DEER VALLEY UNIFIED SCHOOL DISTRICT
DEMOGRAPHIC & ENROLLMENT ANALYSIS
2020/21

Report

March 31, 2021

DEER VALLEY

APPLIED ECONOMICS

Applied Economics LLC
11209 North Tatum Boulevard, Suite 225
Phoenix, Arizona 85028
602-765-2400
www.aeconomics.com

Executive Summary

The 2020/21 demographic and enrollment update for the Deer Valley Unified School District (District) incorporates new data for the District and its sub-areas, as well as information regarding changes in regional socioeconomic conditions. The purpose of this analysis is to identify current and historic demographic, development and enrollment trends, and to anticipate future trends to create District and sub-District enrollment projections through 2030/31.

Some of the main findings and conclusions from this report include:

- Total enrollment in District was 31,711 students in the fall of the 2020/21 school year; this represents a six percent decrease (roughly 2,000 students) compared to 2019/20 enrollment that is due to the anomalous effects of the COVID-19 pandemic. Prior to this year, total enrollment had remained nearly unchanged, averaging about 33,600 students between 2016/17 and 2019/20.

- This year, the declines in average enrollment per grade were strongest in the K-2 (-290 students) and 3-5 cohorts (-200 students), which is evidence of the fact that the negative effects of the COVID-19 pandemic were strongest in the younger grade levels; losses in average enrollment per grade in the 6-8 and 9-12 cohorts was significantly less, declining by 119 and 53 students, respectively, in 2020/21.

- Census data indicates a general aging of the population, which directly impacts District enrollment. The number of persons under 5 years of age and persons aged 5 to 13 years (K-8 grade) has declined since 2010, while slight growth in the high school age population (14 to 17 years) nearly kept pace with the overall population. Since 2010 the share of school-age persons (5 to 17 years) in the District has declined by nearly two percent. The population in the 25 to 44 age group, typically considered prime child-rearing years, has grown by just 0.5 percent per year since 2010, illustrating the correlation of this age group with the population under the age of 18. At 5.2 percent, the average annual rate of growth in the 65 and older category was significantly higher than that of the overall population (1.1 percent) since 2010. The 45 to 64 and 65 and older categories, which together comprised about 27 percent of the population in the District in 2000, now account for more than 40 percent of the total population.

- There are currently 18 charter schools operating within the District's boundaries serving approximately 6,600 K-12 students and a new K-6 Legacy Traditional School is scheduled to open in the fall of 2021. With the addition of grades 9th through 12th and an enrollment increase of more than 200 students this year, Ridgeline Academy became the largest charter school located within the District. The enrollment gain at Ridgeline Academy partly offset losses at nearly all of the other in-District charter schools, resulting in a net decline in in-District charter enrollment of nearly 250 K-12 students in 2020/21. There are another 15 charter schools located within one mile of the District's boundaries that enroll more than 5,500 K-12 students, which represents an increase (270 students) compared to last year. This increase in area charter enrollment is due in part to the opening of the Kaleidoscope School with about 170 Kindergarten to 4th grade students.

- Single family housing production in the District peaked in 2017 (229 permits per quarter); production fell in 2018 but increased in 2019 (182 permits per quarter); multifamily production has also increased significantly in 2019. Potential new housing supply in the District is estimated at over 67,000 units; however, development

in the District is somewhat limited due to terrain, land ownership and infrastructure availability issues. Most long-term growth in the District will likely result from major increases in employment; although increased residential development is unlikely until the last half of the projection period, the amount of potential will support substantial growth for an extended period of time.

- District population and households are expected to increase throughout the projection period as new housing supply enters the market and occupancy rates remain stable. An average of about 1,600 new housing units are forecast to be added each year during the projection period, yielding 16,400 new units and more than 15,500 new households by 2030/31; however, the population per household is expected to fall to 2.632 over the next 10 years. These changes result in a population of nearly 304,000 persons occupying more than 115,000 households by the end of the projection period.

- In 2020/21 the school-age population within the District is estimated to be about 46,700 persons and enrollment totaled 31,711 students. This results in a net difference between enrollment and the school-age population of roughly 15,000 persons. The decline in the District's Enrollment-Population (E-P) Ratio this year to 67.9 percent follows a slight increase last year and is the result of the anomalous effects of the COVID-19 pandemic. Assuming a gradual decline in the E-P Ratio and nominal growth in the school-age population, enrollment is expected to total about 34,300 students at the end of the projection period.

- Elementary attendance area enrollment during the first five-year period is forecast to increase by nine percent, due in part to a 15 percent increase in out-of-District enrollment. In the second five-year period, elementary enrollment growth is projected to slow considerably; in-District enrollment growth during this period is partially offset by a slight decline in out-of-District enrollment, resulting in a net enrollment increase of just one percent between 2026/27 and 2030/31. In terms of students, the new Union Park attendance area is projected to have the largest growth, adding nearly 840 K-8 students during the 10-year period, followed by the Sonoran Foothills (400 students) and Esperanza (300 students) attendance areas; another five attendance areas are expected to add between 100 and 200 elementary students by 2030/31. The Las Brisas and Sierra Verde attendance areas are both projected to lose nearly 200 students over the next 10 years, and another four attendance areas are likely to experience enrollment declines in excess of 90 students each.

- In the middle school attendance areas, growth of nearly 300 students over ten years in the Deer Valley Middle School attendance area is expected to be offset somewhat by a loss of 140 students (16 percent) in the Hillcrest attendance area. Overall, middle school enrollment is projected to increase by about 120 students (5.7 percent) by 2030/31.

- With the addition of nearly 200 out-of-District high school students during the projection period, high school attendance area enrollment is expected to experience a net gain nearly 540 students (5 percent) by the end of the projection period. Significant growth in the Barry Goldwater attendance area is anticipated, adding more than 1,400 students (a 66 percent increase) over the 10-year period. These gains more than offset losses in the Sandra Day (990 students) and Boulder Creek (290 students) attendance areas during the same time period. After declining for the past eight years, enrollment in the Deer Valley high school attendance area is projected to increase by about 30 percent over the next ten years, adding 400 students by 2030/31.

CONTENTS

Executive Summary i

1.0 Introduction 1

2.0 Existing Conditions 3

2.1 Enrollment 3

2.2 Mobility 11

2.3 Demographic Trends 17

2.4 Alternative Providers 24

3.0 Residential Development 29

3.1 Market Conditions 29

3.2 Housing Construction 32

3.3 Residential Development 34

3.3.1 Future Development Potential 34

3.3.2 Development Projects 37

4.0 District Projections 41

4.1 Population & Housing 41

4.2 Enrollment 42

5.0 Sub-District Projections 48

5.1 Enrollment by Attendance Area 51

5.2 Enrollment by School versus by Attendance Area 55

5.3 Enrollment by School 63

Acknowledgements 66

Appendix A: High School Choice by 8th Grade School 67

1.0 Introduction

This demographic update report for the Deer Valley Unified School District (District) for the 2020/21 school year incorporates information on enrollment, demographic trends and residential development into 10-year District-level and small-area projections of enrollment by grade. The District-level projections use long-term demographic and housing trends for the District and projected trends for the region to create a macroeconomic, top-down analysis of population and enrollment.

The District is divided into 282 small area planning geographies, referred to as "grids," as shown in **Map 1**. The projections by grid are summed by current attendance areas in order to calculate baseline projections that provide sufficient detail to support facility and attendance area planning activities. A new grid map is being used this year that reflects the addition of 27 grids in the unpopulated area surrounding the Loop 303 in the western portion of the District in anticipation of development beginning in that area over the next 10 years.

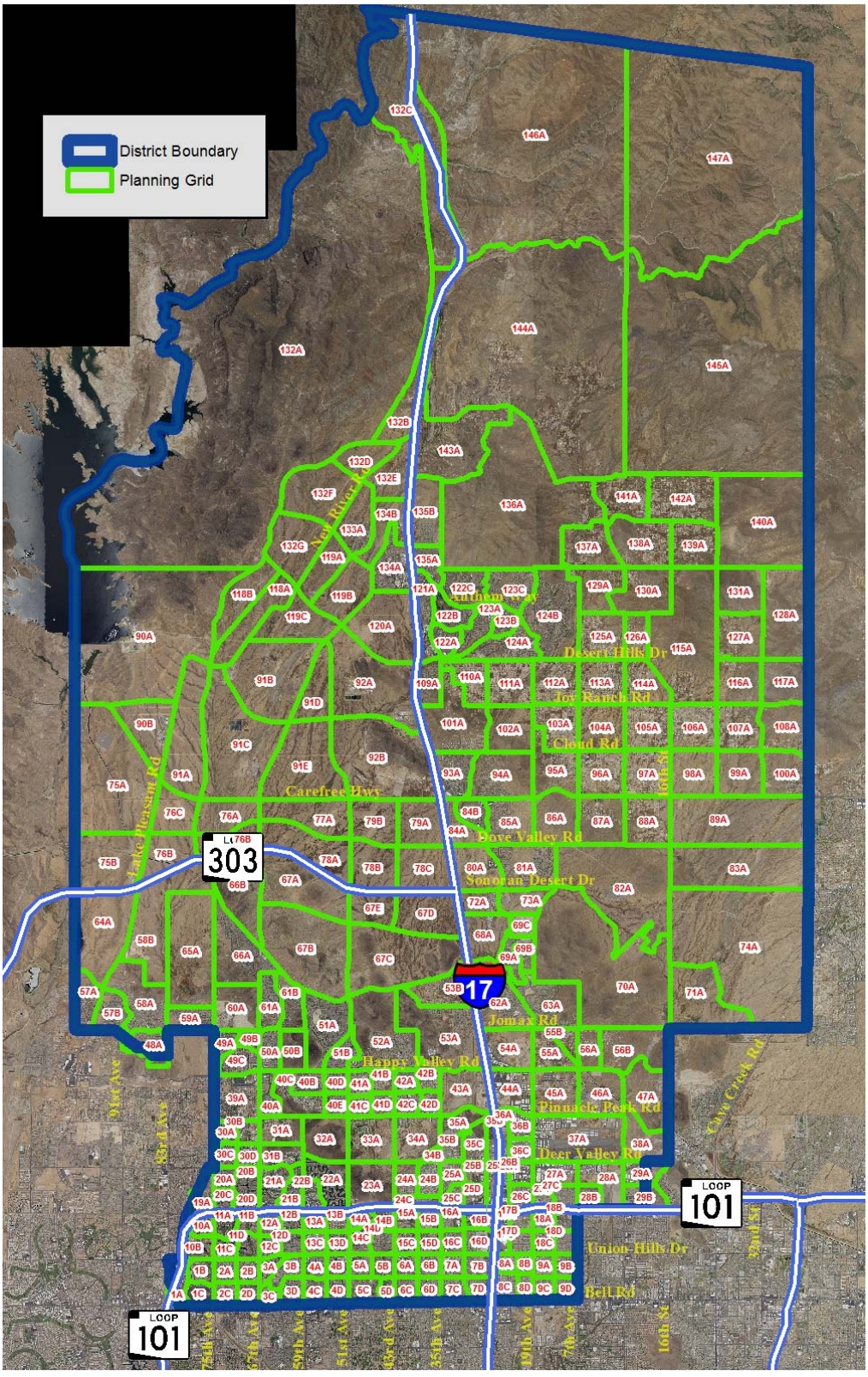
The balance of this report is divided into four sections. Section 2.0 reviews existing demographic and development conditions and provides enrollment information for the District. This chapter details demographic trends, including birth rate and student mobility trends, in the District in order to help understand current changes in enrollment. Finally, charter and private school enrollment data is presented for providers operating within and nearby District boundaries to help explain recent enrollment changes as compared to changes in the school-age population.

Section 3.0, Residential Development, presents information on current construction activity, vacancy rates and the potential future supply of new housing by unit type. It provides estimates for the timing of construction based on current activity, ownership and zoning status for vacant land available for residential development as well as area growth forecasts. The housing potential is segmented both by the type of housing product and the timing of specific housing projects within the district, which leads to the future distribution of enrollment.

Section 4.0 combines the demographic and residential development trends derived from the information presented in sections 2.0 and 3.0 to project District-level enrollment by grade for the 10-year period. These projections are developed in a top-down fashion, using long-term trends in enrollment, housing starts and completions, and student generation. Finally, Section 5.0 presents sub-District enrollment projections and the corresponding impact on student population in current attendance areas. The information in this section is helpful because it identifies the geographical areas of growth using visual representations of the ten-year enrollment projections for the grid planning areas within the District.

The information and observations contained in this report are based on our present knowledge of the land use and development patterns of the area under analysis, the current physical and socioeconomic conditions of the affected areas, and regional forecasts. Estimates and projections made in this report are based on hypothetical assumptions. However, even if the assumptions outlined in this report occur, there will usually be differences between the estimates and projections and the actual results because events and circumstances frequently do not occur precisely as expected. Applied Economics is under no obligation to update this report for events occurring after the date of its release.

MAP 1
DISTRICT GRID PLANNING GEOGRAPHY



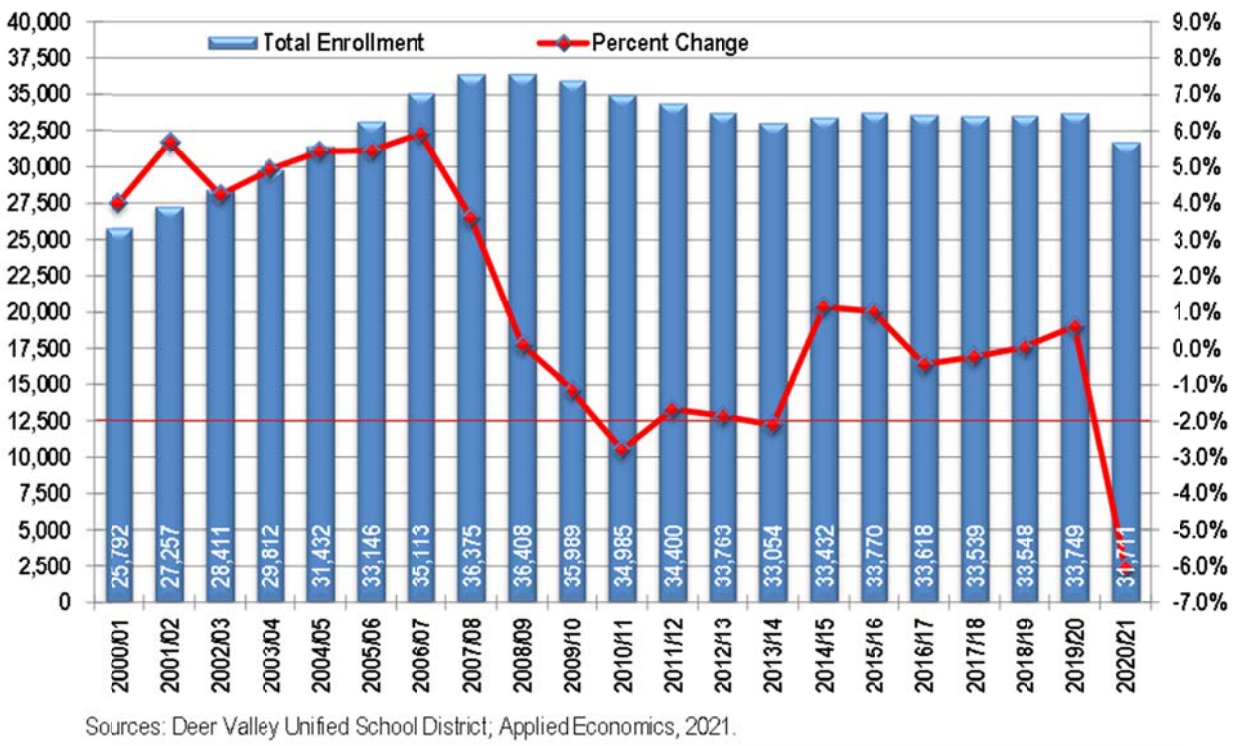
2.0 Existing Conditions

2.1 Enrollment

Total Kindergarten through 12th grade (K-12) enrollment in District was 31,711 students in the fall of the 2020/21 school year; this represents a six percent decrease (roughly 2,000 students) compared to 2019/20 enrollment that is due to the anomalous effects of the COVID-19 pandemic. Prior to this year, total enrollment had remained nearly unchanged, averaging about 33,600 students between 2016/17 and 2019/20.

As illustrated in **Figure 1**, District enrollment grew by 4 to 6 percent per year between 2000/01 and 2006/07, adding more than 9,300 students, due to a wave of new housing construction. This "bubble" in the housing market ultimately collapsed, causing widespread employment losses and dwindling occupancy rates during the ensuing recession. Enrollment declined between 1.2 and 2.8 percent per year between 2008/09 and 2013/14, ultimately reaching a low of about 33,000 students. The large drop in the 2010/11 school year includes the loss of about 400 Kindergarten students as a result of the elimination of the District's free all-day program; the reinstatement free all-day Kindergarten helped fuel the enrollment increases in 2014/15 and 2015/16. Small K-12 enrollment declines returned in 2016/17 before increasing slightly in in 2018/19 and 2019/20.

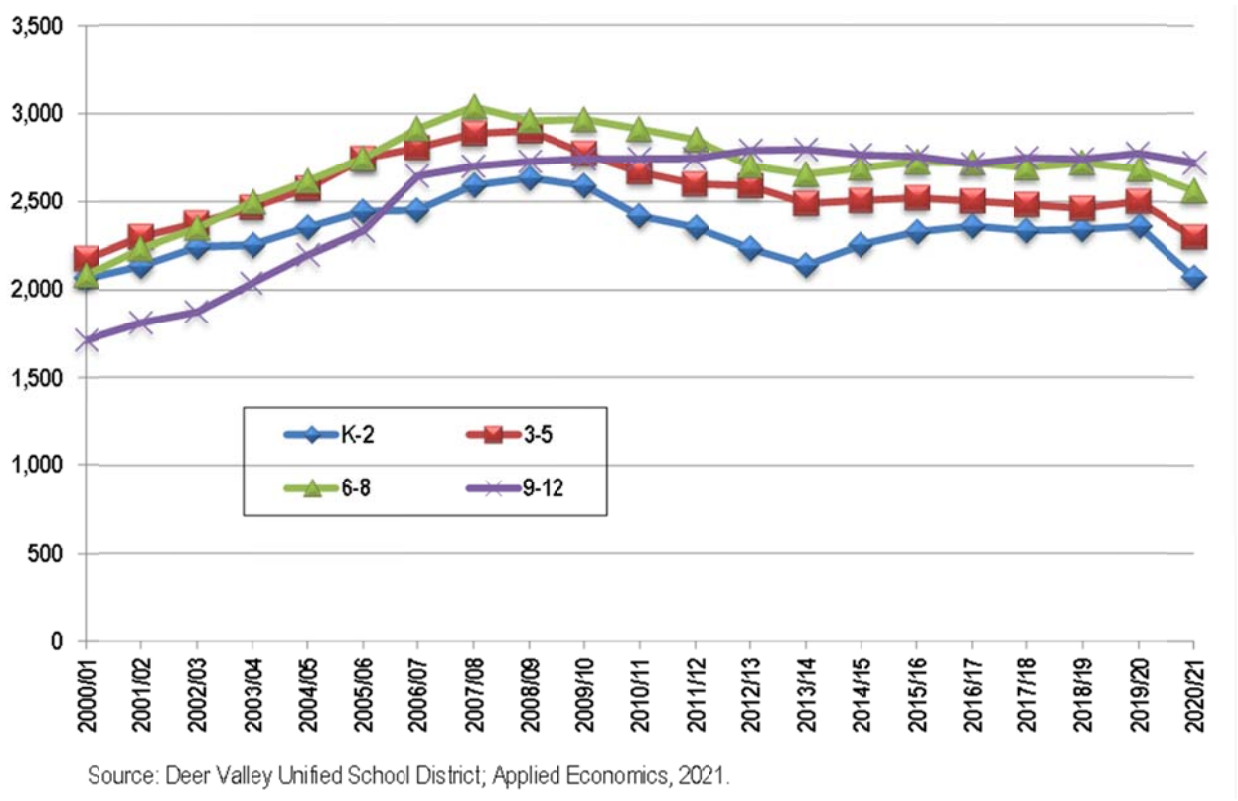
FIGURE 1
TOTAL ENROLLMENT BY YEAR AND ANNUAL GROWTH RATE



Sources: Deer Valley Unified School District; Applied Economics, 2021.

In addition to looking at trends in total enrollment, it is useful to analyze the student population by grade cohort. For this purpose, the grades are divided into four cohorts; in order to equalize the differences in number of grades per cohort, **Figure 2** shows average enrollment per grade in each cohort.

FIGURE 2
AVERAGE ENROLLMENT PER GRADE BY COHORT



Source: Deer Valley Unified School District; Applied Economics, 2021.

Between 2000/01 and 2007/08 every grade experienced high levels of growth, although faster growth in 9-12 and slower growth in Kindergarten to 2nd grade (K-2) cohort is reflective of a shift that occurred in the housing market as rising values limited the supply of entry-level options for younger families. Following the collapse of the housing market, enrollment in Kindergarten through 8th grade (K-8) entered a period of decline that persisted through the 2013/14 school year. The most significant losses were in the K-2 cohort, while losses in the 6th to 8th grade (6-8) cohort were less severe. Although growth in the 9th to 12th grade (9-12) cohort was hindered, it continued to increase slightly through the 2013/14 school year. These trends are evidence of the disproportionate impact of the Great Recession on younger families, which resulted in widespread enrollment decline in the younger grades.

In 2014/15 and 2015/16, average enrollment in each of the K-8 cohorts increased while enrollment in the 9-12 cohort decreased each year; by 2016/17, average enrollment was declining in all but the K-2 cohort. Although many factors impact enrollment, a major source of the 9-12 decline during this period was due simply to the ripple effect of the smaller class sizes in the younger cohorts progressing forward. The 2nd grade class from the K-2 cohort of 2009/10 (the first year of recessionary decline) entered 9th grade in 2016/17, and this year

(2020/21) portions of that cohort comprise grades 11 through 12. While this phenomenon tends to be muted over time, as well as by any significant overall enrollment change, it may continue to dampen enrollment in the 9-12 cohort for a few more years.

In 2017/18, average enrollment declined in all but the 9-12 cohort and in 2018/19, enrollment gains in the 6-8 cohort were offset by losses in the 3rd to 5th (3-5) cohort; in 2019/20, only the 6-8 cohort experienced a decline in average enrollment, likely due to the losses sustained in the 3-5 cohort the year before. This year, the declines in average enrollment were strongest in the K-2 (-290 students) and 3-5 cohorts (-200 students), which is evidence of the fact that the negative effects of the COVID-19 pandemic were strongest in the younger grade levels; losses in average enrollment per grade in the 6-8 and 9-12 cohorts was significantly less, declining by 119 and 53 students, respectively, in 2020/21.

In general, the inconsistent nature of changes in enrollment by grade cohort is not caused by any single factor, but by varying degrees of multiple factors. While the size of an incoming Kindergarten class certainly plays a major role in shaping enrollment in each successive grade level, a myriad of factors, including increased charter school competition, special program additions or closures within the District or in neighboring Districts and the economic climate, and this year's COVID-19 pandemic, ultimately affect enrollment to a greater extent in some cohorts than others.

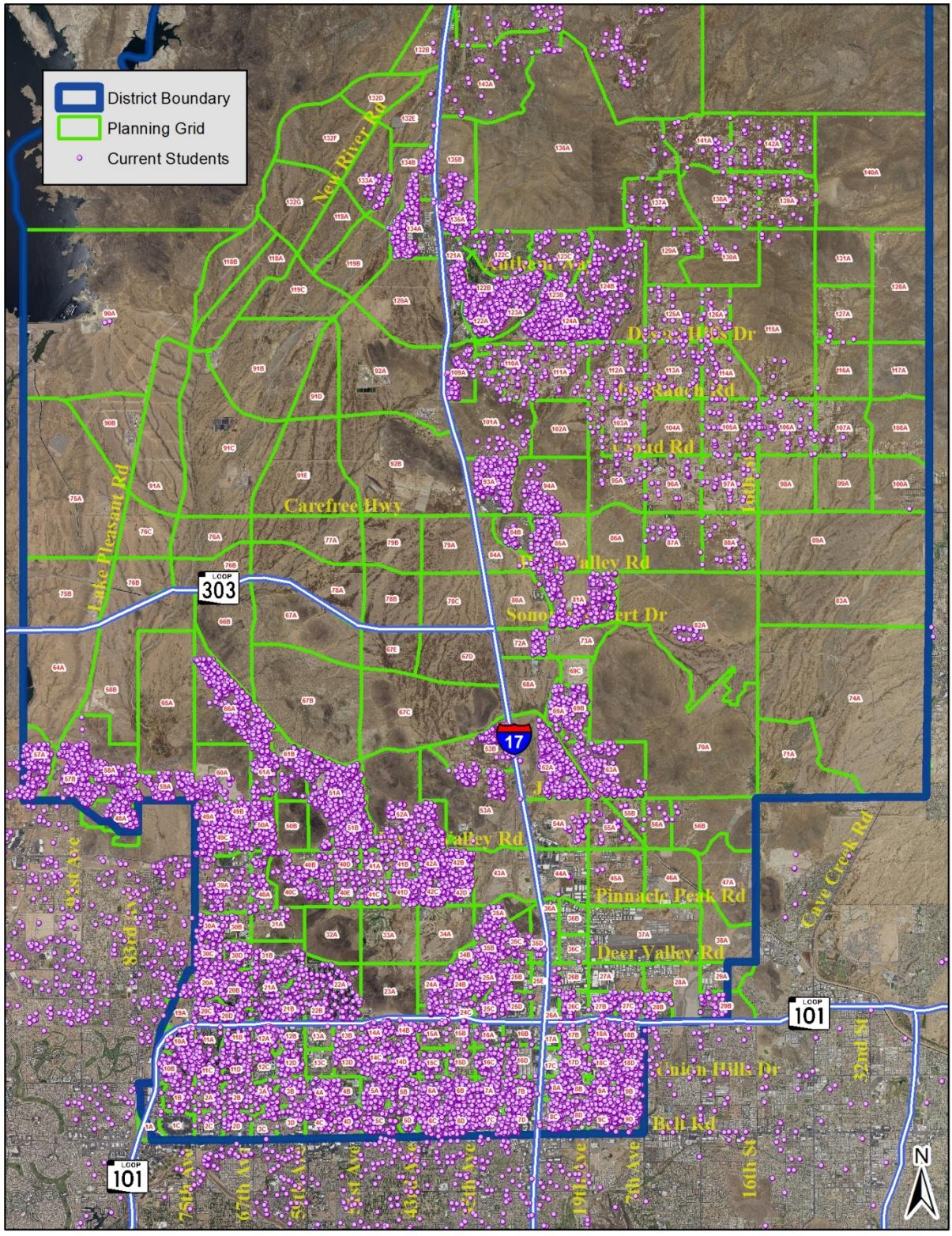
In addition to looking at enrollment by grade, it is also useful to analyze the geographic distribution of students. **Map 2** shows the current point location of students attending District schools, including those living outside District boundaries. In all, 2,250 of the District's 31,711 K-12 students (7.1 percent) reside outside District boundaries, up from about 1,800 students (5.3 percent) in 2015/16. The majority of the in-District students reside in the southwestern portion of the District, which is a well-established, primarily residential, area. Large student concentrations also exist in new and growing subdivisions east of I-17 and north of Jomax Road.

Map 3 displays the number of District students residing in each planning area (grid) used in the analysis. Higher-density areas are primarily concentrated in the established neighborhoods near the District's southern border, in the west north of Happy Valley Road, east of the Loop 101 Freeway, and in the Anthem area to the north. Due to the significant amount of state and federal land within the District, there are large areas with little to no population.

