

**CITY OF PHOENIX, OREGON**

**ORDINANCE NO. 987**

**AN ORDINANCE OF THE CITY OF PHOENIX  
REPEALING THE EXISTING HOUSING ELEMENT AND ADOPTING A  
NEW HOUSING ELEMENT OF ITS COMPREHENSIVE PLAN**

**WHEREAS**, Oregon law requires that state, regional and local governments adopt and periodically update coordinated Comprehensive Plans; and

**WHEREAS**, Oregon Statewide Planning Goal 10, Housing, requires all local governments to “provide for the housing needs of citizens of the state,” and specifically to “encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density” through a specific element within their Comprehensive Plans; and

**WHEREAS**, since the last update to the City’s Goal 10 element in 2000, the City has experienced growth that necessitates a re-evaluation of the City’s needs, services and facilities; and

**WHEREAS**, anticipated future expansion of the City’s Urban Growth Boundary and subsequent expansion of the City limits will require the City to plan for additional residential development consistent with local and regional need; and

**WHEREAS**, the City of Phoenix, with the assistance of EcoNorthwest, conducted extensive research in the development of a Buildable Lands Inventory, Housing Needs Analysis and ultimately the Housing Element over the course of 2015 and 2016; and

**WHEREAS**, adoption of the Housing Element is consistent with the requirements of Statewide Planning Goal 10 – Housing; and

**WHEREAS**, preparation of the Housing Element included extensive research and analysis to inventory current market trends and conditions, determine the local and regional need for housing, forecast future development, and identify goals to meet future housing needs; and

**WHEREAS**, City staff, with the assistance of the Citizens Advisory Committee, refined the initial draft of the Housing Element and supporting materials during 2017; and

**WHEREAS**, on October 9, 2017, the Planning Commission conducted a duly noticed public hearing on the Housing Element, affording all citizens an opportunity to be heard on the subject; and

**WHEREAS**, on October 23, 2017, the Planning Commission conducted a second public hearing to extend the time for public comment and deliberation; and

**WHEREAS**, following receipt of public testimony at the October 9 and 23, 2017 public hearings, the Planning Commission deliberated and forwarded a unanimous recommendation of approval to the City Council; and

**WHEREAS**, the City of Phoenix is a partner to the Regional Problem Solving (RPS) effort and has a responsibility to meet certain regional needs, including but not limited to adoption of measures to accommodate the need for “affordable housing” and a target housing density.

**WHEREAS**, in the near future the RPS Regional Housing Strategy will be finalized, which the City must adopt.

**WHEREAS**, adoption of the Housing Element and the Regional Housing Strategy will assist the City in making complementary code updates to ensure that the City will meet its responsibilities within the existing Urban Growth Boundary (UGB).

**WHEREAS**, adoption of future code amendments that are consistent with the Housing Element and the RHS will provide proof that the City has a menu of efficiency measures in place, which will bolster efforts to expand the UGB to include PH-5 and PH-10, and rezone those areas for development.

**WHEREAS**, the City Council has considered the Planning Commission’s recommendation, the staff reports in this matter, and testimony and evidence of interested parties, and has evaluated the draft Housing Element against Statewide Goals, state, county, and regional requirements, the Comprehensive Plan, and other applicable standards;

**NOW, THEREFORE, THE CITY OF PHOENIX ORDAINS AS FOLLOWS:**

Section 1. Findings. The City Council hereby adopts as findings and conclusions the foregoing recitals and the conclusionary findings in this matter attached hereto as Exhibit 1 and adopted as if set forth fully herein.

Section 2. Order. The City Council hereby repeals the existing (year 2000) Housing Element of the Comprehensive Plan and adopts the Housing Element and all appendices attached as Exhibit 2 incorporated as set forth fully herein.

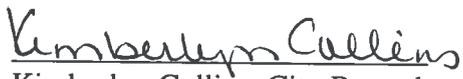
Section 4. Staff Directive. To reflect adoption of the Housing Element, Staff is directed to make conforming changes to the Comprehensive Plan necessary to incorporate the amendments adopted herein.

**PASSED AND ADOPTED** by the City Council and signed by me in authentication of thereof on this 20<sup>th</sup> day of November, 2017.

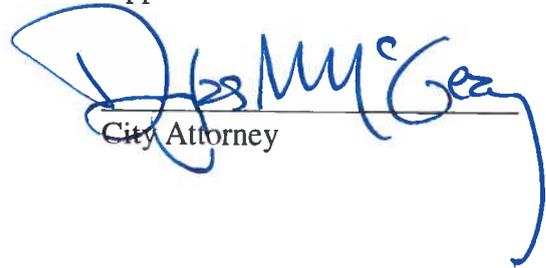


Chris Luz, Mayor

ATTEST:

  
Kimberlyn Collins, City Recorder

Approved as to form:

  
City Attorney



# Housing in Phoenix in the 2030s

## THE VISION

In 2037, people with diverse backgrounds, ages, physical abilities and life circumstances will need housing in the City of Phoenix. A range of housing types will be available to balance the need for owner-occupied and rental housing. Homes will be designed to meet the specific needs of individuals and families of varying ages and physical abilities. Most important, we will strive to ensure that our housing mix is consistent with the financial needs and capacity of our residents.

Our neighborhoods will consist of individuals and families, children and seniors, people of varying physical abilities, some with greater financial means and some with less. We want all of them to experience a high quality of life. Our residential neighborhoods will be places where neighbors know and help one another. They will be places that people remember fondly throughout their lives. They will be places where people can comfortably walk, run or bike for transportation or just for leisure. They will be places where parents know their children can safely walk or bike to school and to visit friends.

We recognize that the City is not a developer, does not control the privately held land within its jurisdiction, and cannot require any person or entity to (re)develop land. We also recognize the fact that we are building a community whose needs and desires must be reflected in and reinforced by its adopted plans and policies if our vision is to succeed.



# GOAL 10: HOUSING

OAR 660-015-0000(10)

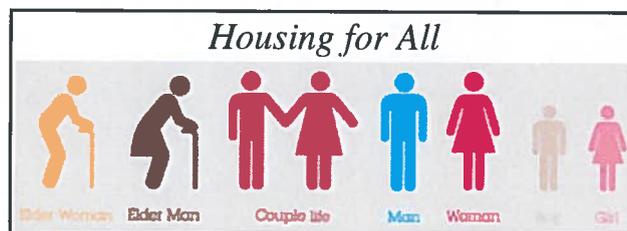
To provide for the housing needs of citizens of the state.

Oregon Statewide Planning Goal 10 requires cities and counties to “encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density.” Goal 10 and the related Needed Housing Statute require Oregon cities to maintain adequate supplies of lands planned and zoned to meet their identified housing needs.

Goal 10 and the associated implementing statutes require the City to adopt and incorporate two important documents into the Comprehensive Plan. The first document is a Buildable Lands Inventory (BLI) that catalogues the development status (developed, underdeveloped, vacant, etc.) and capacity (housing units) that can be accommodated on lands within the UGB. The City’s 2015 BLI for residential lands is adopted and incorporated as Appendix 2 of the Comprehensive Plan. The second document is a Housing Needs Analysis (HNA) that includes an analysis of national, state, and local demographic and economic trends, and recommendations for a mix and density of needed housing types. The City’s January 2017 HNA is adopted and incorporated as Appendix 3 of the Comprehensive Plan. The HNA documents historical housing and demographic trends, the projection of population and housing growth, and an analysis of housing affordability.<sup>1</sup> Based on this analysis, the HNA presents an estimate of needed housing density and mix for growth to 2037.

The BLI and the HNA provide the factual base to support the housing goals and policies in this chapter of the Comprehensive Plan. A major objective of the Comprehensive Plan is to establish residential areas that are affordable, safe, convenient, healthy, and attractive places to live, and which will provide a maximum range of housing choices for the people in Phoenix. The City of Phoenix will face a variety of issues over the coming years in meeting these needs, including:

- Aging population
- Changes in household makeup
- Incomes that are steady or declining relative to increasing housing prices
- Identified UGB expansion areas are not adequately served by utilities



## RESIDENTIAL DEVELOPMENT AND NEIGHBORHOODS

Phoenix, like most cities, has multiple residential neighborhoods. Phoenix has one natural barrier (Bear Creek) and many man-made barriers (Interstate 5, Highway 99, irrigation canals and a railroad) that effectively cut neighborhoods off from one another. In addition, many of the manufactured home and trailer parks in Phoenix have only one access point. All of these barriers contribute to difficult or even impossible connections between and among various areas of the City.

The City has three primary residential Comprehensive Plan designations, and two additional secondary designations. The City has three implementing zones for these designations. The City relies on lot size rather than density for residential development, which does not provide certainty to achieve higher intensity development in lands zoned for medium and high density use.

In addition to the residential zones, mixed use/residential development is permitted and is anticipated to occur in the City's C-C City Center zone. Stand-alone residential development is prohibited; any new projects must be part of a vertical or horizontal Mixed Use development that includes both residential and commercial uses. There are no minimum or maximum density standards for residential development within the City's C-C City Center zone.

Plan Designation	Characteristics	Implementing Zone	Lot Size	
			in square feet	
			Min.	Max.
Low Density Residential	SFR	R-1 Low Density Residential	6,000	8,000
Medium Density Residential	Duplex, MFR	R-2 Medium Density Residential	4,350	8,000
High Density Residential	Duplex, MFR	R-3 High Density Residential	10,000	None
Residential Employment	SF-A, Duplex	R-2 Medium Density Residential	4,350	8,000
Hillside Residential	Large lot SFR	R-1 with HR Overlay		

The City's Plan designations and zones provide for variety and choice in housing types, lot sizes, and locations to serve existing and future housing needs. Additional variety and flexibility may be allowed if the City were to consider moving to density-based zoning standards, which would make it easier to entertain proposals for variability in lot size, structure size/type and shared/common space not just between but within the individual zones.

