

Change in Central Phoenix

And its effect on Phoenix Elementary School District #1



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Executive Summary

As downtown Phoenix experiences a wave of new residential and commercial construction, Phoenix Elementary School District #1 (Phoenix #1) is at the center of the largest local demographic change in decades.

Phoenix #1 educates more than 6,000 students at 14 schools, from preschool through eighth grade, with many families living in older, historic and modest homes around the downtown Phoenix area. Times are changing, with thousands of new high-rise apartments coming to the market in downtown Phoenix in the heart of the school district. Phoenix #1 must consider how these new residents – well educated and often with upper incomes but no children – will fit into a system that draws most its students from less-affluent residential areas surrounding downtown.

Between 2012 and 2016, the population in the downtown area has grown by 11 percent, which exceeds even the growth rate of Maricopa County, the fastest-growing county in the nation. Yet student enrollment in Phoenix #1 has been declining over this period. More people living and working downtown has not translated into more students in Phoenix #1 schools. Population growth has been occurring in the downtown area between 7th Avenue and 7th Street, but there has been no accompanying increase in the number of young children in the area. This is largely the result of factors beyond the control of the district, including a general decline in the birthrate as the nation ages and a sudden drop in births associated with the Great Recession.

New downtown Phoenix residential developments – both recently completed and those still under construction – have not been marketed to people with school-age children. The target market for many of these projects, usually apartment blocks of 20 or more units, tends to be young professionals who are focused on school, career or urban lifestyle and not yet ready to start families.

These new downtown residents have educational attainment levels that are nearly twice that of the rest of the district, with 48 percent having at least a bachelor's degree. It is still too early in this growth cycle to know if these residents will establish roots in the area and settle in for many years, or if at a later time will opt for single-family homes in a suburban setting as they form families and have children.

The radical transformation in downtown Phoenix is adding thousands of new housing units to accommodate the changes brought to the area by the presence of Arizona State University, new tech companies and dozens of new restaurants and entertainment venues. Predicting exactly how this will shape Phoenix #1 is difficult yet the trends suggest that enrollments may stabilize in coming years. At this point in time, the demographics do not suggest the new downtown residents will be contributing large numbers of children to the school system any time soon, if ever.

However, new downtown residents, whether they have children or not, will be part of the civic fabric of the area and will be voting on funding and other policy decisions for the school district. The key for the district, which in 2017 successfully passed a \$5.1 million override vote with more than 75 percent support, is to keep the momentum going on improving area schools.

A connection beyond the traditional one of area families sending their children to neighborhood schools must be established and continually nurtured, strengthened and changed according to the downtown dynamics at play. Phoenix Elementary School district may want to consider ways in which these new residents can become engaged and informed about education issues that are critical to the success of the downtown Phoenix community, as well as Arizona at large for the benefit of all.

Introduction

Phoenix Elementary School District #1 (Phoenix #1), located in central Phoenix, was the first public school district in the state of Arizona.¹ For almost 150 years the district has taught children in the heart of Phoenix as the city has grown from a dusty farming town to the fifth-largest city in the nation. There have been tremendous changes over the years as the city matured. A new resurgence of downtown Phoenix is now well underway and the first substantial residential construction in many decades is taking place within the district boundaries.

Phoenix Elementary has a long history of facing demographic challenges. Even as the city boomed in the years immediately after World War II, leaders in the district realized that longer-range changes were ahead. In 1951, Monterey Park school was featured in *Progressive Architecture* magazine:

A challenging “pro tem” design problem of providing primary classrooms for a part of the city that had just about reached its population peak, but with full expectancy that, within a few years, the rooms would no longer be needed in that location and should, therefore, be readily movable to another part of town.²



Figure 1: Monterey Park School, 1951
Source: *Progressive Architecture*, August 1951, p. 74

¹ A Brief History of Phoenix Elementary School District #1, Marston, Ruth Ann, <https://phxschools.org/district/about/history/>

² Belcher, J.G. (1951, August). How One School Committee Selected Its Architects. *Progressive Architecture*. Volume XXXII (8), 69-85.

Enrollment in the district peaked in the mid-1960's as predicted, yet Monterey Park remained and has recently been home to the district's gifted program.

Phoenix #1 covers a 16-square-mile area bounded by 16th Street on the east, south of Buckeye Road on the south, past 23rd Avenue on the west and toward Thomas Road on the north. Enrollment (about 7,500 students at 14 schools) in the minority-majority district has shown modest growth at best in recent years.

Now downtown Phoenix is seeing major new residential construction for the first time in decades. These changes suggest questions that the district will need to grapple with in the near future:

- Who will be moving into all this new construction?
- How will these new residents affect Phoenix #1?
- Will enrollments in the district rise, fall or continue to remain flat?

Phoenix #1 schools

- Bethune
- Capitol
- Dunbar
- Edison
- Emerson
- Faith North Preschool
- Garfield
- Heard
- Herrera
- Kenilworth
- Lowell
- Magnet Traditional School
- Shaw Montessori
- Whittier

There are no certain answers to these questions, but there are some clues lurking in the data.

Background

Since the arrival of ASU's Downtown Phoenix Campus in 2006, and its continued expansion, there has been a dramatic increase in the number of businesses in central Phoenix. Downtown streets that once were deserted after 5 o'clock are now crowded with people flocking to the many bars, restaurants, sporting events and concerts giving new life to the area. Many people arrive via the light-rail line that began running in 2009 and circulate through the streets on rented bicycles. The skyline bristles with cranes at construction sites, as lots that have been vacant for years sprout high-rise developments.

The arrival of ASU

ASU's downtown campus is currently home to nearly 12,000 students,³ who are supported by about 2,000 faculty and staff.⁴ This influx of people also drives a secondary component to downtown growth: workers in restaurants, hotels, retail shops and other businesses surrounding the campus.

A significant percentage of ASU students, faculty and staff are choosing to live in the downtown area. Several large dormitories have been constructed and blocks of apartments in the area clearly cater to the student crowd. This influx of population has a 24-hour presence in downtown Phoenix that had been lacking for decades. These new residents have kicked off a wider building boom in the area.

Employment changes

Downtown Phoenix also has seen a revival of its commercial core, with tech companies such as Uber opening offices in the area. Downtown Phoenix Inc. reports 7,000 tech employees at 281 firms, and notes that Phoenix is second in the nation for tech office demand.⁵ Business Insider recently ranked Phoenix second in the nation for tech job growth, further demonstrating the area is shedding its reliance

³ <https://facts.asu.edu/Pages/Enrollments/Enrollment-Trends-by-Campus-of-Major.aspx>

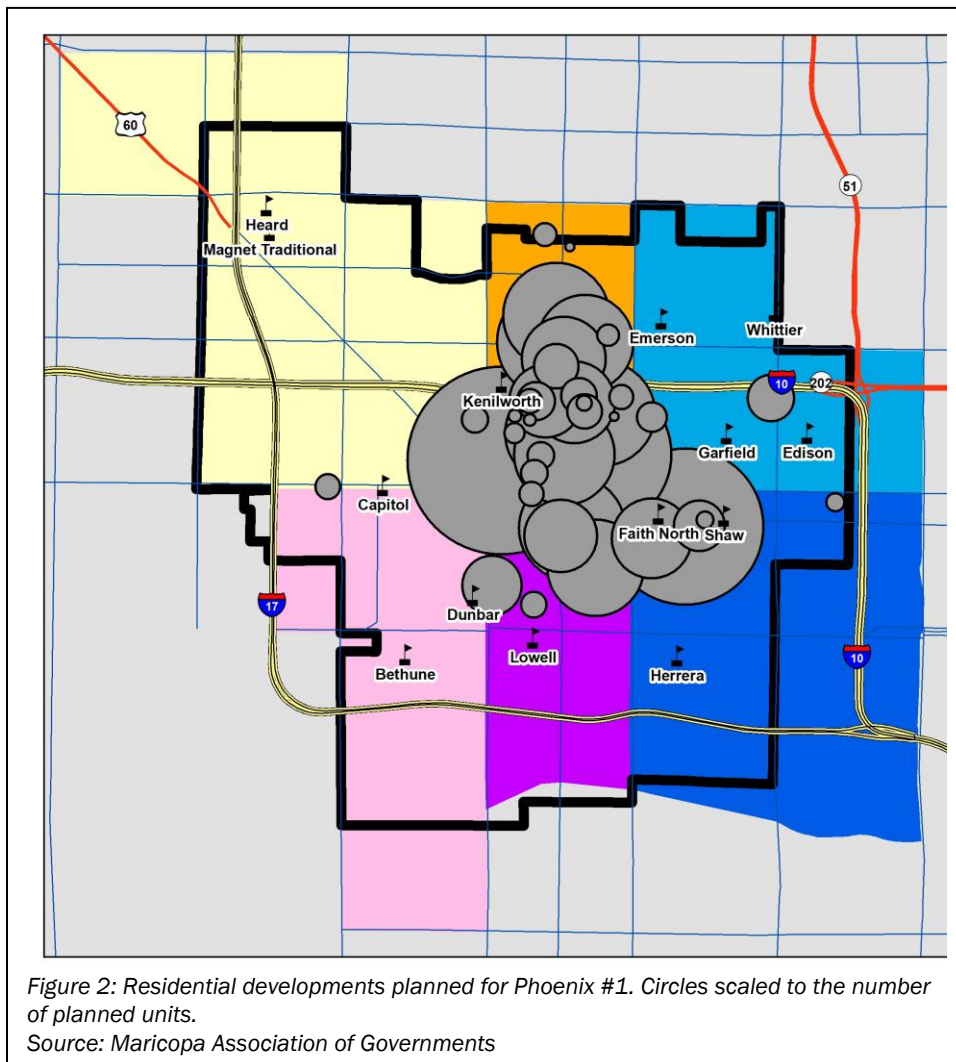
⁴ <https://facts.asu.edu/Pages/Employees/Employee-Trends-by-Campus.aspx>

⁵ http://dtphx.org/wp-content/uploads/2018/04/2018-Infographic_DPI.pdf

on banking and finance as primary employers.⁶

Growth in the education and tech sectors also is spurring employment growth in the hospitality and retail sectors that support these employees. In addition to the many restaurants and entertainment venues that have opened over the past decade, the first new grocery store to open downtown in many decades is currently under construction.