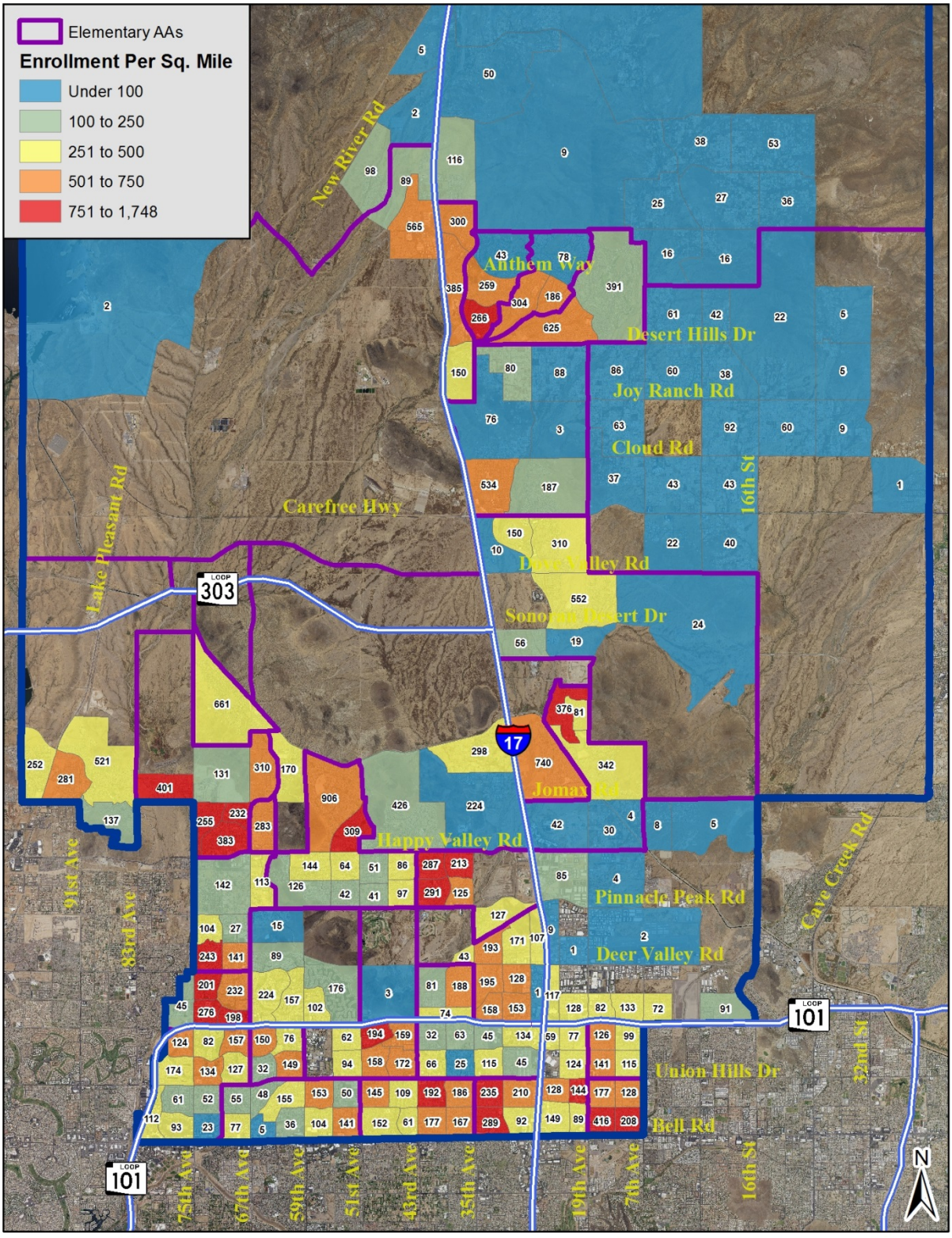
Map 4 displays changes in enrollment between 2014/15 and 2019/20. Enrollment declines were widespread over this period, but particularly severe in the Anthem area and in a few pockets north of Happy Valley Road. Overall, enrollment from inside District boundaries decreased by about 630 students, however, a 610-student increase in out-of-District enrollment offset much of this loss, leaving total enrollment relatively unchanged during this time period. Growth rates during this period were significant in new developments east of I-17, between Jomax and Dove Valley Roads, in areas north of Anthem and in a few pockets west of 51st Avenue and north of Happy Valley Road.

Map 5 shows changes in enrollment since 2019/20. In this view, enrollment declines are widespread but appear to be concentrated in the northernmost portion of the District; these losses more than offset the enrollment growth that was limited to just a few just a few grids in the central portion of the District.

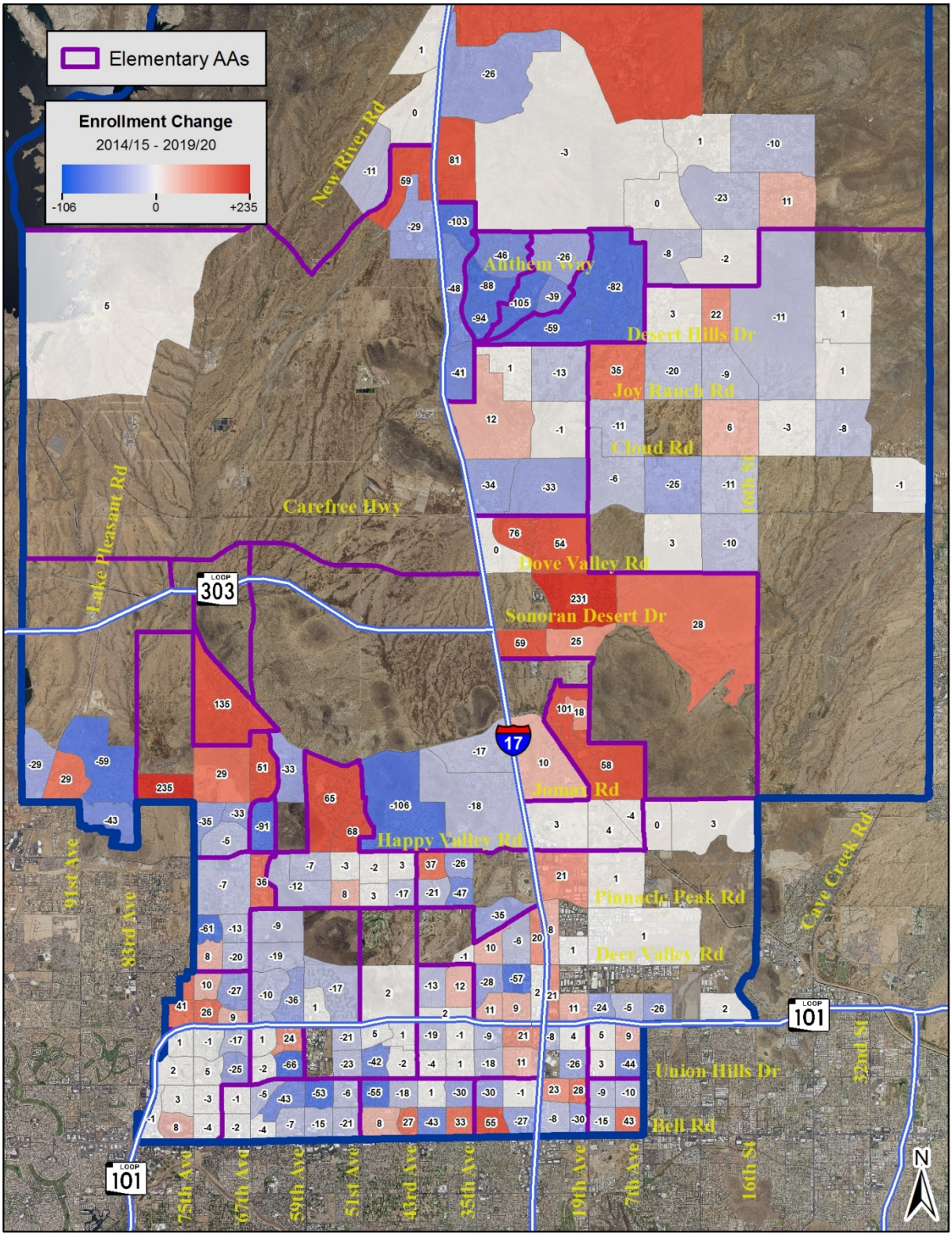
MAP 2
GEOGRAPHIC DISTRIBUTION OF STUDENTS: 2020/21



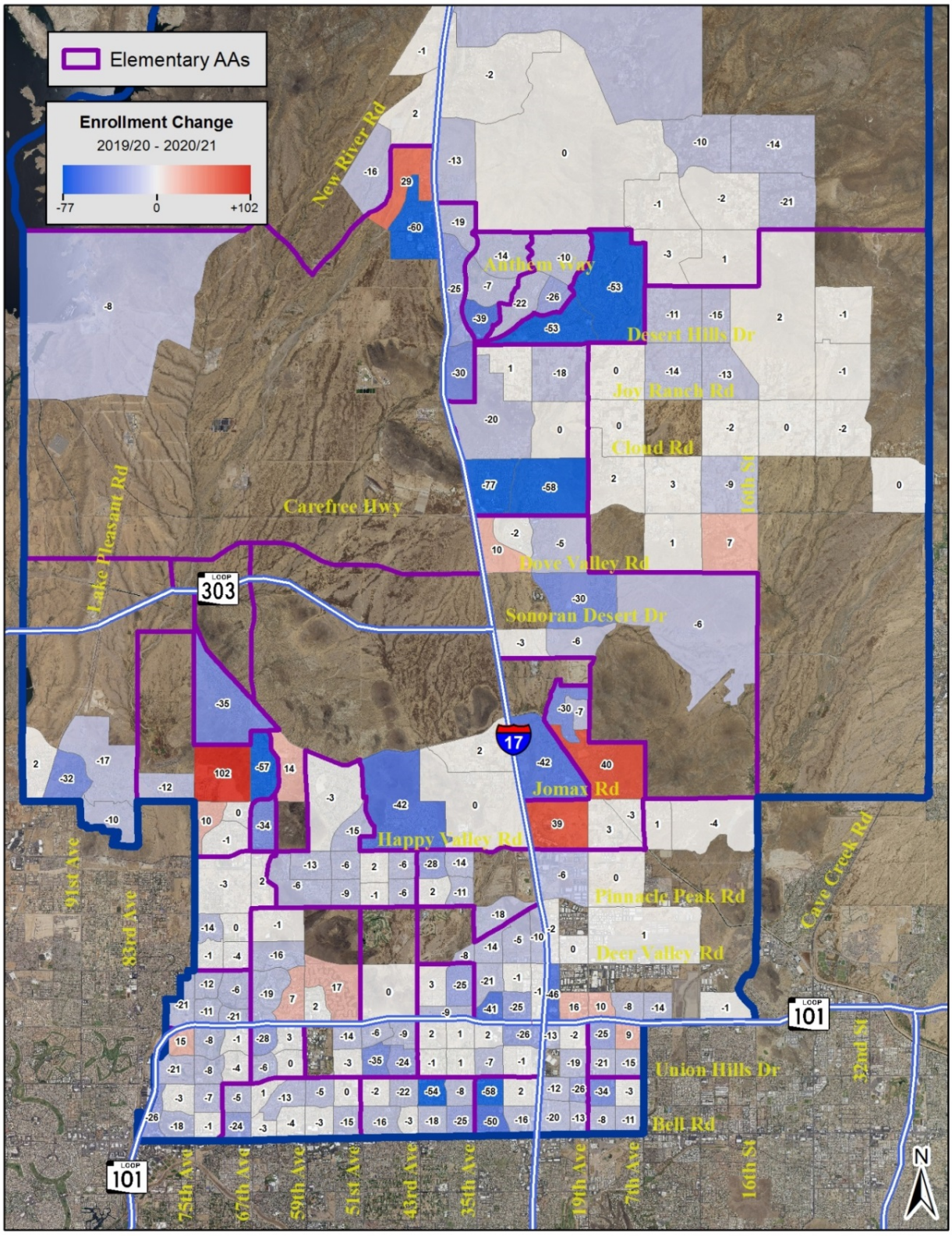
MAP 3
ENROLLMENT DENSITY WITH COUNT BY PLANNING GRID: 2020/21



MAP 4
CHANGE IN ENROLLMENT: 2014/15 - 2019/20

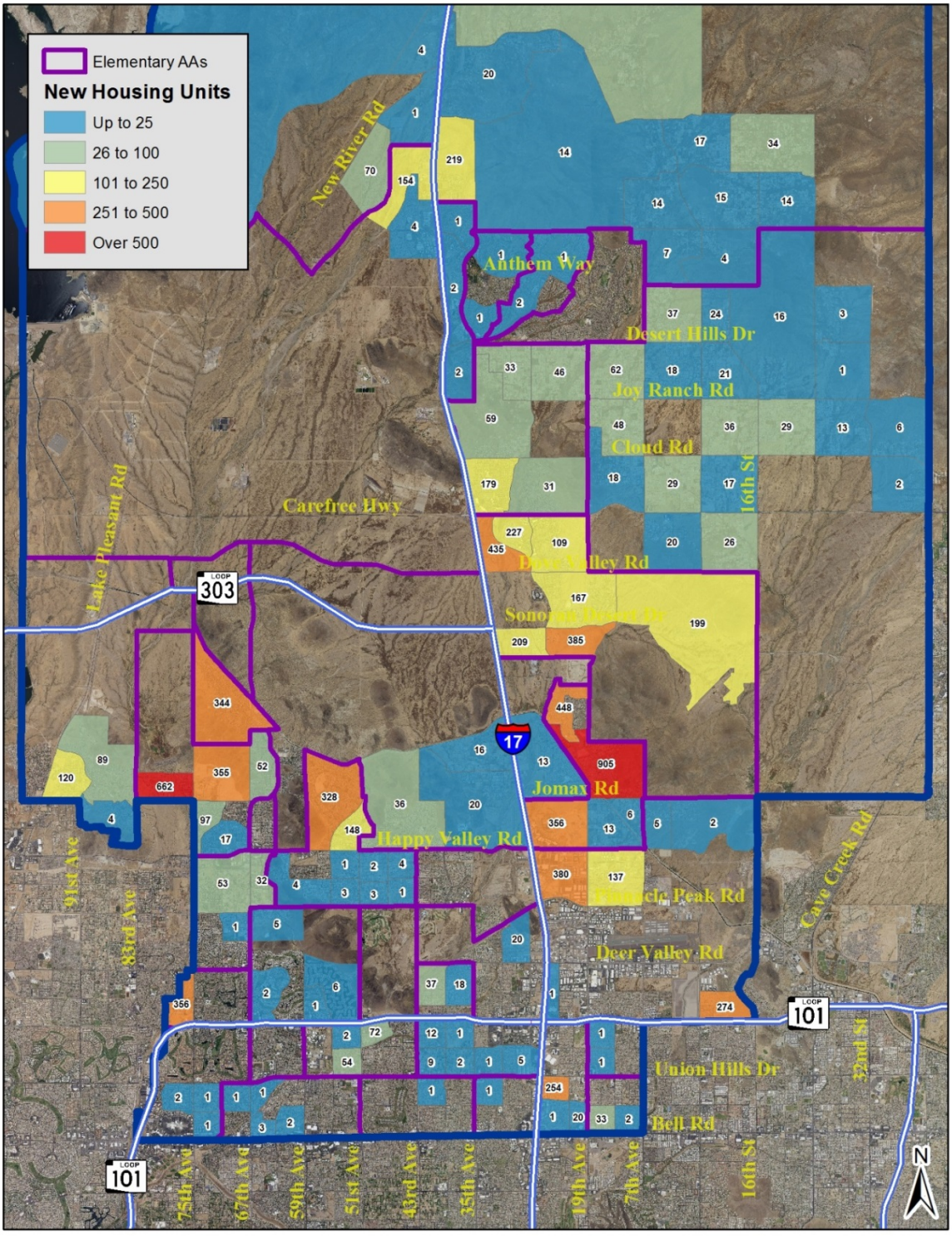


MAP 5
CHANGE IN ENROLLMENT: 2019/20 - 2020/21



Map 6 shows the change in housing units since 2010, which illustrates the correlation between housing construction and enrollment growth over the past ten years. The largest increases have occurred between Carefree Highway and Happy Valley Road due to new development in those areas. Pockets of strong growth are also found on either side of I-17 in the northern part of the District due to new construction in Anthem during this time period.

MAP 6
CHANGE IN HOUSING UNITS: 2010 - 2020



2.2 Mobility

Turn-over and enrollment retention characteristics are important to understanding the long-term trends in student behavior that will drive future enrollment totals. **Table 1** summarizes the key measurements of student movement (including the loss of students from the District one year to the next), the share that new students comprise of total enrollment each year, and the share of students that are retained from the prior year.

TABLE 1
DISTRICT MOBILITY RATES

Year	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2012_13	2,067	2,394	2,380	2,553	2,652	2,602	2,501	2,753	2,881	2,953	2,735	2,653	2,489	33,613
Lost	13%	14%	12%	11%	10%	9%	9%	8%	13%	6%	8%	7%	95%	
New	84%	18%	12%	11%	10%	9%	10%	13%	8%	12%	8%	7%	6%	
Retained	50%	87%	85%	88%	89%	90%	90%	91%	92%	87%	94%	92%	96%	
2013_14	1,941	2,193	2,298	2,354	2,513	2,620	2,599	2,629	2,774	2,869	3,007	2,718	2,722	33,237
Lost	16%	14%	14%	12%	12%	12%	12%	9%	14%	11%	12%	12%	97%	
New	76%	27%	20%	19%	17%	16%	14%	15%	11%	16%	9%	8%	6%	
Retained	55%	84%	86%	86%	88%	88%	88%	89%	91%	86%	89%	88%	91%	
2014_15	2,221	2,207	2,367	2,436	2,493	2,612	2,680	2,736	2,681	2,856	2,816	2,868	2,633	33,606
Lost	17%	16%	15%	12%	12%	12%	12%	10%	15%	11%	11%	12%	97%	
New	78%	21%	20%	17%	16%	15%	13%	15%	11%	19%	9%	8%	6%	
Retained	54%	83%	84%	85%	88%	87%	88%	89%	89%	85%	89%	89%	91%	
2015_16	2,373	2,327	2,294	2,433	2,572	2,569	2,645	2,799	2,749	2,812	2,780	2,743	2,772	33,868
Lost	18%	14%	14%	12%	13%	13%	11%	10%	15%	10%	12%	13%	98%	
New	74%	19%	17%	17%	16%	14%	13%	15%	11%	17%	9%	8%	6%	
Retained	54%	81%	85%	86%	87%	87%	87%	89%	90%	85%	90%	88%	90%	
2016_17	2,337	2,361	2,382	2,363	2,526	2,617	2,587	2,770	2,811	2,818	2,758	2,670	2,618	33,618
Lost	16%	15%	13%	12%	13%	13%	12%	11%	15%	11%	10%	10%	98%	
New	74%	16%	15%	15%	15%	15%	13%	15%	11%	18%	9%	8%	6%	
Retained	53%	84%	84%	87%	87%	87%	87%	89%	89%	85%	89%	90%	92%	
2017_18	2,331	2,327	2,347	2,459	2,414	2,577	2,607	2,704	2,775	2,917	2,766	2,708	2,607	33,539
Lost	16%	13%	13%	11%	14%	12%	13%	10%	15%	11%	12%	12%	98%	
New	74%	17%	17%	14%	15%	16%	14%	17%	13%	17%	9%	10%	5%	
Retained	51%	84%	87%	86%	89%	86%	88%	87%	90%	85%	89%	88%	90%	
2018-19	2,256	2,348	2,421	2,346	2,551	2,486	2,653	2,730	2,785	2,854	2,857	2,688	2,573	33,548
Lost	14%	13%	13%	10%	13%	11%	13%	10%	15%	10%	11%	12%	98%	
New	74%	17%	15%	14%	14%	14%	13%	16%	11%	19%	10%	8%	5%	
Retained	54%	86%	86%	87%	90%	87%	89%	87%	90%	85%	90%	89%	90%	
2019-20	2,379	2,335	2,369	2,455	2,455	2,594	2,526	2,766	2,766	2,915	2,848	2,778	2,563	33,749
Lost	22%	21%	19%	19%	17%	17%	17%	14%	17%	13%	16%	14%	99%	
New	75%	17%	17%	15%	15%	15%	14%	17%	12%	19%	9%	8%	5%	
Retained	45%	77%	79%	80%	81%	84%	82%	83%	86%	83%	87%	84%	87%	
2020-21	1,992	2,205	2,218	2,249	2,358	2,402	2,486	2,542	2,711	2,838	2,773	2,591	2,524	31,889
AVERAGE THROUGH 2019-20														
Lost	16%	15%	14%	12%	13%	12%	12%	10%	15%	11%	12%	12%	97%	
New	77%	21%	17%	16%	15%	14%	13%	16%	11%	17%	9%	9%	6%	
Retained	52%	83%	85%	86%	88%	87%	88%	88%	90%	85%	89%	88%	91%	

Sources: Deer Valley Unified School District; Applied Economics, 2021.

Due to the anomalous effects of Covid-19 on enrollment this year, the changes observed for 2019/20 have been omitted from the averages shown at the bottom of Table 1. The averages for the period 2010/11 through 2018/19, show that the share of students leaving the District after each year range from a high of 16 percent for Kindergarteners (excluding the 97 percent of 12th graders who leave), to a low of 10 percent for 7th graders. These percentages are very different from those shown for 2019/20, wherein the high was 22 percent (Kindergarten) and the low 13 percent (9th grade).

Averaged over the same period, the share of the next year's enrollment coming from new students ranges from a high of 21 percent in 1st grade (excluding the 77 percent of Kindergarteners that are new), to a low of six percent in 12th grade. The share of new students declines steadily after 1st grade as older families stabilize, although there is an increase in both 7th and 9th grade due to students returning to District middle and high schools from alternative providers; the lower shares in 10th through 12th grade reflect the reluctance of parents and students to move once in high school. For the most recent period (2019/20), 9th graders had largest share of new students (19 percent), a distinction normally occurring in 1st grade.

On average, the share of students retained from the year before ranges from 83 percent in 1st grade to 91 percent in 12th grade. The rates tend to increase with the grade level, with the exception of 9th grade where some students that have been attending District schools seek alternative providers for the same reasons that attract new students in the same class. Not surprisingly, retention percentages dropped considerably across all grade levels this past year and ranged from 77 percent in 1st grade to 87 percent for both 10th and 12th grade.

Using the mobility data, it is also possible to track the share of students that stay in the District over time. Overall, the data compiled for 1st through 8th grades showed that about 57 percent of 1st graders were likely to attend a District school through 8th grade. The largest drop (15 percent) occurred from 1st to 2nd grade, followed by nine percent from 2nd to 3rd grade, falling to about 2 percent per year in 8th grade. The long-term survival rate varies significantly by elementary attendance area (i.e. where the student attended first grade), ranging from 32 percent in the Constitution and Mirage attendance areas to 79 percent in the Terramar attendance area, as shown in **Figure 3**.

FIGURE 3
SHARE OF STUDENTS STAYING IN THE DISTRICT FROM 1st - 8th GRADE
2013/14 - 2020/21

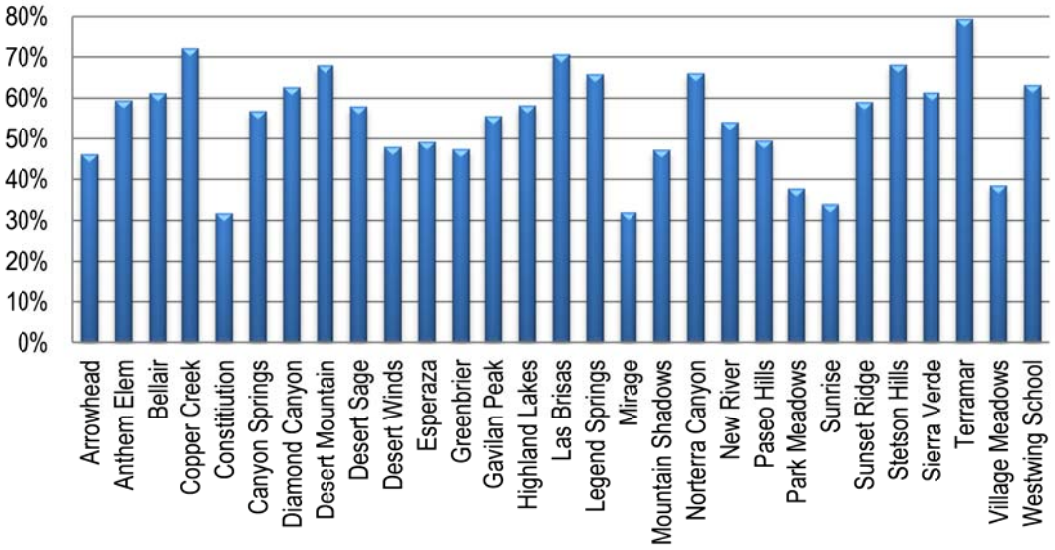
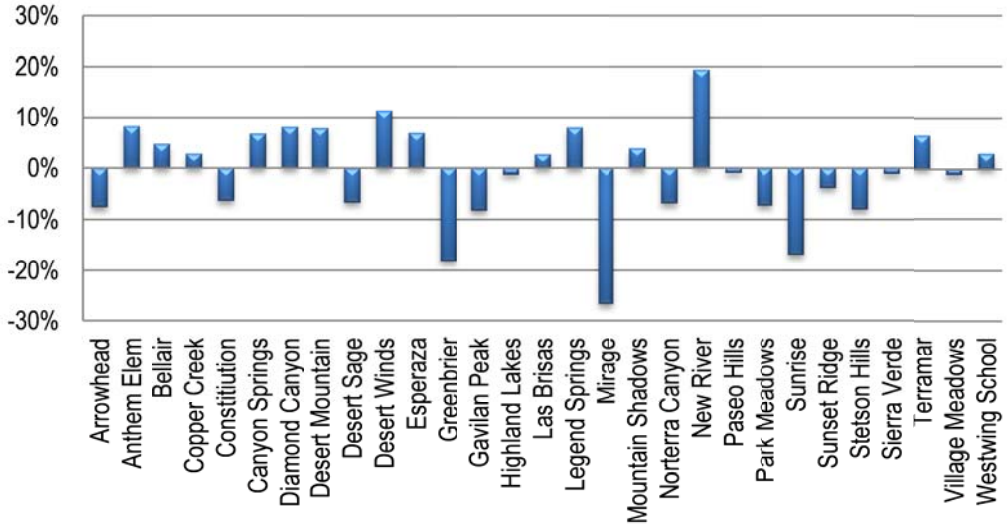


Figure 4 depicts the recent change, for each attendance area, in the share of students that stay in the District from 1st to 8th grade. Note that the share of continuing students increased by more than 10 percent this year in the New River (19 percent) and Desert Wind (11 percent) attendance areas. The largest decreases in the share of continuing students occurred in the Mirage (27 percent), Greenbrier (18 percent) and Surprise (17 percent) attendance areas this year.

FIGURE 4
CHANGE IN THE SHARE OF STUDENTS STAYING IN THE DISTRICT FROM 1st - 8th GRADE:
2019/20 - 2020/21



The movement of students between 8th and 9th grade has become a very important part of the enrollment projections for high schools. **Table 2** details the impact of these shifts by comparing the number of 8th grade students in each attendance area to the number of 9th grade students in each attendance area the next year, and also the number of 8th graders by attendance area and the number of 9th graders by school the next year. With the exception of Barry Goldwater, the rate of progression of 8th to 9th grade by attendance area, which shows the impact of students returning to District schools for high school, has generally improved. The drop this year for Deer Valley was driven by the high school boundary change, which will likely take a number of years to fully stabilize.

The relationship between the number of 8th graders by attendance area and the number of 9th graders by schools shows that the rate at which 9th grade enrollment now typically exceeds 8th grade enrollment in the previous year; the only exception occurs at Barry Goldwater High School where roughly 71 percent of 8th graders in the school's attendance area were enrolled in 9th grade at the school. This data also reveals a significant amount of movement between schools from 8th to 9th grade.