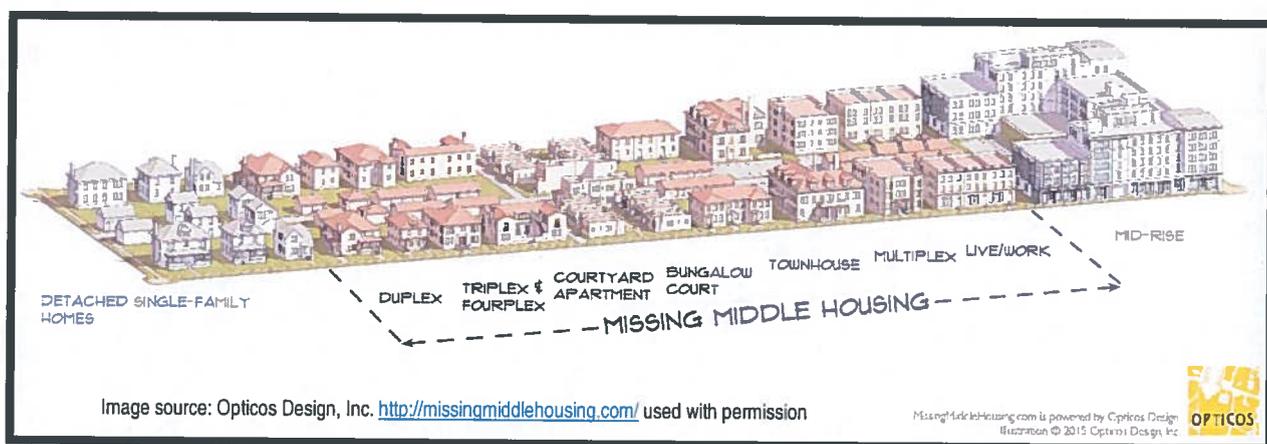
Because the City does not rely on minimum or maximum density standards, there is no actual minimum or maximum density in the R-3 High Density zone. A developer need only plat a lot with a minimum of 10,000 square feet, but no maximum lot size. A three acre lot could theoretically be in full conformance if a single duplex were constructed. The City must update its standards, or provide a minimum density standard, if it is to ensure that higher density housing will be constructed within the R-3 zone. Adoption of minimum and maximum density standards in the R-1 and R-2 zones may be warranted as well, for the reasons identified above.

# GOALS

The intent of this Element of the Comprehensive Plan is to provide and maintain sufficient residential land to accommodate needed housing units under Statewide Planning Goal 10 (Housing).

Simple compliance with Goal 10 can be accomplished without meeting any local desires for building community and fostering quality of life. The following issues set the context for the policies in this chapter. The citizens and elected officials of Phoenix desire to ensure that new residential development within Phoenix and its expanded urban growth boundary:

- Offers a range of housing options that is both desirable and affordable to our local and regional population, especially within what has been defined as the “Missing Middle.”
- Allows and encourages people in all stages of life, income, ethnicity and physical ability to become members of this community and stay as long as they like.
- Maintains and enhances pedestrian connections within, between and among neighborhoods
- Does not come at the expense of existing development.
- Does not result in unsustainable fiscal burdens to construct and maintain public infrastructure for existing and future residents.



Missing Middle is a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living.

“Well-designed ‘Missing Middle’ buildings unify the walkable streetscape as they greatly diversify the choices available for households of different age, size, and income. Smaller households tend to eat out more, helping our neighborhood attract wonderful restaurants. Diverse households keep diverse hours meaning we have more people out walking our streets at more varied hours—keeping them safer.” — Ellen Dunham-Jones, professor at the Georgia Institute of Technology and co-author of *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs*

# GOAL 1

## *Increase efficiency of Land use*

Ensure the City accommodates its share of regional housing needs considering housing types, densities, and prices. Manage residential lands efficiently to meet current and future housing development within the UGB, while improving quality of life throughout residential neighborhoods in Phoenix.

### **Recommended actions**

1. Ensure that the Comprehensive Plan and implementing ordinances keep the City on target to meet the minimum density established through Regional Problem Solving and the Regional Housing Strategy of 6.6 dwelling units per gross acre (8 units per net acre) for the 2010-2035 period and 7.6 dwelling units per gross acre or the 2036-2060 period.
2. Review the Housing Element (in particular the allocation of housing by cost, type and density) on a periodic basis, generally every 5-10 years.
3. Update and revise, as necessary, the housing need projection.
4. Update the Buildable Lands Inventory to coincide with review and update of the housing need projection and expansion of the UGB.
5. Initiate comprehensive plan amendments following the review of the housing need projection and Buildable Lands Inventory to ensure an adequate supply of residential land considering all housing types and densities.
6. Expand the urban growth boundary to provide land for additional residential development.
7. Assume people will walk within one mile of home and work.
8. Make sure new residential development within one mile of a transit corridor has direct, safe and comfortable pedestrian and bicycle connections
9. Identify land to rezone to allow additional moderate- and high-density single-family and multifamily development.
10. Create opportunities for cottage housing, tiny houses, cohousing, live/work and other developments that can accommodate residents as income, physical ability and family size change over time.
11. Evaluate need for right of way and return excess right of way to abutting property owners.
12. Encourage construction of new housing that accommodates low impact work-from-home options.
13. Encourage development and redevelopment of underutilized infill sites.

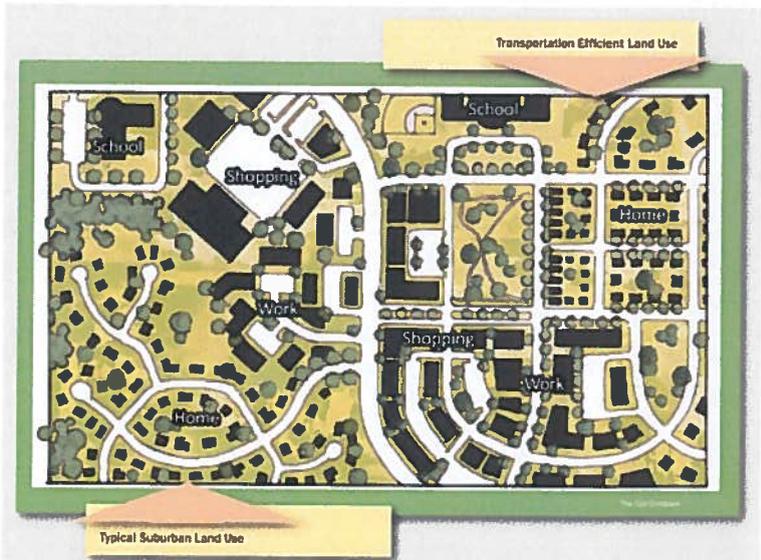


Image source: Virginia Department of Transportation  
[http://www.vdot.virginia.gov/info/transportation\\_efficient\\_land\\_use\\_and\\_design\\_guide.asp](http://www.vdot.virginia.gov/info/transportation_efficient_land_use_and_design_guide.asp)

## GOAL 2

### *Encourage socio-economically diverse neighborhoods*

The City shall encourage the development and long-term maintenance of safe, sanitary, and affordable housing for all citizens, regardless of race, religion, creed, color, marital or family status, mental or physical disability, national origin, age, sex, or sexual orientation in conformance with the Fair Housing Act of 1988 and the Americans with Disabilities Act.

The City will encourage the development of diverse housing to appeal to a range of income levels, ethnicities and generations within our neighborhoods. New developments will be encouraged to address the “Missing Middle:” housing that is not subsidized but is affordable to those who may not want or be able to purchase traditional single family detached housing.

#### **Recommended Actions**

1. The City shall actively promote diversity within the City and its neighborhoods.
2. Efforts within the City’s neighborhoods to create a sense of identity, a structure, and a wholeness of their own shall be supported and honored.
3. Revise development regulations to encourage different types of housing within development projects and districts.
4. Ensure provision of parks and other public amenities to all areas of the city.
5. Encourage developers to build with senior/aging in place design needs in mind.
6. Ensure that the City’s housing stock meets the needs of residents through participation in targeted housing assistance programs (likely to be limited to endorsement of initiatives undertaken by other public and private agencies).
7. City-owned land planned and developed for residential use should include a spectrum of housing costs (inclusionary housing).
8. Actively promote development of housing types and densities which are conducive to home ownership.

#### ***Vertical Mixed Use Housing***



Image courtesy of Architecture Design Collaborative <https://adcollaborative.com/harbor/>

## GOAL 3

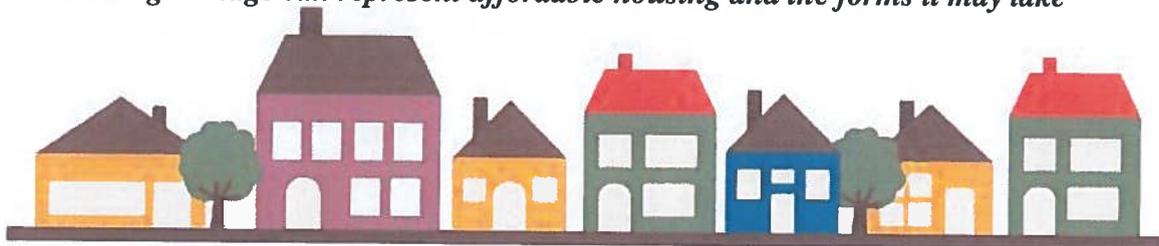
### *Reduce barriers to development of affordable housing*

The City will encourage development of housing affordable for low-income and moderate-income households to provide housing options to all residents of Phoenix, including providing opportunities for employees at local businesses to live in the city.