What is on the drawing board



Since 2000, 6,471 residential units have been added to the downtown core. As of April 2018, more than 2,000 additional units are under construction, with 3,500 more in predevelopment phase.⁷

There are 42 residential development projects either under construction or on the drawing board within the boundaries of Phoenix #1 (Figure 2).⁸ If all these projects come to fruition, it will mean an additional 6,550 housing units added to the area.

These developments are concentrated in the downtown area, between 7th Avenue

and 7th Street and extending up the light rail route along Central Avenue. They supplement other large-scale, high-density complexes that already have been completed, such as Roosevelt Square, iLuminate, and Linear Apartments. Nearly all of these new housing units are rental properties, often targeting students at the ASU Downtown Phoenix Campus or young professionals attracted to an urban lifestyle.

Couples with children do not appear to be a demographic targeted by downtown developers. Amenities

⁶ <http://www.businessinsider.com/20-places-you-can-get-a-great-tech-job-outside-of-silicon-valley-2018-3>

⁷ http://dtphx.org/wp-content/uploads/2018/04/DPP-Fact-Sheet_Q2-2018.pdf

⁸ Maricopa Association of Governments, <http://geo.azmag.gov/maps/landuse/#>

such as playgrounds are not featured, and children and schools are not mentioned in marketing materials. Portland on the Park, a 14-story condominium tower along Central Avenue overlooking Hance Park, has 149 units, but only one child lives in the complex.

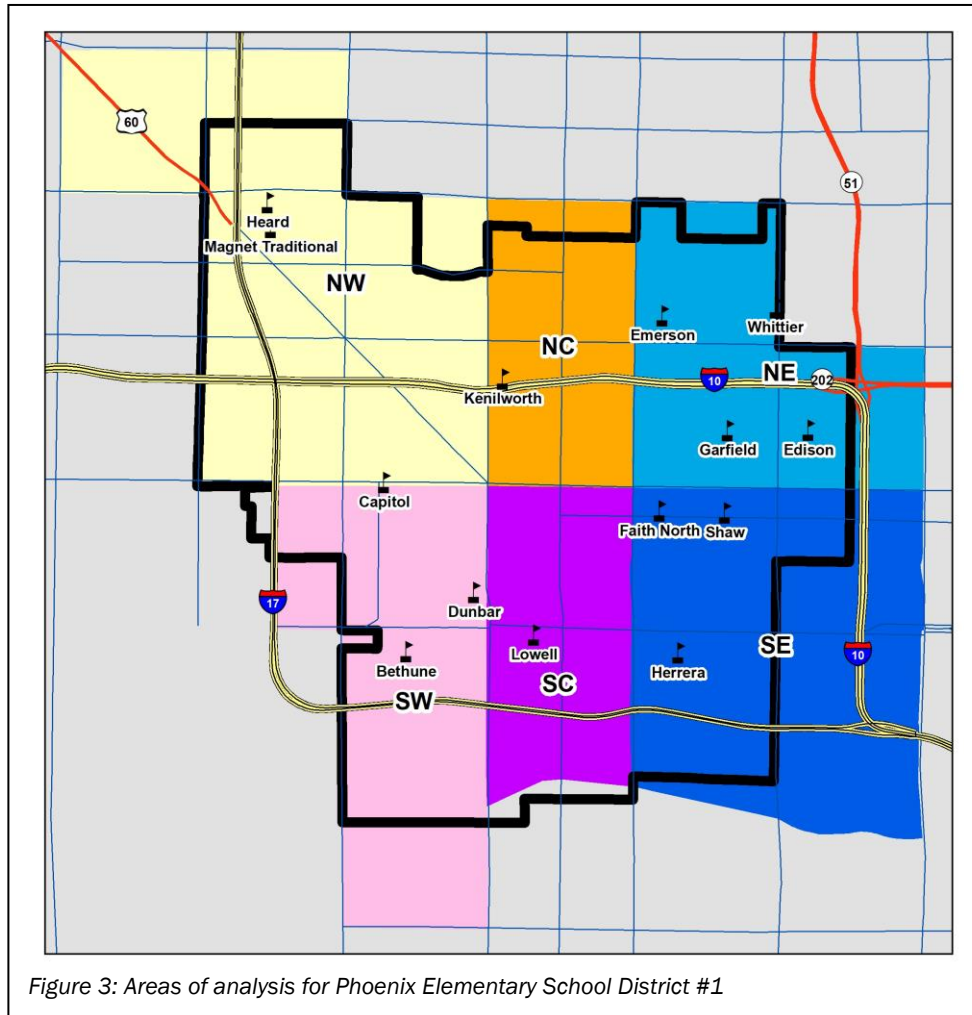
Some of the new developments, such as Roosevelt point, have per-bedroom pricing and function as privately operated dormitories for ASU students. Others are designed for elderly residents. Neither of these populations will contribute students to the district.

Two lenses, two different pictures of the district

This analysis relies heavily on American Community Survey (ACS) data from the United States Census Bureau. The bureau publishes two versions of ACS data. Each provides a different look at what has been happening in the district over the last few years. An understanding of the strengths and weaknesses of these datasets is helpful in understanding the remainder of this analysis.

Each year, the Census Bureau collects a mountain of data about the country through its ACS survey. About 1 percent of the population answers a lengthy questionnaire covering everything from a person's age and marital status to income and education levels. The data are so detailed and so personal that it is necessary to protect the privacy of survey respondents. The data is then released as five-year estimates and one-year estimates. These estimates aggregate the data to ensure privacy. These two datasets have their own strengths and weaknesses, and each tell a part of the story.

Five-year estimates



Ideally, there would be accurate data on how individual neighborhoods are changing year to year within the district. Data is available for census tracts, which are arbitrary areas defined by the Census. However, to protect the privacy of residents and to ensure statistical accuracy, this data is collected over a five-year period and combined before release. A five-year estimate of population therefore can be thought of as a five-year average for an area.

These estimates provide information about small geographic areas, but with less certainty

about time-related aspects of the data.

With the recent release of 2016 ACS data, two non-overlapping five-year data sets can be used for comparison: 2007-11 and 2012-16. Looking at changes across these time periods yields a picture of medium-term changes to small geographies.

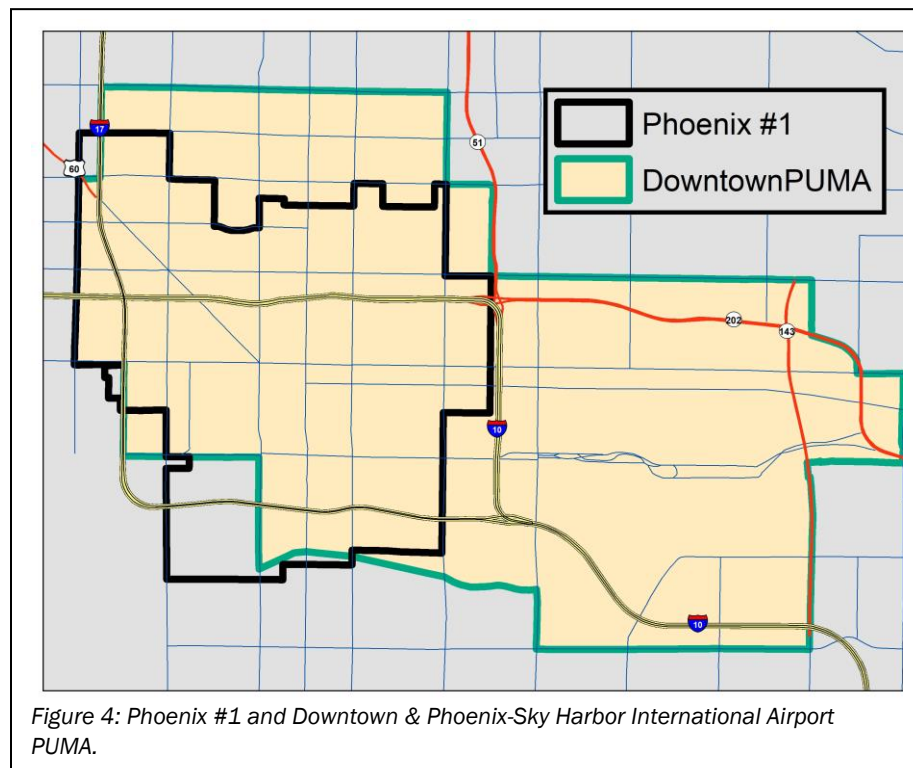
For this analysis, Phoenix #1 was divided into six logical areas (Figure 3). These areas will be used throughout this analysis, referred to by their abbreviations; northwest (NW), north-central (NC), northeast (NE), southwest (SW), south-central (SC) and southeast (SE). Each of these areas was built up from several census tracts. Grouping tracts in this way reduces sampling errors in the ACS, yet gives insight into six areas of the district. As seen in Figure 3, these areas do not always correspond exactly to Phoenix #1 boundaries, but they are the best representation of local conditions in the district.

One-year estimates

One-year estimates are the best tool for gauging recent changes to the rapidly evolving downtown area. Using these figures, it is possible to track changes in downtown Phoenix year by year from 2012 to 2016.

To look at a one-year rather than five-year timeframe, the small-scale geography used in five-year

estimates is sacrificed. The most appropriate geography to use for one-year analysis of Phoenix #1 is the “Downtown Phoenix & Sky Harbor Airport PUMA.”⁹



The Downtown Phoenix PUMA covers almost the entirety of Phoenix #1, the large (and largely unpopulated) area around Sky Harbor airport, plus populated areas to the north and east of the district (Figure 4). The total population of the Downtown Phoenix PUMA is about twice that of the Phoenix Elementary district. Although the Downtown Phoenix PUMA is substantially larger than Phoenix #1, the demographic and economic forces acting on these areas are likely to be very similar. For this

reason, the Downtown Phoenix PUMA serves as a useful proxy for the district.

Using Census data to look at Phoenix #1

In the sections that follow, ACS data from the Census Bureau is used to examine how the district has changed in recent years. These changes have been grouped into three broad categories:

- Housing – Changes to the number and type of housing units.
- Demographics – The total number of people, their ages, family characteristics and educational attainment.
- Economics – Changes in income, poverty and employment.

