	1.0%	3,252	2.0%	4,629	1.5%
К-б	6,816	6,938	7,059	7,417	7,503	7,731	7,707	8,131	9,273	10,568	400	0.5%	2,436	2.7%	2,837	1.6%
7-8	1,854	1,856	2,029	2,038	1,967	1,989	2,269	2,167	2,322	2,660	178	0.9%	492	2.1%	671	1.5%
9-12	3,869	3,957	4,099	4,119	4,158	4,116	4,467	4,915	4,677	5,237	799	1.8%	323	0.6%	1,121	1.2%

SOURCE: Oregon Department of Education, JOHNSON ECONOMICS

#### **CONSOLIDATED ENROLLMENT FORECASTS**

Our final enrollment projections consolidate the results of the two population-to-enrollment conversions. As indicated, we give weight to the grade progression model over the near term, as it is based on existing enrollment and the assumption that the near future will resemble the recent past in terms of population and enrollment growth. We give weight to the capture rate approach for long-term projections, as this methodology better accounts for migration impacts under the assumed growth scenario. More specifically, the consolidated forecasts represent a gradually decreasing weighting of enrollment growth estimated by the grade progression model, from 100% in 2016 to 0% in 2026, while growth projected by the capture rate model gains an incremental 10% weight each year through 2026, for thereafter to remain 100% weighted.

					INED	FORD S	CHOOL	DISTRIC	ст (201	5-2035	)					
		AC	TUAL EN	IROLLME	NT		FO	RECAST E	NROLLN	IENT	2015	-2025	2025	-2035	2015	-2035
Grade	2010	2011	2012	2013	2014	2015	2020	2025	2030	2035	Δ	AAGR	Δ	AAGR	Δ	AAGR
Births	1,148	1,141	1,225	1,182	1,146	1,148	1,352	1,542	1,753	1,875						
К	1,025	962	1,055	1,050	1,058	1,099	1,040	1,192	1,359	1,543	93	0.8%	351	2.6%	444	1.7%
1	1,003	1,038	1,005	1,131	1,122	1,131	1,090	1,235	1,416	1,606	104	0.9%	371	2.7%	475	1.8%
2	939	1,013	1,067	1,066	1,130	1,133	1,091	1,213	1,383	1,572	80	0.7%	359	2.6%	439	1.7%
3	961	971	1,032	1,093	1,062	1,145	1,118	1,191	1,362	1,543	46	0.4%	353	2.6%	398	1.5%
4	928	955	978	1,072	1,062	1,055	1,177	1,164	1,329	1,510	109	1.0%	346	2.6%	455	1.8%
5	1,061	960	976	1,017	1,078	1,083	1,229	1,159	1,317	1,505	76	0.7%	345	2.6%	422	1.7%
6	899	1,039	946	988	991	1,085	1,164	1,132	1,263	1,444	47	0.4%	311	2.5%	359	1.4%
7	925	927	1,069	958	1,003	980	1,169	1,116	1,221	1,388	136	1.3%	272	2.2%	408	1.8%
8	929	929	960	1,080	964	1,009	1,166	1,138	1,189	1,358	129	1.2%	220	1.8%	349	1.5%
9	1,003	977	1,003	972	1,098	988	1,106	1,220	1,181	1,350	232	2.1%	130	1.0%	362	1.6%
10	962	992	1,009	1,019	966	1,099	1,110	1,244	1,162	1,314	145	1.2%	70	0.5%	215	0.9%
11	896	970	1,003	998	986	965	1,102	1,152	1,120	1,249	187	1.8%	97	0.8%	284	1.3%
12	1,008	1,018	1,084	1,130	1,108	1,064	1,101	1,300	1,213	1,325	236	2.0%	26	0.2%	261	1.1%
Total	12,539	12,751	13,187	13,574	13,628	13,836	14,665	15,456	16,516	18,708	1,620	1.1%	3,252	1.9%	4,872	1.5%
К-6	6,816	6,938	7,059	7,417	7,503	7,731	7,909	8,287	9,429	10,723	556	0.7%	2,436	2.6%	2,992	1.6%
7-8	1,854	1,856	2,029	2,038	1,967	1,989	2,336	2,254	2,410	2,747	265	1.3%	492	2.0%	758	1.6%
9-12	3,869	3,957	4,099	4,119	4,158	4,116	4,420	4,915	4,677	5,238	799	1.8%	323	0.6%	1,122	1.2%
SOURCE	: Orego	n Depa	rtment	of Edu	cation,	Јонлѕог	и Есона	MICS								

FIGURE 26: CONSOLIDATED ENROLLMENT FORECAST BY GRADE LEVEL



The consolidated enrollment projections presented on the previous page suggest an increase of nearly 4,900 students over the coming 20 years, reaching a total of 18,700 students. This represents a 1.5% average annual growth rate. The enrollment growth is weighted toward the second half of the period, due to the flat birth trend over the recent past keeping enrollment growth more subdued over the first ten years.

Over the 2016-2025 period, the school district is estimated to see an increase of approximately 1,600 students. This represents an average annual growth rate of 1.1%, which can be compared to a growth rate of 0.6% over the past 15 years; 1.0% over the past 10 years, and 2.0% over the past 5 years. The high school and middle school levels are expected to see the strongest relative increase over this period, while more moderate growth is anticipated on the elementary level due to the recent flat birth trend.

Over the 2026-2035 period, our projections indicate a total increase of roughly 3,250 students, of which the elementary level is projected to account for more than 2,400. The concentration of growth on the elementary level, with only moderate growth on the middle and high school levels, represents a reversal from the prior ten years. This reversal reflects that the relatively large high school classes from the prior ten years have graduated and that growth in the population of females in child-bearing ages is expected to cause an increase in births and subsequently enrollment at the elementary level.