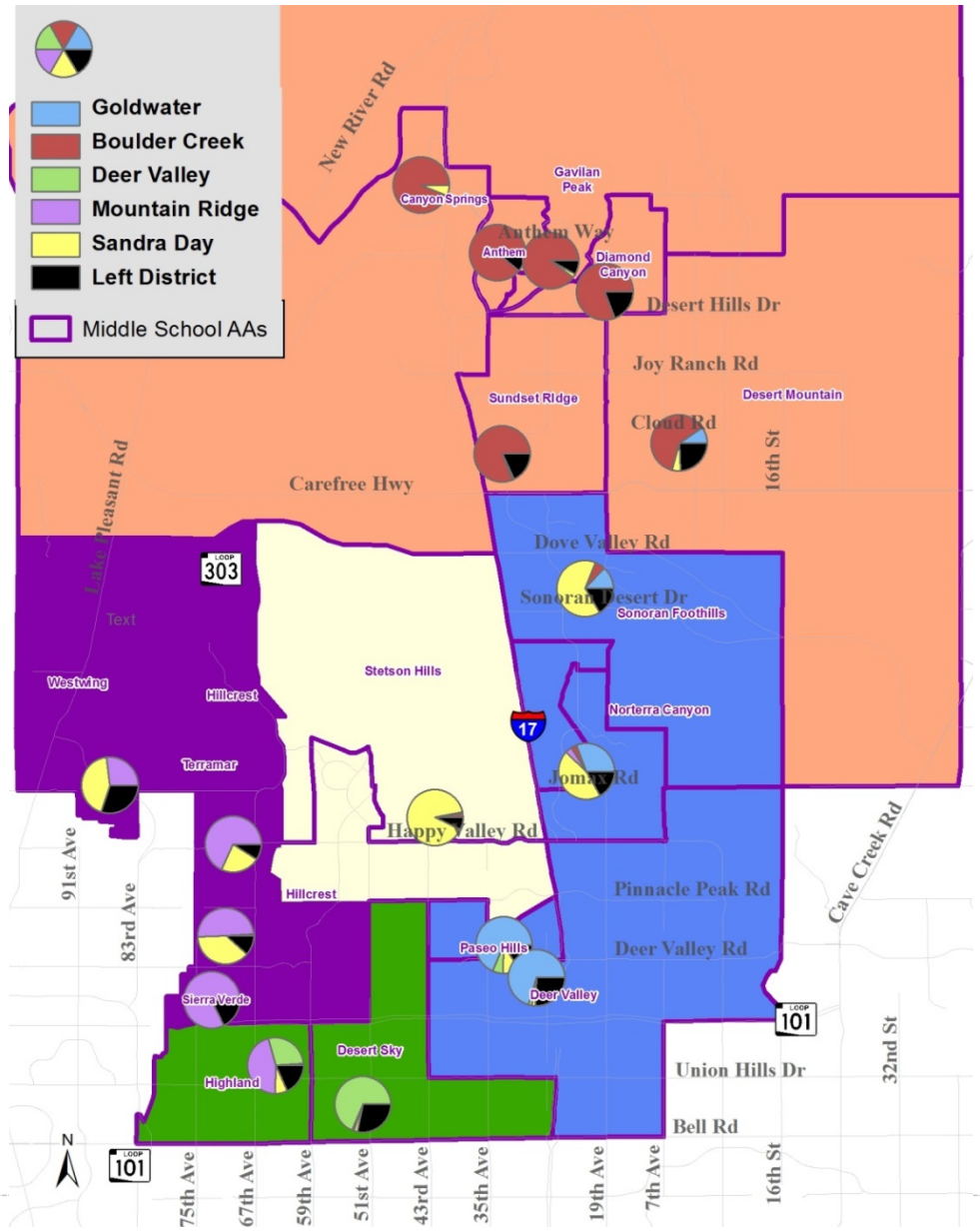
TABLE 2
8th TO 9th GRADE TRANSITION STATISTICS

AA/SCHOOL	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21
8TH GRADERS BY ATTENDANCE AREA									
MOUNTAIN RIDGE	516	469	473	430	454	457	458	444	448
DEER VALLEY	403	405	375	379	385	365	332	363	330
BARRY GOLDWATER	595	595	589	533	622	589	603	633	632
SANDRA DAY	613	534	576	594	589	582	614	604	583
BOULDER CREEK	634	660	548	678	630	645	622	551	542
OUT OF DISTRICT	120	106	120	135	131	137	145	171	175
TOTAL	2,881	2,769	2,681	2,749	2,811	2,775	2,774	2,766	2,710
9TH GRADERS BY ATTENDANCE AREA									
MOUNTAIN RIDGE	552	528	471	482	471	468	486	470	470
DEER VALLEY	448	412	421	403	373	371	350	340	328
BARRY GOLDWATER	619	534	564	578	540	621	558	612	626
SANDRA DAY	592	614	576	609	565	608	617	670	657
BOULDER CREEK	654	667	713	614	709	683	667	652	583
OUT OF DISTRICT	88	112	111	126	160	166	176	171	174
TOTAL	2,953	2,867	2,856	2,812	2,818	2,917	2,854	2,915	2,838
PROGESSION OF 8TH GRADERS BY ATTENDANCE AREA TO 9TH GRADERS BY ATTENDANCE AREA									
MOUNTAIN RIDGE	100.4%	102.3%	100.4%	101.9%	109.5%	103.1%	106.3%	102.6%	105.9%
DEER VALLEY	96.3%	102.2%	104.0%	107.5%	98.4%	96.4%	95.9%	102.4%	90.4%
BARRY GOLDWATER	92.9%	89.7%	94.8%	98.1%	101.3%	99.8%	94.7%	101.5%	98.9%
SANDRA DAY	105.7%	100.2%	107.9%	105.7%	95.1%	103.2%	106.0%	109.1%	108.8%
BOULDER CREEK	101.1%	105.2%	108.0%	112.0%	104.6%	108.4%	103.4%	104.8%	105.8%
OUT OF DISTRICT	95.7%	93.3%	104.7%	105.0%	118.5%	126.7%	128.5%	117.9%	101.8%
TOTAL	99.1%	99.5%	103.1%	104.9%	102.5%	103.8%	102.8%	105.1%	102.6%
9TH GRADERS BY SCHOOL									
MOUNTAIN RIDGE	561	578	533	567	604	577	632	644	725
DEER VALLEY	499	453	472	451	424	435	407	382	376
BARRY GOLDWATER	543	511	506	495	413	492	408	457	447
SANDRA DAY	686	627	597	649	603	675	707	757	683
BOULDER CREEK	645	683	726	630	747	718	689	648	585
OTHER	19	17	22	20	27	20	11	27	22
TOTAL	2,953	2,869	2,856	2,812	2,818	2,917	2,854	2,915	2,838
PROGESSION OF 8TH GRADERS BY ATTENDANCE AREA TO 9TH GRADERS BY SCHOOL									
MOUNTAIN RIDGE	102.0%	112.0%	113.6%	119.9%	140.5%	127.1%	138.3%	140.6%	163.3%
DEER VALLEY	107.3%	112.4%	116.5%	120.3%	111.9%	113.0%	111.5%	115.1%	103.6%
BARRY GOLDWATER	81.5%	85.9%	85.0%	84.0%	77.5%	79.1%	69.3%	75.8%	70.6%
SANDRA DAY	122.5%	102.3%	111.8%	112.7%	101.5%	114.6%	121.5%	123.3%	113.1%
BOULDER CREEK	99.7%	107.7%	110.0%	115.0%	110.2%	114.0%	106.8%	104.2%	106.2%
TOTAL	99.1%	99.6%	103.1%	104.9%	102.5%	103.8%	102.8%	105.1%	102.6%

Sources: Deer Valley Unified School District; Applied Economics, 2021.

Another way to look at relationship between 8th graders and 9th graders is by the high school chosen by 8th graders from each school. This information is detailed in Appendix A and summarized in **Map 7**. It primarily shows the distribution of 9th graders from each school follows logical patterns, with most students choosing the school indicated by their residence; however, in some cases the 8th grade class splits and goes to several high schools. For instance, in 2020/21 the majority (46 percent) of Norterra Canyon 8th graders enrolled at Sandra Day O'Conner, rather than Goldwater (the area's designated high school), and a substantial number of students (11 percent) chose to attend high school outside of the District. West Wing is notable for the large number of 8th grade students leaving the District for high school (30 percent), however this is expect to moderate as the high school boundary change rolls through the grades. A large share of 8th grade students also chose to leave Desert Sky (28 percent) and Deer Valley (25 percent) to attend high schools outside of the District in 2020/21.

MAP 7
TRANSITION OF 8th GRADERS TO HIGH SCHOOL



2.3 Demographic Trends

Table 3 contains Census data on population and housing in the District for 2000 and 2010 and 2020 estimates by Applied Economics; this information can help to explain recent trends and the current character of the area. Like many parts of the Valley, the District experienced a significant increase in population from 2000 to 2010, growing by an average of 4.1 percent annually. Since 2010, the addition of new housing units and households (occupied housing units) has slowed and population growth has been sluggish, increasing by an average of 1.1 percent per year.

TABLE 3
DEMOGRAPHIC TRENDS

	2000 Census	2010 Census	2020 Estimate	Change (2000-2010)* Total	Change (2000-2010)* Percent	Change (2010-2020)* Total	Change (2010-2020)* Percent
Population	159,234	239,040	267,808	79,806	4.1%	28,768	1.1%
Housing Units	60,589	96,493	106,298	35,904	4.8%	9,805	1.0%
Households	56,782	87,217	99,495	30,435	4.4%	12,278	1.3%

Sources: U.S. Bureau of the Census, 2000 and 2010; American Community Survey, 2020; Applied Economics, 2020.
* Annual compound rate of change.

The share of the population by race has changed slightly over the past ten years, as shown in **Table 4**. Since 2010 the share of the population that is White has declined by about one percent and the share of Asian persons has increased by about one percent. Both the Native American and Asian populations in the District grew faster than the overall population during the past 10 years. The Hispanic share of population has remained relatively constant, growing at a rate roughly equal to that of the overall population since 2010.

TABLE 4
DEMOGRAPHIC TRENDS – RACE & ETHNICITY

	2000 Census	2010 Census	2020 Estimate	Change (2000-2010)* Total	Change (2000-2010)* Percent	Change (2010-2020)* Total	Change (2010-2020)* Percent
Population	159,234	239,040	267,808	79,806	4.1%	28,768	1.1%
By Race & Ethnicity:							
White	84.7%	79.2%	77.9%	54,575	3.5%	19,300	1.0%
African American	2.1%	2.4%	2.5%	2,290	5.4%	1,181	1.9%
Native American	0.7%	0.7%	0.8%	611	4.3%	415	2.1%
Asian	2.3%	4.9%	5.9%	7,991	12.1%	3,973	3.0%
Hispanic	10.0%	12.6%	12.7%	14,157	6.6%	3,872	1.2%
Other	0.1%	0.2%	0.2%	184	6.9%	27	0.7%

Sources: U.S. Bureau of the Census, 2000 and 2010; American Community Survey, 2020; Applied Economics, 2020.
* Annual compound rate of change.

The data also indicates a general aging of the population, which directly impacts District enrollment. Between 2000 and 2010, the population under 5 years of age increased by 2.7 percent per year, which was considerably lower than the rate of growth in the overall population during the same time period (**Table 5**). Due to the disproportionate impact of the recession on younger families and the widespread decline in birth rates in general, the population under 5 years of age in the District has dropped slightly since 2010, decreasing by 0.4 percent per year, on average; as a result the share of persons under the age of 5 years has declined by about one percent over the past 10 years. The population aged 5 to 13 years, generally comprising persons in K-8 grade, has also declined since 2010, declining by 0.5 percent per year on average, while slight growth (0.9 percent) in the high school age population (14 to 17 years) nearly kept pace with the overall population. Since 2010 the share of school-age persons (5 to 17 years) in the District has declined by nearly two percent.

The population in the 25 to 44 age group, typically considered prime child-rearing years, has grown by just 0.5 percent per year since 2010, illustrating the correlation of this age group with the population under the age of 18. The population over the age of 44 years grew dramatically between 2000 and 2010 and at 5.2 percent, the average annual rate of growth in the 65 and older category over the past 10 years was significantly higher than that of the overall population (1.1 percent). The 45 to 64 and 65 and older categories, which together comprised about 27 percent of the population in the District in 2000, now account for more than 40 percent of the total population.

TABLE 5
DEMOGRAPHIC TRENDS – AGE

	2000 Census	2010 Census	2020 Estimate	Change (2000-2010)* Total	Change (2000-2010)* Percent	Change (2010-2020)* Total	Change (2010-2020)* Percent
Population	159,234	239,040	267,808	79,806	4.1%	28,768	1.1%
By Age:							
Age 0-4	8.0%	6.9%	6.0%	3,885	2.7%	-606	-0.4%
Age 5-13	14.5%	13.6%	11.6%	9,551	3.5%	-1,554	-0.5%
Age 14-17	6.3%	6.0%	5.9%	4,352	3.7%	1,327	0.9%
Age 18-24	8.5%	8.4%	8.0%	6,669	4.1%	1,341	0.6%
Age 25-44	35.7%	29.8%	28.0%	14,398	2.3%	3,786	0.5%
Age 45-64	21.2%	27.1%	28.6%	30,962	6.7%	11,772	1.7%
Age 65 Up	5.9%	8.1%	12.0%	9,989	7.5%	12,702	5.2%

Sources: U.S. Bureau of the Census, 2000 and 2010; American Community Survey, 2020; Applied Economics, 2020.
* Annual compound rate of change.

As shown in **Table 6**, there were about 36,000 new housing units added between 2000 and 2010, which translates to an annual average growth rate of about 5 percent. Since 2010, nearly 10,000 new units have been added to the inventory, representing an average annual growth rate of just one percent. Multifamily housing additions increased at a slightly higher annual rate than single family in both time periods. Occupancy levels dropped from 93.7 percent to 90.4 percent between 2000 and 2010 as a result of the recession. At roughly 94 percent in 2020, the District's occupancy rate has fully recovered and returned to pre-recession levels.

The profile of occupied housing units shifted from 20.3 percent renter-occupied units in 2000, to 24.9 percent in 2010 and 26.7 percent in 2020; this trend can impact enrollment because the age structure of the student population becomes more stable; although rental units tend to have higher turnover rates, these households are generally replaced by new households with similar characteristics, rather than aging in place. A greater proportion of owner-occupied units will typically increase the student population in the near-term, but it will decrease over time.

TABLE 6
DEMOGRAPHIC TRENDS – HOUSING UNITS

	2000 Census	2010 Census	2020 Estimate	Change (2000-2010)* Total	Change (2000-2010)* Percent	Change (2010-2020)* Total	Change (2010-2020)* Percent
Housing Units	60,589	96,493	106,298	35,904	4.8%	9,805	1.0%
Occupied	93.7%	90.4%	93.6%	30,435	4.4%	12,278	1.3%
Owner	73.4%	65.5%	66.9%	18,720	3.6%	7,893	1.2%
Renter	20.3%	24.9%	26.7%	11,715	6.9%	4,385	1.7%
Vacant	6.3%	9.6%	6.4%	5,469	9.3%	-2,473	-3.1%
Seasonal Use	2.0%	2.2%	1.9%	921	5.9%	-134	-0.7%
By Unit Type:							
Single Family	83.7%	82.5%	81.0%	28,936	4.6%	6,482	0.8%
Multifamily	16.3%	17.5%	19.0%	6,968	5.5%	3,323	1.8%

Sources: U.S. Bureau of the Census, 2000 and 2010; American Community Survey, 2020; Applied Economics, 2020.
* Annual compound rate of change.

The distribution of households (occupied housing units) by age can be an indicator of future student enrollment. Since 2010, data on the age of the householders shows a decline in the share of the age category that drives younger elementary enrollment (ages 25 to 34 years), slightly stronger declines in the category that drives older elementary enrollment (ages 35 to 44 years), and the smallest decline in the share of householders that drive high school enrollment (ages 45 to 54 years). As **Table 7** shows, the District has experienced a sizeable increase in the share of householders over 54 years of age over the last 20 years, increasing from 22 percent in 2000, to 31 percent in 2010 and 38 percent of the population in 2020; these groups represent the aging-in-place that is occurring in many neighborhoods within the District, which, in turn, is contributing to the decreased share of the school-age population. In the longer term, however, this group represents the potential for increased housing turnover and a subsequent regeneration of the school-age population. It is important to also understand that outcomes from this type of demographic change occur much more slowly than those resulting from new construction and, hence, have a lesser impact on enrollment levels in the short-term. Household size has declined slowly since the 2000 Census, which can also be attributed to the reduction in home ownership and the overall aging of the existing population.

TABLE 7
DEMOGRAPHIC TRENDS – HOUSEHOLDS

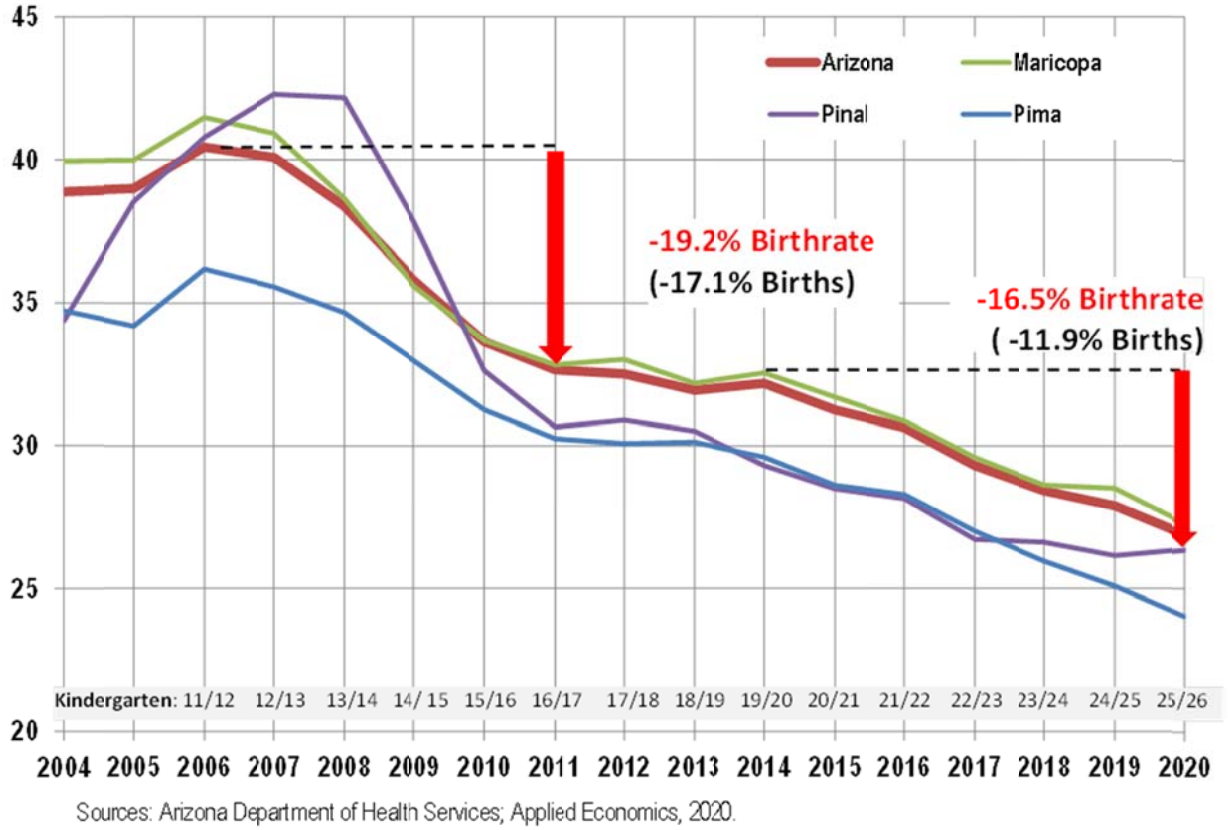
	2000 Census	2010 Census	2020 Estimate	Change (2000-2010)* Total	Change (2000-2010)* Percent	Change (2010-2020)* Total	Change (2010-2020)* Percent
Households	56,782	87,217	99,495	30,435	4.4%	12,278	1.3%
Householders by Age:							
Under 25	5.0%	4.2%	3.2%	817	2.6%	-511	-1.5%
25 to 34	21.7%	17.0%	14.7%	2,504	1.9%	-205	-0.1%
35 to 44	29.0%	23.5%	19.8%	4,039	2.2%	-840	-0.4%
45 to 54	21.7%	24.5%	23.1%	9,059	5.7%	1,540	0.7%
55 to 64	12.5%	17.7%	19.1%	8,337	8.1%	3,548	2.1%
65 to 74	6.5%	8.8%	13.0%	4,012	7.7%	5,226	5.3%
Over 75	3.5%	4.2%	5.7%	1,667	6.3%	1,992	4.4%
Owner Householders by Age:	78.4%	72.5%	71.5%	18,691	3.6%	7,893	1.2%
Under 25	1.3%	0.9%	0.7%	63	0.8%	-164	-2.2%
25 to 34	14.8%	8.6%	6.9%	-954	-1.2%	-653	-0.9%
35 to 44	23.6%	16.7%	12.9%	1,162	0.8%	-1,774	-1.3%
45 to 54	18.8%	19.7%	17.9%	6,502	4.9%	654	0.4%
55 to 64	11.2%	15.3%	16.6%	6,970	7.7%	3,241	2.2%
65 to 74	5.7%	7.8%	11.7%	3,532	7.6%	4,817	5.5%
Over 75	2.9%	3.5%	4.9%	1,416	6.3%	1,772	4.6%
Renter Householders by Age:	21.6%	27.5%	27.0%	11,744	6.9%	2,858	1.1%
Under 25	3.7%	3.3%	2.5%	755	3.1%	-347	-1.3%
25 to 34	6.9%	8.4%	7.8%	3,458	6.6%	448	0.6%
35 to 44	5.4%	6.8%	6.9%	2,877	6.9%	935	1.5%
45 to 54	3.0%	4.9%	5.2%	2,557	9.7%	887	1.9%
55 to 64	1.4%	2.5%	2.5%	1,367	10.6%	307	1.3%
65 to 74	0.8%	1.0%	1.3%	480	7.8%	408	3.8%
Over 75	0.6%	0.7%	0.8%	251	5.9%	220	3.3%
Population Per	2.80	2.74	2.69	-0.06	-0.2%	-0.05	-0.2%

Sources: U.S. Bureau of the Census, 2000 and 2010; American Community Survey, 2020; Applied Economics, 2020.
* Annual compound rate of change.

Another major factor affecting enrollment in schools is the recent decline in the birth rate, both regionally and nationally. As shown in **Figure 5**, the birthrate (births per 1,000 for the population aged 15 to 45) in Arizona declined by 19.2 percent between 2006 and 2011 due to the recession. Between 2011 and 2014 the rate was fairly stable, but since then the rate has been declining again falling by another 16.5 percent in six years, which brings the total compound rate reduction to 33 percent since 2006.

Despite the continued decline in the birth rate, the total number of births has declined less since 2014 because the population aged 15 to 45 has been increasing. The impact of the declining birth rate on Kindergarten enrollment is delayed five years. As such, the statewide birthrate decline between 2006 and 2011 impacted kindergarten enrollment between 2012/13 and 2016/17. The latest drops in the birthrate will likely have a significant impact on the size of incoming kindergarten classes through at least 2025/26, declining by as much as 11.85 percent statewide. Between this factor and the push by charter schools to attract Kindergarteners, nearly all school Districts in the Phoenix Metropolitan Area have experienced recent declines in Kindergarten enrollment and they will likely continue to see reduced class sizes for several more years.

FIGURE 5
BIRTHRATES IN ARIZONA AND SELECTED COUNTIES: 2004 – 2020

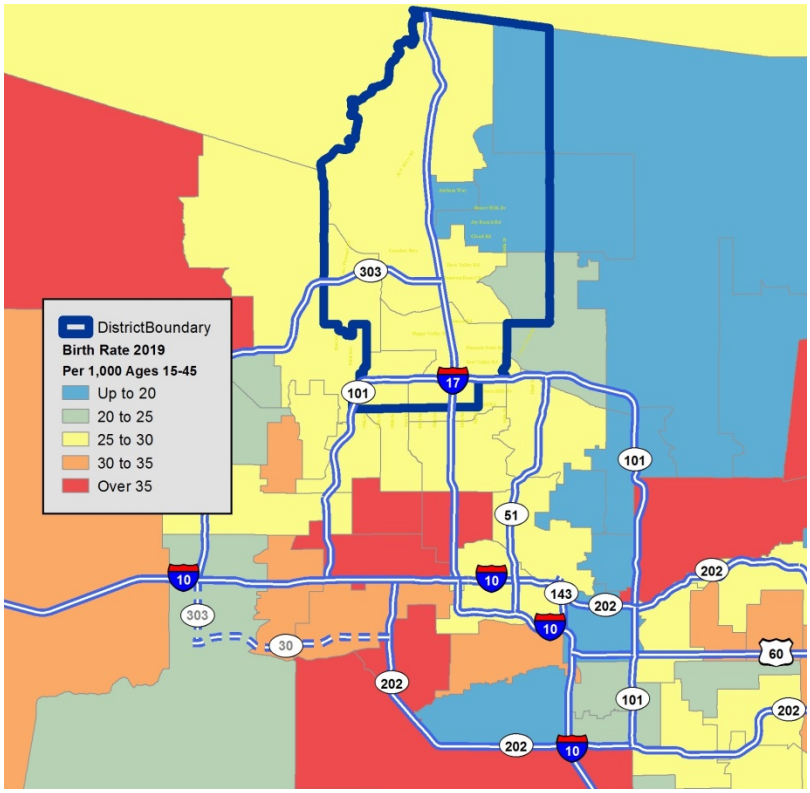


Sources: Arizona Department of Health Services; Applied Economics, 2020.

Historical birth and enrollment data is correlated to help project Kindergarten enrollment in the near-term. This analysis is performed by analyzing District enrollment versus county births; and by examining the characteristics and trends in birth rates with the metropolitan area. The second data set is useful in understanding the local impact on a particular community. The reason to consider the sub-county data in preparing projections is illustrated by the following **Maps 8** and **9** that show how current birthrates in the District compare with other parts of the Phoenix Metropolitan Area, and how these rates have changed over the past five years. The most recent data available at the sub-area level is for 2019.

MAP 8
BIRTH RATES
2019

With respect to sub-county birthrates, most of the populated parts of the District are near the county average. However, the District has generally lower birthrates in Anthem, as evidenced by the enrollment trends for the schools in the area. The southwest Valley and isolated parts of the southeast Valley boast the highest birthrates in the region, while the northeast Valley features the lowest rates.



MAP 9
CHANGE IN BIRTHRATES
2012 - 2019

During the economic recovery period (2011 through 2015), birth rates declined across most of the District, indicative of an aging population and the absence of new, younger families due to the higher than average home prices in many areas. New development in the southwestern and east-central portion of the District has attracted some younger families, thereby causing the birthrate to rise slightly in those areas.

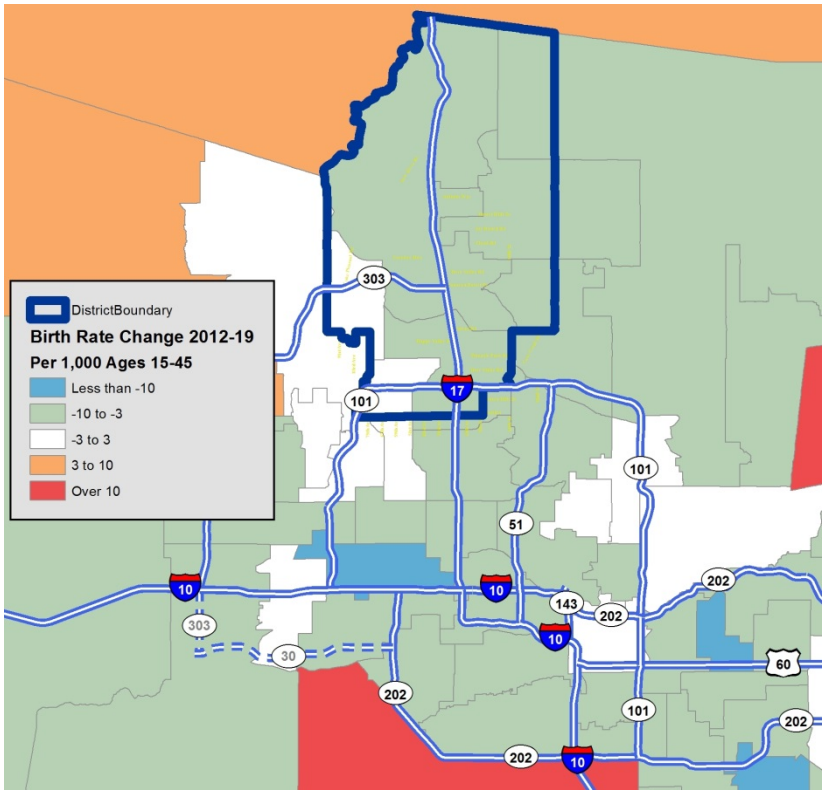


Table 8 shows near-term Kindergarten enrollment projections for the District based on both the county and District methods. The Maricopa County data shows the historical decline, increase and recent stability in the number of births. The lagged relationship of this trend to enrollment shows the District's share of births beginning at about 4.4 percent in the 2015/16 school year, declining to about 4.2 percent in 2018/19 and then rising to 4.3 percent in 2019/20. Held constant at this pre-COVID level and applied to the known births through 2020, this rate would result in a decline in District Kindergarten enrollment from about 2,300 to 2,100 students between 2021/22 and 2025/26, which could be largely offset by increased housing construction.

TABLE 8

PROJECTED KINDERGARTEN ENROLLMENT BASED ON PAST MARICOPA COUNTY AND DISTRICT BIRTHS

Year	Births*	School Year	Kindergarten Enrollment	Share of Lagged Births
Maricopa County				
2004	60,480	2009/10	2,462	4.07%
2005	62,232	2010/11	2,065	3.32%
2006	66,160	2011/12	2,136	3.23%
2007	65,931	2012/13	2,005	3.04%
2008	62,667	2013/14	1,939	3.09%
2009	57,663	2014/15	2,216	3.84%
2010	54,229	2015/16	2,363	4.36%
2011	53,361	2016/17	2,337	4.38%
2012	54,475	2017/18	2,331	4.28%
2013	53,848	2018/19	2,256	4.19%
2014	55,285	2019/20	2,379	4.30%
2015	54,600	2020/21	1,942	3.56%
2016	54,021	2021/22	2,324	4.30%
2017	52,470	2022/23	2,257	4.30%
2018	51,701	2023/24	2,224	4.30%
2019	50,998	2024/25	2,194	4.30%
2020	49,081	2025/26	2,111	4.30%
Deer Valley Unified School District *				
2010	2,584	2015/16	2,363	91.5%
2011	2,619	2016/17	2,337	89.2%
2012	2,638	2017/18	2,331	*88.4%*
2013	2,523	2018/19	2,256	*89.4%*
2014	2,557	2019/20	*2,379*	*93.0%*
2015	2,576	2020/21	*1,942*	*75.4%*
2016	2,579	2021/22	*2,329*	*90.3%*
2017	2,489	2022/23	*2,248*	*90.3%*
2018	2,354	2023/24	*2,125*	*90.3%*
2019	2,427	2024/25	*2,192*	*90.3%*

Sources:
Arizona Department of Health Servcices, 2004 - 2021.
Deer Valley Unified School District, 2004 - 2020; Applied Economics, 2021.

* Births estimated based on birth rate and population for sub-areas in the District
Coloring indicates projections

Using the estimated births in the District, and the lagged historical share of those births compared to Kindergarten enrollment (about 90 percent), District Kindergarten enrollment would decrease from about 2,300 to 2,200 students between 2021/22 and 2024/25, yielding slightly more students than the projections based on the share of county birth-based estimates.