Each of these indicators will be examined with the five-year and one-year estimates described above.

One-year estimates will inform recent, yearly changes using the Downtown Phoenix & Sky Harbor PUMA as a proxy for downtown Phoenix and Phoenix Elementary (Figure 4) from 2012 to 2016. For this analysis, the term “downtown Phoenix” will be used to describe data from the Downtown Phoenix & Sky Harbor PUMA.

Five-year estimates will provide a longer-term picture of changes across the six areas of the district shown in Figure 3. These estimates compare data from the 2007-11 and 2012-16 periods.

⁹ PUMA – Public Use Microdata Area

Housing Change

Housing Units

Changes to the number of housing units are a basic indicator of whether a region is growing or shrinking.

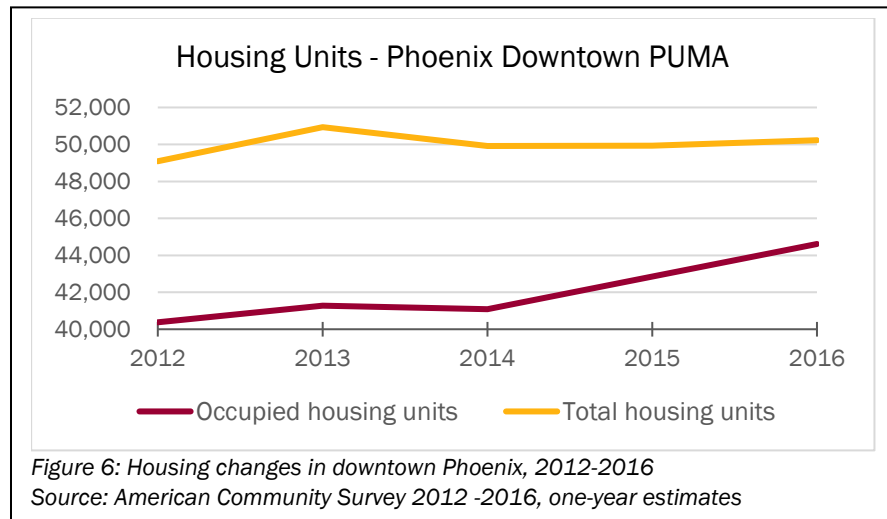
Occupied Housing Units – 2007-2011 to 2012-16				
	2011	2016	Change	% Change
Maricopa County	1,394,016	1,465,840	71,824	5%*
Phoenix Elem.	19,785	20,465	680	3%
NW Phoenix #1	6,941	6,714	(227)	-3%
NC Phoenix #1	4,636	4,744	108	2%
NE Phoenix #1	5,884	6,442	558	9%*
SW Phoenix #1	2,392	2,572	180	8%
SC Phoenix #1	1,644	1,781	137	8%
SE Phoenix #1	2,276	2,132	(144)	-6%
* Statistically significant change, p<0.1				

Figure 5: Occupied housing units, 2007-11 to 2012-16
 Source: American Community Survey 2007-11 and 2012-16, five-year estimates

There was an increase of 858 total housing units and 680 occupied housing units across the district across the two five-year spans of data. The northeast section of the district showed the strongest growth in occupied housing units, adding 558 units, or 9 percent to the total (Figure 5). Both the northwest and southeast areas showed a decrease in occupied units, perhaps indicating an increase in vacant rental

properties in those areas.

Downtown: 2012 to 2016



Between 2012 and 2016, an additional 4,236 housing units were added to the Downtown PUMA, an increase of 10 percent in four years. Note that there was a 3 percent growth in housing units in Maricopa County over this period, so housing is being added to the downtown area at a much higher rate than in the region as a whole

As shown in Figure 6, the percentage of occupied housing units has increased since 2014 as previously vacant units are rented and newly constructed housing come onto the market.

Units in Structure

New housing units in a region do not necessarily mean that new single-family homes are being built. The ACS data tells whether changes are to multi-family or single-family units.

Across the District: 2007-11 to 2012-16

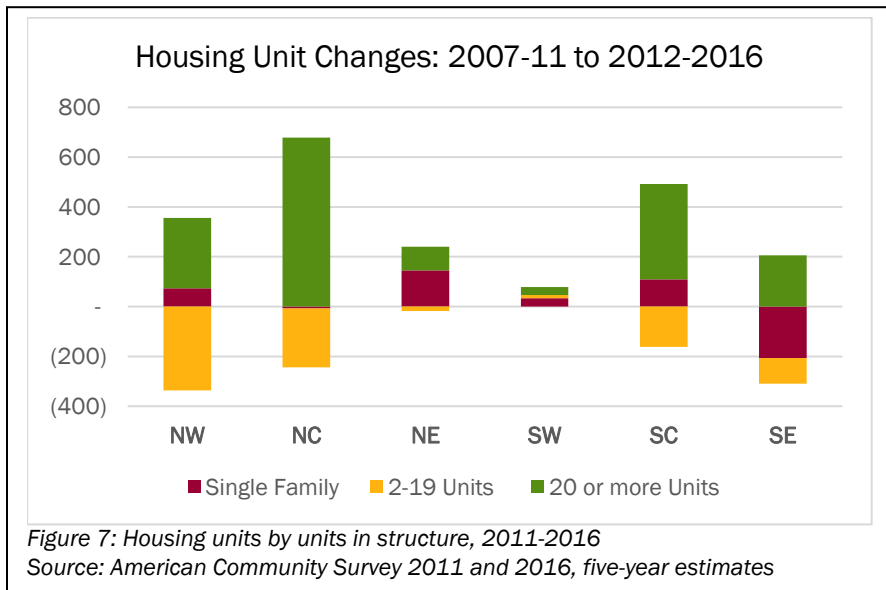


Figure 7: Housing units by units in structure, 2011-2016
Source: American Community Survey 2011 and 2016, five-year estimates

A total of 858 housing units were added to the district, according to census five-year estimates for 2007-11 and 2012-16. But nearly all of this growth in housing stock took place in large complexes of 20 or more units.

Over this time frame, there was a gain of just 29 single-family housing units and a loss of 551 units in buildings of two to 19 units. Buildings of 20 or more units added 1,380 housing units to the

district.

The number of small apartment and condominium complexes of two to nine units decreased in five of the six areas of the district. One southwest corner showed a gain in this form of housing, an increase of just 13 units, indicating that perhaps two or three new two- to nine-unit structures were built.

Downtown: 2012 to 2016

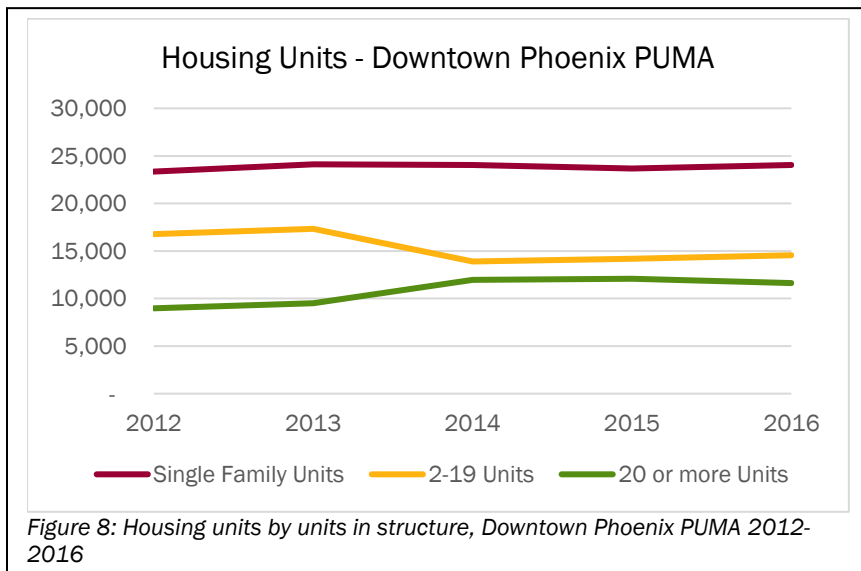


Figure 8: Housing units by units in structure, Downtown Phoenix PUMA 2012-2016

The growth in large housing complexes of 20 or more units seems to be accelerating. When one-year estimates were analyzed, the percentage of single-family housing units remained at 48 percent throughout the district between 2012 and 2016, but there was a dramatic increase in the percentage of housing units in buildings of 20 or more units, from 18 percent in 2012 to 23 percent in 2016. The percentage of small complexes, those between

two and 19 units, showed an accompanying decline, from 34 percent to 29 percent.

Single-family residences are still home to a plurality of residents in the district, but future growth seems to be concentrated in larger complexes of 20 or more units.

Affordability of newly constructed housing

Rent for two bedroom apartments at large complexes in downtown Phoenix				
Development	Address	Year Built	Units	Rent
Alta Midtown	200 E. Thomas	2017	226	\$ 2,122
Broadstone	330 E. Roosevelt	2017	280	\$ 2,505
Muse	1616 N. Central	2017	367	\$ 1,907
Pure Fillmore	601 W. Fillmore	2017	224	\$ 1,609
Union @ Roosevelt	888 N. 1st Ave	2017	80	\$ 2,300
Capital Place	11 S. 12th St.	2016	292	\$ 1,615
Linear	295 E. Roosevelt	2016	215	\$ 2,215
CityScape	11 S. Central	2014	224	\$ 3,100
Skyline Lofts	600 N. 4th St	2009	332	\$ 2,001
Roosevelt Square	121 W. Portland	2001	410	\$ 1,884
Average rent for 2 bedroom apartment:				\$ 2,126
Median monthly income for Phoenix #1 families with children:				\$ 2,014

Figure 9: Rent for two-bedroom apartments in central Phoenix complexes built since 2000.
Source: apartments.com, US Census Bureau

A review of rents for two-bedroom apartments at the large multi-family units constructed since 2000 shows that they are unlikely to be affordable by families with children currently enrolled in the district.

For decades, a rule of thumb for housing affordability has been that housing costs should not exceed 30 percent of household income.¹⁰ Two-bedroom apartments in the recently built buildings near downtown rent for an average of \$2,126 monthly (Figure 9). Median income for families with children under age 18 in Phoenix #1

is less than this amount, at \$2,014. Half of the families in the district could not afford to live in these developments even if they devoted 100 percent of their income to rent. Less than 16 percent of the families with children have incomes sufficient to reasonably afford rent in these developments.