#### **Recommended Actions**

1. Remember that “Affordable Housing” does not necessarily mean subsidized housing.
2. Ensure that the City and private developers make fiscally responsible infrastructure investments for new development.
3. Identify publicly-owned properties that could be used for affordable housing and partner with the Jackson County Housing Authority and other entities to develop affordable housing.
4. Work with a nonprofit in development of a community land trust to support development of affordable owner-occupied housing.
5. Identify sources of funding to support subsidized affordable housing development, in particular in mixed income neighborhoods.
6. Revise PUD and subdivision standards to reduce potential site development costs and ensure high quality construction that meets the needs of future occupants.
7. Maximize ratio of developed land to infrastructure construction, reducing the end cost to users.
8. Evaluate alternative density measures for medium and high density to consider the number of bedrooms rather than number of units to encourage studio and one bedroom units.
9. Explore developer constraints and incentives to the construction of affordable housing.
10. Evaluate innovative affordable housing programs, such as self-help housing, cooperative housing, co-housing, density bonuses and land banking, etc., and consider support when consistent with City policy and objectives.
11. Encourage energy efficiency and conservation measures such as solar and other emerging technologies.

*No single image can represent affordable housing and the forms it may take*



## GOAL 4

*Ensure the Land Development Code accommodates needed housing in all residential plan designations*

The City will take actions to expand opportunities to create additional housing within the current city limits and urban growth boundary and to expand the urban growth boundary to accommodate the demand for quality residential development. The City shall update the Land Development Code to allow developers more flexibility in their efforts to comply with both the letter and intent of this Element.

### Recommended Actions

1. Ensure that adopted plans and policies are consistent with State requirements for Needed Housing.
2. The City's approval standards, special conditions, and procedures regulating development of needed housing shall be clear and objective, and shall not have the effect of discouraging needed housing through unreasonable cost or delay.
3. Move away from minimum/maximum lot size standards to an equivalent density standard, to add flexibility to future development projects and lessen the likelihood of "cookie-cutter" subdivisions and PUDs.
4. Clarify allowances for development of various housing types in residential zones.
5. Allow more flexibility in lot sizes and setbacks, including zero-lot-line residential projects.
6. Consider the use of incentives to promote innovation in the design, layout and construction of residential developments.
7. Ensure that any new residential development guidelines in UGB expansion areas complement and reinforce the other strategies identified above.

### *Cottage Housing*



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# City of Phoenix

## Housing Needs Analysis

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October 2017

Prepared for:  
City of Phoenix

***Final* REPORT**

**ECONorthwest**  
ECONOMICS • FINANCE • PLANNING

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# Summary

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This report presents a housing needs analysis consistent with requirements of Statewide Planning Goal 10 and OAR 660-008. The methods used for this study generally follow the *Planning for Residential Growth* guidebook, published by the Oregon Transportation and Growth Management Program (1996).

The primary goals of the housing needs analysis were to (1) project the amount of land needed to accommodate the future housing needs of all types within the Phoenix Urban Growth Boundary (UGB), (2) evaluate the existing residential land supply within the Phoenix UGB to determine if it is adequate to meet that need, (3) to fulfill state planning requirements for a twenty-year supply of residential land, and (4) identify policy and programmatic options for the City to meet identified housing needs.

## What are the key housing needs in Phoenix?

Following are several key issues identified in the housing needs analysis:

- **Phoenix's housing market is strongly impacted by the housing market in the Rogue Valley.** Phoenix is relatively small, accounting for 2% of Jackson County's population, and located between Medford (with more than 76,000 people) and Ashland (with more than 20,000 people). On average, both housing costs and rental costs are lower in Phoenix than in Medford, and substantially lower than in Ashland. Most residents who live in Phoenix work in Medford or Ashland, and Phoenix residents' incomes are generally lower than in Medford or Ashland.

This information suggests that the role Phoenix plays in the Rogue Valley housing market is as a place where housing is comparatively more affordable. Given these factors, Phoenix will continue to have demand for affordable lower-income and workforce housing.

- **Demographic and economic trends will drive demand for relatively affordable attached single-family housing and multifamily housing in Phoenix.** The key demographic trends that will affect Phoenix's future housing needs are: (1) the aging of the Baby Boomers, (2) aging of the Millennials, and (3) continued growth in Hispanic and Latino population.
  - *Baby Boomers.* By 2035, people 60 years and older will account for 36% of the population in Jackson County (up from 28% in 2015). As the Baby Boomers age, growth of retirees will drive demand for small single-family detached and townhomes for homeownership, townhome and multifamily rentals, age-restricted housing, and assisted-living facilities.
  - *Millennials.* Growth in this population will result in increased demand for both ownership and rental opportunities. Between 2017 and 2037, Millennials will be a key driver in demand for housing that is comparatively affordable and housing for families with children.
  - *Hispanic and Latino population.* Growth in the number of Hispanic and Latino households will result in increased demand for housing of all types, both for ownership and rentals,

with an emphasis on housing that is comparatively affordable. Hispanic and Latino households are more likely to be larger than average, with more children and possibly with multigenerational households.

- **Phoenix has an existing lack of affordable housing.** Phoenix’s key challenge over the next 20 years is providing opportunities for development of relatively affordable housing of all types of housing, from lower-cost single-family housing to market-rate multifamily housing.
  - About half of Phoenix households cannot afford a two-bedroom apartment at HUD’s fair market rent level of \$844.
  - In 2015, a household needed to earn \$16.23 an hour to afford a two-bedroom rental unit in Jackson County.
  - Phoenix currently has a deficit of housing units that are affordable to households that earn less than \$75,000
  - About 44% of Phoenix’s households are cost burdened, with 68% of renters and 31% of owners paying more than 30% of their income on housing.

## How much growth is Phoenix planning for?

A 20-year population forecast (in this instance, 2017 to 2037) is the foundation for estimating the number of new dwelling units needed. Exhibit 1 shows a population forecast for Phoenix for the 2017 to 2037 period. It shows that Phoenix’s population will grow by about 1,929 people over the 20-year period.

### Exhibit 1. Population Forecast, Phoenix, 2017-2037

Source: ECONorthwest based on Phoenix’s official 2015-2035 population forecast from the Oregon Population Forecast Program.

2017 Population	5,142
2037 Population	7,037
Change 2017 to 2037	
Number	1,929
Average annual growth rate	1.6%

The housing needs analysis assumes that Phoenix’s population will grow by 1,929 people over the 2017 to 2037 period.

## How much buildable residential land does Phoenix currently have?

Exhibit 2 shows vacant acres excluding constrained and unbuildable land by plan designation. The results show that Phoenix has about 52 net buildable acres in residential plan designations. Of this, 51% (27 acres) is in the Low-Density Residential designation, 28% (15 acres) is in

Residential Hillside, 18% (9 acres) is in Medium-Density Residential, and 3% (1.6 acres) is in the Residential Employment and High-Density Residential designations.

**Exhibit 2. Vacant Acres, Excluding Constrained and Unbuildable, City of Phoenix, 2015**

Source: City of Phoenix Residential Buildable Lands Inventory Table 10  
Note: Residential Employment land is included with Residential Hillside.

Low-Density Residential	<b>26.7 acres</b>
Medium-Density Residential	<b>9.1 acres</b>
High-Density Residential	<b>1.4 acres</b>
Residential Hillside	<b>14.9 acres</b>
<b>Total</b>	<b>52.2 acres</b>

## How much housing will Phoenix need?

Phoenix will need to provide about 892 new dwelling units to accommodate forecast population growth between 2017 and 2037. About 580 dwelling units (65%) will be single-family attached types, which includes manufactured dwellings. About 45 (5%) will be single-family attached and 267 (30%) will be multifamily, which includes duplexes, structures with three to four dwellings, and structures with five or more dwellings.

## How much land will be required for housing?

Exhibit 3 allocates needed housing units to plan designations in Phoenix. The allocation is based, in part, on the types of housing allowed in the zoning designations in each plan designation. Exhibit 3 shows:

- The overall needed housing mix is 65% single-family detached housing types and 35% multifamily attached housing types (including single-family attached).
  - This mix represents a shift from the existing mix of housing, with three-quarters of the housing stock in single-family detached housing.
  - The shift in mix is in response to the need for a wider range of relatively housing types, including housing types such as duplexes, townhouses, and apartments. In addition, Phoenix has need for relatively affordable smaller single-family detached housing.
- 61% of needed dwelling units will locate in the Low-Density Residential designation.
- 15% of needed dwelling units will locate in the Medium-Density Residential designation.
- 19% of needed dwelling units will locate in the High-Density Residential designation.
- 5% of needed dwelling units will locate in the Residential Hillside designation.

**Exhibit 3. Allocation of needed housing by type and plan designation, Phoenix UGB, 2017 to 2037**

	Residential Plan Designation				Total
	Low-Density Residential	Medium-Density Residential*	High-Density Residential	Residential Hillside	
<b>Dwelling Units</b>					
Single-family detached	536	-	-	44	580
Single-family attached	9	18	18	-	45
Multifamily	-	115	152	-	267
<b>Total</b>	<b>545</b>	<b>133</b>	<b>170</b>	<b>44</b>	<b>892</b>
<b>Percent of Units</b>					
Single-family detached	60%	0%	0%	5%	65%
Single-family attached	1%	2%	2%	0%	5%
Multifamily	0%	13%	17%	0%	30%
<b>Total</b>	<b>61%</b>	<b>15%</b>	<b>19%</b>	<b>5%</b>	<b>100%</b>

Source: ECONorthwest

Note: Medium Density Residential includes 0.15 acres of land in Residential Employment, which is zoned R-2.

Note: Single-family detached housing in High Density Residential is manufactured homes in manufactured home parks.