2.4 Alternative Providers

There are currently 18 charter schools operating within the District's boundaries serving approximately 6,600 K-12 students, as listed on **Table 9,** and a new K-6 Legacy Traditional School is scheduled to open at 2747 W. Union Hills Drive in the fall of 2021. With the addition of grades 9th through 12th and an enrollment increase of more than 200 students this year, Ridgeline Academy became the largest charter school located within the District. Two other in-District charter schools have enrollment of more than 700 students each. The enrollment gain at Ridgeline Academy partly offset losses at nearly all of the other in-District charter schools, resulting in a net decline in in-District charter enrollment this year of nearly 250 K-12 students in 2020/21.

There are another 15 charter schools located within one mile of the District's boundaries that currently enroll more than 5,500 K-12 students, which represents an increase compared to last year. This increase in area charter enrollment is due in part to the opening of the Kaleidoscope School at 3434 W. Greenway Road with about 170 Kindergarten to 4th grade students. Other significant enrollment gains were seen at Student Choice High School (which offers primarily online instruction) and the Legacy Traditional School – Peoria. Overall, these enrollment increases were partially offset by the loss of about 200 students across the remaining area charter schools, resulting in a net enrollment increase of 270 K-12 students compared to last year.

Table 10 shows the enrollment in charter schools by grade over the past ten years. Enrollment has increased by roughly 6,700 students since the 2008/09 school year and nearly 2,400 of those students have gone to in-District charter schools. The total number of in-District and area charter schools has continued to increase, reaching a new high of 34 schools by the fall of 2021. The bulk of charter school enrollment continues to be in the younger grades, with declining enrollment totals beginning in 7th grade and substantial declines in the high school grades.

Private schools do not have the same reporting requirements as charter or district schools and data is often less accessible, although private school enrollment tends to be more stable than charter schools. The Private School Survey, conducted by the National Center for Education Statistics, is the only consistent source of private school enrollment data; however, it is only published every 2 years, therefore, the 2017/18 enrollment figures provided are the most current available. There are currently six private schools operating either in the District or within one mile of the District's boundaries that serve more than 2,000 K-12 students, as shown in **Table 11.** The largest private school, Northwest Christian School, is located just outside of the District and enrolled nearly 1,300 K-12 students in the 2017/18 school year.

TABLE 9
ENROLLMENT IN LOCAL CHARTER SCHOOLS

School Name	Address	City	Zip	Grades	Total K-12*
In-District Charter Schools					
Adams Traditional Academy	2323 W. Parkside Lane	Phoenix	85027	KG-9th	595
Jefferson Preparatory High School	2323 W. Parkside Lane	Phoenix	85027	9th-12th	66
AMCS at Anthem dba Caurus Academy	41900 N. 42nd Avenue	Anthem	85086	KG-6th	287
AMCS at Anthem dba Caurus Academy	44111 N. 43rd Avenue	Phoenix	85087	7th-12th	254
Canyon Pointe Academy	4941 W. Union Hills Drive	Glendale	85308	KG-6th	95
Challenge Charter School	5801 W. Greenbriar Drive	Glendale	85308	KG-6th	457
Deer Valley Academy	18424 N. 51st Avenue	Glendale	85308	9th-12th	31
Desert Heights Preparatory Academy	3540 W. Union Hills Drive	Glendale	85308	5th-12th	533
E-Institute at Grovers	4744 W. Grovers Avenue	Glendale	85308	9th-12th	8
E-Institute at Union Hills	3515 W. Union Hills Drive	Phoenix	85308	9th-12th	67
Great Hearts Academies - Anthem Prep	39808 N. Gavilan Peak Parkway	Anthem	85086	KG-12th	771
Happy Valley School	7140 W. Happy Valley Road	Peoria	85383	KG-8th	525
Imagine Bell Canyon	18052 N. Black Canyon Highway	Phoenix	85053	KG-8th	322
Pinnacle Pointe Academy	6753 W. Pinnacle Peak Road	Glendale	85310	KG-6th	94
Reid Traditional Schools' Valley Academy	1520 W. Rose Garden Lane	Phoenix	85027	KG-8th	744
Ridgeline Academy	33625 N. North Valley Parkway	Phoenix	85085	KG-12th	915
Stepping Stones Academy	35812 N. 7th Street	Phoenix	85086	KG-8th	213
The Hearn Academy	17606 N. 7th Avenue	Phoenix	85023	KG-8th	626
Legacy Traditional School - Deer Valley (Coming Fall 2021)	*2747 W. Union Hills Drive*	*Phoenix*	*85027*	*KG-6th*	-
In-District Total					6,603
Area Charter Schools **					
Legacy Traditional School - Peoria	7877 W. Hillcrest Boulevard	Peoria	85383	KG-8th	810
Arizona Conservatory for Arts and Academics	2820 W. Kelton Lane	Phoenix	85053	9th-12th	160
Arizona Conservatory for Arts and Academics Middle School	2820 W. Kelton Lane	Phoenix	85053	6th-8th	184
Arizona Conservatory for Arts and Academics Elementary School	16454 N. 28th Avenue	Phoenix	85053	KG-5th	220
Ombudsman - Charter West	2909 W. Bell Road	Phoenix	85053	9th-12th	115
BASIS Peoria	9902 W. Yearling Road	Peoria	85383	5th-12th	984
BASIS Peoria Primary	25950 N. Lake Pleasant Parkway	Peoria	85383	KG-4th	666
Desert Heights Charter School	5821 W. Beverly Lane	Glendale	85306	KG-4th	387
Great Hearts Academies - Archway Glendale	23276 N. 83rd Avenue	Peoria	85383	KG-5th	563
Great Hearts Academies - Glendale Prep	23276 N. 83rd Avenue	Peoria	85383	6th-12th	600
Sonoran Science Academy - Peoria	17667 N. 91st Avenue	Peoria	85382	KG-8th	251
Student Choice High School	8194 W. Deer Valley Road	Peoria	85382	9th-12th	278
Intelli-School Glendale	4961 W. Bell Road	Phoenix	85308	9th-12th	82
Self Development Academy - Glendale	16635 N. 51st Avenue	Glendale	85306	KG-8th	72
Kaleidoscope School (New)	3434 W. Greenway Road	Phoenix	85053	KG-4th	167
Area Total					5,539
Grand Total					12,142

Source: Arizona Department of Education; Applied Economics 2021.
* Estimated based on 40th-day 2020-21 ADM data.
** Located within approximately one mile of the District's boundaries.

TABLE 10
ENROLLMENT IN LOCAL CHARTER SCHOOLS BY GRADE

School Year	Schools	KG	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total K-12	Annual Change
In-District Charter Schools																
2008-09	14	651	594	559	526	415	419	356	218	194	75	43	73	100	4,223	
2009-10	16	749	660	595	566	527	435	487	275	213	60	75	76	127	4,845	622
2010-11	19	941	756	700	623	628	566	531	348	265	85	73	116	131	5,763	918
2011-12	21	1,040	912	784	778	703	633	605	340	311	97	79	100	140	6,522	759
2012-13	19	1,098	977	890	804	776	594	636	392	330	107	94	84	168	6,950	428
2013-14	18	1,135	1,012	946	877	772	724	590	454	384	145	104	113	171	7,427	477
2014-15	16	914	988	903	832	790	689	624	393	400	136	99	130	184	7,082	-345
2015-16	16	908	902	921	831	751	724	637	414	368	119	121	128	193	7,017	-65
2016-17	16	831	864	903	840	770	654	658	421	390	107	126	145	212	6,921	-96
2017-18	16	729	757	729	765	694	635	593	454	417	132	110	140	190	6,345	-576
2018-19	16	748	739	754	709	728	715	648	482	449	197	182	108	160	6,619	274
2019-20	18	745	748	721	701	640	690	705	550	492	236	232	219	171	6,850	231
2020-21*	18	628	710	683	665	665	641	652	572	505	259	192	213	218	6,603	-247
Area Charter Schools																
2008-09	5	81	86	95	79	57	58	97	135	142	91	99	84	110	1,214	
2009-10	6	97	86	73	97	86	73	145	130	159	115	95	104	100	1,360	146
2010-11	6	106	113	96	84	91	103	121	179	150	114	123	103	133	1,516	156
2011-12	9	114	122	132	128	102	293	346	346	306	183	130	115	113	2,430	914
2012-13	9	124	151	132	155	153	300	351	397	304	220	161	155	151	2,754	324
2013-14	11	295	240	256	227	269	307	338	382	371	225	195	181	205	3,491	737
2014-15	12	290	190	266	261	259	409	375	364	323	285	238	188	270	3,718	227
2015-16	12	316	311	280	261	265	298	346	346	276	292	320	324	302	3,937	219
2016-17	13	353	342	314	286	285	393	372	412	363	252	261.9	315	373	4,322	385
2017-18	14	480	470	450	415	408	376	386	398	400	285	286	276	360	4,990	668
2018-19	14	508	518	509	484	491	458	443	451	384	324	327	323	381	5,601	611
2019-20	14	532	495	485	497	487	437	452	411	374	230	237	284	348	5,269	-332
2020-21*	15	528	563	535	510	512	428	447	433	386	242	222	281	452	5,539	270
All Charter Schools																
2008-09	19	732	680	654	605	472	477	453	353	336	166	142	157	210	5,437	
2009-10	22	846	746	668	663	613	508	632	405	372	175	170	180	227	6,205	768
2010-11	25	1,047	869	796	707	719	669	652	527	415	199	196	219	264	7,279	1,074
2011-12	30	1,154	1,034	916	906	805	926	951	686	617	280	209	215	253	8,952	1,673
2012-13	28	1,222	1,128	1,022	959	929	894	987	789	634	327	255	239	319	9,704	752
2013-14	29	1,430	1,252	1,202	1,104	1,041	1,031	928	836	755	370	299	294	376	10,918	1,214
2014-15	28	1,204	1,178	1,169	1,093	1,049	1,098	999	757	723	421	337	318	454	10,800	-118
2015-16	28	1,224	1,213	1,201	1,092	1,016	1,022	983	760	644	411	441	452	495	10,954	154
2016-17	29	1,184	1,206	1,217	1,126	1,055	1,047	1,030	833	753	359	388	460	585	11,243	289
2017-18	30	1,209	1,227	1,179	1,180	1,102	1,011	979	852	817	417	396	416	550	11,335	92
2018-19	30	1,256	1,257	1,263	1,193	1,219	1,173	1,091	933	833	521	509	431	541	12,220	885
2019-20	32	1,277	1,243	1,206	1,198	1,127	1,127	1,157	961	866	466	469	503	519	12,119	-101
2020-21*	33	1,156	1,273	1,218	1,175	1,177	1,069	1,099	1,005	891	501	414	494	670	12,142	23

Source: Arizona Department of Education; Applied Economics 2021.

* Estimated based on 40th-day ADM data.

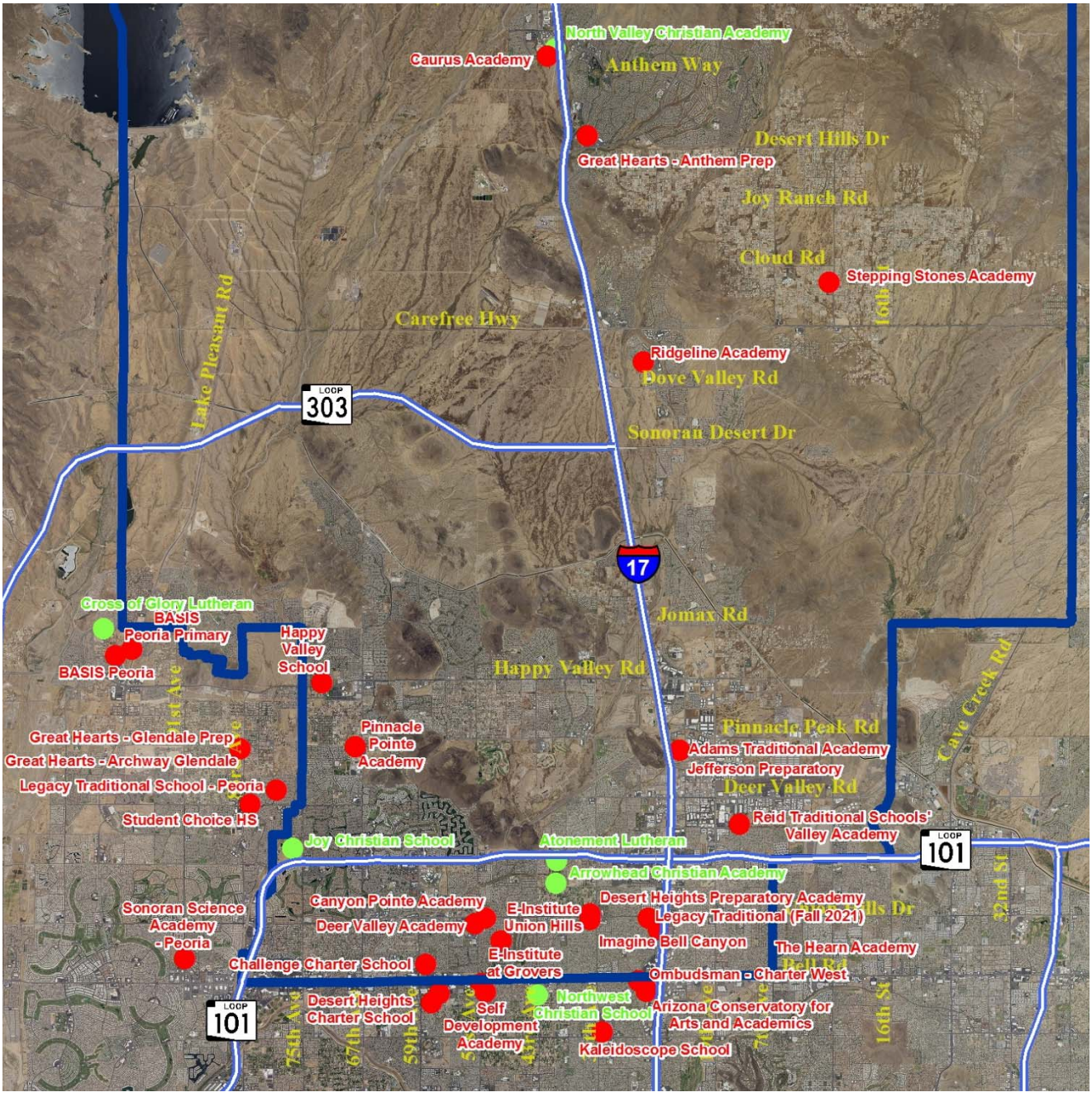
TABLE 11
ENROLLMENT IN LOCAL PRIVATE SCHOOLS

School Name	Address	City	Zip	Grades	Total K-12
In-District Private Schools					
Arrowhead Christian Academy	4030 W. Yorkshire Drive	Glendale	85308	KG-12	164
Atonement Lutheran	4001 W. Beardsley Road	Glendale	85308	KG-8	53
Dream City Christian School	21000 N. 75th Avenue	Glendale	85308	KG-12	235
North Valley Christain Academy	33655 N. 27th Drive	Phoenix	85085	KG-12	280
In-District Total					732
Area Private Schools *					
Cross of Glory Lutheran School	10111 W. Jomax Road	Peoria	85383	KG-8	45
Northwest Christian School	16401 N. 43rd Avenue	Phoenix	85053	K-12	1,266
Area Total					1,311
Grand Total					2,043

Sources: Private School Universe Survey, 2017-18 school year data; Association of Christian Schools International, 2021; Lutheran Church Missouri Synod, 2020; Applied Economics 2021.
* Located within approximately one mile of District's boundaries.

The non-District schools are generally concentrated in the southern portion of the District, as shown in **Map 10**. This is in keeping with the tendency of charter schools to locate along major transportation corridors and in established areas with high population density. Charter and private schools located north of Loop 101 are primarily concentrated along Interstate 17. Some of the largest charter schools are located just outside of the District's southwestern boundary. Since students living in the District are not limited to attending schools located within the District and vice-versa, a complex flow of incoming and outgoing students impacts all areas of the District to some degree.

MAP 10
DEER VALLEY AREA SCHOOLS BY ENTITY TYPE



3.0 Residential Development

3.1 Market Conditions

The foremost market issue in 2020 is the Covid-19 virus. While a viral outbreak similar to the H1N1, SARS, MERS, or Ebola illnesses of the last few years had been anticipated, the precise timing and severity was not, and the response has been unprecedented. Job losses in the spring due to the disease were massive but they were counteracted somewhat by financial transfers from the federal government. After the initial economic shock subsided predictions have varied on some points but, in general, a consensus has emerged that anticipates a partial recovery in the second half of 2020 and into 2021. Unemployment levels are expected to remain above average during 2021 but, as a matter of perspective, the February rate of 3.5 percent was a 50-year low.

While the entire country has been impacted by this recession, some areas, such as Arizona and particularly metropolitan Phoenix, are better situated to recover more quickly and perhaps stronger than others. The 2007 recession was driven significantly by real estate speculation and a severely over-built housing market. Since the last recession there has been an emphasis in Arizona on establishing a more diversified economic base, including advanced manufacturing, bioscience, and financial and professional services. Companies are often attracted by a university system that is graduating large numbers of engineering, science, and mathematics students. Not only do these companies create a large number of jobs, but new tech and manufacturing companies tend to pay better than average wages and new suppliers create additional employment. These types of jobs are also more insulated from economic downturns than many others, allowing for additional stability. While growth in the 2000's fell from the elevated levels of the 1990's and dropped sharply during the 2007-09 recession, overall population growth in the state has been solid (**Table 12**). The population in Arizona, especially in the metro areas, is expected to continue to grow, largely in response to the stronger, more solid economic footing that now exists.

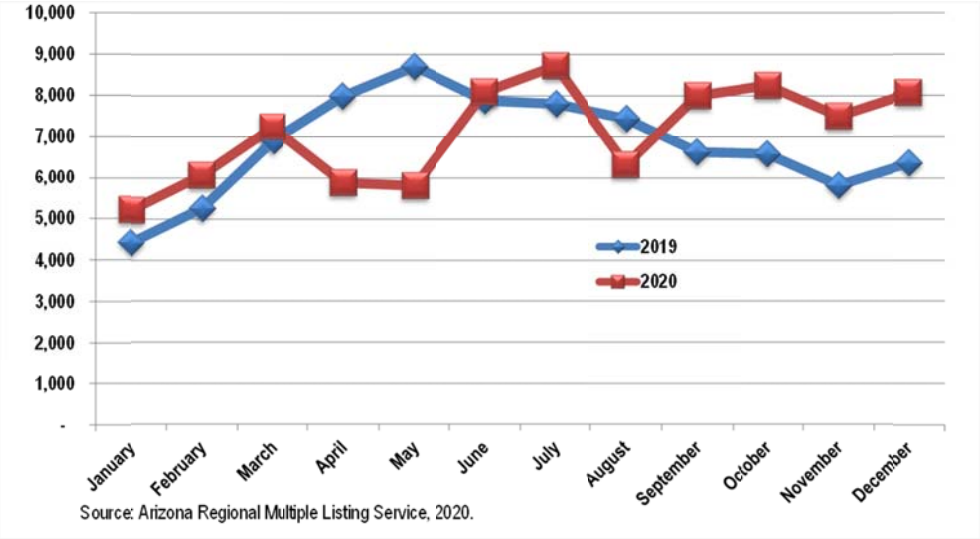
TABLE 12
POPULATION GROWTH IN THE SUN CORRIDOR

Population	2000	2005	2010	2015	2019	2000-2019
Maricopa County	3,092,927	3,577,074	3,824,058	4,076,438	4,367,835	1,274,908
Pima County	848,375	940,004	981,168	1,009,371	1,044,675	196,300
Pinal County	182,435	250,195	376,369	406,468	455,210	272,775
Yavapai County	169,520	196,629	210,899	217,778	232,386	62,866
Arizona	5,175,581	5,924,476	6,401,568	6,758,251	7,189,020	2,013,439
Change	**1995-2000**	**2000-2005**	**2005-2010**	**2010-2015**	**2015-2019**	**2000-2019**
Maricopa County	24%	16%	7%	7%	7.1%	41%
Pima County	13%	11%	4%	3%	3.5%	23%
Pinal County	27%	37%	50%	8%	12.0%	150%
Yavapai County	27%	16%	7%	3%	6.7%	37%
Arizona	21%	14%	8%	6%	6.4%	39%

Source: Arizona Commerce Authority; Applied Economics 2020.

In the current environment the Phoenix housing market is significantly under-supplied, removing a negative factor that played such a large role in the last recession. According to data from the Arizona Regional Multiple List Service (ARMLS) there was only a 2.5 month supply of single family houses in January, rather than the 5 to 6 month supply generally desired for a balanced market. The supply level in the metro area has fallen since then, to less than a months' supply in December (just 7,457 active listings). Housing sales have been very strong following the abrupt reduction in activity in the spring when the pandemic first jolted the economy (**Figure 6**); a drop in sales during August was quickly reversed in September and has remained strong.

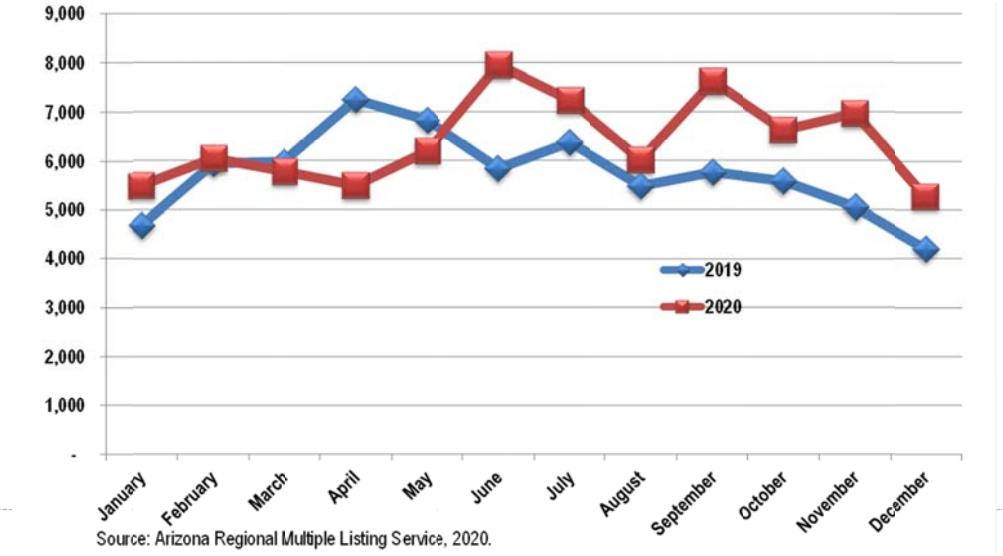
FIGURE 6
SALES OF SINGLE FAMILY HOMES



Source: Arizona Regional Multiple Listing Service, 2020.

Pending sales can serve as a leading indicator of market strength (**Figure 7**). Even though traditional home sale processes were upended by the Coronavirus, builders were very quick to adapt with new techniques. Activity fell during the mid-summer months but increased sharply in September.

FIGURE 7
PENDING SALES OF SINGLE FAMILY HOMES



Source: Arizona Regional Multiple Listing Service, 2020.

Although some slowing in the final months of the year had been expected, activity remains stronger than in 2019. The regional housing market should continue to be robust in 2021 since mortgage rates are at the lowest levels ever, housing supply is low, and the population in Arizona continues to grow.

There has also been a shift in how people view and use their houses due to the pandemic. For some a house is viewed as a safe haven in ways an apartment unit is not. Remote working has underscored the need for office space in the residence. Builders have responded with new standards and options addressing space and health issues. These factors, along with the low mortgage rates, have encouraged people who were planning to purchase within a few years to advance their timetable.

Changes in the housing industry will influence the local real estate market. Increased single family demand is already in evidence, and as increased construction drives up labor costs there will be new pressure on the multifamily market, which has experienced a softening of demand. Multifamily projects with financing in place will probably be completed, but new additions are anticipated to slow.

Along with increased single family demand, there will likely be a desire for larger houses and lots as homes become more central to family life, and even employment or educational needs. This will tend to move growth toward the outer parts of the metro area where land costs are lower. The focus on entry-level and first move-up housing will favor the west Valley, where land sales have already been very active.

The southeast Valley has been a major focus of growth for a long time and the area is rapidly being built out, but the future may bring a new chapter. In 2019, 4,140 acres of State Trust Land was annexed by Queen Creek. An auction in November 2020 for 2,783 acres on the south side of Apache Junction is targeted for a master planned community. The purchase price was over three times higher than the appraised value and D.R. Horton was the successful bidder. Transportation access is a vital aspect for major development, and State Route 24, which connects to Loop 202, will be extended to Ironwood Road in Pinal County, with construction starting near the end of 2020. Opening this land could have a massive impact on the east Valley and San Tan Valley to the south.

In northern Phoenix, new infrastructure is being installed in the I-17 corridor, which will enable new development of State Trust Land. The Phoenix City Council has approved a rezoning northwest of the Loop 303 and I-17, with a State land auction of 1,128 acres to Taiwan Semiconductor Manufacturing Co. in December; much, but not all, of this land is intended for employment uses and manufacturing is scheduled to start by 2024. New housing in this area will likely be higher density and include little, if any, entry-level housing.

In central Pinal County, thousands of new manufacturing jobs are to be gained in the next few years. This will increase housing demand throughout the area. At this time most new housing is entry level, but increased employment opens the possibility for an expanded housing market.

The retail industry has been under pressure for years and the pandemic has caused even more problems. It should be expected that more retail land, both zoned and existing, will be converted to residential uses. Among those uses will likely be single family rental communities, which have become a rapidly expanding market segment; the separate units with no stairs or elevators are even more attractive under current circumstances for individuals that are not interested in purchasing single family houses.

While a variety of negative factors could emerge to slow the housing market, the near-term forecast is for continued strength. Future years will likely see some shifting in the market as different segments and locations react to evolving consumer dynamics, but the more solid underlying economic conditions in metro Phoenix should result in a more consistently resolute housing market.

3.2 Housing Construction

New housing development in the District has recovered well from the recession-era low of 272 total permits in 2010/11, as shown on **Table 13**. Single family permitting nearly doubled the following year and has remained strong since then. The building permit categories shown are intended to reflect correlations between the new housing units and the age structure of the households that occupy them. Group quarter facilities, such as nursing homes or dormitories, are not included as either retirement or multifamily housing.

Single family construction is spread among different density ranges, but density levels have increased over time. Housing at less than 3.5 lots-per-acre has declined from about 80 percent of total single family permits to 34% over the ten years shown below. Multifamily development has also recovered, providing about a third of all new inventory during the decade.

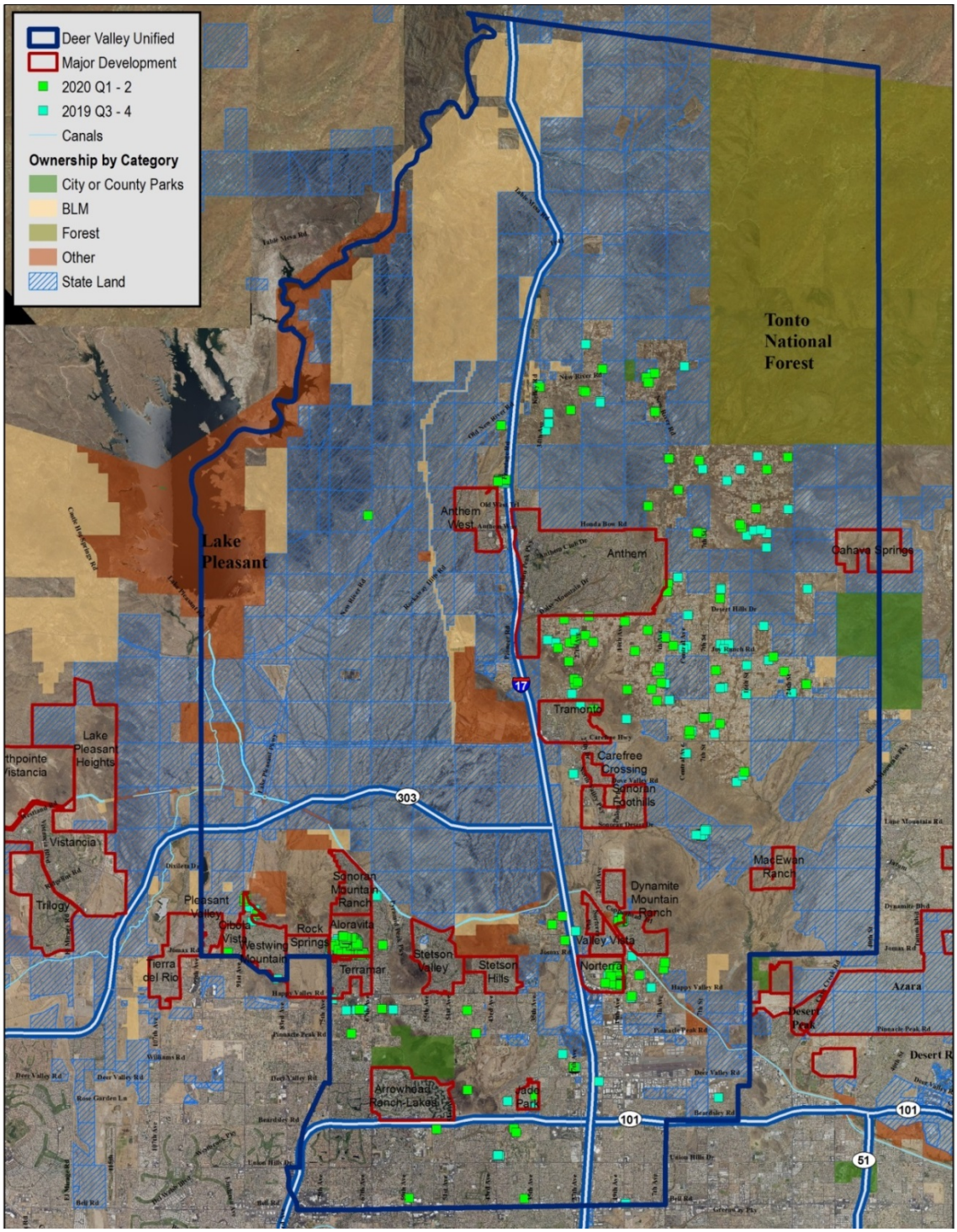
TABLE 13
HOUSING PERMITS

Housing Type	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Single Family 2 du/ac or less	75	108	193	336	208	186	136	159	143	134	1,678
Single Family 2.01 - 3.5 du/ac	147	266	443	327	332	351	270	582	302	113	3,133
Single Family 3.51 - 4.5 du/ac	35	86	42	11	43	89	226	174	191	259	1,156
Single Family 4.51 - 6 du/ac	7	44	49	-	-	20	19	-	152	178	469
Single Family Attached	-	-	-	-	-	-	-	-	-	45	45
Total Single Family	264	504	727	674	583	646	651	915	788	729	6,481
Condominium/Townhouse	-	-	-	25	10	67	5	178	25	252	562
Rental SF	-	-	-	-	-	-	49	76	-	230	355
Standard Courtyard Apts	8	334	-	257	389	69	331	-	-	130	1,518
Urban/Lifestyle Apts	-	-	-	-	-	-	80	305	-	503	888
Total Multifamily	8	334	-	282	399	136	465	559	25	1,115	3,323
Total	272	838	727	956	982	782	1,116	1,474	813	1,844	9,804

Sources: Maricopa Association of Governments; Construction Monitor; Maricopa County Assessor; Applied Economics, 2021.