# CHARTER SCHOOL VS. TRADITIONAL SCHOOL ENROLLMENT

As discussed in the section on recent enrollment trends in the Medford School District, public charter schools have accounted for much of the enrollment growth over the past 10 years. Charter school enrollment grew from 0 in 2006 to nearly 1,500 in 2015, now accounting for 11% of total public enrollment. Just over the past five years, charter enrollment has increased by roughly 230%, or 27% per year on average. However, the growth showed moderation in 2015, when the enrollment increase was only 3%.

The short history and strong initial growth of charter schools in the Medford School District make future charter enrollment difficult to model. Moreover, future enrollment will depend heavily on capacity constraints at existing schools and the approval of new schools. In the following, we will assume gradual growth, though actual enrollment growth may be choppy, reflecting the opening of new schools. We further assume that the growth will be moderate, with the growth rate gradually declining from the 2015 level to the district-wide growth rate from 2021 onward. For the 2016-2020 period, this indicates an increase of 140 charter students, which we expect to be within the existing capacity at charter schools in the district.

The tables included on the following page summarize our enrollment projections for traditional schools and public charter schools.



# FIGURE 27: ENROLLMENT FORECAST, TRADITIONAL VS. CHARTER SCHOOLS, MEDFORD SCHOOL DISTRICT (2015-2035)

Grade2010201120122013201420152020202520302035 $\Delta$ AAGR $\Delta$ AAGR <th>TRADITIO</th> <th>ONAL SC</th> <th>HOOLS</th> <th></th>	TRADITIO	ONAL SC	HOOLS														
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			AC	TUAL EN	IROLLME	INT		FO	RECAST E	INROLLN	IENT	2015	-2025	2025	-2035	2015	-2035
K9759109979889339699121,0461,1931,354770.8%3082.6%3851.7919359709319989919989571,0851,2431,411870.8%3262.7%4131.7928889329929379769939521,0581,2061,371650.6%3132.6%3781.6939059109369659241,0019721,0351,1841,342340.3%3072.6%3411.5948718799099679359251,0271,0151,1601,317900.9%3022.6%3921.8851,0188868939249649541,0781,0161,1541,319620.6%3032.6%3651.6968749758689078979411,0049771,0901,245360.4%2682.5%3041.4979048669908639078731,0379901,0831,2311171.3%2412.2%3581.7989028788789978619121,0501,0251,0701,2231131.2%1981.8%3111.599992927931	Grade	2010	2011	2012	2013	2014	2015	2020	2025	2030	2035	Δ	AAGR	Δ	AAGR	Δ	AAGR
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	К	975	910	997	988	933	969	912	1,046	1,193	1,354	77	0.8%	308	2.6%	385	1.7%
2       888       932       992       937       976       993       952       1,058       1,206       1,371       65       0.6%       313       2.6%       378       1.69         3       905       910       936       965       924       1,001       972       1,035       1,184       1,342       34       0.3%       307       2.6%       341       1.59         4       871       879       909       967       935       925       1,027       1,015       1,160       1,317       90       0.9%       302       2.6%       392       1.8%         5       1,018       886       893       924       964       954       1,078       1,016       1,154       1,319       62       0.6%       303       2.6%       365       1.6%         6       874       975       868       907       897       941       1,004       977       1,090       1,245       36       0.4%       268       2.5%       304       1.4%         7       904       866       990       863       907       873       1,037       990       1,083       1,231       117       1.3%       241	1	935	970	931	998	991	998	957	1,085	1,243	1,411	87	0.8%	326	2.7%	413	1.7%
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	2	888	932	992	937	976	993	952	1,058	1,206	1,371	65	0.6%	313	2.6%	378	1.6%
4       871       879       909       967       935       925       1,027       1,015       1,160       1,317       90       0.9%       302       2.6%       392       1.89         5       1,018       886       893       924       964       954       1,078       1,016       1,154       1,319       62       0.6%       303       2.6%       365       1.69         6       874       975       868       907       897       941       1,004       977       1,090       1,245       36       0.4%       268       2.5%       304       1.49         7       904       866       990       863       907       873       1,037       990       1,083       1,231       117       1.3%       241       2.2%       358       1.79         8       902       878       878       997       861       912       1,050       1,025       1,070       1,223       113       1.2%       198       1.8%       311       1.59         9       992       927       931       894       1,030       918       1,025       1,131       1,095       1,251       213       2.1%       121	3	905	910	936	965	924	1,001	972	1,035	1,184	1,342	34	0.3%	307	2.6%	341	1.5%
5         1,018         886         893         924         964         954         1,078         1,016         1,154         1,319         62         0.6%         303         2.6%         365         1.69           6         874         975         868         907         897         941         1,004         977         1,090         1,245         36         0.4%         268         2.5%         304         1.49           7         904         866         990         863         907         873         1,037         990         1,083         1,231         117         1.3%         241         2.2%         358         1.79           8         902         878         878         997         861         912         1,050         1,025         1,070         1,223         113         1.2%         198         1.8%         311         1.59           9         992         927         931         894         1,030         918         1,025         1,131         1,095         1,251         213         2.1%         121         1.0%         333         1.69           10         945         966         926         926	4	871	879	909	967	935	925	1,027	1,015	1,160	1,317	90	0.9%	302	2.6%	392	1.8%
6       874       975       868       907       897       941       1,004       977       1,090       1,245       36       0.4%       268       2.5%       304       1.49         7       904       866       990       863       907       873       1,037       990       1,083       1,231       117       1.3%       241       2.2%       358       1.79         8       902       878       878       997       861       912       1,050       1,025       1,070       1,223       113       1.2%       198       1.8%       311       1.59         9       992       927       931       894       1,030       918       1,025       1,131       1,095       1,251       213       2.1%       121       1.0%       333       1.69         10       945       966       926       926       873       1,024       1,032       1,156       1,080       1,221       132       1.2%       65       0.5%       197       0.99         11       882       925       930       905       884       882       1,004       1,049       1,021       1,137       167       1.7%       88 <td>5</td> <td>1,018</td> <td>886</td> <td>893</td> <td>924</td> <td>964</td> <td>954</td> <td>1,078</td> <td>1,016</td> <td>1,154</td> <td>1,319</td> <td>62</td> <td>0.6%</td> <td>303</td> <td>2.6%</td> <td>365</td> <td>1.6%</td>	5	1,018	886	893	924	964	954	1,078	1,016	1,154	1,319	62	0.6%	303	2.6%	365	1.6%