Exhibit 4 compares the demand for housing with the capacity of land by plan designation in order to determine whether there is sufficient residential land within the Phoenix UGB to accommodate growth over the 2017 to 2037 period. Exhibit 4 shows that Phoenix has a deficit of capacity in most residential plan designations:

- **Low-Density Residential:** Phoenix has a deficit of capacity for about 425 dwelling units, or 94 gross acres of land to accommodate growth over the 2017-2037 period.
- **Medium-Density Residential:** Phoenix has a deficit of capacity for about 70 dwelling units, or 10 gross acres of land to accommodate growth.
- **High-Density Residential:** Phoenix has a deficit of capacity for about 146 dwelling units, or 8 gross acres of land to accommodate growth.
- **Residential Hillside:** Phoenix has sufficient land in Residential Hillside to accommodate growth.

**Phoenix does not have enough land to accommodate residential growth over the 20-year period.**

**Exhibit 4. Comparison of capacity of existing residential land with demand for new dwelling units and land deficit, Phoenix UGB, 2017-2037**

Source: Buildable Lands Inventory from City of Phoenix; Calculations by ECONorthwest  
 Note: DU is dwelling unit.

Plan Designation	Housing Sufficiency		
	Dwelling Units Capacity of Buildable Land	Needed Dwelling Units (2017-2037)	Surplus or Deficit of Dwelling Units
Low-Density Residential	120	545	-425
Medium-Density Residential	63	133	-70
High-Density Residential	24	170	-146
Residential Hillside	44	44	0
<b>Total</b>	<b>251</b>	<b>892</b>	<b>-641</b>

## What are the Key Conclusions for Phoenix' Housing Needs?

The broad conclusion of the housing needs analysis is that Phoenix can take policy actions to address the deficit of land for residential development. The City will need to evaluate housing policies to address identified deficits of affordable housing, land deficits, and policies to increase densities.

- **Phoenix has an existing deficit of affordable housing.** More than one-third of Phoenix's existing households are low- or very-low income, with income below \$28,000. Phoenix has a deficit of housing that is affordable to households in these income ranges. The types of housing affordable to these households are government subsidized housing, manufactured homes, smaller single-family detached housing (e.g., cottages or "tiny houses"), duplexes or quadplexes, and apartments.

In addition, 40% have income between \$28,000 and \$67,000. Phoenix also has a deficit of housing that is affordable to households in these income ranges. The types of housing affordable to these households are manufactured homes on lots, apartments, duplexes or quadplexes, townhomes, or single-family housing.

- **Phoenix is planning for a shift in the mix of housing developed in Phoenix.** Phoenix's existing housing stock is 75% single-family detached, 24% multifamily, and 1% single-family attached. Within these broad housing types, Phoenix's housing stock is a mixture of housing types. For example, Phoenix's single-family detached housing ranges from mobile and manufactured housing to more affordable single-family detached housing, to higher-amenity, single-family detached housing.

Phoenix is planning for a change in the mix of housing in response to the need for more affordable housing and the demographic changes that suggest demand for a wider variety of housing types. Phoenix's needed housing mix for development over the 2017-2037 period is 65% single-family detached, 30% multifamily, and 5% single-family attached.

- **The City's density assumptions do not meet the requirements of the RPS Regional Plan.** The RPS resulted in agreements from each city in the region about "committed densities" for residential development in land in areas within the UGB but outside the city limits and in the Urban Reserve Areas (URAs). Phoenix' committed density is 6.6 dwelling units per gross acre (or 8 dwelling units per net acre) for the 2010-2035 period. For the 2036-2060 period, Phoenix' committed density is 7.6 dwelling units per gross acre, a 15% increase over the committed density for the 2010-2035 period.<sup>1</sup>

The capacity analysis in Exhibit 58 result in a density of 4.8 dwelling units per gross acre across the UGB. Much of the land outside the city limits but inside the UGB is Low Density, Residential Hillside, and Medium Density Residential. The assumed densities on Low Density Residential and Residential Hillside (4.5 and 3.0 dwelling units per gross acre respectively) do not meet Phoenix' committed density of 6.6 dwelling units per gross acre

<sup>1</sup> Greater Bear Creek Valley Regional Plan, page 2-11 to 2-12.

through 2035. Phoenix will need to develop policies to meet the RPS committed densities, such as land use efficiency measures to increase development density.

- **Phoenix has a deficit of land to accommodate housing in all residential plan designations except for Hillside Residential.** Ninety-four acres are in Low Density Residential, 10 in Medium Density Residential, and eight acres in High Density Residential.
- **Phoenix has a range of options to address the residential deficits: (1) adopt policies to increase land use efficiency, (2) expand the UGB, or (3) do both.** OAR 660-024-0050(4) says: "Prior to expanding the UGB, a local government must demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB." Meeting the standard requires a city to evaluate policies to increase land use efficiency.

The City's policy options for increasing land use efficiency and providing opportunities for development of relatively affordable housing include: ensuring that enough land is zoned for residential development to meet the need in each plan designation, eliminating barriers to residential development, evaluating opportunities for increasing development density (e.g., allowing smaller lot sizes in some zones), allowing a wider range of housing types (e.g., cottage housing), identifying opportunities for denser multifamily development (e.g., redevelopment of an underused site in downtown), and providing infrastructure in a cost-effective way. The City also has options for supporting development of affordable housing, such as partnering with nonprofit housing providers on development of government-subsidized housing, providing property tax breaks for development of desired housing (e.g., affordable workforce multifamily housing), or providing flexibility in development standards for desired housing developments.



# 1. Introduction

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This report presents Phoenix’s Housing Needs Analysis for the 2017 to 2037 period. It is intended to comply with statewide planning policies that govern planning for housing and residential development, including Goal 10 (Housing), and OAR 660 Division 8. The methods used for this study generally follow the *Planning for Residential Growth* guidebook, published by the Oregon Transportation and Growth Management Program (1996).

This report provides Phoenix with a factual basis to update the Housing Element of the City’s Comprehensive Plan and to support future planning efforts related to housing and options for addressing unmet housing needs in Phoenix. It provides information that informs future planning efforts, including development and redevelopment in urban renewal areas in the future. It provides the City with information about the housing market in Phoenix and describes the factors that will affect housing demand in Phoenix in the future, such as changing demographics. This analysis will help decision makers understand whether Phoenix has enough land to accommodate growth over the next 20 years.

## Framework for a Housing Needs Analysis

Economists view housing as a bundle of services for which people are willing to pay: shelter certainly, but also proximity to other attractions (job, shopping, recreation), amenities (type and quality of fixtures and appliances, landscaping, views), prestige, and access to public services (quality of schools). Because it is impossible to maximize all these services and simultaneously minimize costs, households must, and do, make tradeoffs. What they can get for their money is influenced by both economic forces and government policy. Moreover, different households will value what they can get differently. They will have different preferences, which in turn are a function of many factors like income, age of household head, number of people and children in the household, number of workers and job locations, number of automobiles, and so on.

Thus, housing choices of individual households are influenced in complex ways by dozens of factors; and the housing market in the Rogue Valley Region, Jackson County and Phoenix are the result of the individual decisions of hundreds of thousands of households. These points help to underscore the complexity of projecting what types of housing will be built in Phoenix between 2017 and 2037.

The complex nature of the housing market was demonstrated by the unprecedented boom and bust during the past decade. This complexity does not eliminate the need for some type of forecast of future housing demand and need, with the resulting implications for land demand and consumption. Such forecasts are inherently uncertain. Their usefulness for public policy often derives more from the explanation of their underlying assumptions about the dynamics of markets and policies than from the specific estimates of future demand and need. Thus, we start our housing analysis with a framework for thinking about housing and residential markets, and how public policy affects those markets.

## Statewide planning Goal 10

The passage of the Oregon Land Use Planning Act of 1974 (ORS Chapter 197), established the Land Conservation and Development Commission (LCDC), and the Department of Land Conservation and Development (DLCD). The Act required the Commission to develop and adopt a set of statewide planning goals. Goal 10 addresses housing in Oregon and provides guidelines for local governments to follow in developing their local comprehensive land use plans and implementing policies.

At a minimum, local housing policies must meet the requirements of Goal 10 and the statutes and administrative rules that implement it (ORS 197.295 to 197.314, ORS 197.475 to 197.490, and OAR 600-008).<sup>2</sup> Goal 10 requires incorporated cities to complete an inventory of buildable residential lands and to encourage the availability of adequate numbers of housing units in price and rent ranges commensurate with the financial capabilities of its households.

Goal 10 defines needed housing types as “housing types determined to meet the need shown for housing within an urban growth boundary at particular price ranges and rent levels.” ORS 197.303 defines needed housing types:

- (a) Housing that includes, but is not limited to, attached and detached single-family housing and multiple family housing for both owner and renter occupancy;
- (b) Government assisted housing;<sup>3</sup>
- (c) Mobile home or manufactured dwelling parks as provided in ORS 197.475 to 197.490; and
- (d) Manufactured homes on individual lots planned and zoned for single-family residential use that are in addition to lots within designated manufactured dwelling subdivisions.

DLCD provides guidance on conducting a housing needs analysis in the document *Planning for Residential Growth: A Workbook for Oregon’s Urban Areas*, referred to as the Workbook.

Phoenix must identify needs for all of the housing types listed above as well as adopt policies that increase the likelihood that needed housing types will be developed. This housing needs analysis was developed to meet the requirements of Goal 10 and its implementing administrative rules and statutes.

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<sup>2</sup> ORS 197.296 only applies to cities with populations over 25,000.

<sup>3</sup> Government assisted housing can be any housing type listed in ORS 197.303 (a), (c), or (d).

## Organization of this Report

The rest of this document is organized as follows:

- **Chapter 2. Residential Buildable Lands Inventory** presents the methodology and results of Phoenix's inventory of residential land.
- **Chapter 3. Historical and Recent Development Trends** summarizes the state, regional, and local housing market trends affecting Phoenix's housing market.
- **Chapter 4. Demographic and Other Factors Affecting Residential Development in Phoenix** presents factors that affect housing need in Phoenix, focusing on the key determinants of housing need: age, income, and household composition. This chapter also describes housing affordability in Phoenix relative to the larger region.
- **Chapter 5. Housing Need in Phoenix** presents the forecast for housing growth in Phoenix, describing housing need by density ranges and income levels.
- **Chapter 6. Residential Land Sufficiency within Phoenix** estimates Phoenix's residential land sufficiency needed to accommodate expected growth over the planning period.