Map 11 shows development activity in the District in 2019/20 with green markers for individual building permits. The clusters at Norterra and Aloravita are expected, but the northern rural area around Anthem continues to experience strong growth although activity did fall slightly in the past year.

MAP 11
RESIDENTIAL PERMITTING



3.3 Residential Development

3.3.1 Future Development Potential

Potential new housing supply in the District is estimated at over 67,000 units, as detailed on **Table 14** by type of housing and according to the general time period during which construction may begin. An additional potential supply of more than 40,000 units exists on land considered to be speculative or well beyond the projected time frame and is not included here. The timing categories only indicate a beginning, since projects generally develop over a number of years. The Infill category includes rural parcels, single lots within existing neighborhoods, and small custom projects that are likely to be under development intermittently over a number of years. Both unit potential and timing estimates on this table will change as new information becomes available.

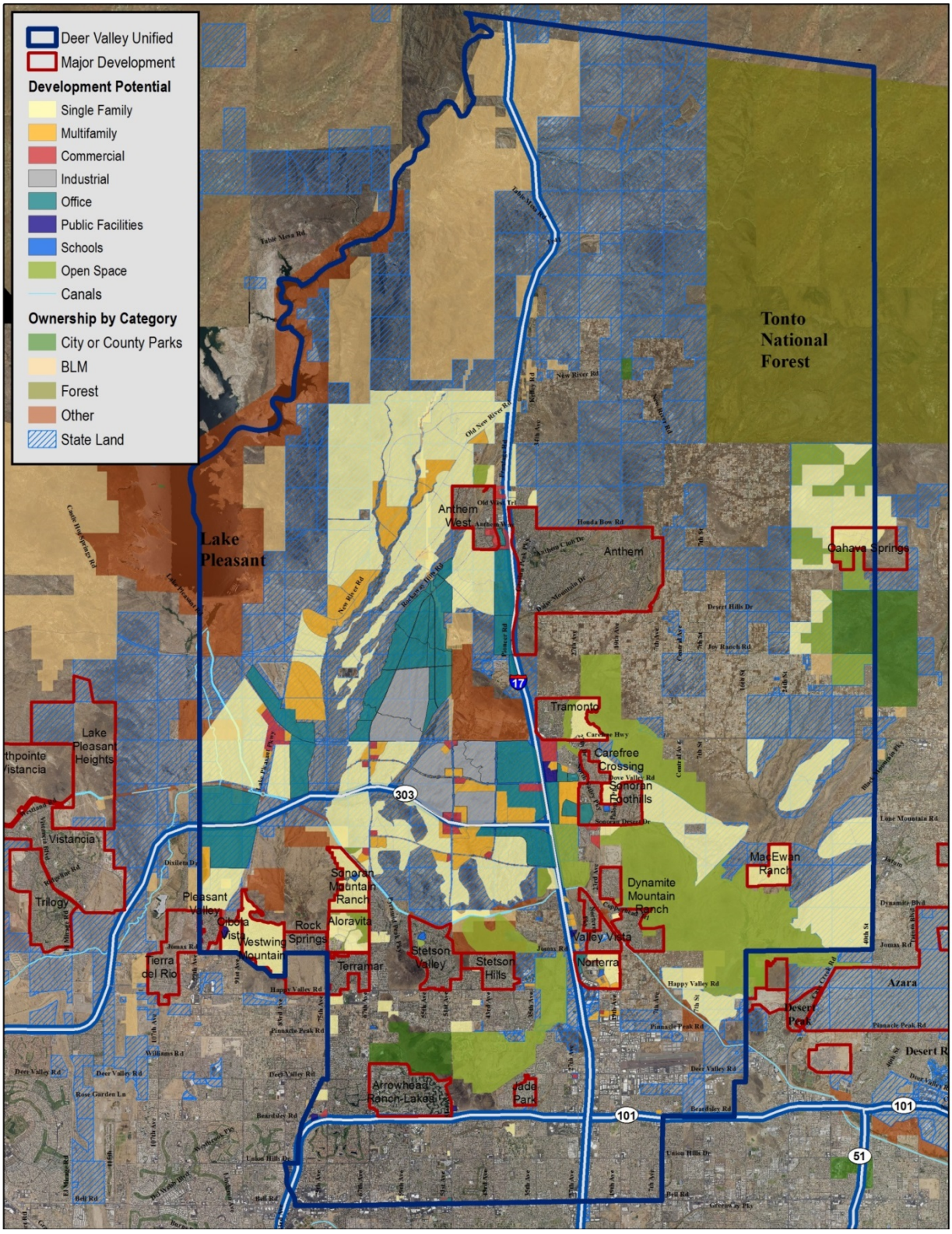
TABLE 14
POTENTIAL NEW HOUSING BY DEVELOPMENT TIMELINE

	Existing		Vacant Land					
Housing Type	Infill	Projects	1 Year	2-3 Years	3-5 Years	5-10 Years	10+ Years	Total
Family Housing								
Single Family 2 du/ac or less	1,685	-	45	141	129	50	2,697	4,747
Single Family 2.01 - 3.5 du/ac	344	50	125	1,223	2,749	3,684	27,865	36,040
Single Family 3.51 - 4.5 du/ac	3	344	292	145	1,740	80	3,253	5,857
Single Family 4.51 - 6 du/ac	-	31	248	240	82	-	214	815
Single Family 6.01du/ac & Over	-	-	33	-	-	-	-	33
Single Family Attached	-	68	-	-	100	-	-	168
Total Single Family	2,032	493	743	1,749	4,800	3,814	34,029	47,660
Condominium/Townhouse	-	-	-	248	90	-	5,010	5,348
Rental SF	-	-	365	-	-	1,951	-	2,316
Standard Courtyard Apts	695	171	963	-	400	1,848	3,234	7,311
Urban/Lifestyle Apts	-	-	-	260	498	3,722	-	4,480
Total Multifamily	695	171	1,328	508	988	7,521	8,244	19,455
Total	2,727	664	2,071	2,257	5,788	11,335	42,273	67,115
Age-Restricted Housing								
Condominium/Townhouse	-	-	-	-	200	-	-	200
Standard Courtyard Apts	-	-	-	140	-	-	-	140
Total Age-Restricted	-	-	-	140	200	-	-	340
Total	2,727	664	2,071	2,397	5,988	11,335	42,273	67,455

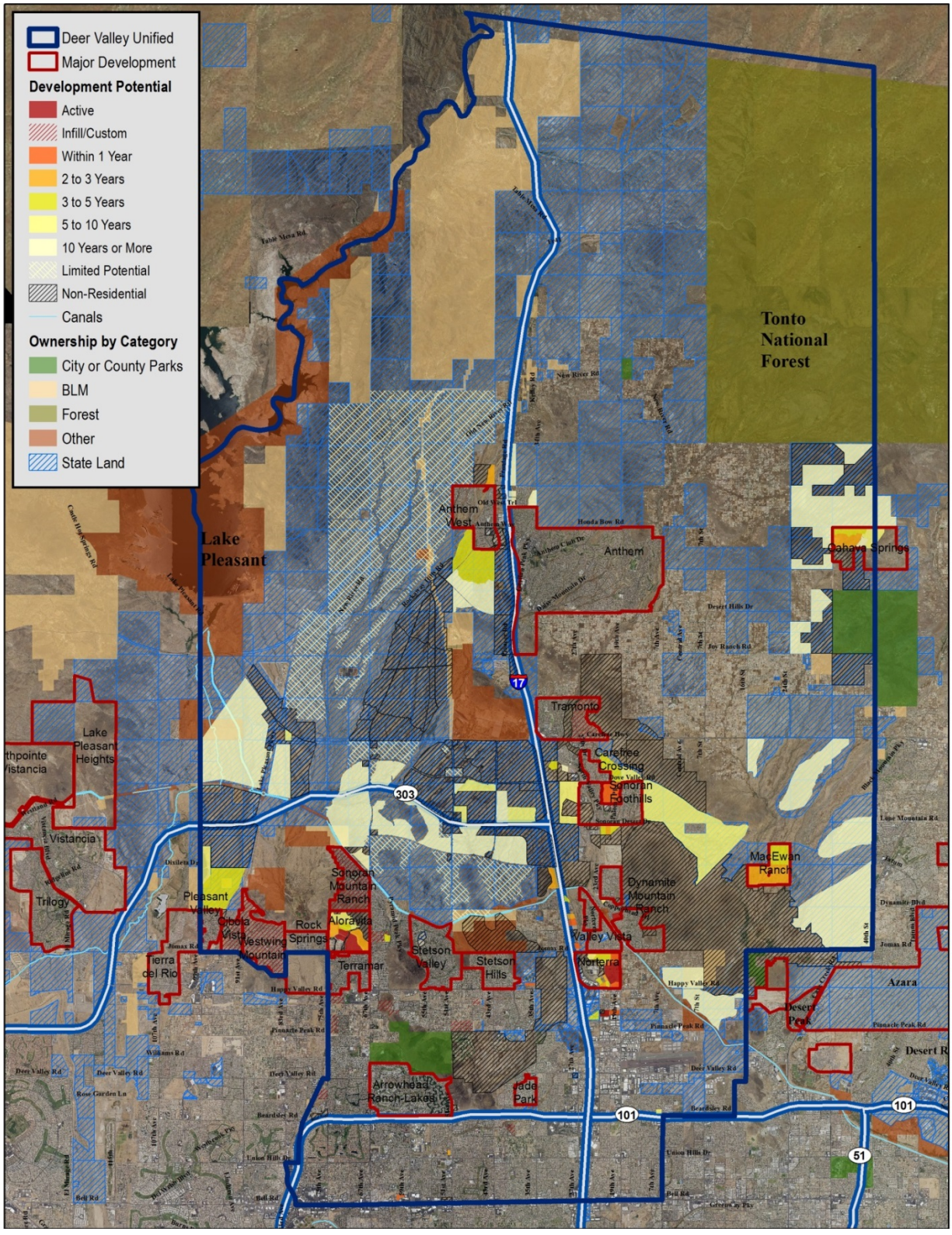
Sources: City of Phoenix: City of Peoria; City of Glendale; Arizona State Land Department; Applied Economics, 2021.

Future land use and development timing by area is depicted in the following maps (**Maps 12 and 13**). Most of the expected growth is on State Trust Land, which adds to the uncertainty of both type of development and the timing. As planning on this land progresses the number and location of units, housing type, and timing will be more clearly defined.

MAP 12
FUTURE LAND USE



MAP 13
DEVELOPMENT TIMING



The presence of a variety of housing options lends stability to the market. When a single market segment is dominant the potential exists for severe market disruptions if that particular segment fails. Housing in the District is largely in the move-up market, as shown on **Table 15**. Lower-cost properties exist in the resale market and the District does have a large and diverse inventory, but options are limited in the new housing sector. This type of a limited market also tends to restrict the typical age structure of the resident households. One notable difference found in the District is that there is a significant amount of multifamily housing, and more is coming; this improves the ability of households to remain within the community as they grow financially.

TABLE 15
HOUSING CHARACTERISTICS AT SELECTED DISTRICT SUBDIVISIONS

Builder	Subdivision	Models offered	Sq. Ft. Min	Beds Min	Price Min	Sq. Ft. Max	Beds Max	Price Max	Price/SqFt Min-Max	
Cachet Homes	Union Park at Norterra	3	2,831	3	$ 616,900	2,983	3	$ 641,900	$218	$215
David Weekley	Union Park at Norterra	7	2,332	3	$ 547,990	3,864	5	$ 659,990	$235	$171
D. R. Horton	Copperhead	4	1,696	4	$ 434,000	2,674	4	$ 488,000	$256	$182
K Hovnanian	Union Park at Norterra	3	1,954	3	NA	2,399	3	NA	NA	NA
Pulte Homes	Aloravita: Estate	5	2,294	3	$ 469,990	3,826	5	$ 533,990	$205	$140
Shea Homes	Aloravita: Ascent	6	1,968	3	$ 402,490	3,062	4	$ 459,490	$205	$150
	Aloravita: Emblem	6	2,318	3	$ 474,490	3,505	4	$ 530,490	$205	$151

Source: Builder websites; Applied Economics, February 10, 2021.

3.3.2 Development Projects

The housing market impacts from the Covid-19 pandemic have generally been short-lived in the metro region and development in the District is currently strong, as evidenced by increased production and the opening of new communities. While it is possible that continued economic slowing will cause new construction to falter, it is also possible that recent improvements could cause more master planned communities to enter production, or to enter the market sooner than anticipated. At this time, the housing market is forecast to remain strong at least for another year.

The main issue confronting the District is a lack of easily developable land. Many of the small parcels being currently brought into production have poor accessibility or topographic limitations. Some available land also lacks good infrastructure. The largest tracts are owned by the State and also lack infrastructure; these areas are in the central portion of the District and hold the key for long-term future growth. In the near-term, however, strong levels of activity in new residential development should continue despite the presence of some limitations.

Aloravita (Jomax Road and 67th Avenue) - Shea Homes, Pulte Homes: 1,890 estimated total lots with 1,400 remaining

This project opened in 2018/19 and production doubled to 324 units last year. Taylor Morrison built out their subdivisions in early 2020 while Shea and Pulte opened new parcels. Housing production is expected to fall in 2020/21 and decline further the following year. The northernmost tract of 415 acres was purchased by Shea Homes at auction in December 2020; land preparation in this area is scheduled to begin by spring 2022 with house production by three builders following in mid-2023 and house closings by late 2023.

Copperleaf (Dove Valley Road and Paloma Parkway) - Lennar Homes, Pulte Homes: 440 estimated total lots

Mass grading at this development was underway by early 2021 and model construction is scheduled for fall 2021. There will be four product lines in the project with a wide range of densities and production is expected to be strong. Pricing will likely attract buyers in the move-up market and a family-orientation is expected. The first house closings should be in spring 2022, which will impact the 2022/23 school year.

Middle Vista (I-17 and CAP Canal) - Lennar Homes: 240 estimated total lots

Infrastructure issues at this 240-lot Lennar project have slowed the start of development. Housing starts are now anticipated for late 2022, with closings to begin in the first half of 2023.

Union Park at Norterra (Happy Valley Road and 19th Avenue) - Cachet Homes, David Weekley, K. Hovnanian: 1,000 estimated total lots (800 remaining) and 1,100 estimated multifamily units

New single family housing construction in this development of standard and attached products is steady. Grading is underway for the next two subdivisions which will be built by Ashton Woods and David Weekley and will offer two new housing product lines. Housing construction on Phase 2 is to begin early 2022. Additional parcels will follow but the development policy has been to maintain moderate but steady production, which would cause housing additions to continue into the second half of the production period.



Multifamily construction is underway in this area at the Landing at Union Park apartments (right) and grading has begun at 154-unit BB Living single family rental project. Additional multifamily is to follow, including an age-restricted complex.

Macewan Ranch (Sonoran Desert Drive and 24th Street) - Taylor Morrison: 1,420 estimated total lots, 360 of which are to be age-targeted

There are issues related to zoning and infrastructure that are delaying this project. The relatively remote location has some desirable qualities that come with increased development costs. If the market remains strong it is possible issues will be resolved so that development can proceed in the next two to three years, but that is not certain.

The rental market has been increasing in the District, particularly in the Norterra area (around I-17 and Happy Valley Road). Bungalows on Jomax (141 units) was built in 2020 at I-17 between Happy Valley and Jomax Roads with another 211-unit single family rental project, Avilla Canyon, which is now under construction on an adjacent parcel. Just to the north, the Ascend at Dynamite apartments are expected to add 260 units in the next two to three years and Jomax Apartments is nearing a start on about 240 units to the south. Just south of Happy Valley Road, between 19th and 23rd Avenues, the Springs at Deer Valley began construction on 296 apartment units in mid-2020 and grading began in early 2021 for a 396-unit Related Group apartment complex. At Happy Valley Road and 35th Avenue grading was underway in early 2021 for a 325-unit apartment complex. Given the limited amount of available land and the demonstrated attractiveness of the area, it is expected that apartments and single family rental projects will continue to be introduced.

Infill projects are small but can collectively add a few dozen new housing units per year. There are limited infill parcels available in the District but in a tight housing market this land continues to be brought into production. Two current examples can be found at 61st Avenue just north of Bell Road. On one side of the street is Hartford Court, a Newmark Homes 33-lot subdivision set to begin construction in spring 2021. Across from it is Windsor Court where grading is underway for an estimated 24 to 30 lots (right).



State Land (West of I-17 and 303 Loo) - 6,500 estimated total multifamily units
State Land (East of I-17 and Sonoran Desert Drive) - 4,000 estimated total single family lots
State Land (West of I-17 near Anthem West) - 3,500 estimated total single family lots

While infill and redevelopment will provide some new additions to inventory, most long-term growth in the District will result from major increases in employment. Taiwan Semiconductor Manufacturing Company is planning to build a major plant northwest of I-17 and Loop 303 that will anchor an industrial park of approximately 1,100 acres; the company is expected to employ 1,600 people by 2024. The amount of new employment that is anticipated would assuredly create new housing demand and State Trust Land is the only real option to fulfill the need. The land west of I-17 is primarily seen as an area for high-density residential development, although actual plans will likely evolve over time. Land to the east is expected to be mostly single family that will be surrounded by desert open space, and it is only a few miles from the employment node. There is also land to the north (by Anthem West) that will be served by infrastructure that is planned to be completed by summer 2021. While residential development in any of these areas is unlikely until the last half of the projection period, the amount of potential would provide for substantial growth for an extended period.

4.0 District Projections

4.1 Population & Housing

District-level enrollment projections are created by integrating historical enrollment, demographic and housing market trends with the projected housing unit additions and the associated change in the school-age population. The projections of future enrollment are also impacted by assumptions regarding the share of the District's population that will choose to attend District schools. Due to the pronounced demographic and development differences that exist among the different areas of the District, the District-level projections are cross-checked using projections by District sub-area, as presented in Section 5 of this report. These projections account for local and regional trends in socioeconomic conditions and economic growth forecasts.

The long-term population and housing projections for the District shown in **Table 16** are based on historical and forecast trends in housing construction, occupancy, and economic growth indicators. Currently, the District contains nearly 268,000 persons in 99,500 households (occupied housing units), with a population per household of about 2.69 persons. Occupancy rates appear to have stabilized at about 94 percent over the past five years, after falling during the recession. Population per household is expected to continue to decline throughout the projection period due to aging in existing households and the increase in multifamily housing, both of which dampen the impact of the increase in the number of households on total and school-age population.

District population and households are expected to increase throughout the projection period as new housing supply enters the market and occupancy rates remain stable. In the past year, more than1,800 new housing units were added to inventory and an average of about 1,600 new units are forecast to be added each year during the projection period, yielding 16,400 new units by 2030/31. With continued improvements in the housing occupancy rate, more than 15,500 new households are expected to be formed in that same ten-year period; however, the population per household is expected to fall to 2.632 by 2030/31. These changes result in a population of nearly 304,000 persons occupying more than 115,000 households by the end of the projection period.

TABLE 16
HISTORIC AND PROJECTED POPULATION AND HOUSING

Year	Population	Housing Units Total	Housing Units New	Occupancy Rate	Vacant Units	Households Total	Households Change
2010/11	**239,040**	**96,493**	**872**	**90.4%**	**9,276**	**87,217**	**106**
2011/12	**240,998**	**96,765**	**272**	**91.0%**	**8,714**	**88,051**	**834**
2012/13	**245,326**	**97,603**	**838**	**92.0%**	**7,792**	**89,811**	**1,760**
2013/14	**247,712**	**98,330**	**727**	**92.3%**	**7,551**	**90,779**	**968**
2014/15	**252,202**	**99,287**	**957**	**93.2%**	**6,702**	**92,585**	**1,805**
2015/16	**254,374**	**100,269**	**982**	**93.3%**	**6,696**	**93,573**	**988**
2016/17	**258,345**	**101,051**	**782**	**94.2%**	**5,886**	**95,165**	**1,592**
2017/18	**260,431**	**102,167**	**1,116**	**94.1%**	**6,033**	**96,134**	**970**
2018/19	**262,824**	**103,641**	**1,474**	**93.8%**	**6,420**	**97,221**	**1,086**
2019/20	**264,842**	**104,454**	**813**	**93.9%**	**6,388**	**98,066**	**845**
2020/21	**267,808**	**106,298**	**1,844**	**93.6%**	**6,803**	**99,495**	**1,429**
2021/22	270,324	107,418	1,120	93.7%	6,767	100,651	1,156
2022/23	273,796	109,044	1,626	93.8%	6,761	102,283	1,633
2023/24	276,498	110,224	1,180	93.9%	6,724	103,500	1,217
2024/25	280,692	112,016	1,792	94.0%	6,721	105,295	1,795
2025/26	284,028	113,555	1,539	94.0%	6,813	106,742	1,447
2026/27	288,308	115,520	1,965	94.0%	6,931	108,589	1,847
2027/28	291,928	117,209	1,689	94.0%	7,033	110,176	1,588
2028/29	295,866	119,043	1,834	94.0%	7,143	111,900	1,724
2029/30	299,730	120,860	1,817	94.0%	7,252	113,608	1,708
2030/31	303,684	122,745	1,885	94.0%	7,365	115,380	1,772
2020/21-2029/30			16,406				15,542

Source: Applied Economics, 2021.
***Bolding Indicates Actuals**

4.2 Enrollment

In addition to the volume and market orientation of housing development, trends in per-household student generation rates and enrollment-population (E-P) ratios are key factors used in determining future enrollment levels. The first element, student generation, refers to the expected size of the school-age population (persons aged 5 to 17 years old) per household. The school-age population averaged 0.538 persons per household in 2010, but has since declined to 0.47 persons per household due to historically low birth rates and the overall aging of the District's population. As detailed in **Table 17**, the decline in the number of school-age persons per household is expected to continue throughout the projection period since the number of new households that will be added is small in comparison to the total population.

Open enrollment causes a shifting of students between districts, with gains and losses offsetting each other to varying degrees, whereas charter schools only detract from District enrollment. Due to the increasing number of educational alternatives and open enrollment policies, it is necessary to apply an Enrollment-to-Population

(E-P) Ratio to the school-age population in order to project enrollment. This ratio can be based on the difference between the school-age population and **total** enrollment, acknowledging that there are flows of students between all school districts in Arizona (henceforth referred to as the Enrollment-Population (E-P) Ratio), or it can be based on **in-District** enrollment alone (herein referred to as the Service Rate).

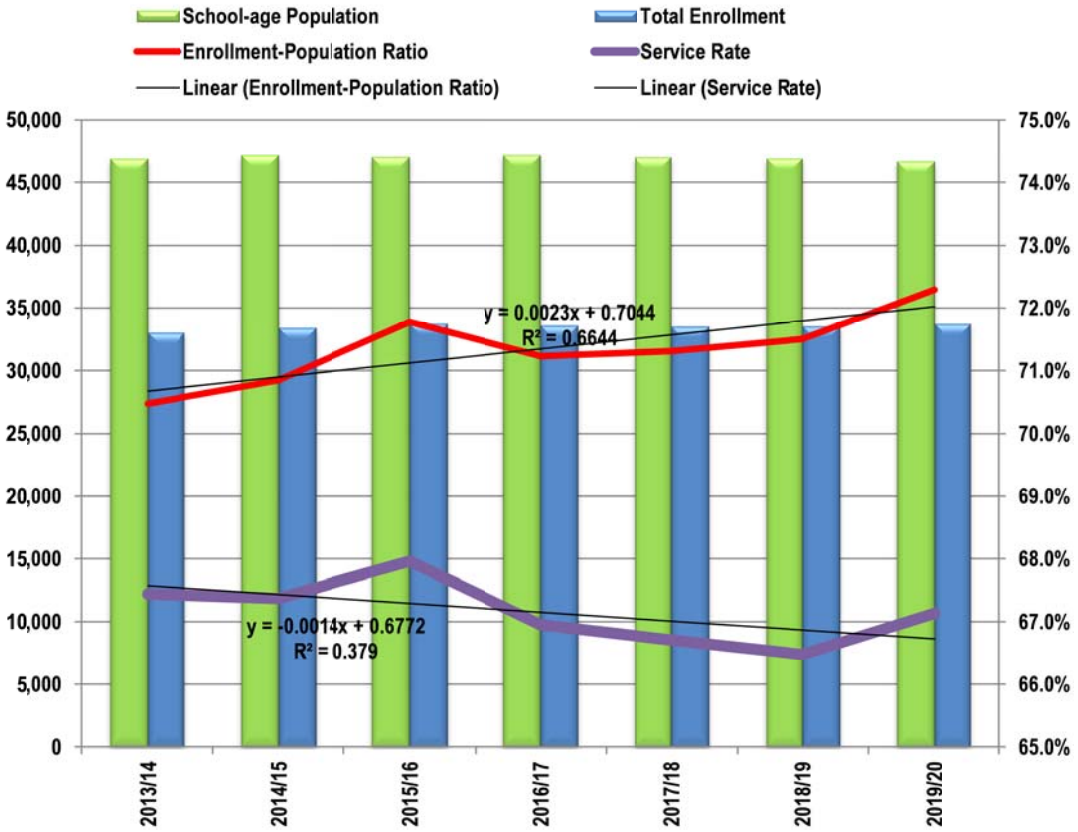
TABLE 17
SCHOOL-AGE POPULATION, ENROLLMENT, E-P RATIO AND SERVICE RATE

		School-Age Population *		K-12 Enrollment		Net	Enrollment -	Out of District	In-District	Service
Year	Households	Total	Per Household	Total	Per Household	Difference	Population Ratio	Students	Enrollment	Rate
2010/11	87,217	46,950	0.538	34,985	0.401	11,965	74.5%	1,092	33,893	72.2%
2011/12	88,051	46,756	0.531	34,400	0.391	12,356	73.6%	1,241	33,159	70.9%
2012/13	89,811	47,044	0.524	33,763	0.376	13,281	71.8%	1,360	32,403	68.9%
2013/14	90,779	46,906	0.517	33,054	0.364	13,852	70.5%	1,420	31,634	67.4%
2014/15	92,585	47,190	0.510	33,432	0.361	13,758	70.8%	1,639	31,793	67.4%
2015/16	93,573	47,047	0.503	33,770	0.361	13,277	71.8%	1,797	31,973	68.0%
2016/17	95,165	47,198	0.496	33,618	0.353	13,580	71.2%	2,017	31,601	67.0%
2017/18	96,134	47,032	0.489	33,539	0.349	13,493	71.3%	2,165	31,374	66.7%
2018/19	97,221	46,919	0.483	33,548	0.345	13,371	71.5%	2,358	31,190	66.5%
2019/20	98,066	46,685	0.476	33,749	0.344	12,936	72.3%	2,407	31,342	67.1%
2020/21	99,495	46,722	0.470	31,711	0.319	15,011	67.9%	2,250	29,461	63.1%
2021/22	100,651	46,863	0.466	33,341	0.331	13,522	71.1%	2,400	30,941	66.0%
2022/23	102,283	47,219	0.462	33,678	0.329	13,541	71.3%	2,400	31,278	66.2%
2023/24	103,500	47,374	0.458	33,611	0.325	13,763	70.9%	2,400	31,211	65.9%
2024/25	105,295	47,786	0.454	33,680	0.320	14,106	70.5%	2,400	31,280	65.5%
2025/26	106,742	48,031	0.450	33,690	0.316	14,341	70.1%	2,400	31,290	65.1%
2026/27	108,589	48,447	0.446	33,852	0.312	14,595	69.9%	2,400	31,452	64.9%
2027/28	110,176	48,737	0.442	33,884	0.308	14,853	69.5%	2,400	31,484	64.6%
2028/29	111,900	49,079	0.439	34,028	0.304	15,051	69.3%	2,400	31,628	64.4%
2029/30	113,608	49,405	0.435	34,124	0.300	15,281	69.1%	2,400	31,724	64.2%
2030/31	115,380	49,749	0.431	34,279	0.297	15,470	68.9%	2,400	31,879	64.1%

Source: Applied Economics, 2021.
* Population age 5 through 17, corresponds with Kindergarten through 12th grade.
Bolding indicates historical data.