7         904         866         990         863         907         873         1,037         990         1,083         1,231         117         1.3%         241         2.2%         358         1.7%           8         902         878         878         997         861         912         1,050         1,025         1,070         1,223         113         1.2%         198         1.8%         311         1.5%           9         992         927         931         894         1,030         918         1,025         1,131         1,095         1,251         213         2.1%         121         1.0%         333         1.69           10         945         966         926         926         873         1,024         1,032         1,156         1,080         1,221         132         1.2%         65         0.5%         197         0.99           11         882         925         930         905         884         882         1,004         1,049         1,021         1,137         167         1.7%         88         0.8%         255         1.39           12         999         994         1.021         1.047	6	874	975	868	907	897	941	1,004	977	1,090	1,245	36	0.4%	268	2.5%	304	1.4%
8         902         878         878         997         861         912         1,050         1,025         1,070         1,223         113         1.2%         198         1.8%         311         1.5%           9         992         927         931         894         1,030         918         1,025         1,131         1,095         1,251         213         2.1%         121         1.0%         333         1.69           10         945         966         926         926         873         1,024         1,032         1,156         1,080         1,221         132         1.2%         65         0.5%         197         0.99           11         882         925         930         905         884         882         1,004         1,049         1,021         1,137         167         1.7%         88         0.8%         255         1.39           12         999         994         1.021         1.047         1.024         974         1.005         1.186         1.107         1.209         212         2.0%         23         0.2%         235         1.19	7	904	866	990	863	907	873	1,037	990	1,083	1,231	117	1.3%	241	2.2%	358	1.7%
9         992         927         931         894         1,030         918         1,025         1,131         1,095         1,251         213         2.1%         121         1.0%         333         1.69           10         945         966         926         926         873         1,024         1,032         1,156         1,080         1,221         132         1.2%         65         0.5%         197         0.9%           11         882         925         930         905         884         882         1,004         1,049         1,021         1,137         167         1.7%         88         0.8%         255         1.39           12         999         994         1.021         1.047         1.024         974         1.005         1.186         1.107         1.209         212         2.0%         23         0.2%         235         1.19	8	902	878	878	997	861	912	1,050	1,025	1,070	1,223	113	1.2%	198	1.8%	311	1.5%
10         945         966         926         926         873         1,024         1,032         1,156         1,080         1,221         132         1.2%         65         0.5%         197         0.9%           11         882         925         930         905         884         882         1,004         1,049         1,021         1,137         167         1.7%         88         0.8%         255         1.3%           12         999         994         1.021         1.047         1.024         974         1.005         1.186         1.107         1.209         212         2.0%         23         0.2%         235         1.1%	9	992	927	931	894	1,030	918	1,025	1,131	1,095	1,251	213	2.1%	121	1.0%	333	1.6%
11         882         925         930         905         884         882         1,004         1,049         1,021         1,137         167         1.7%         88         0.8%         255         1.3%           12         999         994         1.021         1.047         1.024         974         1.005         1.186         1.107         1.209         212         2.0%         23         0.2%         235         1.19	10	945	966	926	926	873	1,024	1,032	1,156	1,080	1,221	132	1.2%	65	0.5%	197	0.9%
	11	882	925	930	905	884	882	1,004	1,049	1,021	1,137	167	1.7%	88	0.8%	255	1.3%
	12	999	994	1,021	1,047	1,024	974	1,005	1,186	1,107	1,209	212	2.0%	23	0.2%	235	1.1%
Total 12,090 12,018 12,202 12,318 12,199 12,364 13,055 13,769 14,686 16,633 1,405 1.1% 2,864 1.9% 4,269 1.5%	Total	12,090	12,018	12,202	12,318	12,199	12,364	13,055	13,769	14,686	16,633	1,405	1.1%	2,864	1.9%	4,269	1.5%
K-6 6,466 6,462 6,526 6,686 6,620 6,781 6,902 7,233 8,230 9,360 452 0.6% 2,127 2.6% 2,579 1.6%	К-6	6,466	6,462	6,526	6,686	6,620	6,781	6,902	7,233	8,230	9,360	452	0.6%	2,127	2.6%	2,579	1.6%
7-8 1,806 1,744 1,868 1,860 1,768 1,785 2,087 2,015 2,153 2,454 230 1.2% 440 2.0% 669 1.6%	7-8	1,806	1,744	1,868	1,860	1,768	1,785	2,087	2,015	2,153	2,454	230	1.2%	440	2.0%	669	1.6%
9-12 3,818 3,812 3,808 3,772 3,811 3,798 4,065 4,521 4,302 4,819 723 1.8% 297 0.6% 1,021 1.2%	9-12	3,818	3,812	3,808	3,772	3,811	3,798	4,065	4,521	4,302	4,819	723	1.8%	297	0.6%	1,021	1.2%

CHARTE	R SCHOC	OLS														
		AC	TUAL EN	ROLLME	NT		FO	RECAST E	NROLLN	IENT	201	5-2025	202	5-2035	2019	5-2035
Grade	2010	2011	2012	2013	2014	2015	2020	2025	2030	2035	Δ	AAGR	Δ	AAGR	Δ	AAGR
Total	449	733	985	1,256	1,429	1,472	1,610	1,687	1,830	2,075	215	1.4%	388	2.1%	603	1.7%
К-6	350	476	533	731	883	950	1,007	1,054	1,199	1,363	104	1.0%	310	2.6%	413	1.8%
7-8	48	112	161	178	199	204	248	239	256	292	35	1.6%	53	2.0%	88	1.8%
9-12	51	145	291	347	347	318	354	394	375	419	76	2.2%	25	0.6%	101	1.4%



# VI. ENROLLMENT FORECAST BY SCHOOL

In this section, we allocate forecasted district-wide enrollment growth to individual schools (ESAAs) within the district. This exercise highlights the likely path of growth as well as potential capacity constraints.