## 2. Residential Buildable Lands Inventory

This chapter provides a summary of the residential buildable lands inventory (RBLI) for the Phoenix UGB. The City of Phoenix staff developed the buildable lands inventory analysis. It is intended to comply with statewide planning Goal 10 policies that govern planning for future housing and residential development. The full buildable lands inventory completed by City staff is presented in Appendix A.

### Definitions

The City of Phoenix developed the buildable lands inventory with a tax lot database from Jackson County GIS. The tax lot database is current as of October 2015. The inventory builds from the database to estimate buildable land by plan designation. The following definitions were used to identify buildable land for inclusion in the inventory:

- *Developed land.* Land that is developed at densities or with uses consistent with the zoning district in which it falls containing improvements that make it unlikely to redevelop in the near future. ☉
- *Vacant land.* Parcels with no permanent structures or improvements. ☉
- *Partially Vacant land.* Parcels with some buildings or improvements on it, but with vacant portions large enough to accommodate additional development based on the size of the lot, zoning designations, and/or the value of land and improvements. The Safe Harbor in OAR 660-024-0050 was used for the purpose of this RBLI. ☉
- *Buildable land.* Residentially designated land within the urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available and necessary for residential uses (OAR 660-008-0005 (2)). ☉
- *Constrained land.* Parcels with significant physical, environmental or infrastructure limits to development. Development constraints include, but are not limited to, environmentally sensitive areas such as wetlands, and areas with steep slopes, extreme topography, infrastructure deficiencies, parcel fragmentation, or natural hazards (OAR 660-008-0005 (2)).
- *Unbuildable land.* Land that is under the minimum legal building lot size for the underlying zoning district, land that has no automobile access, or land that is already committed to other uses by policy.

## Development constraints

Consistent with state guidance on buildable lands inventories, the City of Phoenix deducted the following constraints from the buildable lands inventory and classified those portions of tax lots that fall within the following areas as constrained, unbuildable land.

- *Lands in wetlands.* No wetland areas were determined to be “locally significant” within any residential buildable land.
- *Lands within floodways and the 100-year floodplain.* Development on land within floodways is prohibited. Lands within the 100-year floodplain are not constrained and are considered developable at standard densities since the City allows residential development within the floodplain if certain standards are met.
- *Riparian setbacks.* Class 1 streams 50 feet; Class 2 streams 25 feet. These areas are 100% constrained (development is prohibited). Riparian Areas that overlap with other constraints (i.e. 100-Year Flood Hazard Zone) were not identified to prevent double-counting the constraints.
- *Slopes.* Lands with slopes of 25 percent or greater are constrained and considered unbuildable. Slopes 15% to 24% are considered partially constrained because they can only be developed at densities lower than residential developments on slopes of less than 15%.

# Buildable Lands Inventory Results

## Land Base

The Residential Buildable Land Inventory includes a review of the following residential plan designations:

- Residential Employment
- Residential Hillside
- Low-Density Residential
- Medium-Density Residential
- High-Density Residential

Exhibit 5 shows residential land in Phoenix by classification (development status). The results show that Phoenix has 474 total acres in residential plan designations. Seventy-one percent (335 acres) of residential land is developed, 15% (73 acres) is vacant, 10% (47 acres) is partially vacant, and 4% (19 acres) is unbuildable.

**Exhibit 5. Land by Classification, Phoenix UGB, 2015**

Plan Designation	Vacant Acres	Partially Vacant Acres	Developed Acres	Unbuildable Acres	Gross Acres
Residential Employment	0.2	0.0	3.0	0.0	3.1
Residential Hillside	51.3	14.8	15.3	11.1	92.5
Low-Density Residential	8.2	28.4	199.9	6.4	242.9
Medium-Density Residential	11.8	3.5	15.9	0.6	31.7
High-Density Residential	1.8	0.0	101.0	0.5	103.4
<b>Total</b>	<b>73.3</b>	<b>46.7</b>	<b>335.0</b>	<b>18.6</b>	<b>473.5</b>

Source: City of Phoenix Residential Buildable Lands Inventory Table 4

Exhibit 6 shows gross and net buildable acres for vacant and partially vacant land by plan designation. The results show that Phoenix has about 52 net buildable acres in residential plan designations. Of this, 51% (27 acres) is in the Low-Density Residential designation, 28% (15 acres) is in Residential Hillside, 18% (9 acres) is in Medium-Density Residential, and 3% (1.6 acres) is in the Residential Employment and High-Density Residential designations.

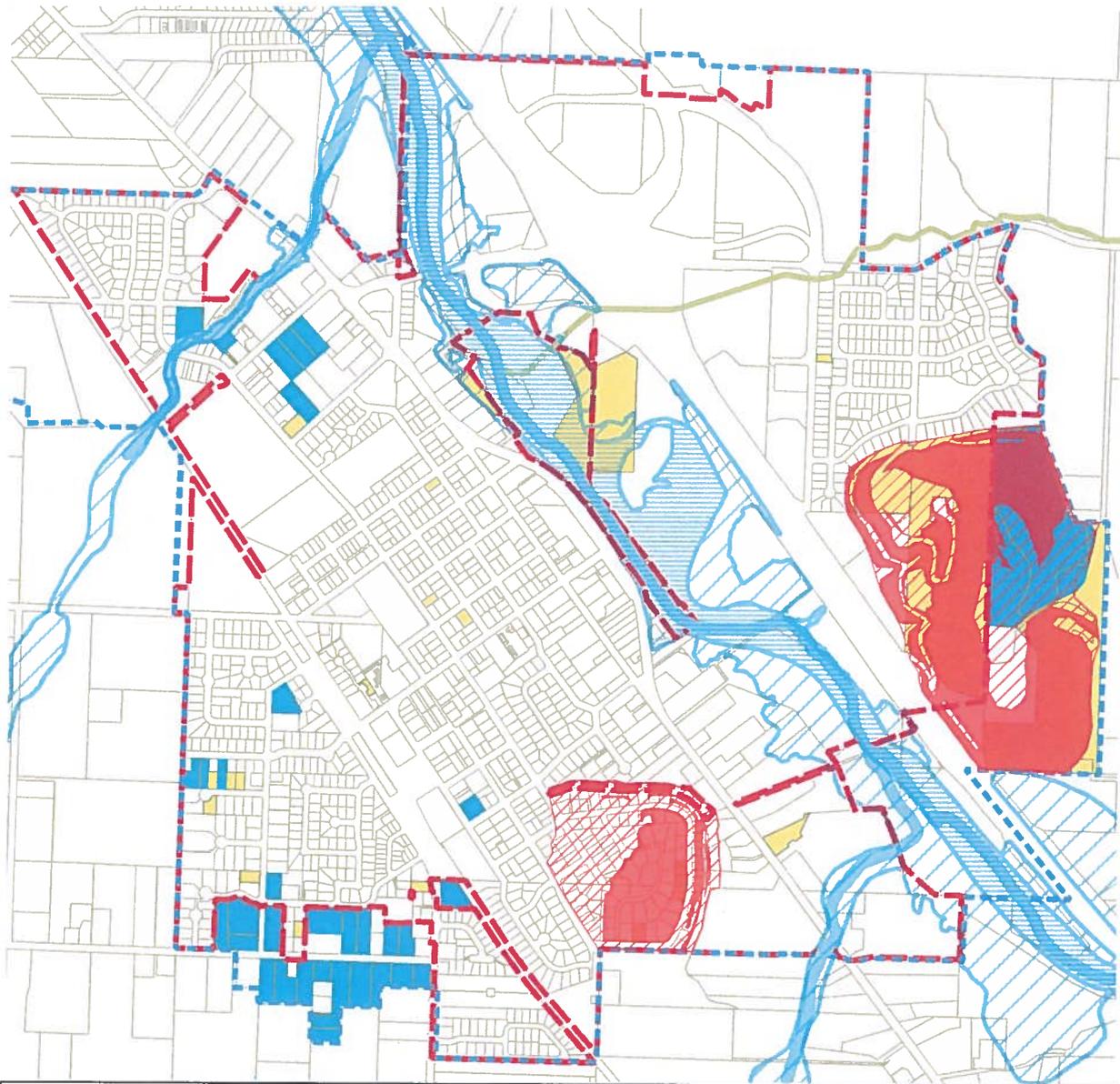
**Exhibit 6. Gross and Net Buildable Acres by Plan Designation, Phoenix UGB, 2015**

Plan Designation	Vacant Acres	Unbuildable Constrained Acres	Total Unbuildable Acres	Vacant Acres (Excluding Constrained and Unbuildable)
Residential Employment	0.2	0.0	0.0	0.2
Residential Hillside	65.8	3.7	47.4	14.7
Low-Density Residential	29.5	1.6	1.2	26.7
Medium-Density Residential	14.3	1.3	3.9	9.1
High-Density Residential	1.8	0.4	0.0	1.4
<b>Total</b>	<b>111.6</b>	<b>7.0</b>	<b>52.4</b>	<b>52.2</b>

Source: City of Phoenix Residential Buildable Lands Inventory Table 10

Exhibit 7 shows vacant and partially vacant residential land by plan designation with development constraints.