Figure 8 is a graphical illustration of the relationship between the size of the District's school-age population, total enrollment, and both the E-P Ratio and the Service Rate. In 2020/21 the school-age population within the District is estimated to be about 46,700 persons, while enrollment totaled 31,711 students. This results in a difference between enrollment and the school-age population of roughly 15,000 persons and an E-P ratio of 67.9 percent. The decline in the District's E-P Ratio this year follows a slight increase last year and is the result of the anomalous effects of the COVID-19 pandemic; the sharp decline follows a period of time since 2014/15 when the E-P Ratio showed signs of gradual increase, despite some downward annual fluctuations. Although the District's Service rate also dropped dramatically this year, this ratio (which is based on in-District enrollment) had generally drifted downward after 2015/16, before increasing last year (2019/20).

FIGURE 8
LONG TERM TRENDS IN THE E-P RATIO AND SERVICE RATE



It is important to note that assumptions regarding future trends in the District's E-P Ratio will have an effect on enrollment projections, therefore three scenarios are presented in **Table 18** for comparison; these scenarios have been developed based on trends in the District's Service Rate (based on in-District enrollment), since out-of-District enrollment is assumed to remain stable for the duration of the projection period. The "Long-Term Trend" scenario assumes a more aggressive decline in the District's E-P ratio, which is informed by the average rate of decline in the District's Service Rate over the nine years preceding 2019/20 (pre-pandemic). In this scenario, the District would add roughly 1,200 students over the next ten years and enrollment would total 32,900 students by 2030/31; this increase, however, includes the return next year of a large number of students that were "lost" due to the pandemic this year. Compared to 2019/20, enrollment under this scenario represents a decrease of about 800 students (2.5 percent) by 2030/31.

The "Short-Term Trend" scenario assumes that the District's E-P ratio declines at a slower rate which is informed by the rate of decline in the District's Service Rate over the seven years preceding 2019/20 (pre-pandemic), or since the large drop in 2012/13 that resulted from budget-mandated reductions in services; ***this scenario is used in all of the sub-District projections presented in Section 5 of this report***. The more gradual decline in the ratio would result in enrollment of about 34,300 students at the end of the projection period. Compared to 2019/20, enrollment under this scenario is projected to increase by about 500 students (1.6 percent) over the next 10 years.

The "Stable" scenario assumes an E-P ratio is in place for the duration of the 10-year period that is similar to the relatively stable ratio that was documented in the District between 2015/16 and 2019/20. This scenario would result in District enrollment of approximately 35,700 K-12 students by 2030/31. Compared to 2019/20, enrollment under this scenario is projected to increase by nearly 2,000 students (5.8 percent) by 2030/31.

TABLE 18
PROJECTED E-P RATIO AND ENROLLMENT BY SCENARIO

	Long-term Trend			Short-term Trend			Stable		
Year	Enrollment - Population Ratio	Enrollment	Change	Enrollment - Population Ratio	Enrollment	Change	Enrollment - Population Ratio	Enrollment	Change
2010/11	74.5%	34,985		74.5%	34,985		74.5%	34,985	
2011/12	73.6%	34,400	-585	73.6%	34,400	-585	73.6%	34,400	-585
2012/13	71.8%	33,763	-637	71.8%	33,763	-637	71.8%	33,763	-637
2013/14	70.5%	33,054	-709	70.5%	33,054	-709	70.5%	33,054	-709
2014/15	70.8%	33,432	378	70.8%	33,432	378	70.8%	33,432	378
2015/16	71.8%	33,770	338	71.8%	33,770	338	71.8%	33,770	338
2016/17	71.2%	33,618	-152	71.2%	33,618	-152	71.2%	33,618	-152
2017/18	71.3%	33,539	-79	71.3%	33,539	-79	71.3%	33,539	-79
2018/19	71.5%	33,548	9	71.5%	33,548	9	71.5%	33,548	9
2019/20	72.3%	33,749	201	72.3%	33,749	201	72.3%	33,749	201
2020/21	67.9%	31,711	-2,038	67.9%	31,711	-2,038	67.9%	31,711	-2,038
2021/22	70.7%	33,118	1,407	71.1%	33,341	1,630	71.6%	33,564	1,853
2022/23	70.6%	33,344	226	71.3%	33,678	337	72.0%	34,010	446
2023/24	70.0%	33,164	-180	70.9%	33,611	-67	71.9%	34,062	52
2024/25	69.3%	33,108	-56	70.5%	33,680	69	71.7%	34,262	200
2025/26	68.7%	32,989	-119	70.1%	33,690	10	71.6%	34,408	146
2026/27	68.2%	33,017	28	69.9%	33,852	162	71.6%	34,708	300
2027/28	67.5%	32,921	-96	69.5%	33,884	32	71.6%	34,879	171
2028/29	67.1%	32,932	11	69.3%	34,028	144	71.6%	35,164	285
2029/30	66.6%	32,895	-37	69.1%	34,124	96	71.7%	35,402	238
2030/31	66.2%	32,919	24	68.9%	34,279	155	71.8%	35,704	302
2021/22-2030/31		-830	1,208		530	2,568		1,955	3,993

Source: Applied Economics, 2021.

Table 19 provides a detailed view of total projected enrollment by grade cohort based on the "Short-Term Trend" scenario. The distribution of enrollment among the cohorts was disproportionately affected by COVD-19 pandemic, since enrollment losses in 2020/21 were strongest in the youngest grades. As a result, the share of Kindergarten to 4th grade (K-4) students dropped from 35.5 percent in 2019/20 to 33.9 percent this year; at the same time the share of 5th to 8th grade (5-8) students was nearly unchanged and the share of high school students increased from 33 to 34 percent. By the end of the projection period the distribution of enrollment by grade cohort is expected to be very nearly the same as it was in 2019/20 (pre-pandemic).

Over the next ten years, enrollment in all of the grade levels is projected to increase; following the return in 2021/22 of a large number of students that were "lost" to the pandemic, virtually all of the projected enrollment growth will be in the K-4 and 5-8 cohorts, which of which will add more than 400 students between 2022/23 and 2030/31; during the same time period, the 9-12 cohort is expected to increase by about 50 students, primarily due to strong growth at the end of the projection period. Most of the enrollment growth in the K-4 cohort is expected to occur by 2025/26, while the majority of growth in the 5-8 cohort will have taken place by 2027/28.

TABLE 19
HISTORICAL AND PROJECTED 40TH DAY ENROLLMENT BY LEVEL

		Enrollment by Level				K-12 Total		
Fall	PS	K-4	5-8	K-8	9-12	Enrollment	Change	% Change
2010/11	297	12,499	11,510	24,009	10,976	34,985	-1,004	-2.8%
2011/12	343	12,335	11,083	23,418	10,982	34,400	-585	-1.7%
2012/13	403	11,903	10,691	22,594	11,169	33,763	-637	-1.9%
2013/14	412	11,280	10,583	21,863	11,191	33,054	-709	-2.1%
2014/15	465	11,680	10,684	22,364	11,068	33,432	378	1.1%
2015/16	490	11,989	10,745	22,734	11,036	33,770	338	1.0%
2016/17	453	11,969	10,785	22,754	10,864	33,618	-152	-0.5%
2017/18	434	11,878	10,663	22,541	10,998	33,539	-79	-0.2%
2018/19	440	11,922	10,654	22,576	10,972	33,548	9	0.0%
2019/20	426	11,993	10,652	22,645	11,104	33,749	201	0.6%
2020/21	426	10,746	10,073	20,819	10,892	31,711	-2,038	-6.0%
2021/22	425	11,803	10,385	22,188	11,153	33,341	1,630	5.1%
2022/23	426	12,049	10,501	22,550	11,128	33,678	337	1.0%
2023/24	427	12,123	10,425	22,548	11,063	33,611	-67	-0.2%
2024/25	427	12,167	10,548	22,715	10,965	33,680	69	0.2%
2025/26	427	12,271	10,499	22,770	10,920	33,690	10	0.0%
2026/27	427	12,129	10,775	22,904	10,948	33,852	162	0.5%
2027/28	425	12,078	10,912	22,990	10,894	33,884	32	0.1%
2028/29	423	12,102	10,939	23,041	10,987	34,028	144	0.4%
2029/30	423	12,159	11,038	23,197	10,927	34,124	96	0.3%
2030/31	423	12,230	10,843	23,073	11,206	34,279	155	0.5%

Source: Applied Economics, 2021.
Bolding indicates actuals.

The distribution of total enrollment by individual grade is shown in **Table 20**, and can provide some additional insight into enrollment patterns and the progressive impact of smaller or larger classes. If enrollment was evenly distributed, each K-12 grade would have 7.7 percent of the total. In 2000/01, grades 1st through 6th each had over eight percent of enrollment, while grade 12 only had 5.6 percent of the total. In 2019/20, Kindergarten through 4th grade each have about seven percent of total enrollment, while grades 7th to 11th each have more than eight percent; this clearly demonstrates the shift of enrollment to the older grades. Despite the changes in enrollment over the next 10 years, these same grade-level distributions are projected to persist in 2030/31.

TABLE 20
HISTORIC AND PROJECTED ENROLLMENT BY GRADE

Year	PS	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 Total	Percent Change
2010/11	297	2,065	2,526	2,667	2,650	2,591	2,768	2,846	2,983	2,913	2,916	2,809	2,711	2,540	34,985	-2.8%
2011/12	343	2,136	2,338	2,585	2,649	2,627	2,523	2,734	2,863	2,963	2,841	2,847	2,712	2,582	34,400	-1.7%
2012/13	403	2,005	2,371	2,331	2,539	2,657	2,577	2,476	2,744	2,894	2,992	2,827	2,782	2,568	33,763	-1.9%
2013/14	412	1,939	2,190	2,293	2,350	2,508	2,611	2,588	2,619	2,765	2,854	2,979	2,696	2,662	33,054	-2.1%
2014/15	465	2,216	2,197	2,353	2,432	2,482	2,605	2,687	2,718	2,674	2,835	2,805	2,844	2,584	33,432	1.1%
2015/16	490	2,363	2,330	2,290	2,436	2,570	2,561	2,645	2,794	2,745	2,803	2,770	2,728	2,735	33,770	1.0%
2016/17	453	2,337	2,361	2,382	2,363	2,526	2,617	2,587	2,770	2,811	2,818	2,758	2,670	2,618	33,618	-0.5%
2017/18	434	2,331	2,327	2,347	2,459	2,414	2,577	2,607	2,704	2,775	2,917	2,766	2,708	2,607	33,539	-0.2%
2018/19	440	2,256	2,348	2,421	2,346	2,551	2,486	2,653	2,730	2,785	2,854	2,857	2,688	2,573	33,548	0.0%
2019/20	426	2,379	2,335	2,369	2,455	2,455	2,594	2,526	2,766	2,766	2,915	2,848	2,778	2,563	33,749	0.6%
2020/21	426	1,942	2,131	2,141	2,209	2,323	2,373	2,452	2,546	2,702	2,841	2,810	2,654	2,587	31,711	-6.0%
2021/22	425	2,425	2,227	2,363	2,352	2,436	2,518	2,513	2,697	2,657	2,889	2,861	2,801	2,603	33,341	5.1%
2022/23	426	2,351	2,495	2,300	2,443	2,460	2,507	2,580	2,654	2,760	2,787	2,858	2,790	2,693	33,678	1.0%
2023/24	427	2,302	2,392	2,549	2,352	2,528	2,505	2,540	2,694	2,686	2,863	2,742	2,779	2,679	33,611	-0.2%
2024/25	427	2,290	2,355	2,456	2,620	2,446	2,588	2,552	2,667	2,741	2,801	2,824	2,670	2,670	33,680	0.2%
2025/26	427	2,294	2,335	2,410	2,516	2,716	2,496	2,628	2,670	2,705	2,849	2,759	2,748	2,564	33,690	0.0%
2026/27	427	2,312	2,341	2,393	2,472	2,611	2,774	2,537	2,753	2,711	2,815	2,808	2,685	2,640	33,852	0.5%
2027/28	425	2,324	2,354	2,393	2,448	2,559	2,660	2,813	2,651	2,788	2,814	2,771	2,731	2,578	33,884	0.1%
2028/29	423	2,338	2,368	2,408	2,451	2,537	2,610	2,700	2,942	2,687	2,897	2,771	2,696	2,623	34,028	0.4%
2029/30	423	2,351	2,382	2,422	2,465	2,539	2,586	2,648	2,823	2,981	2,791	2,852	2,695	2,589	34,124	0.3%
2030/31	423	2,365	2,395	2,436	2,480	2,554	2,589	2,624	2,769	2,861	3,096	2,748	2,774	2,588	34,279	0.5%

Source: Applied Economics, 2021.

5.0 Sub-District Projections

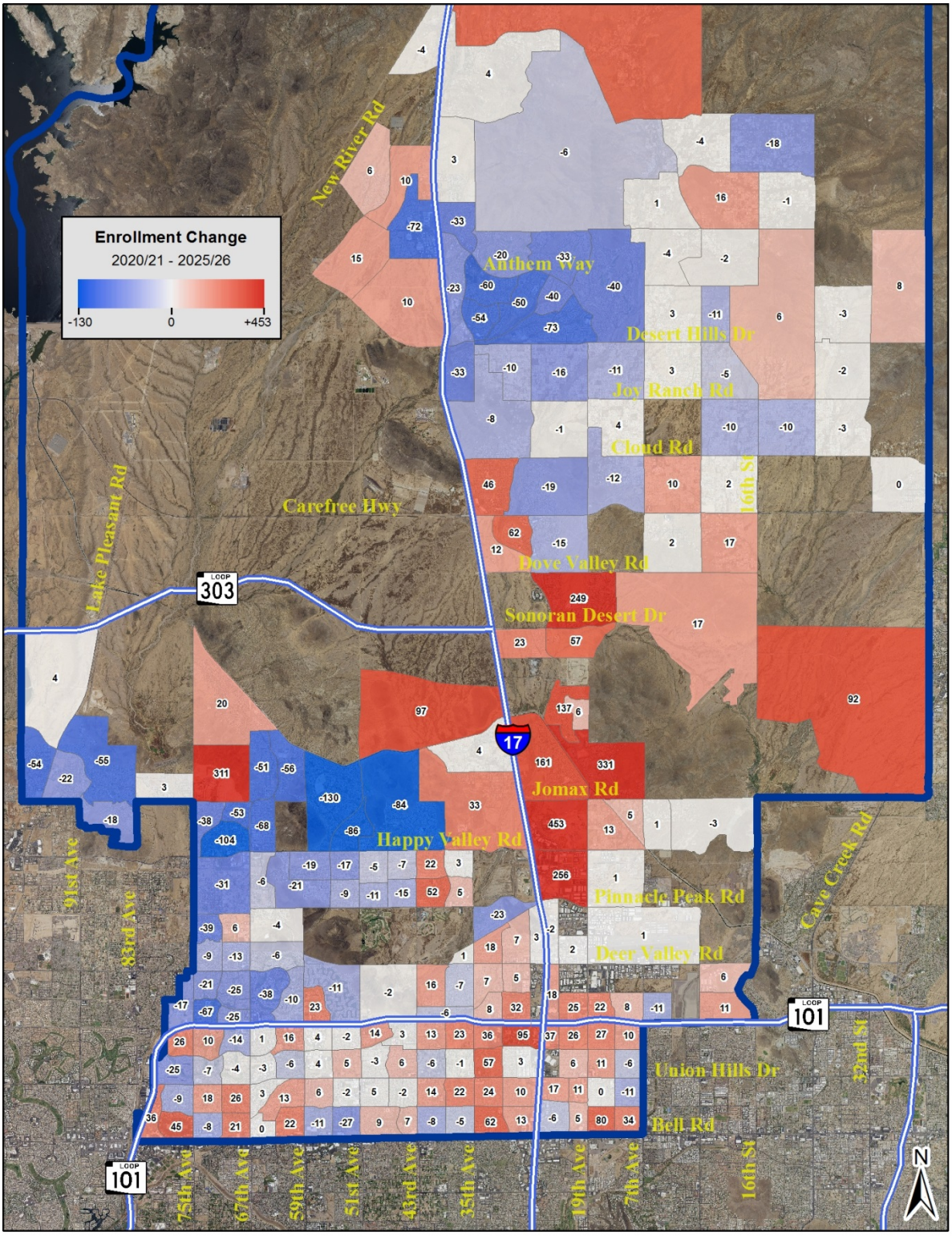
Sub-District enrollment projections are based on the current number of students in each study area, the expected occupancy of existing housing units, absorption of new housing units, and the expected student generation from existing and newly created households. The small-area forecasts are developed by applying the expected level of District-wide absorption to the supply of new residential housing on a project-by-project basis. Absorption is first allocated to active residential projects and then to vacant land planned for residential development, according to the development schedule assigned to each project or portion thereof. Using this data, annual projections of enrollment by grade for each of the study areas have been developed.

The projected changes in the number of students by study area over the next two five-year periods are depicted on **Maps 14** and **15**. The grids are color coded according to the amount of change, with increasing saturations of red for positive change and blue for negative change. During the first five-year period, the highest growth is expected east of I-17 from Pinnacle Peak Road north to Dove Valley Road in areas that have seen high growth levels in recent years, such as Norterra, and new growth areas such as MacEwan Ranch. A pocket of growth can also be seen in the west-central portion of the District, around the Alora Vita and Sonoran Mountain Ranch developments. Declines are anticipated in older residential areas, including Anthem and Stetson Valley/Stetson Hills, while the southern portion of the District should see a mix of gains and losses as new infill projects partially offset aging neighborhoods.

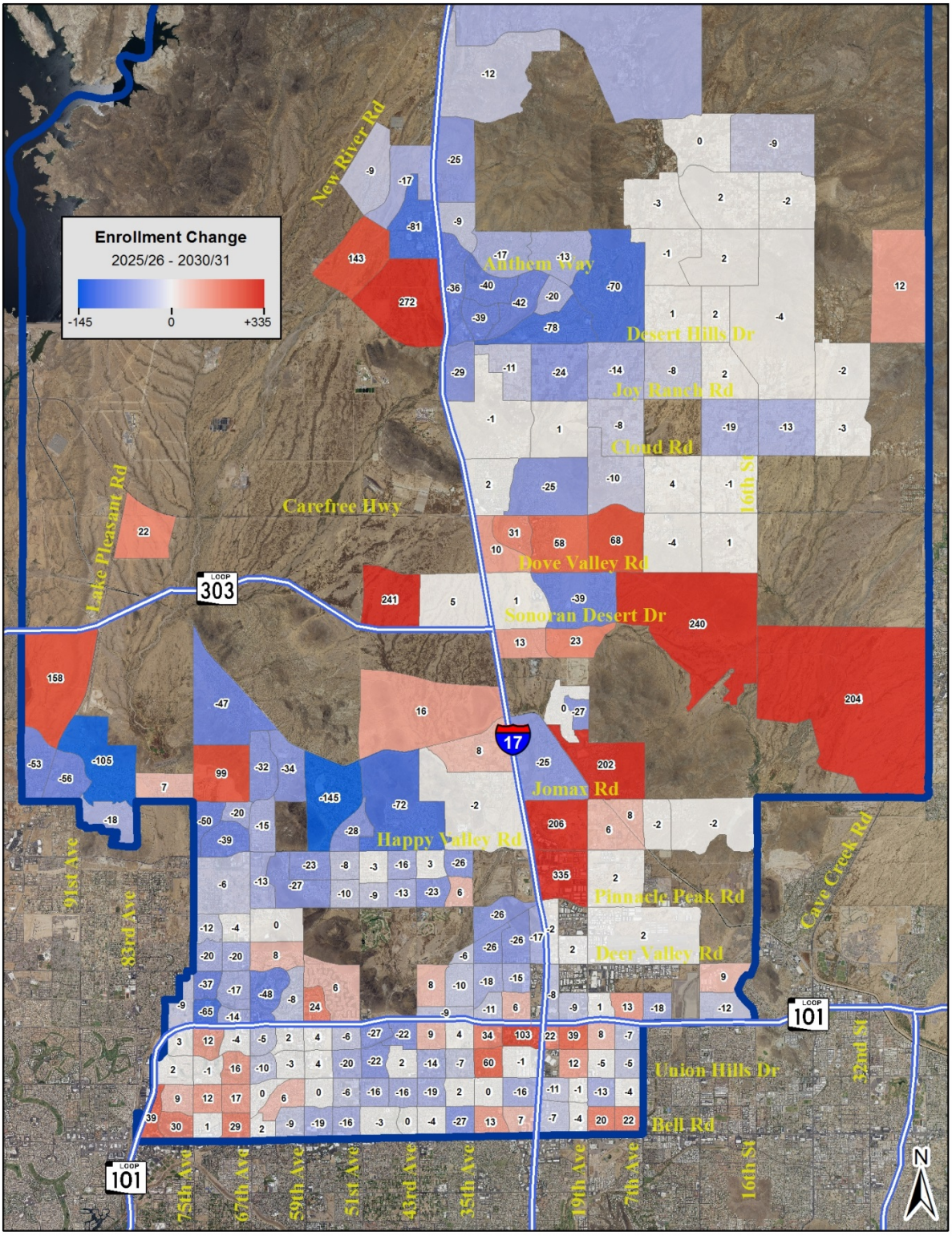
During the second five-year period (Map 15), growth is expected to become more concentrated in areas along both the western (Pleasant Valley) and eastern (MacEwan Ranch) District borders and in Norterra, between Pinnacle Peak and Jomax Roads. In the north, new growth areas appear due to increased development west of I-17 and north of Desert Hills Drive (Anthem West area) and north of the Loop 303 near 51st Avenue. Some losses in current growth areas are also expected due to aging, most notably just east of I-17 along Jomax Road and Sonoran Desert Drive.

The southern portion of the District should continue to be a mixture of aging and re-generation. There are a number of major employers in the southern part of the District, creating a strong base of office, retail and industrial jobs. This portion of the District, particularly the area south of the Loop 101 freeway, consists of older, more affordable housing whose appeal to the area's workforce helps to create some stability in the school-age population. Therefore, grids in this area have different levels of age and household composition, which helps to explain the "patchwork" appearance of enrollment growth in the area.

MAP 14
ENROLLMENT CHANGE: 2020/21 - 2025/26



MAP 15
ENROLLMENT CHANGE: 2025/26 - 2030/31



5.1 Enrollment by Attendance Area

For analysis purposes, the grid level data within the District is summed to generate enrollment estimates by current school attendance areas, as was shown previously on Map 1. **Table 21** displays the projected enrollment by attendance area through 2030/31 based on current student data and the demographic and development trends observed in the District. Enrollment is presented for each level and is based solely on the attendance area designated for the student's place of residence. This provides a direct link to the demographic analysis and development projections that were used as the basis for predicting enrollment at each school. Projected enrollment from outside District boundaries is also included.

Attendance area enrollment is color coded by size relative to the average size (number of students) of the attendance areas, and by level; larger numbers are represented in red and smaller numbers are in blue. The saturation of the colors increases with the attendance area's variation in size over time. The changes in both color and saturation from year to year provide a visual representation of growth trends within each area.

Elementary (K-6 and K-8) attendance area enrollment during the first five-year period is forecast to increase by nine percent, or roughly 1,600 students, due in part to a 15 percent increase in out-of-District enrollment (250 students). Compared to 2019/20 enrollment (pre-pandemic), attendance area enrollment is expected to increase by almost 120 students, or just one percent by 2025/26. As a percentage, the largest enrollment increases are expected in the Union Park (93 percent), Park Meadows (35 percent) and Esperanza (32 percent) attendance areas; four additional attendance areas are expected to increase enrollment by 20 percent or more in the next five years and another five areas are projected to increase by at least 10 percent. Six elementary attendance areas are projected to experience declines of 11 percent or more during this period; the largest percentage declines in the next five years are expected in the Anthem (25 percent) and Westwing (-34 percent) attendance areas. It is important to note that the opening of Union Park School, the dissolution of the Bellair attendance area into the Greenbrier and Mirage attendance areas, and the unprecedented changes brought about by the COVID-19 pandemic this year have contributed to some of the aforementioned enrollment changes.

In the second five-year period, elementary (K-6 and K-8) attendance area enrollment growth is projected to slow considerably; in-District enrollment growth during this period is partially offset by a slight decline in out-of-District enrollment (2 percent), resulting in a net enrollment increase of just one percent between 2026/27 and 2030/31.The Desert Mountain attendance area will see the largest percentage increase (26 percent) in enrollment during the second half of the projection period, followed closely by the Canyon Springs attendance area which is projected to grow by 23 percent. Four other attendance areas will see enrollment increases in excess of 15 percent during the second five-year period. The largest percentage decline in elementary enrollment in the second half of the projection period is expected in the Sierra Verde attendance area (19 percent); another six attendance areas are projected to decline by 10 percent or more.

In terms of students, the new Union Park attendance area is projected to have the largest growth, adding nearly 840 K-8 students during the 10-year period, followed by the Sonoran Foothills (400 students) and Esperanza (300 students) attendance areas; another five attendance areas are expected to add between 100 and 200 elementary students by 2030/31. The Las Brisas and Sierra Verde attendance areas are both projected to lose nearly 200 students over the next 10 years, and another four attendance areas are likely to experience enrollment declines in excess of 90 students each.

In the middle school attendance areas, growth of nearly 300 students over ten years in the Deer Valley Middle School attendance area is expected to be offset somewhat by a loss of 140 students (16 percent) in the Hillcrest attendance area. Overall, middle school enrollment is projected to increase by about 120 students (5.7 percent) by 2030/31; most of this growth (4 percent) is expected to occur during the first half of the projection period.

More dramatic changes in the high school attendance areas are projected. Significant growth in the Barry Goldwater attendance area is anticipated, adding more than 1,400 students (a 66 percent increase) over the 10-year period. These gains more than offset losses in the Sandra Day (990 students) and Boulder Creek (290 students) attendance areas during the same time period. After declining for the past eight years, enrollment in the Deer Valley high school attendance area is projected to increase by about 30 percent over the next ten years, adding 400 students by 2030/31; the vast majority of this growth will occur during the first half of the projection period. With the addition of nearly 200 out-of-District high school students during the projection period, high school attendance area enrollment is expected to experience a net gain nearly 540 students (5 percent) by the end of the projection period.

TABLE 21
ACTUAL AND PROJECTED ENROLLMENT BY ATTENDANCE AREA

	Actual						Projected										Change		
Attendance Area*	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	'15-'20	'20-25	'25-30
Anthem Elem	494	469	453	422	371	337	321	301	294	273	252	243	232	229	228	221	-32%	-25%	-12%
Arrowhead	620	631	597	603	595	566	597	633	644	667	682	694	695	696	699	704	-9%	21%	3%
Bellair	451	446	467	469	431	0	0	0	0	0	0	0	0	0	0	0			
Canyon Springs	1,143	1,144	1,060	1,083	1,023	957	931	918	895	868	869	903	925	965	1,020	1,070	-16%	-9%	23%
Constitiution	620	680	670	738	707	653	681	702	716	717	725	709	703	689	678	669	5%	11%	-8%
Copper Creek	677	662	685	679	700	658	719	720	696	694	669	661	657	639	625	615	-3%	2%	-8%
Desert Mountain	515	501	495	486	486	443	491	486	477	511	531	540	566	609	646	669	-14%	20%	26%
Desert Sage	558	576	567	596	613	561	608	624	619	608	588	572	568	549	534	523	1%	5%	-11%
Diamond Canyon	841	810	774	718	705	644	651	647	606	585	568	546	521	513	506	488	-23%	-12%	-14%
Esperanza	512	588	580	596	583	561	625	665	668	707	740	756	783	804	832	867	10%	32%	17%
Gavilan Peak	616	573	529	494	470	448	486	470	430	398	387	381	375	376	367	354	-27%	-14%	-9%
Greenbrier	470	468	464	441	443	416	435	454	458	472	482	466	471	465	461	459	-11%	16%	-5%
Highland Lakes	579	548	542	593	597	531	536	525	529	537	536	564	572	567	582	571	-8%	1%	7%
Las Brisas	1,076	1,048	1,018	1,010	1,008	922	953	920	872	833	815	802	792	767	749	734	-14%	-12%	-10%
Legend Springs	417	403	378	373	378	356	383	375	363	368	365	369	373	371	371	374	-15%	3%	2%
Mirage	706	697	710	725	727	649	673	672	649	643	648	630	623	608	596	586	-8%	0%	-10%
Mountain Shadows	492	517	534	502	508	434	464	473	463	452	435	431	430	418	409	403	-12%	0%	-7%
New River	377	345	350	359	399	328	349	343	342	350	352	350	348	343	339	337	-13%	7%	-4%
Norterra Canyon	836	852	856	876	904	541	587	601	591	592	595	608	610	610	596	585	-35%	10%	-2%
Park Meadows	540	544	536	513	527	473	524	556	585	624	639	634	647	651	656	664	-12%	35%	4%
Paseo Hills	802	783	788	786	813	730	782	786	783	758	744	714	694	676	657	635	-9%	2%	-15%
Sierra Verde	650	680	703	689	667	612	605	600	592	568	538	510	494	475	458	435	-6%	-12%	-19%
Sonoran Foothills	624	713	745	805	863	818	853	892	950	990	1,030	1,066	1,078	1,119	1,182	1,217	31%	26%	18%
Stetson Hills	792	782	765	703	694	684	692	713	714	740	731	741	765	794	840	859	-14%	7%	18%
Sunrise	544	546	538	532	501	439	486	496	499	503	493	496	493	485	479	476	-19%	12%	-3%
Sunset Ridge	825	798	800	733	709	574	652	629	613	621	628	619	627	612	614	604	-30%	9%	-4%
Terramar	960	968	986	1,006	1,056	1,079	1,100	1,106	1,094	1,127	1,197	1,232	1,231	1,220	1,201	1,177	12%	11%	-2%
Village Meadows	492	483	475	453	464	397	452	471	483	479	483	477	484	480	479	480	-19%	22%	-1%
Westwing	965	905	894	885	850	790	786	750	685	650	627	611	626	634	646	651	-18%	-21%	4%
Union Park	0	0	0	0	0	660	819	942	1,072	1,190	1,275	1,364	1,434	1,478	1,482	1,496		93%	17%
Out Of District	1,323	1,404	1,496	1,628	1,678	1,713	1,818	1,900	1,919	1,955	1,963	1,961	1,967	1,967	1,956	1,931	29%	15%	-2%
Total	20,517	20,564	20,455	20,496	20,470	18,974	20,057	20,370	20,303	20,476	20,588	20,651	20,783	20,808	20,888	20,853	-8%	9%	1%

Source: Applied Economics, 2021.