We utilize a "top-down" allocation method that incorporates a series of variables with impact on enrollment, including births, migration trends, buildable residential land, and the propensity for new households to include school-age children. The allocation also takes into account ESAA-specific grade progression ratios (GPRs) and ratios between births and kindergarten enrollment five years later. These factors are discussed in more detail over the next pages, followed by a presentation of the modeling results.

Note that as we refer to "north schools" and "south schools" in this section, we rely on the Middle School boundary line. This delineation classifies the Howard ESAA in the south because it feeds McLaughlin Middle School.

# FACTORS AFFECTING ESAA CAPTURE/ALLOCATION

# **BIRTH ACTIVITY**

There is a clear correlation between the births occurring in an attendance area and kindergarten enrollment five years later. The relationship between the two is not one-to-one, as some of the children will not survive, and others will opt for alternative school options or move out of the area. As we analyze the relationship between births and enrollment, we convert calendar year birth estimates to school year estimates, as Kindergarten enrollment is dominated by children who have turned five at the start of the school year.

The following example illustrates the correlation between births and kindergarten enrollment by comparing ESAA capture of births during the 2006-2007 school year and capture of fall 2012 enrollment. The capture rates are calculated as percent of total enrollment in traditional schools.



FIGURE 28: ESAA KINDERGARTEN ENROLLMENT CAPTURE (2012) VS. BIRTH CAPTURE (2006-07)

SOURCE: Oregon Health Authority, Oregon Department of Education, JOHNSON ECONOMICS



As indicated by the chart on the previous page, certain ESAAs tend to capture a greater share of kindergarten enrollment than births, and vice versa. These shifts exhibit a great degree of stability from year to year, and are reflective of migration patterns among young families. Certain ESAAs have relatively high concentrations of births, as they provide housing that is affordable and suitable for families that are in the process of getting established, but see a net out-migration prior to kindergarten enrollment, as some of the families move to ESAAs that are perceived as more family-friendly.

Statistically, three variables can explain the ESAA capture of kindergarten enrollment relative to births (capture factors). Single-family home values exhibit the strongest correlation to these capture factors, as ESAAs with relatively low home values have a relatively high share of the youngest families, while ESAAs with relatively high home values tend to be more attractive for established families, who also tend to have higher income levels.

The same dynamic is at work with rental apartments. ESAAs with relatively many apartment units see an outflow of young families as their children approach kindergarten age and the families move to areas with more family-friendly housing.

Finally, ESAAs with considerable home construction also tend to capture larger shares of kindergarten enrollment than births five year prior. In part, this reflects that these ESAAs have expanded their housing supply over the five-year period. As such, they accommodate more families in general, regardless of the age of their children.

The following table displays capture factors for each of the ESAAs, along with the three variables discussed above. The capture factors represent averages for the 2010-2015 period, and are calculated in percentage points (kindergarten enrollment capture minus birth capture). In aggregate, north schools are net beneficiaries of in-migrating families with recent births, together capturing four percentage points more kindergarten enrollment than births. Note that Ruch is excluded from the table due to zoning districts that complicate an analysis of residential construction and home values.

ESAA	N/S	Capture Factor (Avg. 2010-2015)	Average Home Value (2015)	Apartment Properties	New Homes (2010-15)
A. Lincoln	North	2.5%	\$296,573	1	94
Hoover	North	2.4%	\$342,414	6	315
Jacksonville	South	1.6%	\$351,678	5	179
Griffin Creek	South	1.3%	\$210,487	4	134
Lone Pine	North	0.7%	\$257,636	1	32
Wilson	North	-0.2%	\$176,848	27	7
Jefferson	South	-0.3%	\$177,627	18	32
Kennedy	North	-0.3%	\$216,642	14	47
Washington	South	-0.7%	\$135,394	16	3
Roosevelt	North	-0.7%	\$190,934	35	4
Oak Grove	South	-1.2%	\$170,860	12	129
Howard	South	-2.1%	\$163,422	13	36
Jackson	South	-2.7%	\$131,125	37	4
Correlation			87%	-71%	67%

FIGURE 29: KINDERGARTEN/BIRTH CAPTURE FACTORS AND SELECT HOUSING VARIABLES, BY ES	AA (2010-2015)
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SOURCE: Jackson County, JOHNSON ECONOMICS



Our modeling of kindergarten enrollment on the ESAA level does not only take into account the relative capture of kindergarten enrollment and births, but also trends in terms of the number of births that occur in each ESAA. There is considerable disparity in the birth trends within the different ESAAs. Over the 2005-2015 period, the Kennedy ESAA experienced a birth increase of 57% while Jackson saw a decline of 18%. When the rates of changed are calculated from linear trends rather than actual counts, Kennedy's increase is estimated to 35%, while Lone Pine represents the strongest decline at -39%.

Note that birth counts on the ESAA level exhibit considerable volatility from year-to-year, and birth trends calculated from short time periods are susceptible to random fluctuations, and cannot simply be extrapolated into the future. Future trends may also shift in response to changing rates of housing production. We therefore employ a number of measures in addition to the observed recent trend when allocating future births from the district level to the ESAA level.



FIGURE 30: LINEAR BIRTH TRENDS, BY ESAA (2005-2015)

SOURCE: Oregon Health Authority, JOHNSON ECONOMICS



### FUTURE HOUSING PRODUCTION

Future housing production will affect the number of births as well as the number of school-age children in each ESAA. Some of the ESAAs are already built out and will add little new housing over the forecast period. These include Jackson, Roosevelt, Washington, and Wilson. Other ESAAs, such as Hoover and Abraham Lincoln, have a large number of improved lots ready to be built, and can therefore accommodate significant housing production over the near and mid-term. Other ESAAs again, like Jacksonville, Oak Grove, and Griffin Creek, have a large supply of unimproved residential land, and will likely account for larger shares of the district's housing production over the longer term.