**Exhibit 7. Vacant and Partially Vacant Land with Constraints**



Legend	
	CityLimits
	UGB
<b>Residential Land Classifications</b>	
	Partially Vacant
	Vacant
<b>Hillsides</b>	
	Medium Slope (15-24%)
	Unbuildable Slope (25% and more)
<b>FEMA National Flood Hazard Designations</b>	
	100 YEAR BOUNDARY
	100 YEAR DETERMINED BFE
	100 YEAR SHALLOW FLOODING
	FLOODWAY
<b>Riparian Setbacks</b>	
	Class 1 Stream
	Class 2 Stream

Source: City of Phoenix Residential Buildable Lands Inventory Map 7

### 3. Historical and Recent Development Trends

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Analysis of historical development trends in Phoenix provides insight into the functioning of the local housing market. The mix of housing types and densities, in particular, are key variables in forecasting future land need. The specific steps are described in Task 2 of the DLCD *Planning for Residential Lands Workbook* as:

1. Determine the time period for which the data will be analyzed
2. Identify types of housing to address (all needed housing types)
3. Evaluate permit/subdivision data to calculate the actual mix, average actual gross density, and average actual net density of all housing types

This HNA examines changes in Phoenix's housing market from January 2000 to February 2015. We selected this time period because it provides information about Phoenix's housing market before and after the national housing market bubble's growth and deflation. In addition, data about Phoenix's housing market during this period is readily available, from sources such as the Census and the City and County's building permit database.

The HNA presents information about residential development by housing type. There are multiple ways that housing types can be grouped. For example, they can be grouped by:

1. Structure type (e.g., single-family detached, apartments, etc.)
2. Tenure (e.g., distinguishing unit type by owner or renter units)
3. Housing affordability (e.g., units affordable at given income levels)
4. Some combination of these categories

For the purposes of this study, we grouped housing types based on: (1) whether the structure is stand-alone or attached to another structure and (2) the number of dwelling units in each structure. The housing types used in this analysis are:

- **Single-family detached** includes single-family detached units, manufactured homes on lots and in mobile home parks, and accessory dwelling units.
- **Single-family attached** is all structures with a common wall where each dwelling unit occupies a separate lot, such as row houses or townhouses.
- **Multifamily** is all attached structures (e.g., duplexes, triplexes, quadplexes, and structures with five or more units) other than single-family detached units, manufactured units, or single-family attached units.

## Data Used in this Analysis

Throughout this analysis, we use data from multiple sources, choosing data from well-recognized and reliable data sources. One of the key sources for data about housing and household data is the U.S. Census. This report primarily uses data from two Census sources:

- The **Decennial Census**, which is completed every ten years and is a survey of all households in the U.S. The Decennial Census is considered the best available data for information such as demographics (e.g., number of people, age distribution, or ethnic or racial composition), household characteristics (e.g., household size and composition), and housing occupancy characteristics. As of the 2010 Decennial Census, it does not collect more detailed household information, such as income, housing costs, housing characteristics, and other important household information. Decennial Census data is available for 2000 and 2010.
- The **American Community Survey (ACS)**, which is completed every year and is a sample of households in the U.S. From 2009 through 2013, the ACS sampled an average of 3.2 million households per year, or about 2.8% of the households in the nation. The ACS collects detailed information about households, such as: demographics (e.g., number of people, age distribution, ethnic or racial composition, country of origin, language spoken at home, and educational attainment), household characteristics (e.g., household size and composition), housing characteristics (e.g., type of housing unit, year unit built, or number of bedrooms), housing costs (e.g., rent, mortgage, utility, and insurance), housing value, income, and other characteristics.

In general, this report uses data from the 2009-2013 ACS for Phoenix. Where information is available, we report information from the 2000 and 2010 Decennial Census.

The foundation of the housing needs analysis is the population forecast for Phoenix from the Oregon Population Forecast Program by the Portland State University Population Research Center.

## Trends in Housing Mix

This section provides an overview of changes in the mix of housing types in Phoenix and comparison geographies. These trends demonstrate the types of housing developed in Phoenix historically. Unless otherwise noted, this chapter uses data from the 2000 and 2010 Decennial Census, and 2009-2013 American Community Survey 5-Year Estimates.

This section shows the following trends in housing mix in Phoenix:

- **Phoenix's housing stock is made up of mostly single-family detached housing units.** 75% percent of Phoenix's housing stock is single-family detached, 24% is multifamily and only about 1% is single-family attached (e.g., townhouses). In comparison, these housing types account for 22% of Jackson County's housing stock, and 34% of Medford's.
- **Phoenix's overall housing mix has remained largely stable since 2000.** Phoenix's housing stock grew by 18% (more than 340 new units) between 2000 and the 2009-2013 period.<sup>4</sup> However the mix of housing types remained largely stable, shifting by no more than a percent in any category. The percentage of single-family attached housing increased from 74% in 2000 to 75% in 2009-2013.
- **Single-family detached housing accounted for nearly all of housing growth between 2000 and 2014.** About 98% of new housing was single-family detached and 2% was multifamily housing, such as duplexes or fourplexes.

The implication for the forecast of new housing in Phoenix is that the City's housing stock primarily single-family detached and very little multifamily development is occurring. One of the City's key challenges in future housing development will be to encourage multifamily development, as a way to provide a wider range of housing options.

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<sup>4</sup> This report presents data from the 2000 Decennial Census and from the 2009-2013 American Community Survey 5-Year Estimates. Single-year Ceneus data, such as the 2000 and 2010, are only available for small cities like Phoenix from the Decennial Census. Between the Decennial Census, the best available data is from the American Community Survey, collected over a 5-year period. Since Phoenix is a small city and the American Community Survey is based on a sample of the population, it takes five years of American Community Survey responses to result in statistically valid results. The American Community Survey data used in this report is from the 2009-2013 period.

## Housing Mix

### About 75% of Phoenix's housing stock is single-family detached.

In comparison, about 78% of the housing in Jackson County, and about 66% in Medford are single-family detached.

### The mix of housing in Phoenix was largely stable between 2000 and 2009-2013.

The percentage of single-family attached housing increased by about one percent to 75% while single-family attached and multifamily both fell by about 1% respectively.

Phoenix had 2,239 dwelling units in the 2009-2013 period. About 1,674 were single-family detached, 32 were single-family attached, and 444 were multifamily.

Exhibit 8. Housing Mix, 2009-2013

Source: Census Bureau, 2009-2013 ACS Table B25024

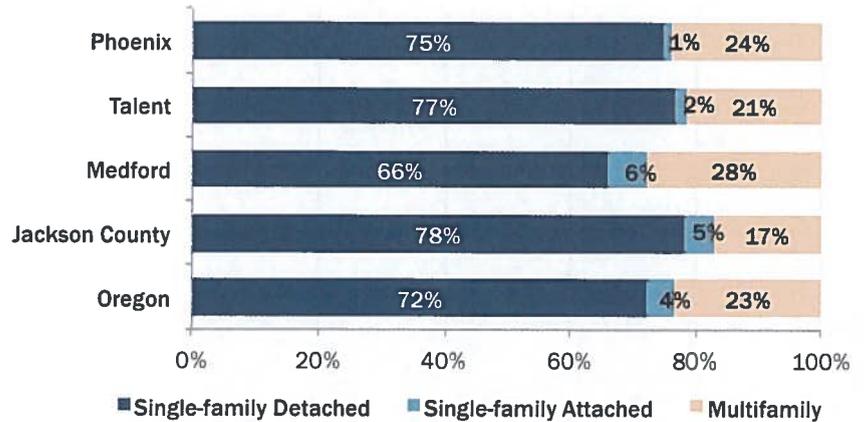
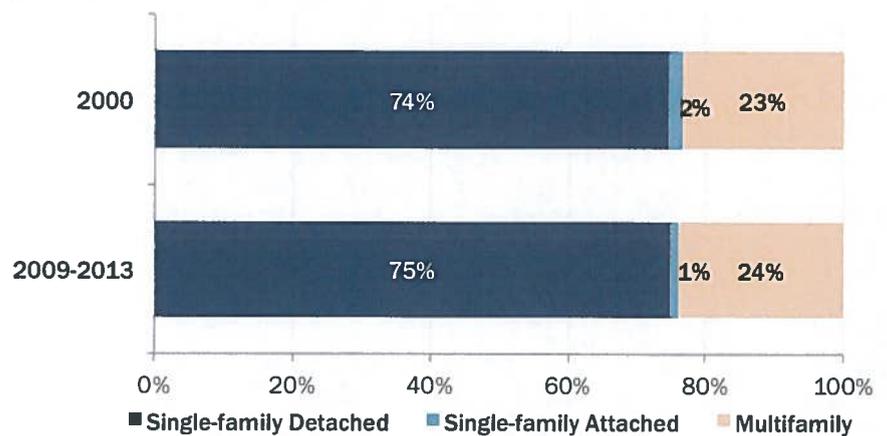


Exhibit 9. Change in Housing Mix, Phoenix, 2000 and 2009-13

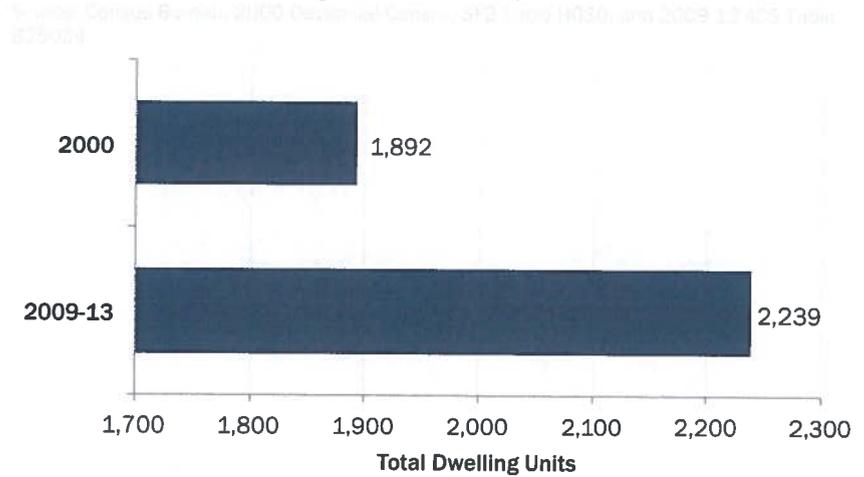
Source: Census Bureau, 2000 Decennial Census, SF3 Table H030, and 2013 ACS Table B25024



**The total number of dwelling units in Phoenix increased by 347 dwelling units from 2000 to 2009-13.**

This amounted to an 18% increase over the analysis period.