* Bold indicates a K-8 school.

TABLE 21 (Continued)
ACTUAL AND PROJECTED ENROLLMENT BY ATTENDANCE AREA

	Actual						Projected										Change		
Attendance Area	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	'15-'20	'20-25	'25-30
Middle School *																			
Deer Valley Middle	644	644	605	598	630	685	715	764	781	805	817	908	942	938	980	961	6%	19%	18%
Desert Sky Middle	654	630	588	565	600	550	561	564	584	580	550	556	542	550	561	533	-16%	0%	-3%
Hillcrest Middle	927	978	939	940	923	866	856	852	880	853	816	790	722	745	768	725	-7%	-6%	-11%
Total	2,225	2,252	2,132	2,103	2,153	2,101	2,131	2,180	2,245	2,239	2,182	2,253	2,207	2,233	2,309	2,220	-6%	4%	2%
High School																			
Barry Goldwater	2,097	2,004	2,128	2,116	2,221	2,141	2,336	2,510	2,688	2,829	2,962	3,040	3,096	3,242	3,345	3,544	2%	38%	20%
Boulder Creek	2,521	2,533	2,566	2,530	2,536	2,333	2,503	2,450	2,393	2,289	2,162	2,112	2,065	2,063	2,030	2,047	-7%	-7%	-5%
Deer Valley	1,573	1,453	1,448	1,413	1,347	1,334	1,486	1,605	1,717	1,698	1,705	1,692	1,685	1,730	1,692	1,739	-15%	28%	2%
Mountain Ridge	2,038	1,953	1,892	1,834	1,851	1,960	2,121	2,153	2,162	2,071	1,989	1,942	1,904	1,813	1,765	1,775	-4%	1%	-11%
Sandra Day	2,308	2,308	2,295	2,349	2,420	2,166	1,996	1,720	1,372	1,316	1,294	1,303	1,278	1,249	1,192	1,180	-6%	-40%	-9%
Out Of District	474	613	669	730	729	734	712	692	732	762	808	860	866	891	902	920	55%	10%	14%
Total	11,011	10,864	10,998	10,972	11,104	10,668	11,153	11,128	11,063	10,965	10,920	10,948	10,894	10,987	10,927	11,206	-3%	2%	3%

Source: Applied Economics, 2021.
*Excludes out of district students at these schools as they are included in the out of district total on the elementary school table.

5.2 Enrollment by School versus by Attendance Area

In order to convert the projections of enrollment by attendance area (place of residence) into enrollment by school, it is necessary to quantify the relationship between the place of residence and school of attendance. This is accomplished by analyzing the relationship between the two based on current student information. **Tables 22, 23,** and **24** display the distribution of enrollment by school versus enrollment by attendance area for elementary (K-6), middle (7-8) and high school students. These patterns at the school level provide an informative view of the flow of students between schools and from outside the District. It also provides insight into the success of each school in retaining students within their own attendance area and attracting students from outside their attendance area.

Reading the table across shows the number of students attending a school from each attendance area (listed by initials across the top row as defined in the first column) and from outside the District. Reading down the columns details where students living in each attendance area choose to go to school. The number of students attending the school in their designated attendance area is shaded in green and the rightmost columns show the net difference between attendance area and school enrollment. For example, at Arrowhead Elementary, there are 406 students enrolled who also live within the Arrowhead attendance area. There is one student at Arrowhead who resides in the Constitution attendance area, 4 from Canyon Springs, and so on. There are also 51 students who attend Arrowhead from outside the District, resulting in a total enrollment of 514 students. The Arrowhead attendance area contains a student population of 566, although 1 attends Constitution, 6 are at Canyon Springs, and so forth. Arrowhead has a net loss of 52 students, or about nine percent of the resident K-6 student population.

Overall, nearly 77 percent of the elementary school students living within District boundaries attended their designated school in the 2020/21 school year, while nearly 78 percent of 7th and 8th grade students attended their designated middle school. At the high school level that share jumps to almost 83 percent. The lower rate of attendance at designated schools at the elementary level is likely due to the greater number of educational options for families and the shorter distances between neighboring schools. Schools located near the District boundaries are also more likely to have cross-enrollment with schools in neighboring districts.

The net difference between each school's enrollment and the number of students that reside within the attendance area provides an estimate of in- and out-migration impacts on enrollment. Among elementary schools, Highland Lakes has the largest net gain in enrollment from outside its attendance area with 451 additional K-6 students, including 135 students from outside of the District. Legend Springs, Sierra Verde and Stetson Hills each have net gains of over 200 students. Highland Lakes, Legend Springs, Stetson Hills and Westwing each retained 90 percent or more of their attendance area students in 2020/21. Las Brisas had the largest loss of students (-243), followed by Esperanza (-184 students) and New River (-130 students). At 53 percent, New River retained the smallest share of its resident student population.

At the middle school level, Highland Lakes had the largest gain (115 students), including 57 from outside of the attendance area, while Paseo Hills retained the largest percentage of their attendance area students (74 percent). Desert Sky Middle School attracted the largest number of out-of-District students (85) and retained 85 percent of its resident students. Sierra Verde retained the largest share of its resident student population (92 percent), while Union Park retained the smallest share of resident 7-8 students (37 percent) in 2020/21.

Among the high schools, Boulder Creek retains the highest share of its resident population (95 percent), followed by Mountain Ridge (86 percent); Barry Goldwater has a retention rate of just 67 percent and a net loss of 531 students. Mountain Ridge had a net gain of 568 students, 267 of which were from outside of the District and Sandra Day had a net gain of 470 students, 114 of which were from outside of the District. The net gain at Deer Valley High School (130 students) was due entirely to the enrollment of students from outside of the District (215).

TABLE 22

SCHOOL VERSUS ATTENDANCE AREA ENROLLMENT (K-6th GRADE): 2020/21

		Attendance Area																														Total	Total	
School	Code	AEE	ANE	CCE	COE	CSE	DCS	DME	DSE	ESE	GBE	GPE	HLE	LBE	LEG	MEE	MSE	NOR	NRE	PHE	PME	SEE	SFS	SRE	STE	SVE	TER	UPS	VME	WWE	Outside	Attend	Reside	Diff.
Arrowhead	AEE	406			1	4			3	1	22		1	4	1	4	5			1		1		1	1	6			1		51	514	566	-52
Anthem Elem	ANE		147	101			18	2				5							27	1			3								10	314	224	90
Copper Creek	CCE		10	426			17	7	3	1		17		8	2	1	2	7	27		4		11	15	2		3	7		3	10	583	685	-102
Constitiution	COE	1			452					73						3	2			5	6	3					1	3	16		53	618	522	96
Canyon Springs	CSE	6			2	507			2	1	3		2	8	2	4	3			1					5	5	16			2	56	625	658	-33
Diamond Canyon	DCS		31	70			397	3				49		1				1	29				4	9		2		2			5	603	482	121
Desert Mountain	DME			1			4	262										1	14				28	15	2		1	1			3	332	320	12
Desert Sage	DSE					9		1	456	13	2		1	26	2	2	4	6		24	9	3	1		6		13	6			30	614	561	53
Esperanza	ESE				4				1	475						1				4								2	8		13	508	692	-184
Greenbrier	GBE	4				3			1	4	260		4			24	10					3			3				1		112	429	416	13
Gavilan Peak	GPE		32	62			32	3				151							36				8	21		1		6	1		10	363	232	131
Highland Lakes	HLE	83			5	20			7	2	73	1	193	20	10	28	23	1		7	12	3	1		6	13	14	4	1	3	135	665	214	451
Las Brisas	LBE					6			2	2	2			650			1	2		1	2				4		13	1	1	2	9	698	922	-224
Legend Springs	LEG	30	1		2	18	3		7	3	10		7	40	323	10	33			5	7	1			6	4	23	4		3	127	667	356	311
Mirage	MEE				2	2				2	6			1		407	8			3	6	19						8			76	540	649	-109
Mountain Shadows	MSE	3			1					2	3			3		13	306			6	9	1						4			32	383	434	-51
Norterra Canyon	NOR					4		1	3	13				10			1	333	4	7		2	14	1	1		1	29	2		25	451	394	57
New River	NRE			1			2	4						1					175				2					1		12	198	328	-130
Paseo Hills	PHE				2				9	22		2		1		3	2			517	17	5	1	1	1				5		27	615	643	-28
Park Meadows	PME	1	1		7	2	1	1	1	19	5					15	12			39	375	14						2	15		88	598	473	125
Sunrise	SEE	1			7				3	1	2					3				2	2	366			2				6		42	437	439	-2
Sonoran Foothills	SFS			6			1	16		6	1	1		3				21	1	1	1		513	14	3		5	76			17	686	623	63
Sunset Ridge	SRE			13			7	13											9	1			22	322			5	4	1		11	408	409	-1
Stetson Hills	STE	3	1	1		13		2	47	12				102		2	1	6		7	6	4	3	3	461		13	9	1	7	20	724	507	217
Sierra Verde	SVE	24				22		3	5		5		6	15	11	5	8			1	5					1	434	23		1	3	115	687	466	221
Terramar	TER	1				36			3		2			20	1		5			1	1					2	1	583	1		5	71	733	773	-40
Union Park	UPS	1	1	1		2		1	3	19		5		2	4		1	16		1	3		12	6			3	374	2		12	469	532	-63
Village Meadows	VME				28					11						1	1			1	2	3							318		24	389	397	-8
Westwing School	WWE					9			3					4					1							1	54	1		535	123	731	564	167
Bellair	BEE	2			5				1	5	19			1		116	6		1	2	2	6							3		44	213	0	213
Other		0	0	3	4	1	0	1	1	5	1	1	0	2	0	7	0	0	4	5	4	5	0	1	0	0	2	0	1	1	2	51	0	51
Total Reside		566	224	685	522	658	482	320	561	692	416	232	214	922	356	649	434	394	328	643	473	439	623	409	507	466	773	532	397	564	1,365	15,846	14,481	1,365
Attend = Reside:		72%	66%	62%	87%	77%	82%	82%	81%	69%	63%	65%	90%	70%	91%	63%	71%	85%	53%	80%	79%	83%	82%	79%	91%	93%	75%		80%	95%		11,124	76.8%	

Sources: Deer Valley Unified School District; Applied Economics, 2021.

TABLE 23

SCHOOL VERSUS ATTENDANCE AREA ENROLLMENT (7th – 8th GRADE): 2020/21

School Name	Code	Attendance Area																			Total Attend	Total Reside	Diff.
		ANE	CSE	DCS	DME	DSM	DVM	GPE	HCM	HLE	NOR	PHE	SFS	SRE	STE	SVE	TER	UPS	WWE	Outside			
Anthem Elem	ANE	63	53	5	1		1	8					2	4						5	142	113	29
Canyon Springs	CSE	7	158	6	4	1	1	22	3			2	4	2	1		2		2	2	217	272	-55
Diamond Canyon	DCS	21	26	138	5			33					2	3				1		3	232	162	70
Desert Mountain	DME				97			7			1		24	6				1		1	137	123	14
Desert Sky Middle	DSM					467	26		3	5		2			1		2			85	591	550	41
Deer Valley Middle	DVM					7	539		1			6						1		20	574	685	-111
Gavilan Peak	GPE	17	28	12	1		1	136			1		3	5						4	208	216	-8
Hillcrest Middle	HCM					15	5		709	13		2			5	9	34	1	9	54	856	865	-9
Highland Lakes	HLE					43	9		27	276	5			1	2	3	7	2	1	57	433	318	115
Norterra Canyon	NOR	1				1	10		10	1	126		2	2	2		1	25		4	185	147	38
Paseo Hills	PHE						63		3			74		2	1			1	1	6	151	87	64
Sonoran Foothills	SFS	1	1		9	1		2	2		6		145	6			1	42		7	223	195	28
Sunset Ridge	SRE	3	5	1	4			7					10	131				3		3	167	165	2
Stetson Hills	STE				1	2	10		66	1	3	1	1	2	158		10	2	1	7	265	177	88
Sierra Verde	SVE					3	5		19	20					2	134	8		3	37	231	146	85
Terramar	TER					2			18						1		232		5	17	275	306	-31
Union Park	UPS				1		4	1		1	5		2	1				47		2	64	128	-64
Westwing School	WWE								4						2		9	1	203	32	251	226	25
Other		0	1	0	0	8	11	0	0	1	0	0	0	0	2	0	0	1	1	2	27	0	27
Total Reside:		113	272	162	123	550	685	216	865	318	147	87	195	165	177	146	306	128	226	348	5,229	4,881	348
Attend = Reside:		56%	58%	85%	79%	85%	79%	63%	82%	87%	86%	85%	74%	79%	89%	92%	76%	37%	90%		3,786	77.6%	

Sources: Deer Valley Unified School District; Applied Economics, 2021.

TABLE 24

SCHOOL VERSUS ATTENDANCE AREA ENROLLMENT (9th – 12th GRADE): 2020/21

School	Code	Attendance Area						Total Attend	Total Reside	Diff.
		BGH	BCH	DVH	MRH	SDH	Outside			
Barry Goldwater	BGH	1,430	31	33	12	15	89	1,610	2,141	-531
Boulder Creek	BCH	120	2,217	3		7	44	2,391	2,333	58
Deer Valley	DVH	77	4	1,087	66	11	215	1,460	1,330	130
Mountain Ridge	MRH	70	3	177	1,677	334	267	2,528	1,960	568
Sandra Day	SDH	430	72	28	199	1,793	114	2,636	2,166	470
Other		14	6	2	6	6	0	34	0	34
Total Reside		2,141	2,333	1,330	1,960	2,166	729	10,659	9,930	729
Attend = Reside:		67%	95%	82%	86%	83%		8,204	82.6%	

Sources: Deer Valley Unified School District; Applied Economics, 2021.

Table 25 shows the pattern of attendance versus residence over the past four years. The opening of Union Park in 2020/21 has likely impacted enrollment at Norterra Canyon and Sonoran Foothills, and possibly Desert Mountain. In addition, fluctuations this year reflect the fact that Bellair merged with Mirage in 2020/21. Notable positive differences have been seen at Highland Lakes, Legend Springs, Stetson Hills, Sierra Verde and Westwing in each of the past four years. There have been recent improvements at Constitution, which had a positive net difference of 96 students this year and recurring losses at Desert Mountain gave way to a small net gain this year. New losses appeared at Mirage in 2020/21 and continued at Las Brisas and New River; losses accelerated at Esperanza and Copper Creek, while some improvement can be seen at Canyon Springs. Overall, the attend-reside ratio for elementary schools has dropped by nearly two percent since 2017/18 (from 78.4 to 76.8 percent).

TABLE 25

TOTAL ENROLLMENT ATTENDANCE VERSUS RESIDENCE

GRADES K-6

	2017-18		2018-19		2019-20		2020-21		Difference			
School	Attend	Reside	Attend	Reside	Attend	Reside	Attend	Reside	2017/18	2018/19	2019/20	2020/21
Arrowhead	541	597	538	603	527	595	514	566	-56	-65	-68	-52
Anthem Elem	426	329	399	304	361	257	314	224	97	95	104	90
Copper Creek	689	683	678	679	686	700	583	685	6	-1	-14	-102
Constitiution	583	596	649	738	631	707	618	522	-13	-89	-76	96
Canyon Springs	571	761	614	766	590	705	625	658	-190	-152	-115	-33
Diamond Canyon	729	571	682	542	657	530	603	482	158	140	127	121
Desert Mountain	430	578	425	585	419	605	332	320	-148	-160	-186	12
Desert Sage	604	567	623	596	662	613	614	561	37	27	49	53
Esperanza	552	667	567	611	549	603	508	692	-115	-44	-54	-184
Greenbrier	374	293	353	278	363	300	429	416	81	75	63	13
Gavilan Peak	455	280	446	269	426	249	363	232	175	177	177	131
Highland Lakes	684	212	681	227	670	235	665	214	472	454	435	451
Las Brisas	778	1,018	767	1,010	765	1,008	698	922	-240	-243	-243	-224
Legend Springs	654	378	698	373	691	378	667	356	276	325	313	311
Mirage	467	414	475	419	523	439	540	649	53	56	84	-109
Mountain Shadows	454	534	435	502	443	508	383	434	-80	-67	-65	-51
Norterra Canyon	733	699	722	687	727	697	451	394	34	35	30	57
New River	231	350	245	376	252	425	198	328	-119	-131	-173	-130
Paseo Hills	665	700	637	700	654	716	615	643	-35	-63	-62	-28
Park Meadows	638	536	642	513	677	527	598	473	102	129	150	125
Sunrise	531	538	509	532	503	501	437	439	-7	-23	2	-2
Sonoran Foothills	694	606	770	635	855	676	686	623	88	135	179	63
Sunset Ridge	549	573	513	529	514	531	408	409	-24	-16	-17	-1
Stetson Hills	776	543	744	492	754	499	724	507	233	252	255	217
Sierra Verde	785	514	778	516	729	502	687	466	271	262	227	221
Terramar	697	718	710	730	735	765	733	773	-21	-20	-30	-40
Union Park	na	na	na	na	na	na	469	532	na	na	na	-63
Village Meadows	479	475	472	453	452	464	389	397	4	19	-12	-8
Westwing School	769	637	755	619	777	614	731	564	132	136	163	167
Bellair	463	467	468	469	453	431	213	0	-4	-1	22	213
Other	59	0	66	0	68	0	51	0	59	66	68	50
Total	17,060	15,834	17,061	15,753	17,113	15,780	15,846	14,481	1,226	1,308	1,333	1,364
Attend = Reside:		78.4%		77.8%		77.8%		76.8%				

Sources: Deer Valley Unified School District; Applied Economics, 2021.

At the middle school level, Highland Lakes continues to have the strongest out-of-area enrollment, with a net difference of more than 100 students in each of the past four years. Anthem has seen their positive net difference decline from 47 to 29 students over the past four years, while recurring losses at both Desert Mountain and Paseo Hills gave way to net increases in 2020/21. Losses accelerated significantly this year at Deer Valley, increasing from a net loss of just 12 students last year to 111 students this year. Overall, the attend-reside rate at the middle school level has dropped from 82.0 percent 77.6 percent in the past four years. Differences at the high schools continue to show a strong negative trend at Barry Goldwater and significant increases at Mountain Ridge and Sandra Day. Overall, the high school attend-reside ratio has declined from 87.9 percent to 82.6 percent over the past four years.

TABLE 25 (continued)

TOTAL ENROLLMENT ATTENDANCE VERSUS RESIDENCE

GRADES 7-8

	2017-18		2018-19		2019-20		2020-21		Difference			
School Name	Attend	Reside	Attend	Reside	Attend	Reside	Attend	Reside	2017-18	2018-19	2019-20	2020-21
Anthem Elem	171	124	158	118	121	114	142	113	47	40	7	29
Canyon Springs	220	296	198	289	217	267	217	272	-76	-91	-50	-55
Diamond Canyon	244	203	223	176	235	175	232	162	41	47	60	70
Desert Mountain	172	218	175	215	176	219	137	123	-46	-40	-43	14
Desert Sky Middle	631	588	604	565	634	600	591	550	43	39	34	41
Deer Valley Middle	554	605	581	598	618	630	574	685	-51	-17	-12	-111
Gavilan Peak	270	249	253	230	234	237	208	216	21	23	-3	-8
Hillcrest Middle	967	939	971	940	938	923	856	865	28	31	15	-9
Highland Lakes	452	330	476	366	469	362	433	318	122	110	107	115
Norterra Canyon	167	157	203	189	212	207	185	147	10	14	5	38
Paseo Hills	187	198	178	209	169	201	151	87	-11	-31	-32	64
Sonoran Foothills	161	139	209	170	224	187	223	195	22	39	37	28
Sunset Ridge	224	227	200	204	186	178	167	165	-3	-4	8	2
Stetson Hills	270	222	265	211	261	195	265	177	48	54	66	88
Sierra Verde	258	189	251	173	250	165	231	146	69	78	85	85
Terramar	237	268	248	276	274	291	275	306	-31	-28	-17	-31
Union Park	na	na	na	na	na	na	64	128	na	na	na	-64
Westwing School	272	257	287	266	272	236	251	226	15	21	36	25
Other	22	0	35	0	42	0	27	0	22	35	42	27
Total	5,479	5,209	5,515	5,195	5,532	5,187	5,229	4,881	270	320	345	348
Attend = Reside:		82.1%		81.6%		81.6%		77.6%				

Sources: Deer Valley Unified School District; Applied Economics, 2021.

GRADES 9-12

	2017-18		2018-19		2019-20		2020-21		Difference			
School	Attend	Reside	Attend	Reside	Attend	Reside	Attend	Reside	2017-18	2018-19	2019-20	2020-21
Barry Goldwater	1,786	2,128	1,694	2,116	1,707	2,221	1,610	2,141	-342	-422	-514	-531
Boulder Creek	2,650	2,566	2,610	2,530	2,604	2,536	2,391	2,333	84	80	68	58
Deer Valley	1,729	1,448	1,649	1,413	1,566	1,347	1,460	1,330	281	236	219	130
Mountain Ridge	2,303	1,892	2,349	1,834	2,396	1,851	2,528	1,960	411	515	545	568
Sandra Day	2,442	2,295	2,560	2,349	2,696	2,420	2,636	2,166	147	211	276	470
Other	88	0	110	0	135	0	34	0	88	110	135	34
Total	10,998	10,329	10,972	10,242	11,104	10,375	10,659	9,930	669	730	729	729
Attend = Reside:		87.9%		85.8%		85.1%		82.6%				

Sources: Deer Valley Unified School District; Applied Economics, 2021.

Table 26 shows attend-reside data for the District high school attendance areas over the past four years. While most of the schools have fairly stable levels of enrollment shifts between other attendance areas, there are some trends that should be noted. Mountain Ridge has been taking in an increasing number of students from the Sandra Day O'Conner attendance area and this year received an influx of students from the Deer Valley attendance area. While Sandra Day O'Conner continues to receive an increasing number of students from the Barry Goldwater attendance area, this year the school also saw a rise in the number of students from the Mountain Ridge attendance area and from outside of the District. A large number of out-of-District students continue to attend both Deer Valley and Mountain Ridge.

TABLE 26
HIGH SCHOOL ENROLLMENT VERSUS ATTENDANCE AREA ENROLLMENT

	Barry Golwater	Boudler Creek	Deer Valley	Mountain Ridge	Sandra Day	Out of District	Total
Barry Goldwater							
2016-17	1,559	41	28	20	23	68	1,739
2017-18	1,606	35	36	13	19	77	1,786
2018-19	1,495	33	34	8	25	99	1,694
2019-20	1,520	30	46	4	20	87	1,707
2020-21	1,430	31	33	12	15	89	1,610
Boulder Creek							
2016-17	106	2,410		2	5	63	2,586
2017-18	131	2,455		1	5	58	2,650
2018-19	136	2,401	5		3	65	2,610
2019-20	137	2,401	4		3	59	2,604
2020-21	120	2,217	3	0	7	44	2,391
Deer Valley							
2016-17	83	4	1,294	61	36	235	1,713
2017-18	92	6	1,292	55	30	254	1,729
2018-19	92	4	1,238	54	26	235	1,649
2019-20	90	6	1,161	53	18	238	1,566
2020-21	77	4	1,087	66	11	215	1,460
Mountain Ridge							
2016-17	37	5	94	1,778	211	185	2,310
2017-18	42	7	83	1,731	236	204	2,303
2018-19	53	3	91	1,672	292	238	2,349
2019-20	54	2	97	1,693	305	245	2,396
2020-21	70	3	177	1,677	334	267	2,528
Sandra Day O'Connor							
2016-17	178	43	15	77	2,011	60	2,384
2017-18	222	46	22	84	1,995	73	2,442
2018-19	316	62	28	84	1,981	89	2,560
2019-20	378	65	24	82	2,050	89	2,688
2020-21	430	72	28	199	1,793	114	2,636
Other							
2016-17	16	10	8	1	5	1	41
2017-18	35	17	15	8	10	3	88
2018-19	24	27	17	16	22	4	110
2019-20	42	32	15	19	24	3	135
2020-21	14	6	2	6	6	0	34
Total							
2016-17	1,979	2,513	1,439	1,939	2,291	612	10,773
2017-18	2,128	2,566	1,448	1,892	2,295	669	10,998
2018-19	2,116	2,530	1,413	1,834	2,349	730	10,972
2019-20	2,221	2,536	1,347	1,851	2,420	721	11,096
2020-21	2,141	2,333	1,330	1,960	2,166	729	10,659

Source: Deer Valley Unified School District; Applied Economics, 2021.

5.3 Enrollment by School

Tables 27 and **28** show actual enrollment since the 2015/16 school year and projected enrollment by school for 2021/22 through 2030/31, based on applying the existing reside/attend relationships to the projected level of enrollment by resident attendance area. *Note that in Table 23 the 7th & 8th grade enrollment at the K-8 schools is included in the totals for the elementary schools, which leaves only the three 7th and 8th grade middle schools on Table 24, along with the five high schools.* Color coding indicates a school's relationship to its enrollment capacity, as defined by the School Facilities Board (SFB), with orange indicating where enrollment exceeds the facility capacity, yellow indicates the school is approaching 100 percent capacity and blue indicates that the school is at less than 50 percent of capacity.

Stetson Hills is currently over-capacity and forecast to continue to grow throughout the projection period; Sierra Verde, Sonoran Foothills, Terramar and Westwing are all currently operating at more than 90 percent capacity; while enrollment at Sierra Verde and Westwing is projected to drop during the first half of the projection period, enrollment growth is expected to continue at Sonoran Foothills and Terramar. Enrollment growth at Terramar will put that school over-capacity for most of the duration of the projection period beginning next year. Sonoran Foothills is projected to remain at 90 percent capacity until 2023/24 and then remain over capacity for the rest of the projection period. Both Constitution and Union Park are expected to grow rapidly and exceed capacity by 2022/23. Enrollment growth at Park Meadows, Esperanza and Highland Lakes will be more gradual, bringing each school to more than 90 percent capacity in the second half of the projection period. Canyon Springs is not expected to surpass 90 percent of its building capacity until 2029/30. Anthem, Bellair, Desert Mountain, Mountain Shadows and New River are all currently operating at less than 50 percent capacity, but Mountain Shadows is expected to see increases in enrollment next year that remedy that situation; each of the other schools are expected to remain at less than 50 percent capacity for the duration of the projection period. Enrollment losses at the end of the projection period are expected to bring both Mirage and Mountain Shadows to less than 50 percent capacity by 2028/29.