The table on the following page provides a summary of recent housing production and potential future housing supply by ESAA. The estimates are calculated from taxlot data from Jackson County. Hoover is by far the largest single contributor to new housing supply over the past ten years, with some 900 new units. In aggregate, the north and south ESAAs have supplied nearly equal numbers of new homes. However, we expect a shift toward north ESAAs over the near term, as these represent 75% of the district's improved single-family lots. In a long-term perspective, the north and south ESAAs have approximately the same amount of buildable single-family land. With multifamily land included, the north represents 56% of the total potential housing supply.

Note that our projections for housing production take into account recent trends as well as potential future supply. For instance, even if the north ESAAs represent 75% of all vacant improved lots, the south ESAAs still have more than a two-year supply available, and might see the addition of new subdivisions over the near term. The approval and recording of one additional large-scale development could go a long ways in evening out the imbalance between the north and south ESAAs.

	RECENT HOU		POTEN	ITIAL FUTURE H		PPLY *
ESAA	Built 2006-15	Built 2011-15	Vacant Improved SF Lots	Potential Unimproved SF Lots	Potential MF Units	Total Potential Units
A. Lincoln	149	73	167	16	0	183
Griffin Creek	260	129	48	130	0	178
Hoover	564	336	460	128	207	795
Howard	110	35	36	20	125	181
Jackson	35	4	7	0	29	36
Jacksonville	326	171	102	342	0	444
Jefferson	79	31	16	16	0	32
Kennedy	171	37	39	0	195	234
Lone Pine	53	39	73	0	0	73
Oak Grove	238	103	43	134	0	177
Roosevelt	10	3	14	0	0	14
Washington	18	3	3	0	0	3
Wilson	38	2	3	5	7	15
North total	985	490	756	149	409	1,314
South total	1,066	476	255	642	154	1,051

FIGURE 31: HISTORICAL AND POTENTIAL FUTURE HOUSING SUPPLY

\* Potential future housing supply is estimated on the basis of vacant residential land. For single-family land, the total acreage is divided by the average lot size in the ESAA, while multi-family land is converted to units assuming 18 units per acre. The distinction between improved and unimproved lots is made on the basis of taxlot size and assessed value. SOURCE: Jackson County, JOHNSON ECONOMICS



#### CHILDREN PER NEW HOUSEHOLD

Housing production does not have an even impact on enrollment in every ESAA, as the propensity for new households to include school-age children varies by area. The share of family households, average household sizes, concentration of females in child-bearing ages, and fertility rates all play a role in determining rates of children per new household.

The following table displays the net change in the number of new school-age children per net new household by ESAA, calculated from decennial census data from 2000 and 2010. As indicated in the introduction to this report, more recent data than 2010 would have been ideal for this analysis, but the margins of error are prohibitively high for more recent data on the ESAA level. Even decennial census data must be used with some caution, especially data from 2010, which might include distortions due to the upheaval in the housing market. Note also that the ratios tend to be misleading when the net change in households is close to zero (Jackson and Washington).

The table indicates that the south schools in general have seen a greater increase in births per new household than the north schools, likely reflecting more affordable housing. In line with our observations regarding the relative capture of births and kindergarten enrollment, north schools generally see a greater increase in children around kindergarten age per new household. This dynamic is also observed for children between 7 and 11, while there is no difference between north and south schools when it comes to high-school-age children.

	Net Change in	Net Chan	Net Change in Children per Net New Household								
ESAA	Households	Age 0-1	Age 4-6	Age 7-11	Age 12-17						
Abraham Lincoln	438	0.01	0.08	0.07	0.06						
Griffin Creek	520	-0.01	-0.01	0.00	0.07						
Hoover	485	0.05	0.19	0.17	-0.03						
Howard	524	0.07	0.01	-0.04	0.23						
Jackson	-20	0.57	2.76	5.06	4.83						
Jacksonville	1,454	0.02	0.07	0.06	0.09						
Jefferson	547	0.04	0.01	0.01	0.17						
Kennedy	410	0.02	0.07	-0.05	-0.04						
Lone Pine	197	0.02	0.01	-0.46	-0.35						
Oak Grove	416	0.06	0.06	-0.07	0.14						
Roosevelt	90	-0.13	0.06	0.10	0.26						
Ruch	256	-0.04	-0.11	-0.63	-0.67						
Washington	-10	-1.67	2.18	9.77	2.24						
Wilson	797	0.04	0.11	0.06	0.18						
North total	2,417	0.02	0.11	0.02	0.04						
South total	3,687	0.03	0.01	-0.08	0.04						

### FIGURE 32: NET CHANGE IN CHILDREN PER HOUSEHOLD

SOURCE: Jackson County, JOHNSON ECONOMICS



#### **GRADE PROGRESSION RATIOS**

Our allocation model also makes use of historical grade progression ratios (GPRs) for each school. High GPRs reflect a high degree of student in-migration. To the extent that we expect recent migration trends to continue into the future, we can therefore use historical GPRs to estimate the relative capture of enrollment among attendance areas.

For modeling purposes, the GPRs serve a similar function as the children-per-household ratios, as both measures are reflective of student migration. The advantages of using GPRs in the allocation process are that these ratios are based on accurate counts and that they are directly reflective of enrollment. However, past GPRs will be misleading over the long-term, as they reflect past migration patterns and do not account for attendance areas being built out, with development of new housing shifting to new areas. For our long-term projections, we therefore give weight to children-per-household ratios used in conjunction with our estimates of future housing supply.