Exhibit 10. Total Dwelling Units, Phoenix, 2000 and 2009-13

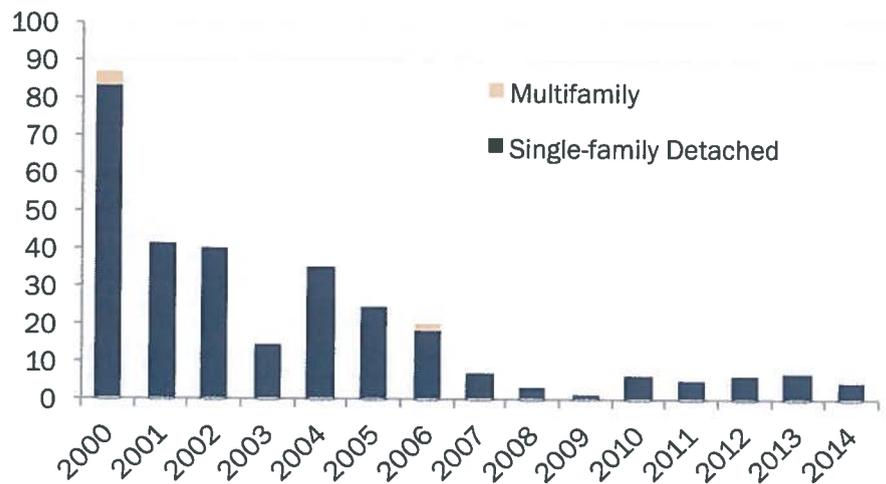


## Building Permits

**Over the 2000 to 2014 period, Phoenix issued permits for more than 303 dwelling units, with an average of 20 permits issued annually.**

About 98% of dwellings permitted were single-family detached and 2% were multifamily.

Exhibit 11. Building Permits by Type of Unit, Phoenix, 2000 through 2014



## Trends in Tenure

Housing tenure describes whether a dwelling is owner- or renter-occupied. This section shows:

- **Almost two thirds of Phoenix’s households are owner-occupied.** In comparison, 62% of households in Jackson County, and about half (51%) of households in Medford are owner-occupied.
- **Homeownership in Phoenix is close to the county average.** Sixty two percent of households are homeowners throughout Jackson County.
- **Most homeowners (99%) live in single-family detached housing and most renters (68%) live in multifamily housing in Phoenix.**

The implications for the forecast of new housing are: (1) opportunities for rental housing are limited, given that two-thirds of renters live in multifamily housing and that very little new multifamily housing has been built in Phoenix since 2000 and (2) there may be opportunities to encourage development of a wider variety of affordable attached housing types for homeownership, such as townhomes.

### Phoenix has similar homeownership rates to the county, but higher homeownership rates than Medford and Talent.

More than half of households in Phoenix live in owner-occupied dwelling units, compared with 62% of households in Jackson County and 51% of Medford households.

### The overall homeownership rate in Phoenix remained between 63% and 65% since 2000.

Exhibit 12. Tenure, Occupied Units, Phoenix, Medford, Jackson County, 2009-13

Source: Census Bureau, 2009-2013 ACS Table B24003

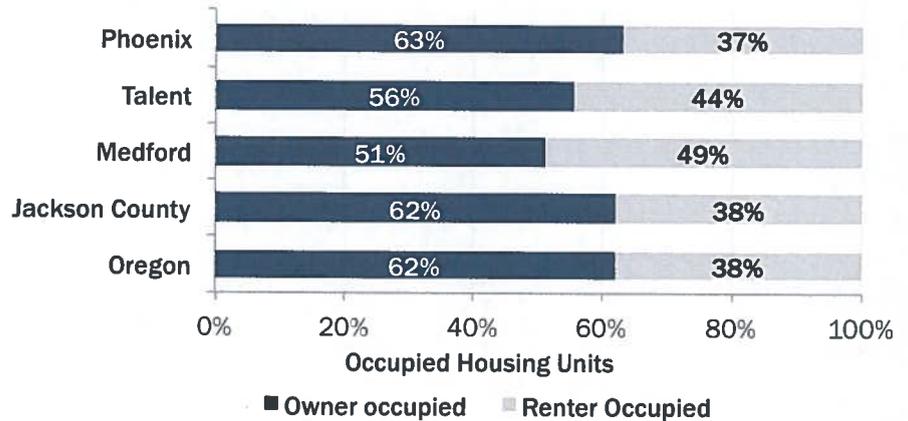
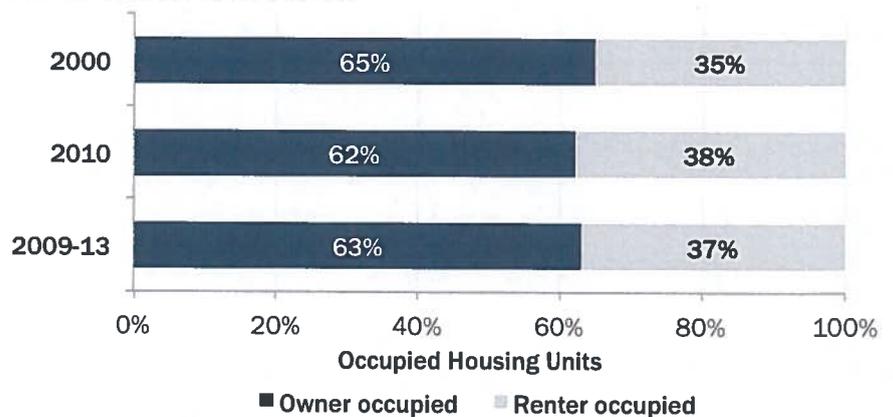


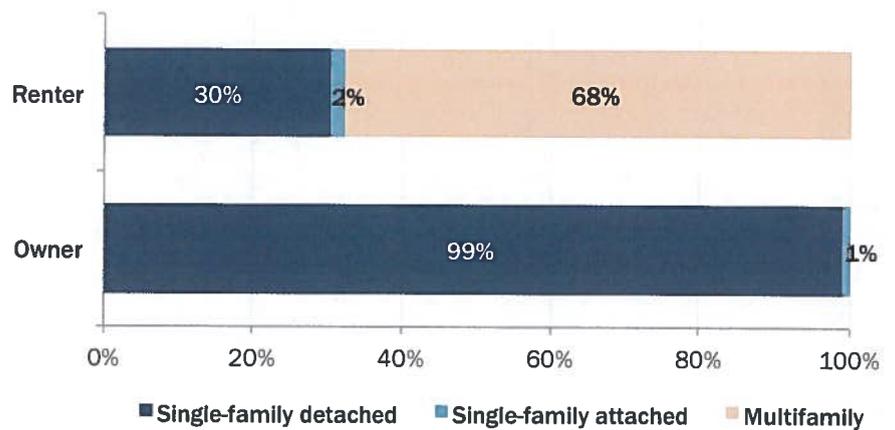
Exhibit 13. Tenure, Occupied Units, Phoenix, 2000-2013

Source: Census Bureau, 2000 Decennial Census SF1 Table H034, 2010 Decennial Census SF1 Table B24003, 2009-13 ACS Table B24003



The majority (99%) of owner-occupied housing units are single-family detached units and less than one third of renter-occupied units are multifamily.

Exhibit 14. Housing Units by Type and Tenure, Phoenix, 2013



## Vacancy Rates

The Census defines vacancy as: "Unoccupied housing units are considered vacant. Vacancy status is determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only." The 2010 Census identified vacant through an enumeration, separate from (but related to) the survey of households. The Census determines vacancy status and other characteristics of vacant units by enumerators obtaining information from property owners and managers, neighbors, rental agents, and others.

In 2000, the vacancy rate in Phoenix was 5.6%, equivalent to the rate of the county, and lower than that of the state.

Exhibit 15. Percent of Housing Units that are Vacant, 2000



From 2000 to 2010, Phoenix's vacancy rate rose to 6.9%, but still stood below that of the county and state.

Exhibit 16. Percent of Housing Units that are Vacant, 2010



In the 2009-2013 period, the vacancy rate in Phoenix, was below that of Jackson County and Oregon.

Exhibit 17. Percent of Housing Units that are Vacant, 2009-2013



A survey of multifamily housing developments conducted by ECONorthwest in July and August 2015 (see Exhibit 45) shows no vacancies (100% occupancy) in the multifamily complexes surveyed in Phoenix, Talent, and Medford. While this survey is not comprehensive, it indicates that the market for multifamily rental housing in the region is tight.

## Housing Density

Housing density is the density of housing by structure type, expressed in dwelling units per net or gross acre.<sup>5</sup> The U.S. Census does not track residential development density. As part of the Buildable Lands Inventory (in Appendix A), Phoenix staff calculated single-family detached development in the city on land without a slope averages 4.9 dwelling units per net acre. Land with slopes of 15-20% developed at an average density of 3.9 dwelling units per net acre (or 80% of average density) and 3.2 dwelling units per acre (or 65% of the average density) on land with slopes 21-25%.

Exhibit 18 shows the density for a sample of single-family attached and multifamily housing in Phoenix. The single-family attached and multifamily developments shown in Exhibit 18 include the majority of these housing types in Phoenix, with five of Phoenix nine multifamily housing complexes shown in Exhibit 18. All of these units were built in 2001 or before, except Creekside, which is a proposed multifamily development in Phoenix.