Demographic Change

Population and age distribution

Population changes herald future changes to both school enrollments and the potential tax base for a district. Changes to the population under age 5 telegraphs future enrollment trends.

¹⁰ See <https://www.census.gov/housing/census/publications/who-can-afford.pdf>

Across the District: 2007-11 to 2012-16
When comparing the five-year estimates for 2007-11 and 2012-16, the district as a whole showed a population increase of 2,059 (Figure 10). However, this change was not

	2011 Population	2016 Population	Absolute Change	Percent Change
Phoenix #1 Total	54,130	56,189	2,059	4%
Northwest Phoenix #1	19,854	17,711	(2,143)	-11%
North central Phoenix #1	7,787	8,946	1,159	15%
Northeast Phoenix #1	16,202	19,522	3,320	20%
Southwest Phoenix #1	8,778	9,615	837	10%
South central Phoenix #1	6,160	5,728	(432)	-7%
Southeast Phoenix #1	6,662	5,895	(767)	-12%

Figure 10: Population change, 2007-11 to 2012-2016
Source: American Community Survey 2011 and 2016, five-year estimates

uniformly distributed across the district. The southern half of Phoenix #1 had smaller changes in population, with the north exhibiting greater changes. The northwest corner of the district lost more than 2,000 residents, while the north-central and northwest sectors posted strong, significant growth.¹¹

The change in the under-age-5 population gives some indication of what the future might hold in terms of school enrollments (Figure 11). On this measure, the district lost 407 youngsters between 2011 and

	2011 < age 5	2016 < age 5	Absolute Change	Percent Change
Phoenix #1 Total	4,170	3,763	(407)	-10%
Northwest Phoenix #1	1,901	1,299	(602)	-32%
North central Phoenix #1	184	279	95	52%
Northeast Phoenix #1	1,676	1,519	(157)	-9%
Southwest Phoenix #1	626	944	318	51%
South central Phoenix #1	289	299	10	3%
Southeast Phoenix #1	682	391	(291)	-43%

Figure 11: Under-age-5 population change, 2007-11 to 2012-2016
Source: American Community Survey 2007-11 and 2012-2016, five-year estimates

2016, accounting for a 10 percent drop. Once again, this change was not uniform across the district. The northwest sector showed nearly a one-third decline in the under-age-5 population, the southeast sector lost 43 percent and the southwest corner experienced an increase of more than 50 percent.

The sections of the district where the largest number of young children live (NW, NE and SE) are also those that showed the greatest decline in under-age-5 population. The highly populated southwest corner of the district is an exception to this pattern, showing a strong increase in the number of young children. The north-central region, which experienced strong overall population growth, also showed a large percentage increase in the number of children under age 5. However, this increase was to a very small initial population of young children, so the net increase for the area is just 95 children.

Downtown: 2012 to 2016

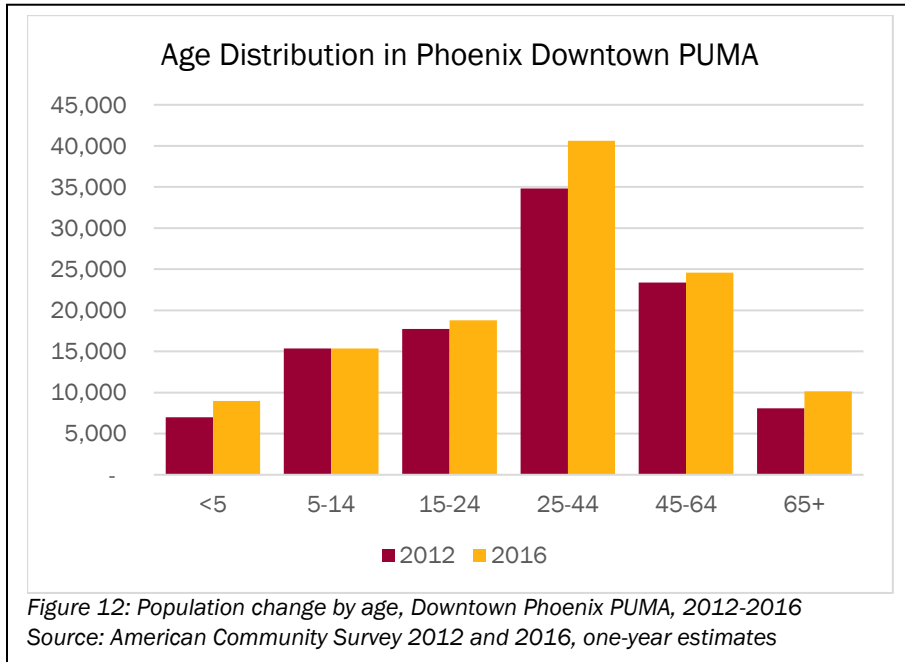
The total population of the Downtown PUMA grew by 11 percent from 2012 to 2016 – from 106,358 to 118,477. This outpaced the growth rate of Maricopa County, the fastest growing county in the nation.¹²

¹¹ For this analysis, the term “significant” will be used to describe statistical significance where $p < 0.1$.

¹² <https://www.census.gov/newsroom/press-releases/2017/cb17-44.html>

The state’s most-populous county grew by 8 percent over the same period.

Breaking down population changes by age group reveals several categories of changes that may impact the district in coming years (Figure 12). The 5- to 14-year-olds bracket essentially was unchanged between 2012 and 2016. This corresponds with the NCES numbers showing flat enrollment over that period. However, there has been growth in the under-age-5 group, indicating that the district might see an uptick in enrollments in the next few years.

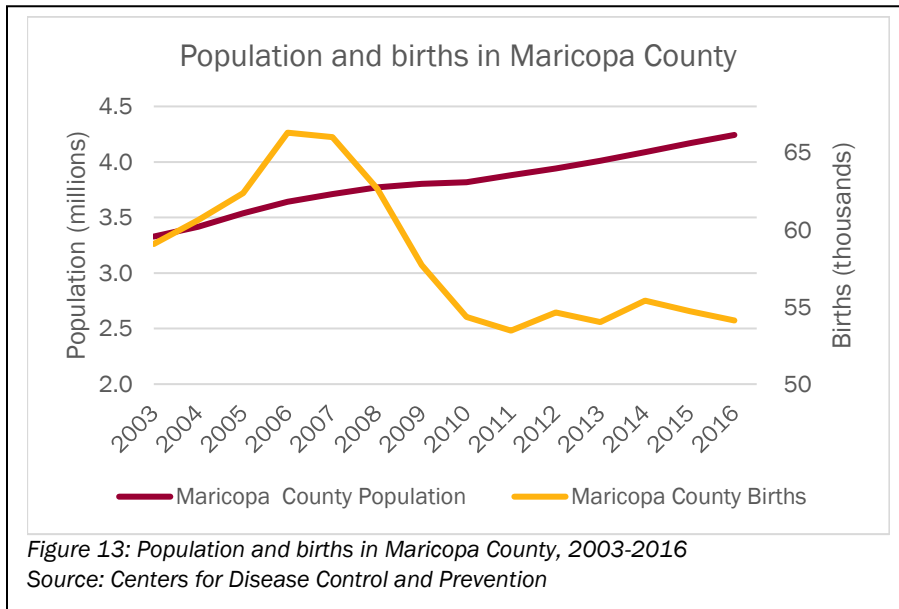


The increasing numbers of older residents reflect the nationwide trend as the baby boom generation ages. Also noteworthy is the strong growth of the 25- to 44-year-old population.

Growth has been especially strong in the lower end (age 25 to 34) of this demographic, likely reflecting the influx of graduate students, faculty and staff to the ASU Downtown Phoenix Campus.

Births

Although the population in both the county and the district has been increasing, both the birth rate and the absolute number of births have been declining. Comparing the 5-year census estimates for 2007-11 and 2012-16 the number of births in Maricopa County declined by 13 percent from 59,444 to 51,583, even as the population increased by 8 percent. Within Phoenix #1, the number of births dropped from 786 to 659, a decline of 16 percent, as the population increased by four percent. Note that although these figures are from five-year estimates, they are essentially 5 year rolling averages of population and births, so over the 5 years from 2012 to 2016, Phoenix #1 saw somewhere around 3,295 births (659 x 5=3,295).



The trend of increasing population with decreasing births has been seen in Maricopa County for some years (Figure 13). Since 2003, the population of Maricopa County has increased by 27 percent, from 3.3 million to 4.2 million. The number of children born annually in the county shows a much different trend. After peaking at over 66,000 births in 2006 and 2007, the birth rate has dropped to about 54,000 annually;

a decline of 18 percent.

Population growth in metropolitan Phoenix has traditionally been driven by in-migration of new residents rather than by the birth of new babies. As in the rest of the country, there was a drop in the birth rate in the wake of the Great Recession. As the economy has stabilized, the birth rate has risen somewhat, but not yet to levels seen before the recession. The lower number of babies being born in the district appears to be affected enrollment in the district already. Although it is difficult to predict fertility changes on small scales such as the district, it appears that the decline in new babies has at least slowed, if not reversed itself.

Households with children under age 18

Knowing how the number of households with children under age 18 has changed over time gives insight into possible trends in school attendance.