Average school level GPRs for the 2000-2015 period are displayed in the table below. The ratios largely confirm the children-per-household ratios presented on the previous page, which are from the 2000-2010 period. For instance, Hoover is the attendance area with the highest average GPR on the elementary level, and Hoover is also the ESAA with the highest rates of children 4-6 and 7-11 per net new household (ignoring Jackson and Washington, which have inflated student-per-household ratios due to a household change near zero). On the middle school level, the north ESAAs exhibit considerably higher GPRs than the south, in line with student-per-household ratios. Also in line with the latter, there is no observable difference between north and south on the high school level.

SCHOOL	GRADE												
	1	2	3	4	5	6	7	8	9	10	11	12	Average
A. Lincoln Elementary School	1.17	1.01	1.00	1.03	1.04	0.99							1.04
Griffin Creek Elementary School	1.11	1.00	1.02	0.98	1.01	1.01							1.02
Hoover Elementary School	1.22	1.03	1.03	1.10	1.09	0.98							1.07
Howard Elementary School	0.96	0.98	0.94	0.97	0.98	0.91							0.96
Jackson Elementary School	0.99	0.96	0.96	0.98	1.01	0.95							0.98
Jacksonville Elementary School	1.22	1.00	1.07	1.06	1.06	0.98							1.06
Jefferson Elementary School	0.97	1.01	0.98	0.98	0.98	0.98							0.98
Kennedy Elementary School	1.08	0.97	1.00	1.01	1.03	0.99							1.01
Lone Pine Elementary School	1.17	1.05	1.06	1.05	1.05	0.94							1.05
Oak Grove Elementary School	1.03	0.97	1.01	0.99	0.98	1.04							1.00
Roosevelt Elementary School	0.92	0.95	0.98	0.95	1.03	1.01							0.97
Ruch Elementary School	1.04	0.96	1.14	1.07	1.11	1.05							1.06
Washington Elementary School	0.98	0.98	0.98	0.96	0.97	0.99							0.98
Wilson Elementary School	0.98	0.96	1.03	1.02	0.93	1.03							0.99
Hedrick Middle School							1.02	1.00					1.01
McLoughlin Middle School							0.94	0.99					0.96
Ruch Community School							1.12	1.06					1.09
North Medford High School									1.01	0.97	0.92	1.00	0.98
South Medford High School		-	-	-	_				1.05	0.97	0.93	0.99	0.98

#### FIGURE 33: GRADE PROGRESSION RATIOS BY SCHOOL (2000-2015 AVERAGES) \*

\* For certain grade levels and schools, the averages are calculated for different time periods to avoid distorting impacts of the opening and closing of grades/schools, including the temporary enrollment of 6<sup>th</sup> graders at Hedrick Middle School.



# **RESULTS OF THE ESAA ENROLLMENT ALLOCATION**

Over the following pages, we display the results of our allocation of district-wide enrollment projections to individual ESAAs. The allocation begins with birth projections, which are converted to birth capture rates and thereafter to kindergarten enrollment capture. Enrollment capture for grades 1 through 12 are then estimated based on historical GPRs and projections for housing production and children per household.

# **BIRTH ALLOCATION**

Our birth projections by ESAA are displayed below. The projections represent an allocation of district-level projections, and take into account current birth capture trends and expected future capture given anticipated housing production and rates of births per new household. Hoover is projected to see the strongest increase over the 20-year period, while Jackson and Lone Pine are projected to see declines.



SOURCE: JOHNSON ECONOMICS

# **KINDERGARTEN ENROLLMENT ALLOCATION**

By applying birth-to-kindergarten capture factors to the births projected above, we arrive at estimates of kindergarten enrollment by ESAA. Kennedy is projected to see the strongest absolute enrollment increase, followed by Hoover, while Jackson is the only ESAA with a considerable decrease.





SOURCE: JOHNSON ECONOMICS



# **GRADE 1-12 ENROLLMENT ALLOCATION**

Allocation of district-wide enrollment for grades 1 through 12 is done with a model that primarily gives weight to relative GPRs observed over the 2000-2015 period, but that also takes into account expected migration impacts due to anticipated shifts in the housing production over the long term. The latter component relies on children-per-household estimates from the 2000-2010 period. The following chart displays the results of the allocation model, summing up total enrollment by school, including kindergarten enrollment.



#### FIGURE 36: TOTAL ENROLLMENT PROJECTIONS, BY SCHOOL (2016-2035)

SOURCE: JOHNSON ECONOMICS

# **ENROLLMENT PROJECTIONS BY SCHOOL**

Our enrollment projections by school are summarized over the following pages. We advise some caution when interpreting long-term forecasts within small geographies. Input variables among small geographies tend to exhibit a great degree of variability, with relatively small changes having significant impact over time.