None of the middle schools are currently over-crowded and none are expected to approach or exceed building capacity during the projection period. Among the high schools, Mountain Ridge and Sandra Day are currently over-capacity and both schools are projected to remain that way throughout the projection period. Boulder Creek is projected to remain above 90 percent capacity until 2022/23 and then remain below this threshold for the duration of the projection period. Neither Barry Goldwater or Deer Valley are expected to approach or exceed building capacity at any time during the projection period

TABLE 27
ELEMENTARY ENROLLMENT BY SCHOOL

School	SFB Capacity	Actual						Projected										
		2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Anthem Elem	928	757	724	613	567	497	463	456	432	426	401	383	377	363	359	367	363
Arrowhead	841	614	601	576	562	560	541	603	637	648	660	674	676	677	680	686	695
Bellair	681	477	486	467	486	465	215	216	216	211	209	210	214	212	208	208	208
Canyon Springs	1,098	810	809	809	827	825	794	813	817	822	803	812	856	890	937	989	1,040
Constitiution	747	624	618	604	675	653	652	710	747	771	776	786	795	788	771	758	746
Copper Creek	926	728	732	708	698	723	729	813	821	809	815	806	807	805	789	778	771
Desert Mountain	1,329	689	651	615	612	605	460	503	504	498	527	543	549	560	589	619	633
Desert Sage	938	624	655	645	661	691	656	719	730	733	721	702	676	669	648	628	610
Desert Winds	847	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diamond Canyon	1,040	1,031	1,017	973	909	892	849	852	826	785	779	766	740	720	721	715	698
Esperanza	806	530	577	579	600	589	518	593	637	640	685	716	731	755	774	801	834
Gavilan Peak	919	795	723	735	718	679	576	639	650	597	557	553	552	541	543	535	525
Greenbrier	802	388	385	397	370	375	472	487	490	496	494	500	486	491	486	485	484
Highland Lakes	1,294	1,134	1,146	1,134	1,155	1,140	1,096	1,139	1,140	1,141	1,152	1,153	1,186	1,205	1,197	1,217	1,210
Las Brisas	894	849	829	797	780	764	745	828	816	794	780	787	800	792	767	751	739
Legend Springs	902	681	645	652	693	692	691	726	725	724	744	743	755	762	763	767	773
Mirage	957	470	500	487	492	539	563	585	588	558	548	540	497	493	478	469	462
Mountain Shadows	869	498	479	493	485	494	428	464	466	458	441	437	437	439	429	422	419
New River	559	239	209	229	243	254	167	183	187	183	188	182	176	177	170	166	164
Norterra Canyon	945	909	863	925	948	957	666	696	696	667	662	644	630	614	598	581	566
Park Meadows	807	610	622	648	672	693	611	675	711	724	740	743	736	741	741	742	747
Paseo Hills	1,012	942	914	864	837	829	800	823	788	777	742	719	691	681	666	656	643
Sierra Verde	938	982	1,010	1,040	1,032	979	904	909	899	876	848	817	785	775	754	734	711
Sonoran Foothills	950	589	786	855	985	1,080	909	919	943	979	1,010	1,032	1,036	1,039	1,072	1,116	1,126
Stetson Hills	972	1,070	1,074	1,045	1,009	1,013	1,003	1,021	1,019	1,014	1,032	1,020	1,022	1,041	1,069	1,122	1,145
Sunrise	768	564	562	543	517	509	466	512	524	524	530	514	512	508	500	494	492
Sunset Ridge	1,039	889	821	797	742	736	627	698	684	664	662	670	652	651	626	620	601
Terramar	1,039	866	894	967	985	1,024	1,027	1,053	1,059	1,030	1,074	1,110	1,131	1,103	1,080	1,045	1,007
Village Meadows	726	500	478	487	490	467	455	512	526	539	532	542	540	549	545	542	541
Westwing School	1,040	1,038	1,024	1,041	1,044	1,049	953	989	966	920	893	867	860	874	887	894	894
Union Park	950	0	0	0	0	0	525	846	1,045	1,207	1,359	1,483	1,613	1,725	1,802	1,811	1,830
VSP		43	86	83	101	42	49	39	38	39	38	39	41	43	44	44	44
Total	28,563	20,940	20,920	20,808	20,895	20,815	19,610	21,019	21,328	21,255	21,404	21,494	21,561	21,682	21,689	21,758	21,719
Percent of Capacity		73.3%	73.2%	72.8%	73.2%	72.9%	68.7%	73.6%	74.7%	74.4%	74.9%	75.3%	75.5%	75.9%	75.9%	76.2%	76.0%

Source: Applied Economics, 2021.

Bold indicates a K-8 school.

>100% Capacity >90% Capacity <50% Capacity

TABLE 28
MIDDLE AND HIGH SCHOOL ENROLLMENT

School	SFB Capacity	Actual 2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Projected 2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Middle School																	
Deer Valley Middle	943	602	599	559	579	615	576	578	627	642	669	684	771	804	801	843	820
Desert Sky Middle	910	695	683	630	607	611	602	608	622	646	647	624	629	619	630	642	614
Hillcrest Middle	1,016	985	1,004	969	968	938	867	855	849	883	870	844	822	762	795	825	786
Total	2,869	2,282	2,286	2,158	2,154	2,164	2,045	2,041	2,098	2,171	2,186	2,152	2,222	2,185	2,226	2,310	2,220
Percent of Capacity		79.5%	79.7%	75.2%	75.1%	75.4%	71.3%	71.1%	73.1%	75.7%	76.2%	75.0%	77.4%	76.2%	77.6%	80.5%	77.4%
Grades 9-12																	
Barry Goldwater	2,380	1,885	1,783	1,791	1,699	1,707	1,672	1,691	1,756	1,811	1,852	1,892	1,882	1,849	1,903	1,919	2,021
Boulder Creek	2,660	2,593	2,621	2,648	2,609	2,603	2,429	2,466	2,382	2,318	2,218	2,097	2,048	2,000	1,996	1,963	1,981
Deer Valley	2,466	1,818	1,725	1,729	1,658	1,567	1,517	1,493	1,478	1,483	1,483	1,531	1,568	1,592	1,681	1,679	1,767
Mountain Ridge	2,196	2,282	2,324	2,296	2,352	2,396	2,561	2,693	2,688	2,596	2,505	2,419	2,368	2,324	2,231	2,181	2,191
Sandra Day	2,660	2,442	2,407	2,443	2,565	2,697	2,685	2,685	2,695	2,726	2,777	2,850	2,950	2,996	3,043	3,052	3,113
Other		na	4	91	89	134	28	126	129	129	130	131	132	133	133	133	133
Total	12,362	11,020	10,864	10,998	10,972	11,104	10,892	11,154	11,128	11,063	10,965	10,920	10,948	10,894	10,987	10,927	11,206
Percent of Capacity		89.1%	87.9%	89.0%	88.8%	89.8%	88.1%	90.2%	90.0%	89.5%	88.7%	88.3%	88.6%	88.1%	88.9%	88.4%	90.6%

Source: Applied Economics, 2021.

>100% Capacity >90% Capacity <50% Capacity

Acknowledgements

We would like to acknowledge the people and organizations that have provided information for this study. Their time and expertise are valued assets working in support of Arizona's public schools.

Lorie Dever
Planning Manager
City of Peoria

Mark Edelman
Manager, Planning & Engineering
Arizona State Land Department

David Garcia
Vice President of Land Acquisitions & Development
Shea Homes

Jeff Gunderson
Senior Vice President of Land Development
Lennar Homes

Samantha Keating
Principal Planner
City of Phoenix

Colin Phipps
Project Manager
Taylor Morrison

Builder
Pulse Newsletter

Kasten Long Commercial Group
New Apartment Construction

Maricopa Association of Governments
Information Services

Maricopa County Assessor's Office
Maricopa County, AZ

Phoenix Business Journal
Residential Real Estate

Rose Law Group
Rose Law Group Reporter

Appendix A: High School Choice by 8th Grade School

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Total
ANTHEM ELEM											
BARRY GOLDWATER	7	7	5		2		4	1	1		27
BOULDER CREEK	84	86	89	76	97	95	82	62	96	49	816
MOUTAIN RIDGE			1			1	1				3
SANDRA DAY	4	3			3	1		2	1		14
LEFT DISTRICT	28	13	9	11	9	10	15	9	2	6	112
TOTAL	123	109	104	87	111	107	102	74	100	55	972
CANYON SPRINGS											
BARRY GOLDWATER	1	3	3	1	2	1	1	1	2		15
BOULDER CREEK	87	73	91	97	73	90	73	97	67	83	831
MOUTAIN RIDGE							1	1			2
DEER VALLEY							1				1
SANDRA DAY	1			3	1	1	1	6	2	5	20
LEFT DISTRICT	21	23	3	9	11	9	9	23	21	1	130
TOTAL	110	99	97	110	87	101	86	128	92	89	999
DEER VALLEY MIDDLE											
BARRY GOLDWATER	252	284	253	271	251	210	254	213	204	215	2,407
BOULDER CREEK	3	1	1	1	1	1		1			9
DEER VALLEY	5	12	7	7	6	8	3	7	5	7	67
MOUTAIN RIDGE	1		1	1	1		2			1	7
SANDRA DAY	9	1		2	4	1	1	7	5	2	32
LEFT DISTRICT	97	103	70	57	60	58	56	55	80	76	712
TOTAL	367	401	332	339	323	278	316	283	294	301	3,234
DESERT MOUNTAIN											
BARRY GOLDWATER	3	8	4	2	7	4	6	6	1	8	49
BOULDER CREEK	95	83	86	83	55	73	70	70	68	54	737
MOUTAIN RIDGE										1	1
SANDRA DAY	1	6	3	3	2	3	1	3	2	4	28
LEFT DISTRICT	25	22	11	15	13	15	19	15	14	21	170
TOTAL	124	119	104	103	77	95	96	94	85	88	985
DESERT SKY MIDDLE											
BARRY GOLDWATER	8	12	7	2	7	8	7	9	4	3	67
BOULDER CREEK		1		2			1	1		1	6
DEER VALLEY	299	305	289	293	251	264	265	259	241	215	2,681
MOUTAIN RIDGE	1	2		5	1	4	3	3	5	3	27
SANDRA DAY	7	4	6		1		5	2	2	5	32
LEFT DISTRICT	67	76	38	41	41	62	59	54	51	90	579
TOTAL	382	400	340	343	301	338	340	328	303	317	3,392

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Average
ANTHEM											
BARRY GOLDWATER	5.7%	6.4%	4.8%	0.0%	1.8%	0.0%	3.9%	1.4%	1.0%	0.0%	2.8%
BOULDER CREEK	68.3%	78.9%	85.6%	87.4%	87.4%	88.8%	80.4%	83.8%	96.0%	89.1%	84.0%
MOUTAIN RIDGE	0.0%	0.0%	1.0%	0.0%	0.0%	0.9%	1.0%	0.0%	0.0%	0.0%	0.3%
SANDRA DAY	3.3%	2.8%	0.0%	0.0%	2.7%	0.9%	0.0%	2.7%	1.0%	0.0%	1.4%
LEFT DISTRICT	22.8%	11.9%	8.7%	12.6%	8.1%	9.3%	14.7%	12.2%	2.0%	10.9%	11.5%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
CANYON SPRINGS											
BARRY GOLDWATER	0.9%	3.0%	3.1%	0.9%	2.3%	1.0%	1.2%	0.8%	2.2%	0.0%	1.5%
BOULDER CREEK	79.1%	73.7%	93.8%	88.2%	83.9%	89.1%	84.9%	75.8%	72.8%	93.3%	83.2%
MOUTAIN RIDGE											0.2%
DEER VALLEY	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.1%
SANDRA DAY	0.9%	0.0%	0.0%	2.7%	1.1%	1.0%	1.2%	4.7%	2.2%	5.6%	2.0%
LEFT DISTRICT	19.1%	23.2%	3.1%	8.2%	12.6%	8.9%	10.5%	18.0%	22.8%	1.1%	13.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
DEER VALLEY MIDDLE											
BARRY GOLDWATER	68.7%	70.8%	76.2%	79.9%	77.7%	75.5%	80.4%	75.3%	69.4%	71.4%	74.4%
BOULDER CREEK	0.8%	0.2%	0.3%	0.3%	0.3%	0.4%	0.0%	0.4%	0.0%	0.0%	0.3%
DEER VALLEY	1.4%	3.0%	2.1%	2.1%	1.9%	2.9%	0.9%	2.5%	1.7%	2.3%	2.1%
MOUTAIN RIDGE	0.3%	0.0%	0.3%	0.3%	0.3%	0.0%	0.6%	0.0%	0.0%	0.3%	0.2%
SANDRA DAY	2.5%	0.2%	0.0%	0.6%	1.2%	0.4%	0.3%	2.5%	1.7%	0.7%	1.0%
LEFT DISTRICT	26.4%	25.7%	21.1%	16.8%	18.6%	20.9%	17.7%	19.4%	27.2%	25.2%	22.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
DESERT MOUNTAIN											
BARRY GOLDWATER	2.4%	6.7%	3.8%	1.9%	9.1%	4.2%	6.3%	6.4%	1.2%	9.1%	5.0%
BOULDER CREEK	76.6%	69.7%	82.7%	80.6%	71.4%	76.8%	72.9%	74.5%	80.0%	61.4%	74.8%
MOUTAIN RIDGE										1.1%	
SANDRA DAY	0.8%	5.0%	2.9%	2.9%	2.6%	3.2%	1.0%	3.2%	2.4%	4.5%	2.8%
LEFT DISTRICT	20.2%	18.5%	10.6%	14.6%	16.9%	15.8%	19.8%	16.0%	16.5%	23.9%	17.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
DESERT SKY MIDDLE											
BARRY GOLDWATER	2.1%	3.0%	2.1%	0.6%	2.3%	2.4%	2.1%	2.7%	1.3%	0.9%	2.0%
BOULDER CREEK	0.0%	0.3%	0.0%	0.6%	0.0%	0.0%	0.3%	0.3%	0.0%	0.3%	0.2%
DEER VALLEY	78.3%	76.3%	85.0%	85.4%	83.4%	78.1%	77.9%	79.0%	79.5%	67.8%	79.0%
MOUTAIN RIDGE	0.3%	0.5%	0.0%	1.5%	0.3%	1.2%	0.9%	0.9%	1.7%	0.9%	0.8%
SANDRA DAY	1.8%	1.0%	1.8%	0.0%	0.3%	0.0%	1.5%	0.6%	0.7%	1.6%	0.9%
LEFT DISTRICT	17.5%	19.0%	11.2%	12.0%	13.6%	18.3%	17.4%	16.5%	16.8%	28.4%	17.1%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Total
DIAMOND CANYON											
BARRY GOLDWATER	1	2	5			1	1		1	1	12
BOULDER CREEK	108	80	105	110	86	122	121	119	99	90	1,040
DEER VALLEY											0
SANDRA DAY		4			1		1		4		10
LEFT DISTRICT	20	15	18	9	16	12	7	12	15	21	145
TOTAL	129	101	128	119	103	135	130	131	119	112	1,207
GAVILAN PEAK											
BARRY GOLDWATER	2	1	1	1	3	1	2		3	1	15
BOULDER CREEK	101	107	117	129	79	123	94	117	106	111	1,084
DEER VALLEY						1		1	2		4
SANDRA DAY	2					3	1	1	2	2	11
LEFT DISTRICT	15	19	11	8	9	15	16	20	22	10	145
TOTAL	120	127	129	138	91	143	113	139	135	124	1,259
HIGHLAND LAKES											
BARRY GOLDWATER	7	3	7	2	4	3	5	3	3	3	40
BOULDER CREEK				5	9	6	5	4		2	31
DEER VALLEY	73	98	105	89	103	80	78	66	50	70	812
MOUTAIN RIDGE	115	92	122	101	67	127	107	121	131	113	1,096
SANDRA DAY	9	4	2	8	7	4	18	18	5	18	93
LEFT DISTRICT	35	37	18	26	25	43	30	26	32	47	319
TOTAL	239	234	254	231	215	263	243	238	221	253	2,391
HILLCREST MIDDLE											
BARRY GOLDWATER	7	5	8	3	8	1	4	2	7	5	50
BOULDER CREEK	2	2		1		1	1	1		1	9
DEER VALLEY		2		4	1	2	3	1	3	5	21
MOUTAIN RIDGE	232	248	230	198	219	213	213	211	214	232	2,210
SANDRA DAY	243	263	258	211	253	214	242	220	231	178	2,313
LEFT DISTRICT	52	71	54	63	53	46	43	43	58	51	534
TOTAL	536	591	550	480	534	477	506	478	513	472	5,137
NORTERRA CANYON											
BARRY GOLDWATER	28	37	45	41	37	29	11	13	34	34	309
BOULDER CREEK	1	1	11	6	1	2	4	2		3	31
DEER VALLEY			1	1	1	1		2			6
MOUTAIN RIDGE	1	2	2		1	1	2	1	1	4	15
SANDRA DAY	58	37	28	17	41	47	45	47	44	50	414
LEFT DISTRICT	17	19	25	30	13	16	13	13	12	19	177
TOTAL	105	96	112	95	94	96	75	78	91	110	952

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Average
DIAMOND CANYON											
BARRY GOLDWATER	0.8%	2.0%	3.9%	0.0%	0.0%	0.7%	0.8%	0.0%	0.8%	0.9%	1.0%
BOULDER CREEK	83.7%	79.2%	82.0%	92.4%	83.5%	90.4%	93.1%	90.8%	83.2%	80.4%	86.2%
DEER VALLEY	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SANDRA DAY	0.0%	4.0%	0.0%	0.0%	1.0%	0.0%	0.8%	0.0%	3.4%	0.0%	0.8%
LEFT DISTRICT	15.5%	14.9%	14.1%	7.6%	15.5%	8.9%	5.4%	9.2%	12.6%	18.8%	12.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
GAVILAN PEAK											
BARRY GOLDWATER	1.7%	0.8%	0.8%	0.7%	3.3%	0.7%	1.8%	0.0%	2.2%	0.8%	1.2%
BOULDER CREEK	84.2%	84.3%	90.7%	93.5%	86.8%	86.0%	83.2%	84.2%	78.5%	89.5%	86.1%
DEER VALLEY	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.7%	1.5%	0.0%	0.3%
SANDRA DAY	1.7%	0.0%	0.0%	0.0%	0.0%	2.1%	0.9%	0.7%	1.5%	1.6%	0.9%
LEFT DISTRICT	12.5%	15.0%	8.5%	5.8%	9.9%	10.5%	14.2%	14.4%	16.3%	8.1%	11.5%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
HIGHLAND LAKES											
BARRY GOLDWATER	2.9%	1.3%	2.8%	0.9%	1.9%	1.1%	2.1%	1.3%	1.4%	1.2%	1.7%
BOULDER CREEK	0.0%	0.0%	0.0%	2.2%	4.2%	2.3%	2.1%	1.7%	0.0%	0.8%	1.3%
DEER VALLEY	30.5%	41.9%	41.3%	38.5%	47.9%	30.4%	32.1%	27.7%	22.6%	27.7%	34.0%
MOUTAIN RIDGE	48.1%	39.3%	48.0%	43.7%	31.2%	48.3%	44.0%	50.8%	59.3%	44.7%	45.8%
SANDRA DAY	3.8%	1.7%	0.8%	3.5%	3.3%	1.5%	7.4%	7.6%	2.3%	7.1%	3.9%
LEFT DISTRICT	14.6%	15.8%	7.1%	11.3%	11.6%	16.3%	12.3%	10.9%	14.5%	18.6%	13.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
HILLCREST MIDDLE											
BARRY GOLDWATER	1.3%	0.8%	1.5%	0.6%	1.5%	0.2%	0.8%	0.4%	1.4%	1.1%	1.0%
BOULDER CREEK	0.4%	0.3%	0.0%	0.2%	0.0%	0.2%	0.2%	0.2%	0.0%	0.2%	0.2%
DEER VALLEY	0.0%	0.3%	0.0%	0.8%	0.2%	0.4%	0.6%	0.2%	0.6%	1.1%	0.4%
MOUTAIN RIDGE	43.3%	42.0%	41.8%	41.3%	41.0%	44.7%	42.1%	44.1%	41.7%	49.2%	43.0%
SANDRA DAY	45.3%	44.5%	46.9%	44.0%	47.4%	44.9%	47.8%	46.0%	45.0%	37.7%	45.0%
LEFT DISTRICT	9.7%	12.0%	9.8%	13.1%	9.9%	9.6%	8.5%	9.0%	11.3%	10.8%	10.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
NORTERRA CANYON											
BARRY GOLDWATER	26.7%	38.5%	40.2%	43.2%	39.4%	30.2%	14.7%	16.7%	37.4%	30.9%	32.5%
BOULDER CREEK	1.0%	1.0%	9.8%	6.3%	1.1%	2.1%	5.3%	2.6%	0.0%	2.7%	3.3%
DEER VALLEY	0.0%	0.0%	0.9%	1.1%	1.1%	1.0%	0.0%	2.6%	0.0%	0.0%	0.6%
MOUTAIN RIDGE	1.0%	2.1%	1.8%	0.0%	1.1%	1.0%	2.7%	1.3%	1.1%	3.6%	1.6%
SANDRA DAY	55.2%	38.5%	25.0%	17.9%	43.6%	49.0%	60.0%	60.3%	48.4%	45.5%	43.5%
LEFT DISTRICT	16.2%	19.8%	22.3%	31.6%	13.8%	16.7%	17.3%	16.7%	13.2%	17.3%	18.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Total
PASEO HILLS											
BARRY GOLDWATER	54	61	79	93	79	66	91	58	61	56	698
BOULDER CREEK					1	1					2
DEER VALLEY	2	5	1	4	3	3	3	1	2	5	29
MOUTAIN RIDGE			2	1						1	4
SANDRA DAY	23	17	9	5	8	10	4	13	9	7	105
LEFT DISTRICT	16	22	22	12	15	13	13	16	9	13	151
TOTAL	95	105	113	115	106	93	111	88	81	82	989
SIERRA VERDE											
BARRY GOLDWATER	2			1		1	1	1	2	0	8
BOULDER CREEK		1		2						0	3
DEER VALLEY	1	2	1		2	1	1		1	2	11
MOUTAIN RIDGE	76	76	70	94	96	90	86	104	106	98	896
SANDRA DAY	1		1	2	3	1	2	3	3	0	16
LEFT DISTRICT	19	18	27	24	26	19	33	21	14	23	224
TOTAL	99	97	99	123	127	112	123	129	126	123	1,158
SONORAN FOOTHILLS											
BARRY GOLDWATER							14	16	26	15	71
BOULDER CREEK							22	8	7	7	44
DEER VALLEY							2	0		1	3
MOUTAIN RIDGE							1	1			2
SANDRA DAY							20	33	48	73	174
LEFT DISTRICT							8	23	16	18	65
TOTAL							67	81	97	114	359
STETSON HILLS											
BARRY GOLDWATER		2	1		1	2	2	1		1	10
BOULDER CREEK		1			1		2			2	6
DEER VALLEY		1	1						1	1	4
MOUTAIN RIDGE	1		1		5	1	1	1			10
SANDRA DAY	124	118	137	120	125	114	124	128	120	116	1,226
LEFT DISTRICT	11	13	14	6	6	13	12	10	11	10	106
TOTAL	136	135	154	126	138	130	141	140	132	130	1,362
SUNSET RIDGE											
BARRY GOLDWATER	8	7	14	8	5	3	2	2	1	1	51
BOULDER CREEK	84	107	93	101	87	110	105	98	92	76	953
MOUTAIN RIDGE		1		1	1						3
SANDRA DAY	13	3	4	10	3	2	2	2	3	1	43
LEFT DISTRICT	17	23	8	14	14	13	15	13	10	17	144
TOTAL	122	141	119	134	110	128	124	115	106	95	1,194

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Average
PASEO HILLS											
BARRY GOLDWATER	56.8%	58.1%	69.9%	80.9%	74.5%	71.0%	82.0%	65.9%	75.3%	68.3%	70.6%
BOULDER CREEK	0.0%	0.0%	0.0%	0.0%	0.9%	1.1%	0.0%	0.0%	0.0%	0.0%	0.2%
DEER VALLEY	2.1%	4.8%	0.9%	3.5%	2.8%	3.2%	2.7%	1.1%	2.5%	6.1%	2.9%
MOUTAIN RIDGE	0.0%	0.0%	1.8%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.4%
SANDRA DAY	24.2%	16.2%	8.0%	4.3%	7.5%	10.8%	3.6%	14.8%	11.1%	8.5%	10.6%
LEFT DISTRICT	16.8%	21.0%	19.5%	10.4%	14.2%	14.0%	11.7%	18.2%	11.1%	15.9%	15.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SIERRA VERDE											
BARRY GOLDWATER	2.0%	0.0%	0.0%	0.8%	0.0%	0.9%	0.8%	0.8%	1.6%	0.0%	0.7%
BOULDER CREEK	0.0%	1.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
DEER VALLEY	1.0%	2.1%	1.0%	0.0%	1.6%	0.9%	0.8%	0.0%	0.8%	1.6%	0.9%
MOUTAIN RIDGE	76.8%	78.4%	70.7%	76.4%	75.6%	80.4%	69.9%	80.6%	84.1%	79.7%	77.4%
SANDRA DAY	1.0%	0.0%	1.0%	1.6%	2.4%	0.9%	1.6%	2.3%	2.4%	0.0%	1.4%
LEFT DISTRICT	19.2%	18.6%	27.3%	19.5%	20.5%	17.0%	26.8%	16.3%	11.1%	18.7%	19.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SONORAN FOOTHILLS											
BARRY GOLDWATER							20.9%	19.8%	26.8%	13.2%	19.8%
BOULDER CREEK							32.8%	9.9%	7.2%	6.1%	12.3%
DEER VALLEY							3.0%	0.0%	0.0%	0.9%	0.8%
MOUTAIN RIDGE							1.5%	1.2%	0.0%	0.0%	0.6%
SANDRA DAY							29.9%	40.7%	49.5%	64.0%	48.5%
LEFT DISTRICT							11.9%	28.4%	16.5%	15.8%	18.1%
TOTAL							100.0%	100.0%	100.0%	100.0%	100.0%
STETSON HILLS											
BARRY GOLDWATER	0.0%	1.5%	0.6%	0.0%	0.7%	1.5%	1.4%	0.7%	0.0%	0.8%	0.7%
BOULDER CREEK	0.0%	0.7%	0.0%	0.0%	0.7%	0.0%	1.4%	0.0%	0.0%	1.5%	0.4%
DEER VALLEY	0.0%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.3%
MOUTAIN RIDGE	0.7%	0.0%	0.6%	0.0%	3.6%	0.8%	0.7%	0.7%	0.0%	0.0%	0.7%
SANDRA DAY	91.2%	87.4%	89.0%	95.2%	90.6%	87.7%	87.9%	91.4%	90.9%	89.2%	90.0%
LEFT DISTRICT	8.1%	9.6%	9.1%	4.8%	4.3%	10.0%	8.5%	7.1%	8.3%	7.7%	7.8%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SUNSET RIDGE											
BARRY GOLDWATER	6.6%	5.0%	11.8%	6.0%	4.5%	2.3%	1.6%	1.7%	0.9%	1.1%	4.3%
BOULDER CREEK	68.9%	75.9%	78.2%	75.4%	79.1%	85.9%	84.7%	85.2%	86.8%	80.0%	79.8%
MOUTAIN RIDGE	0.0%	0.7%	0.0%	0.7%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
SANDRA DAY	10.7%	2.1%	3.4%	7.5%	2.7%	1.6%	1.6%	1.7%	2.8%	1.1%	3.6%
LEFT DISTRICT	13.9%	16.3%	6.7%	10.4%	12.7%	10.2%	12.1%	11.3%	9.4%	17.9%	12.1%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Total
TERRAMAR											
BARRY GOLDWATER	3		4								7
BOULDER CREEK	1	1		1							3
DEER VALLEY			1		2	2	1				6
MOUTAIN RIDGE	63	64	62	62	66	48	41	69	63	85	623
SANDRA DAY	18	28	19	26	22	41	31	28	44	29	286
LEFT DISTRICT	11	11	8	7	24	9	15	14	19	11	129
TOTAL	96	104	94	96	114	100	88	111	126	125	1,054
WESTWING SCHOOL											
BARRY GOLDWATER	1		1		2		1				5
BOULDER CREEK	1	1			1			1	1		5
DEER VALLEY			1	2					1		4
MOUNTAIN RIDGE	2	3	2	3	5	4	7	6	3	39	74
SANDRA DAY	78	72	82	94	75	74	67	78	91	64	775
LEFT DISTRICT	37	29	58	26	51	64	56	44	47	44	456
TOTAL	119	105	144	125	134	142	131	129	143	147	1,319

	9th Grade Class Year										
	2011_12	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2019_20	2020_21	Average
TERRAMAR											
BARRY GOLDWATER	3.1%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
BOULDER CREEK	1.0%	1.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
DEER VALLEY	0.0%	0.0%	1.1%	0.0%	1.8%	2.0%	1.1%	0.0%	0.0%	0.0%	0.6%
MOUTAIN RIDGE	65.6%	61.5%	66.0%	64.6%	57.9%	48.0%	46.6%	62.2%	50.0%	68.0%	59.1%
SANDRA DAY	18.8%	26.9%	20.2%	27.1%	19.3%	41.0%	35.2%	25.2%	34.9%	23.2%	27.1%
LEFT DISTRICT	11.5%	10.6%	8.5%	7.3%	21.1%	9.0%	17.0%	12.6%	15.1%	8.8%	12.2%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
WESTWING SCHOOL											
BARRY GOLDWATER	0.8%	0.0%	0.7%	0.0%	1.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.5%
BOULDER CREEK	0.8%	1.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.8%	0.7%	0.0%	0.5%
DEER VALLEY	0.0%	0.0%	0.7%	1.6%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.4%
MOUNTAIN RIDGE	1.7%	2.9%	1.4%	2.4%	3.7%	2.8%	5.3%	4.7%	2.1%	26.5%	7.0%
SANDRA DAY	65.5%	68.6%	56.9%	75.2%	56.0%	52.1%	51.1%	60.5%	63.6%	43.5%	73.5%
LEFT DISTRICT	31.1%	27.6%	40.3%	20.8%	38.1%	45.1%	42.7%	34.1%	32.9%	29.9%	43.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	125.1%