Across the District: 2007-11 to 2012-16

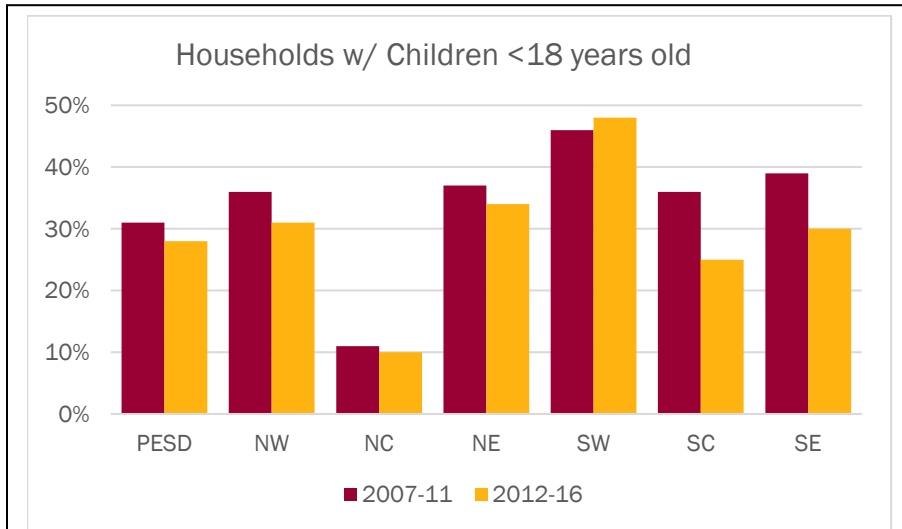


Figure 14: Percentage of household with children under age 18. Source: American Community Survey 2007-11 and 2012-2016, five-year estimates

The district had a decrease of 314 households with at least one child across the 2007-11 and 2012-16 datasets, from 6,116 to 5,802. The percentage of households with children present dropped from 31 percent to 28 percent in this period (Figure 14).

With the exception of the southwest region, all areas of the district showed a decline in the percentage of households with children over the two five-year periods.

The southwest region, which already had the highest percentage of households with children present with 46 percent in the 2007-11 time period, saw an increase to 48 percent in 2012-16, going from 1,089 families with children to 1,247.

Downtown: 2012 to 2016

The percentage of households with children under age 18 present remained the same from 2012 to 2016, at 29 percent. This is significantly lower than the countywide rate of households with children at 33 percent.

Population enrolled in school

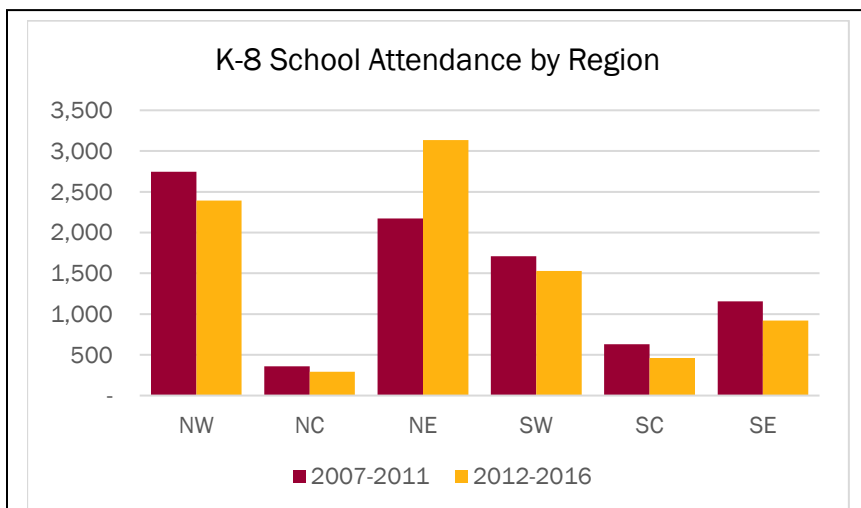


Figure 15: Population enrolled in K-8 by Phoenix #1 regions Source: American Community Survey 2007-11 and 2012-16, five-year estimates

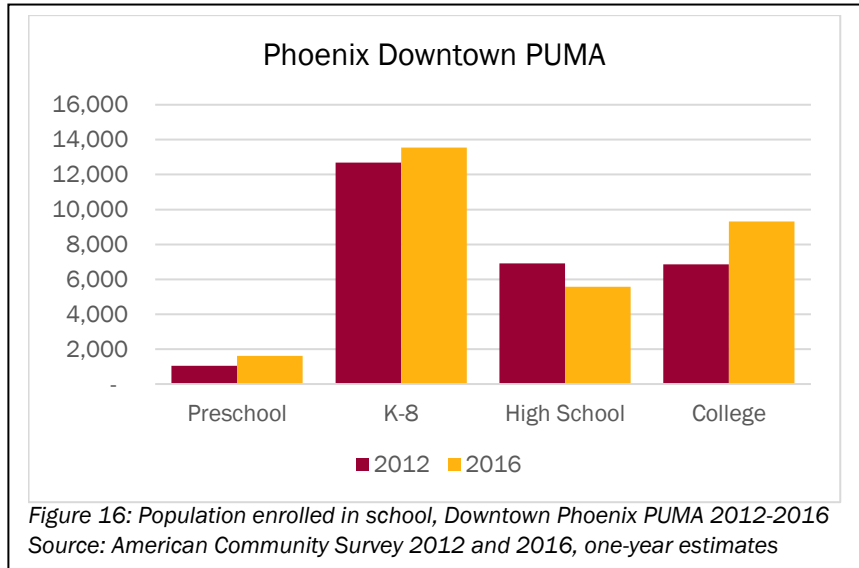
The Census Bureau provides information on school enrollment not only for K-12 education, but also college attendance.

Across the District: 2007-11 to 2012-16

Five of the six regions of Phoenix #1 showed declines in the number of K-8 school attendees over the 2007-11 to 2012-16 time frames (Figure 15). These declines were offset by strong attendance growth in the northeast sector, though not enough of a statistically

significant gain to change the overall K-8 attendance in the district, which increased from 7,028 to 7,186.

Downtown: 2012 to 2016



Over the last five years preschool, K-8 and college enrollments have risen for people living in the downtown area, but high school enrollments have dropped slightly (Figure 16).

College enrollments are up strongly, likely due to an influx of students attending ASU's Downtown Phoenix Campus.

The modest rise seen in preschool enrollments may presage a bump in K-8 enrollments in the near

future, if those families remain in the downtown area.

Phoenix #1 capture of potential students

Census figures for elementary school enrollment in the district confirm the NCES numbers that show flat enrollment. However, the census does not ask *where* students attend school. In an open-enrollment

	Average NCES Enrollment for Phoenix #1	Census K-8 Enrollment for children living in Phoenix #1
2007-11	6,899	7,028
2012-16	6,889	7,186

Figure 17: Comparison of NCES and Census K-8 enrollment
Source: American Community Survey 2007-11 and 2012-2016, five-year estimates, National Center for Education Statistics

environment it is certain that some children living within the Phoenix #1 boundaries attend other schools and that some students from elsewhere go to school in Phoenix #1.

Comparing the NCES enrollment figures for the district to the Census estimates of the number of children enrolled in K-8 education gives insight into how effectively Phoenix #1 is capturing the student population within its borders (Figure 17).

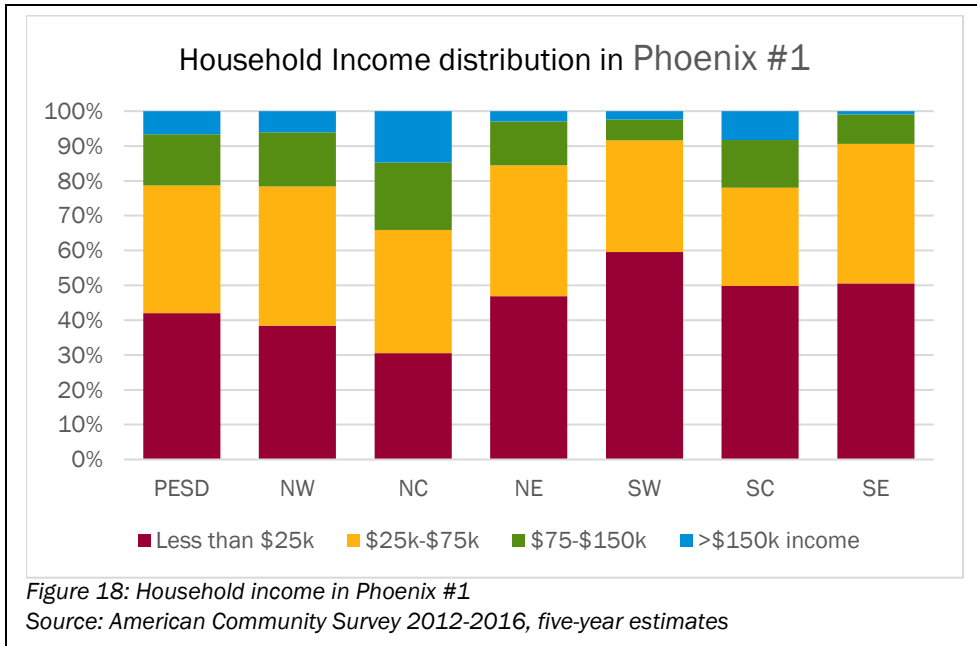
Economic Change

Income

Income distribution and median household income are the most basic indicators of economic well-being.

Across the District: 2007-11 to 2012-16

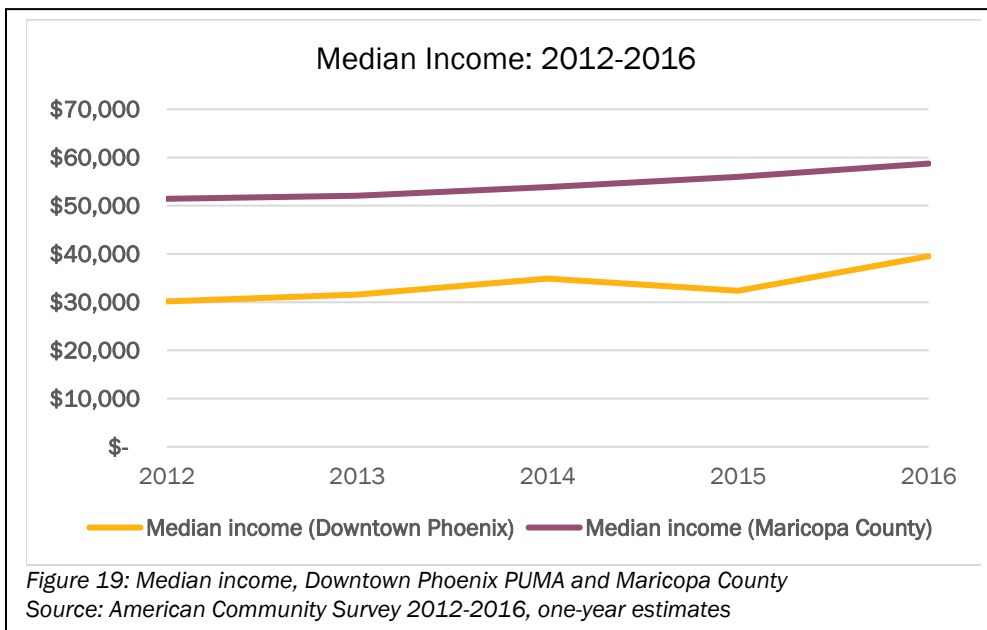
Median household income in Phoenix Elementary School District #1 over the 2012-2016 timeframe was \$26,422, less than half of the median household income for Maricopa County.