	ACTUAL ENROLLMENT				FORECAST ENROLLMENT				2015-2025		2025-2035		2015-2035			
School	2010	2011	2012	2013	2014	2015	2020	2025	2030	2035	Δ	AAGR	Δ	AAGR	Δ	AAGR
NORTH SCHOOLS																
Wilson	485	485	447	467	501	545	532	556	558	575	11	0.2%	20	0.3%	30	0.3%
Hoover	638	603	627	644	676	648	756	849	1,041	1,304	201	2.7%	456	4.4%	656	3.6%
Lone Pine	537	564	605	623	591	595	549	577	601	620	-18	-0.3%	43	0.7%	25	0.2%
Kennedy	515	519	489	565	575	563	585	644	722	865	81	1.4%	221	3.0%	302	2.2%
Roosevelt	407	406	404	374	390	386	398	401	424	440	15	0.4%	39	0.9%	54	0.7%
A. Lincoln	466	449	475	466	496	499	574	609	760	936	110	2.0%	327	4.4%	437	3.2%
the dut of t	000	004	054	0.20	001	070	1 000	1.050	1 1 1 0	1 2 6 2	477	1.00/	200	1.00/	204	1.00/
Hedrick	908	894	954	936	901	879	1,093	1,056	1,110	1,263	1//	1.8%	208	1.8%	384	1.8%
North Medford	1,775	1,/34	1,/11	1,683	1,/12	1,700	1,802	2,084	1,985	2,164	384	2.1%	80	0.4%	464	1.2%
SOUTH SCHOOLS																
Griffin Creek	593	580	601	622	609	596	604	634	780	937	38	0.6%	303	4.0%	341	2.3%
Oak Grove	471	492	513	495	462	489	523	541	649	789	52	1.0%	249	3.9%	300	2.4%
Jacksonville	391	400	409	434	416	457	514	536	678	853	79	1.6%	317	4.8%	396	3.2%
Jefferson	495	505	493	488	463	466	421	401	446	451	-65	-1.5%	50	1.2%	-15	-0.2%
Jackson	388	394	439	415	430	482	417	398	414	389	-84	-1.9%	-9	-0.2%	-93	-1.1%
Washington	420	443	435	456	421	443	415	437	462	462	-6	-0.1%	25	0.6%	19	0.2%
Howard	547	501	473	494	464	467	472	481	506	515	14	0.3%	34	0.7%	48	0.5%
Ruch*	171	176	187	204	187	206	203	221	262	305	15	0.7%	85	3.3%	99	2.0%
McLoughlin	837	789	838	850	799	845	934	909	968	1,110	64	0.7%	200	2.0%	265	1.4%
Central/SD 549C	242	224	290	305	307	313	395	464	461	537	151	4.0%	73	1.5%	224	2.7%
South Medford	1,804	1,821	1,812	1,794	1,795	1,785	1,869	1,974	1,856	2,118	189	1.0%	144	0.7%	333	0.9%
К-6	6,466	6,462	6,526	6,686	6,620	6,781	6,902	7,233	8,230	9,360	452	0.6%	2,127	2.6%	2,579	1.6%
7-8	1,806	1,744	1,868	1,860	1,768	1,785	2,087	2,015	2,153	2,454	230	1.2%	440	2.0%	669	1.6%
9-12	3,818	3,812	3,808	3,772	3,811	3,798	4,065	4,521	4,302	4,819	723	1.8%	297	0.6%	1,021	1.2%
TOTAL:	12,090	12,018	12,202	12,318	12,199	12,364	13,055	13,769	14,686	16,633	1,405	1.1%	2,864	1.9%	4,269	1.5%

#### FIGURE 37: ENROLLMENT FORECAST BY SCHOOL, MEDFORD SCHOOL DISTRICT (2016-2035)

\* Ruch represents a combination of elementary and middle school grades.

- At the elementary level, we anticipate that Hoover will capture the largest share of long-term enrollment growth. Hoover saw strong enrollment growth prior to the most recent economic downturn, but has seen only moderate growth since. However, this ESAA accounted for the largest share of new home construction during the 2010-2015 period (35%), and currently holds a large share of the district's inventory of vacant single-family lots (45%). Moreover, Hoover is on an upward birth trend, and exhibits the strongest rates of student in-migration per new household in the school district.
- Two other north ESAAs are also expected to see strong enrollment growth over the long term. Lincoln has the second largest inventory of buildable residential land in North Medford, and has seen a strong increase in births and relatively strong student in-migration over the recent past. Kennedy is on an even stronger birth trend – the steepest in the district (+57% between 2000 and 2015). With its supply of multi-family land, the ESAA might sustain strong birth rates among young households in the future. However, Kennedy currently has a limited supply of single-family land, and has historically captured less kindergarten enrollment than births. We therefore expect more limited enrollment growth in Kennedy than Lincoln, especially over the long term.
- We expect very limited enrollment growth among the three remaining ESAAs in the north, reflecting that these are largely built out. Lone Pine has some land supply, but has exhibited a



negative birth trend in recent years, and limited kindergarten capture. However, it does benefit from relatively strong in-migration of elementary students above the kindergarten level. **Roosevelt** and **Wilson** are not expected to see much additional housing production. Moreover, these ESAAs represent nearly flat birth trends and have seen slightly negative student migration in recent years.

- Among the south ESAAs, the enrollment growth is expected to be concentrated in Jacksonville, Oak Grove, and Griffin Creek. Jacksonville has seen some of the strongest gains in births and enrollment in the district over the past ten years. It has also seen considerable home building, and currently has the largest supply of lots and land in the south. Its inventory of residential land represents 25% of the entire district. Moreover, it exhibits strong student in-migration, and has achieved higher GPRs than any other school in the south over the recent past.
- Oak Grove and Griffin Creek are nearly identical in terms of their land supply, their nearly flat birth trends, and limited student migration above the kindergarten grade. However, Oak Grove has somewhat higher birth numbers, while Griffin Creek captures more kindergarten enrollment. These factors are anticipated to have an offsetting effect, leading to comparable enrollment projections for the two ESAAs.
- Ruch (elementary level) is expected to see only moderate growth over the forecast period, though
  on a relative basis, the growth is projected to be slightly higher than the school district as a whole.
  The ESAA has plenty of land for expansion, but the lots are large and there is limited new
  development. The birth trend is fairly strong, but absolute counts remain low compared to other
  ESAAs. While its kindergarten capture is relatively low, in-migration of older students is relatively
  high.
- Washington and Howard are expected to see very limited growth over the forecast horizon. Washington is built out, and has seen flat birth figures in recent years. Howard has a few singlefamily lots and some multi-family land available, and has seen a slight increase in births recently. However, Howard typically sees a net out-migration of young families prior to kindergarten enrollment in recent years, and the effect of additional homebuilding on enrollment is therefore expected to be limited. Both ESAAs tend to lose students as they progress through elementary school.
- Jefferson and Jackson are projected to see enrollment declines over the forecast period. Both are
  largely built out, and both have seen marked declines in births over the past ten years. Moreover,
  both ESAAs tend to capture relatively little kindergarten enrollment compared to births, especially
  Jackson, and the two ESAAs also tend to lose students as they progress through the elementary
  grades.
- At the middle school level, Hedrick is projected to see the strongest enrollment increase over the first ten-year period. This reflects that north elementary schools are expected to graduate more students than south schools, while also seeing somewhat stronger student in-migration. However, in the following ten-year period, our projections indicate that McLoughlin will match Hedrick in terms of growth. More than anything, this is a function the south having a larger supply of undeveloped residential land than the north, something that we anticipate to shift the migration balance back toward the south over the long term. Middle school enrollment at Ruch Community School is projected to remain around current levels through 2025, and see moderate growth over the following ten-year period.