When income brackets are examined across the district, the relative wealth of the north-central region becomes apparent (Figure 18). This area of the district has a much larger portion of households earning in excess of \$150,000 annually, and a smaller percentage of households making under \$25,000.

Other notable aspects of income distribution are the high-income households in south-central, which are attributable to a few high-rise projects in downtown south of Van Buren Avenue and north of Jackson Street, as well as the higher percentage of low-income households in the southwest portion of the district.

Downtown: 2012 to 2016



The downtown Phoenix PUMA has a median income for 2016 (\$39,528) that is considerably lower than that of Maricopa County (\$58,737). However this gap has been diminishing since 2012, with the median income level of downtown rising faster than that of the county (Figure 19).

Families in poverty

Determining the rate of poverty among families offers insight into the number and type of services that an area might need to provide.

Across the District: 2007-11 to 2012-16

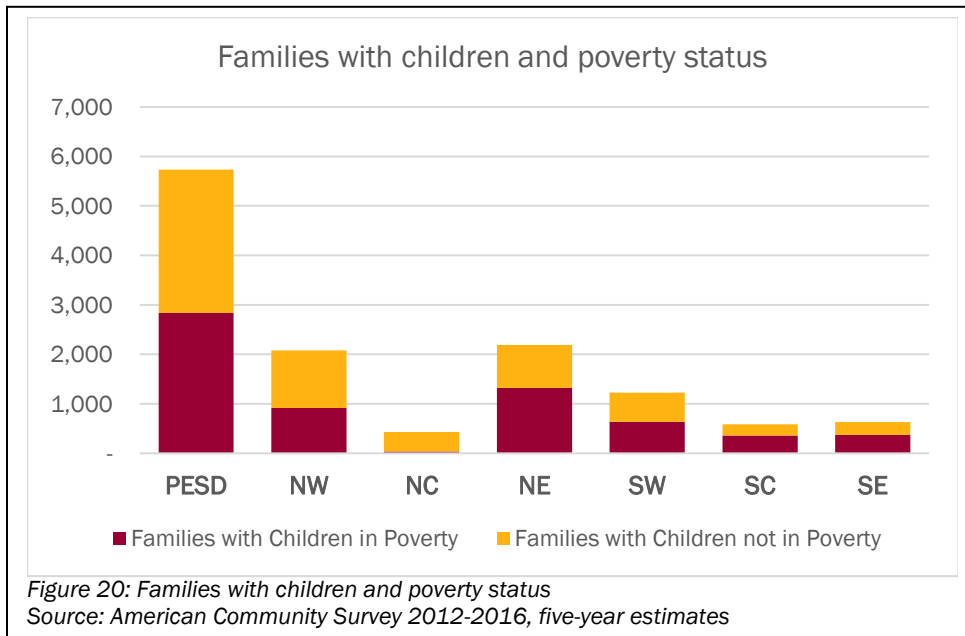


Figure 20: Families with children and poverty status
Source: American Community Survey 2012-2016, five-year estimates

About half of the families with children live in the northeast and northwest areas of the district. The north-central, south-central and southeast sections contribute relatively few families to the district total.

District-wide, half of the families with children had incomes below the federal poverty level across the 2012-16

timeframe (Figure 20). For 2016, the poverty level was defined as \$24,250 for a family of four. This contrasts with a county-wide poverty rate of 19 percent for families with children.

Poverty among families varies across Phoenix #1, from a high of 61 percent in the northeast and south-central areas to just 9 percent in the north-central part of the district. Note that the north-central area also has the lowest number of total families with children, but it also the area where the greatest growth is projected. To the degree that any families in this area have children in the future, they are less likely to be children of poverty.

Downtown: 2012 to 2016

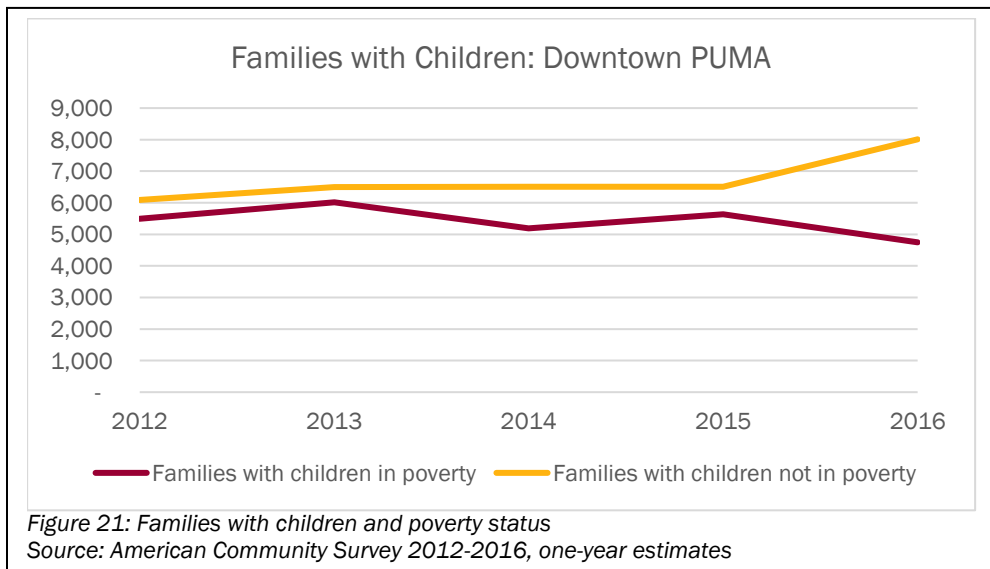
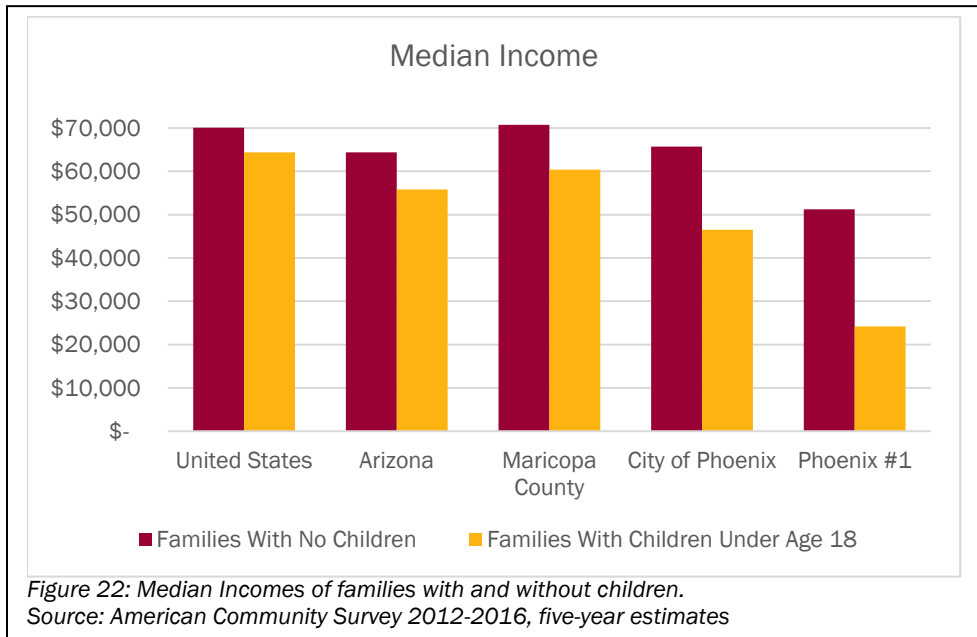


Figure 21: Families with children and poverty status
Source: American Community Survey 2012-2016, one-year estimates

When ACS one-year estimates are used to look at yearly changes in the Downtown Phoenix PUMA, it appears that the percentage of families with children in poverty is declining even as the total number of families has increased (Figure 21). Between 2012 and 2016,

the number of families with children increased by 1,178, or 10 percent. However, there was a drop of 743 in the number of families with children below the poverty line, which reduced the poverty rate from

47 percent in 2012 to 37 percent in 2016.



A striking aspect of family income in Phoenix #1 is the income differential between families with children and families with no children. Childless families generally have higher incomes than those with children, largely because it is more likely that both spouses will work full time. Families with children sacrifice some earning

potential so that one or both parents can spend time on childcare duties.

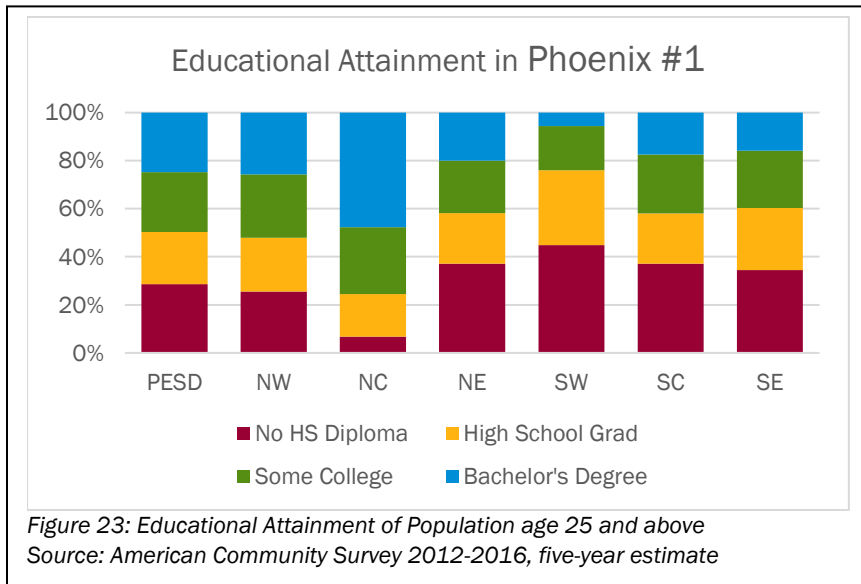
Nationally, median income for families with children is 8 percent less than childless families (Figure 22). Statewide, this differential is 13 percent. However the situation is much different in Phoenix #1, with a 53 percent income differential. Families with no children present have a median income of \$51,201, while those with children under age 18 have median income of \$24,171. In Phoenix #1, families with children have less than half the income of their childless counterparts. Note that the Federal Poverty Level for 2016 was \$20,160 for a family of three and \$24,300 for a family of four.¹³ From this data, it appears that about half of the families with children in the district are living below the poverty line.