- The migration dynamics anticipated to influence middle school enrollment are also expected to impact high school enrollment. North Medford High is thus projected to capture the highest enrollment growth over the first ten-year period, while South Medford High is expected to capture the majority of the enrollment growth in the following ten-year period.
- For enrollment at alternative high school programs, including Central Medford High, we have modeled a continuation of the current capture trend, which increased from 6.8% of district-wide high school enrollment in 2010 to 9.0% in 2015. We have assumed a moderating (logarithmic) increase in the capture rate, reaching 11.1% by 2035. This suggests absolute growth nearly on par with South Medford High over the first ten years and with North Medford High over the following ten years. The projected growth is based on total high school enrollment, and is independent of the north/south capture.



# VII. CONCLUSION

The Medford School District experienced declining enrollment among most of the District's facilities between 2000 and 2010, but this trend was reversed over the following five-year period. The recent enrollment growth can be explained by in-migration in combination with the enrollment of children born during the pre-recession birth boom. Over the long term, the City of Medford is planning for robust economic and demographic expansion, with job growth around 1.7% per year. Growth at this rate will require additional in-migration, which will continue to boost K-12 enrollment over the long term.

In the preceding analysis, we identified the likely pattern of growth for the district over a 10-year and 20year planning horizon, assuming job growth at the pace adopted as the baseline forecast in the City's Comprehensive Plan. Because we expect labor-driven migration to be the principal contributor to population growth, we document how net-migrants have a higher propensity to be in more mobile age segments, who are also disproportionately parents.

In addition to migration impacts, we have observed a measurable rebound in fertility rates throughout the district over the recent past. This has in part been driven by the district's growing Hispanic population. For example, in 2015, we observe a fertility rate of 72.6 births per female in child-bearing age within the district, compared to 62.7 in 2000. This will likely put upward pressure on enrollment over the long term. However, the decline in births that took place following the most recent economic downturn will likely mean moderate enrollment growth over the mid-term.

Taken together, planned economic and demographic growth translates into notable capacity concerns for the district, especially on the elementary level. As shown in figure 38, one elementary school was operating above capacity in 2015, while three additional schools were within 10% of their cap.

FIGURE 38: EXISTING SCHOOL CAPACITY, MEDFORD SCHOOL DISTRICT FACILITIES (2015)											
School/		Building	Teaching	Student	2015	Residual					
Address		Size / SF	Stations	Capacity	Enrollment	Capacity					
Abraham Lincoln	3101 McLoughlin Drive	63,438	24	561	499	62					
Griffin Creek	2430 Griffin Creek Road	54,930	26	584	596	-12					
Hoover	2323 Siskiyou Boulevard	55,403	29	681	648	33					
Howard	286 Mace Road	59,530	29	655	467	188					
Jackson	713 Summit Avenue	57,596	22	494	482	12					
Jacksonville	655 Hueners Lane	57,561	22	514	457	57					
Jefferson	333 Holmes Drive	52,943	23	561	493	68					
Kennedy	2860 Keene Way Drive	54,788	27	655	563	92					
Lone Pine	3158 Lone Pine Road	77,042	26	661	595	66					
Oak Grove	2838 West Main Street	59,355	25	584	489	95					
Roosevelt	1212 Queen Anne Avenue	51,002	20	468	386	82					
Ruch	156 Upper Applegate Road	34,590	13	327	187	140					
Washington	610 Peach Street	58,146	24	584	443	141					
Wilson	1400 Johnson Street	52,660	28	659	545	114					
ELEMENTARY:			338	7,988	6,850	1,138					
Hedrick	1501 E. Jackson Street	158,990	50	1,197	879	318					
McLoughlin	320 W. 2nd Street	161,072	47	1,142	845	297					
MIDDLE:			97	2,339	1,724	615					
North Medford	1900 N. Keene Way Drive	234,121	78	2,122	1,700	422					
South Medford	1551 Cunningham Avenue	255,000	82	2,230	1,785	445					
Central Medford	815 S. Oakdale Avenue	251,721	74	1,998	275	1,723					
HIGH:			234	6,350	3,760	2,590					
CUDCE Mardford Cales	10:1:			-							

SOURCE: Medford School District, JOHNSON ECONOMICS



Over the next ten years, elementary school growth is estimated to around 450 students, which in aggregate will create a need for at least one additional elementary school in the district. The Hoover ESAA, in particular, will likely need another school. It is already near capacity, and is projected to add around 200 students over the coming ten years, followed by around 450 students in the following ten-year period. Griffin Creek is already above capacity, and will likely become increasingly constrained, though the growth at this school is projected to be more moderate.

At the middle school level (7<sup>th</sup> and 8<sup>th</sup> grade), we expect there to be adequate capacity through most of the coming 20 years, although our projections indicate that Hedrick will exceed capacity at the end of the period.

Finally, at the high school level, the north and south schools together had excess capacity for nearly 900 students in 2015. With Central Medford included, there was excess capacity for 2,600 students. In aggregate, we therefore expect there to be excess capacity over the 20-year period. However, for the north attendance area, our projections indicate that enrollment will reach capacity by 2035. South Medford is not projected to reach capacity during the forecast period.



#### FIGURE 39: 10-YEAR SCHOOL CHARTS