Educational attainment

Educational attainment, especially the percentage of population age 25 and older, is a reliable indicator of the potential wealth of a region.

¹³ <https://aspe.hhs.gov/computations-2016-poverty-guidelines> Note that the Census

Across the District: 2007-11 to 2012-16

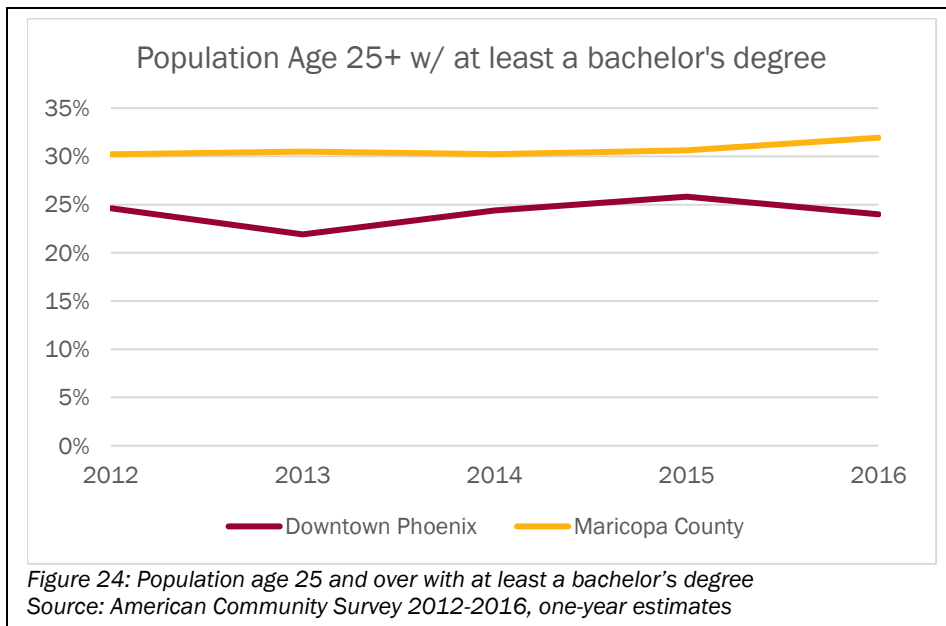


The north-central portion of the district stands in contrast to other areas of Phoenix #1 with a much higher percentage of its population holding at least a bachelor's degree (Figure 23). The "bachelor's or better" rate in north-central is 48 percent for age 25 and older, which is almost double the Phoenix #1 average of 25 percent and significantly higher than the county figure of 31 percent.

The southwest corner of the district has a significantly higher percentage of its over-

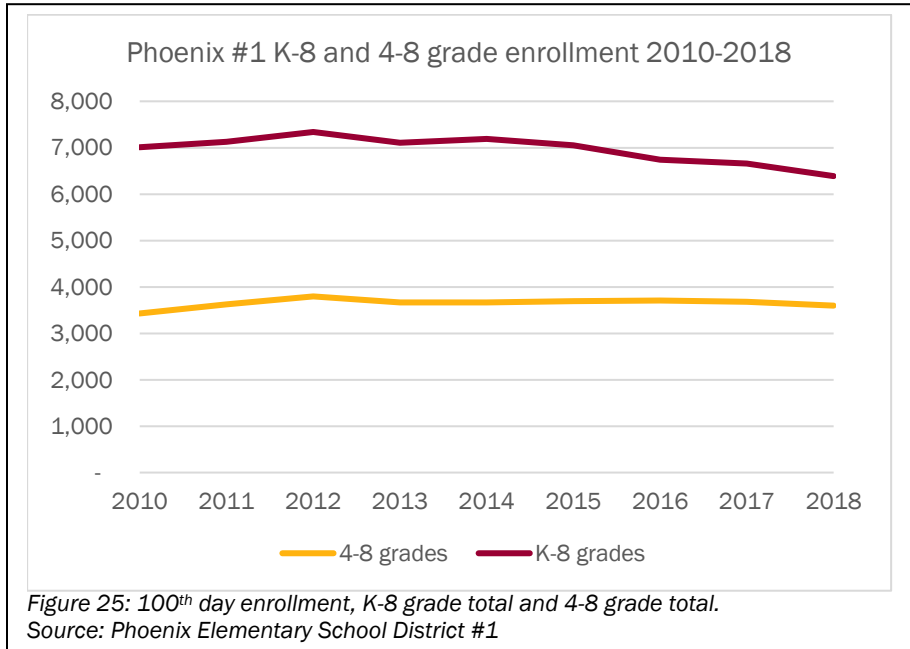
25 population that lacks a high school diploma. There is wide variance in educational attainment across the district. Children in Phoenix #1 schools are likely to live in regions with lower levels of educational attainment, while the high-attainment areas contribute relatively few students to the district.

Downtown: 2012 to 2016



Downtown Phoenix as a whole has a significantly lower bachelor's attainment rate (24 percent) than Maricopa County with 31 percent (Figure 24). As with the state and nation, the trend has been toward increasing levels of education, but the recent growth rate in downtown Phoenix has been slightly less than the county's growth in bachelor degrees.

District enrollment

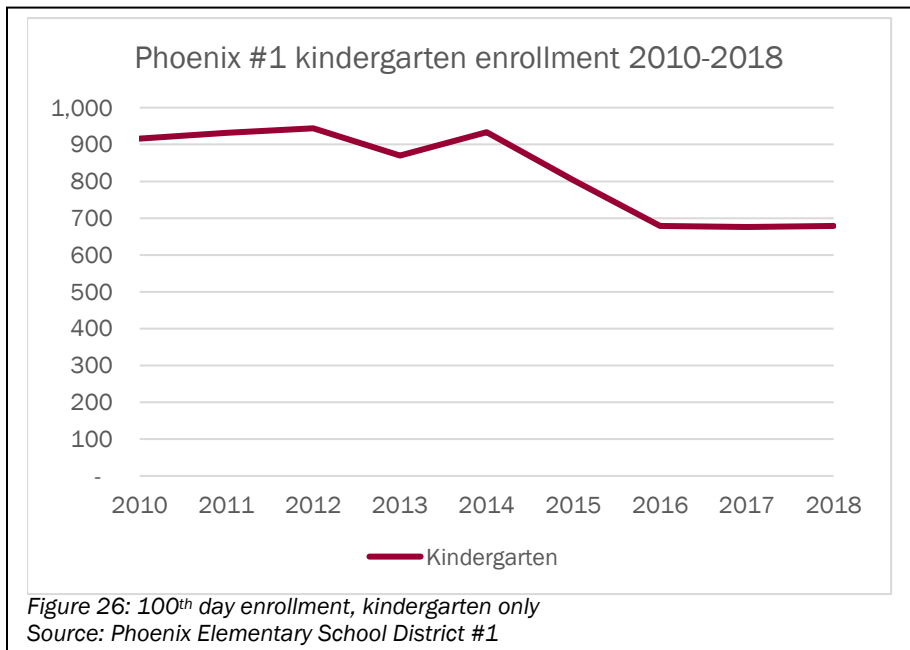


The most recent peak in enrollment in the district was in 1998, with 9,227 students. Since that time, total enrollment has declined by 31 percent to 6,388 in 2018.

There was a particularly dramatic one-year enrollment decline of 14 percent between 2009 and 2010, when the number of students dropped from 8,204 to 7,073. This decline was likely the result of the combined effects of the Great Recession and SB1070 causing families

to leave the district.

After stabilizing somewhat from 2011 to 2014, total K-8 enrollment began dropping again in 2015. However, the enrollment for grades 4-8 actually increased by 5 percent between 2010 and 2018 (Figure 25). This suggests that the enrollment decline does not come from families leaving the district, but from a lack of new students entering the lower grades.



While fourth- through eighth-grade enrollment increased by 167 students over the 2010-2018 time frame, there was a loss of 798 students in kindergarten through third grade.

This decline began in 2015 when kindergarten enrollment in the district dropped by 130 from the previous year. There was a similar drop the next year, followed by basically flat kindergarten numbers for 2017 and 2018. Even though kindergarten enrollment

has stabilized, at least temporarily, the sharp drop seen between 2014 and 2016 will continue to be felt

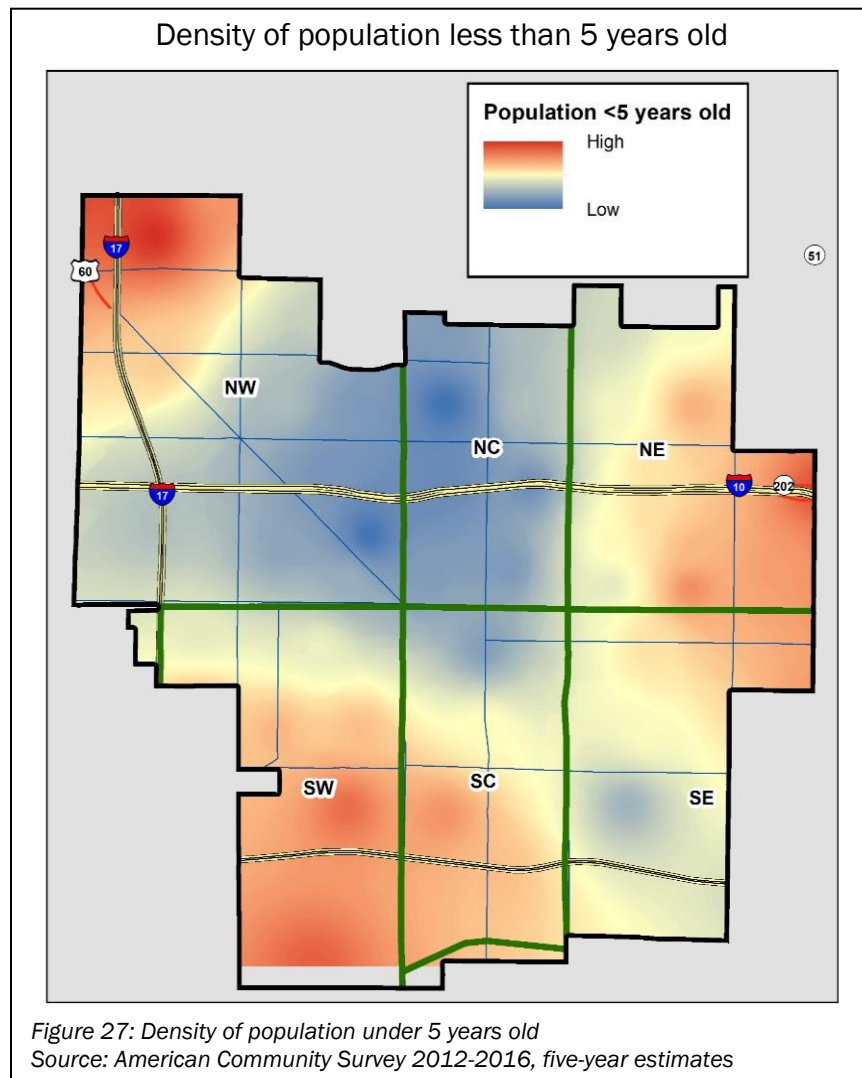
for years as the effects of this loss ripple through the system. First-, second- and now third-grade numbers have declined in successive years, as a result of the lowered kindergarten numbers that began appearing in 2015.

It should be noted that the decline in kindergarten enrollment seen between 2014 and 2016 is not unique to Phoenix #1. Similar albeit much smaller declines were seen across all central Phoenix schools, across Maricopa County and statewide. The number of kindergarten students in the Arizona and in Maricopa County declined by 6 percent between 2014 and 2016, while Phoenix #1 saw a 25 percent decrease.

The decrease in kindergarten enrollment likely has its roots in the drop in new births in the wake of the Great Recession (Figure 13) coupled with a smaller cohort of potential new parents in the millennial generation, and lowered migration of new families to the district.

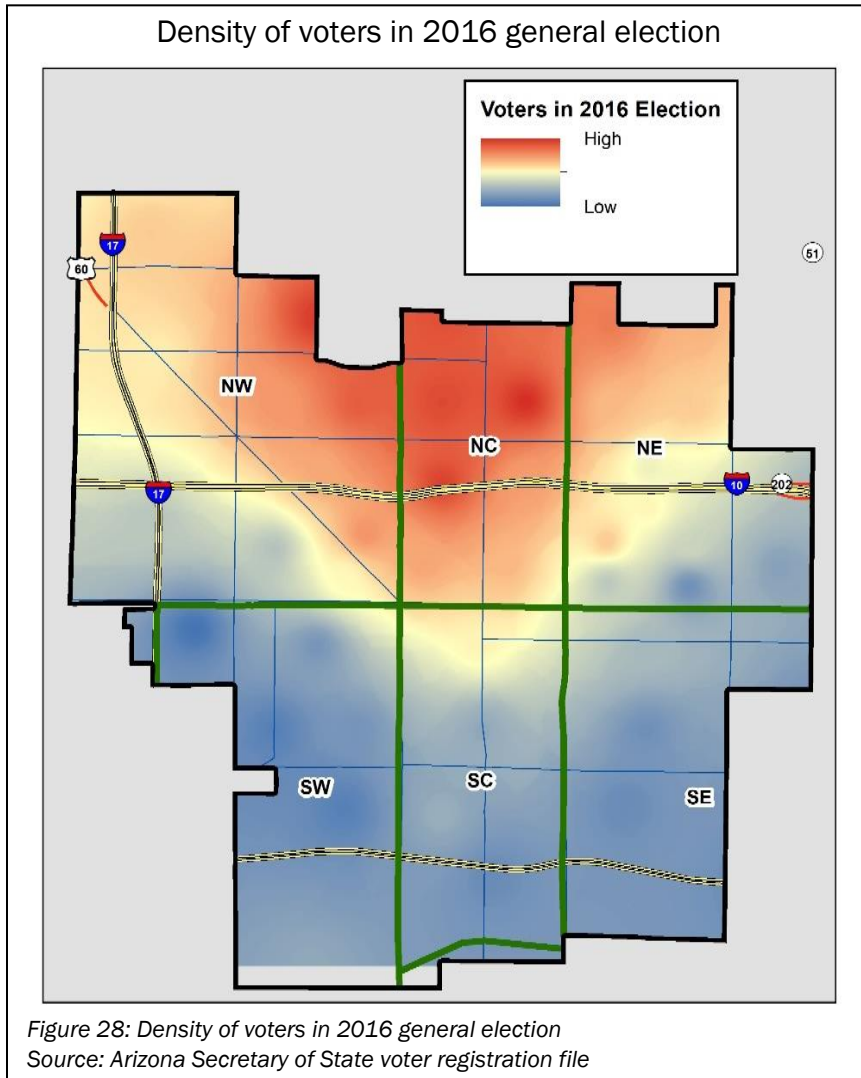
Distribution of voters and potential students

Interesting patterns emerge when heat maps are created of the density of people under 5 years old in the district and the density of voters (18 and over) in the 2016 general election.



The presence of children under age 5 represents the potential for new students in the district. Figure 27 shows red areas where the density of this population is highest, and also blue areas that have relatively fewer young children.

These youngsters are concentrated in the northwest and southwest corners of the district, with a smaller cluster along the eastern edge.



The density of voters, on the other hand, shows where the political will is concentrated in the district. Voters determine the direction the district will take through their support of bonds and overrides, ballot propositions and seats on the district governing board.

Voters in Phoenix #1 are clustered in the north-central region of the district (Figure 28). This comports with the general trend for higher voting rates among populations with higher incomes and educational attainment levels.

Note that Figure 27 and Figure 28 are nearly opposites of each other. The areas where the district can expect the most future student growth do not coincide with the area where voters who will make large-scale decisions about the district reside. This may or may not be a problem, but

the disconnect between the location of voters and students is something that should be taken into consideration as Phoenix #1 plans for its future.

Analysis & Conclusion

Phoenix Elementary School District #1 is facing major changes to the residential character of downtown Phoenix. The influx of new housing and the economic revitalization of the downtown core represent the greatest change to downtown since the commercial and residential exodus to other areas in the Valley more than 50 years ago.

It is apparent from the data that the district should not be thought of as a monolithic entity. There are marked differences across the district in terms of demographics, income and other factors, as noted.

The residential transformation of downtown Phoenix is still in its early stages, with thousands of new housing units coming to the market over the next few years. The increased population for downtown will spur a wave of retail and commercial development as the area becomes more attractive as a place to live for urban denizens.

It is still too early in this revival, however, to make definitive predictions about what downtown Phoenix will look like exactly when the current wave of building projects is complete. Publicly available data sources are not current enough to capture the effects of the recent building boom. The full picture will become much clearer as more data from the census and other sources becomes available in coming years.

Short-term outlook

Some things are clear from what is now known about changes to downtown, and indications are that these trends will continue, at least for the next few years:

- Population growth in Phoenix #1 has been concentrated between 7th Avenue and 7th Street, in the center of the district, generally along the light rail route.
- New housing projects, both those currently under construction and those being proposed, are similarly concentrated in downtown and up Central Avenue along the rail line.
- The great majority, up to 90 percent, of this new housing are rental units in structures of 20 or more units.
- The new construction in downtown Phoenix is largely being marketed to young, childless professionals who want to experience an urban lifestyle.
- Buyers in the condominium units are often older and wealthier couples with grown children.
- In the short term, the increase in housing units and overall population in downtown will not mean a large influx of new students into the district.
- Although there has been a dramatic decrease in the number of kindergartners entering district schools over the past few years, the growth of the population under age 5 seen in the larger downtown area since 2012 may indicate that a small increase in enrollments is near at hand.
- The relatively stable supply of students for Phoenix #1 will likely continue to come from the eastern and western edges of the district, with a small portion of student growth from the developing central corridor.

Long-term outlook

Long-term predictions about the future are, of course, even less certain. Unpredictable outside factors, such as changes to the national and global economy, become more important as time goes on. Although these factors are generally beyond anyone's direct control, an awareness of some larger trends may help guide district decisions:

- It is possible that if downtown Phoenix is seen as a viable place to raise a family, a portion of the recent young arrivals to the area will remain, have children, and eventually enroll their children in district schools.
- If the current boom in higher education and tech sector employment continues to mature and spread, other employers may be attracted to downtown, broadening the employment base and increasing the residential appeal of the area.
- There is a chance that developers have overestimated the demand for apartments targeted at a relatively affluent childless population. If this happens, some projects may stand partially or entirely vacant for a period until they are repurposed to appeal to different market segment: families.
- The nationwide demographic trend of an aging population will continue. There always will be children living in the district, but the general pattern of fewer children and an increased elderly population is likely.

As Phoenix Elementary School District #1 looks to the future, its minority-majority student base will continue to reside in the lower-income neighborhoods around the edges of the district. There will be an increase in relatively well-off residents in the downtown area and along the light rail route. Many of these new residents, however, are young and not ready to start families. When the time comes for them to have children, perhaps they may be enticed to stay in downtown and not move to the suburbs – if they can be assured that there are good educational options available.

Going forward, Phoenix #1 must balance the needs and desires of the families in neighborhoods that have been home to most of the district's students with the needs of potential families that may come to live in the central core in coming years. Additionally, there should be some consideration of how to engage the many residents who do not have children enrolled in school but are still taxpayers and voters in the district. Many of the new arrivals to the district fall into the latter category. They will need some awareness of issues facing the district and the importance of a well-functioning school system to the overall health of the community that will be downtown Phoenix.

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