**Existing single-family attached housing has a density of about 12.5 dwelling units per net acre and multifamily has a density of 22.8 dwelling units per net acre.**

Exhibit 18. Sample of Density of Single-Family Attached And Multifamily Housing, Phoenix, 2015

Development	Net Acres	Dwelling Units	Density (DU/Net Acre)
<b>Single-Family Attached</b>	<b>7.27</b>	<b>91.00</b>	<b>12.5</b>
Cheryl Lane Townhome	0.84	20	23.8
Megan Lane Townhouses	2.74	21	7.7
Brookside Townhouses	1.70	32	18.8
Park Rose	1.99	18	9.0
<b>Multifamily</b>	<b>5.44</b>	<b>124.00</b>	<b>22.8</b>
Phoenix Court	0.66	13	19.7
Leisure Village	1.74	44	25.3
Phoenix Village	1.18	20	16.9
Midas Gardens	0.83	15	18.1
Creekside (proposed)	1.03	32	31.1

The Regional Problem Solving process (RPS) resulted in commitments from each city in the region about “committed densities” for residential development in Urban Reserve Areas (URAs). Phoenix’s committed density is 6.6 dwelling units per gross acre (or 8 dwelling units per net acre)

<sup>5</sup> OAR 660-024-0010(6) uses the following definition of net buildable acre. “Net Buildable Acre” “...consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads.” While the administrative rule does not include a definition of a gross buildable acre, using the definition above, a gross buildable acre will include areas used for rights-of-way for streets and roads. Areas used for rights-of-way are considered unbuildable.

for the 2010-2035 period. For the 2036-2060 period, Phoenix's committed density is 7.6 dwelling units per gross acre, a 15% increase over the committed density for the 2010-2035 period.<sup>6</sup>

## Government-assisted housing programs

Governmental agencies and nonprofit organizations offer a range of housing assistance to low- and moderate-income households in renting or purchasing a home. In Phoenix, one such development provides government-assisted housing. The Brookside and Rose Court apartments, offer 76 units of affordable housing directed towards elderly and disabled Phoenix residents, according to Oregon Housing and Community Services.<sup>7</sup>

## Manufactured Homes

Manufactured homes have provided a source of affordable housing in Phoenix. They provide a form of homeownership that can be made available to low- and moderate-income households. Cities are required to plan for manufactured homes—both on lots and in parks (ORS 197.475-492).

Generally, manufactured homes in parks are owned by the occupants who pay rent for the space. Monthly housing costs are typically lower for a homeowner in a manufactured home park for several reasons, including the fact that property taxes levied on the value of the land are paid by the property owner rather than the manufactured homeowner. The value of the manufactured home generally does not appreciate in the way a conventional home would, however. Manufactured homeowners in parks are also subject to the mercy of the property owner in terms of rent rates and increases. It is generally not within the means of a manufactured homeowner to relocate another manufactured home to escape rent increases. Living in a park is desirable to some because it can provide a more secure community with on-site managers and amenities, such as laundry and recreation facilities.

Phoenix had 477 mobile homes in 2000 and 514 mobile homes in the 2009-13 period, an increase of 37 dwellings. According to Census data, 93% of the mobile homes in Phoenix were owner-occupied in the 2009-2013 period.

OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial or high-density residential development. Exhibit 19 presents the inventory of mobile and manufactured home parks within Phoenix in 2015.

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<sup>6</sup> Greater Bear Creek Valley Regional Plan, page 2-11 to 2-12.

<sup>7</sup> "Oregon Low Cost Housing Projects," Oregon Housing and Community Services, accessed August, 2015, <https://egov.hcs.state.or.us/reser/APS/LowCostHousing.jsp>.

**Phoenix has 5 manufactured home parks with a total of 386 spaces, of which 6 are vacant.**

**Exhibit 19. Inventory of Mobile/Manufactured Home Parks, Phoenix, 2015**

*Source: Greenway Manufacturing Home Park Directory*

Name	Total Spaces	Vacant Spaces	Comprehensive Plan Designation
Bear Lake Mobile Estates	210	3	High Density Residential
Creekside Estates	58	1	High Density Residential
Greenway Village Mobile Home Park	55	2	High Density Residential
Rogue Valley South MHP	63	0	High Density Residential

## 4. Demographic and Other Factors Affecting Residential Development in Phoenix

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Demographic trends are important to a thorough understanding of the dynamics of the Phoenix housing market. Phoenix exists in a regional economy; trends in the region impact the local housing market. This chapter documents demographic, socioeconomic, and other trends relevant to Phoenix, at the national, state, and regional levels.

Demographic trends provide a context for growth in a region; factors such as age, income, migration and other trends show how communities have grown and how they will shape future growth. To provide context, we compare Phoenix to Medford and Jackson County where appropriate. Characteristics such as age and ethnicity are indicators of how population has grown in the past and provide insight into factors that may affect future growth.

A recommended approach to conducting a housing needs analysis is described in “Planning for Residential Growth: A Workbook for Oregon’s Urban Areas,” the Department of Land Conservation and Development’s guidebook on local housing needs studies. As described in the workbook, the specific steps in the housing needs analysis are:

1. Project the number of new housing units needed in the next 20 years.
2. Identify relevant national, state, and local demographic and economic trends and factors that may affect the 20-year projection of structure type mix.
3. Describe the demographic characteristics of the population and, if possible, the housing trends that relate to demand for different types of housing.
4. Determine the types of housing that are likely to be affordable to the projected households based on household income.
5. Determine the needed housing mix and density ranges for each plan designation and the average needed net density for all structure types.
6. Estimate the number of additional needed units by structure type.

This chapter presents data to address steps 2, 3, and 4 in this list. Chapter 5 presents data to address steps 1, 5, and 6 in this list.

## Demographic and Socioeconomic Factors Affecting Housing Choice <sup>8</sup>

Analysts typically describe housing demand as the *preferences* for different types of housing (i.e., single-family detached or apartment), and *the ability to pay* for that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing; in other words, income or wealth).

Many demographic and socioeconomic variables affect housing choice. However, the literature about housing markets finds that age of the householder, size of the household, and income are most strongly correlated with housing choice.

- **Age of householder** is the age of the person identified (in the Census) as the head of household. Households make different housing choices at different stages of life. This chapter discusses generational trends, such as housing preferences of Baby Boomers, people born from about 1946 to 1964, and Millennials, people born from about 1980 to 2000.
- **Size of household** is the number of people living in the household. Younger and older people are more likely to live in single-person households. People in their middle years are more likely to live in multiple person households (often with children).
- **Income** is the household income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and to household tenure (e.g., rent or own).

This chapter focuses on these factors, presenting data that suggests how changes to these factors may affect housing need in Phoenix over the next 20 years.

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<sup>8</sup> The research in this chapter is based on numerous articles and sources of information about housing, including:

- Davis, Hibbits, & Midghal Research, "Metro Residential Preference Survey," May 2014.
- The American Planning Association, "Investing in Place; Two generations' view on the future of communities." 2014 "Access to Public Transportation a Top Criterion for Millennials When Deciding Where to Live, New Survey Shows," Transportation for America.
- "Survey Says: Home Trends and Buyer Preferences," National Association of Home Builders International Builders *The Case for Multi-family Housing*. Urban Land Institute. 2003
- E. Zietz. *Multi-family Housing: A Review of Theory and Evidence*. Journal of Real Estate Research, Volume 25, Number 2. 2003.
- C. Rombouts. *Changing Demographics of Homebuyers and Renters*. Multi-family Trends. Winter 2004.
- J. McIlwain. *Housing in America: The New Decade*. Urban Land Institute. 2010.
- D. Myers and S. Ryu. *Aging Baby Boomers and the Generational Housing Bubble*. Journal of the American Planning Association. Winter 2008.
- M. Riche. *The Implications of Changing U.S. Demographics for Housing Choice and Location in Cities*. The Brookings Institution Center on Urban and Metropolitan Policy. March 2001.
- L. Lachman and D. Brett. *Generation Y: America's New Housing Wave*. Urban Land Institute. 2010.

## National Trends <sup>9</sup>

This brief summary on national housing trends builds on previous work by ECONorthwest, the Urban Land Institute (ULI) reports, and conclusions from *The State of the Nation's Housing, 2014* report from the Joint Center for Housing Studies of Harvard University. The Harvard report summarizes the national housing outlook as follows:

“With promising increases in home construction, sales, and prices, the housing market gained steam in early 2013. But when interest rates notched up at mid-year, momentum slowed. This moderation is likely to persist until job growth manages to lift household incomes. Even amid a broader recovery, though, many hard-hit communities still struggle and millions of households continue to pay excessive shares of income for housing.”

Several challenges to a strong domestic housing market remain. Demand for housing is closely tied to jobs and incomes, which are taking longer to recover than in previous cycles. While trending downward, the number of underwater homeowners, delinquent loans, and vacancies remains high. *The State of the Nation's Housing* report projects that it will take several years for market conditions to return to normal and, until then, the housing recovery will likely unfold at a moderate pace.

- **Post-recession recovery slows down.** Despite strong growth in the housing market in 2012 and the first half of 2013, by the first quarter of 2014, housing starts and existing home sales were both down by 3% from the same time a year before, while existing home sales were down 7% from the year before. Increases in mortgage interest rates and meager job growth contributed to the stall in the housing market.
- **Continued declines in homeownership.** After 13 successive years of increases, the national homeownership rate declined each year from 2005 to 2013, and is currently at about 65%. The Urban Land Institute projects that homeownership will continue to decline to somewhere in the low 60% range.
- **Housing affordability.** In 2012, more than one-third of American households spent more than 30% of income on housing. Low-income households face an especially dire hurdle to afford housing. Among those earning less than \$15,000, more than 80% paid over 30% of their income and almost 70% of households paid more than half of their income. For households earning \$15,000 to \$29,000, more than 60% were cost burdened, with about 30% paying more than half of their income on housing.
- **Long-term growth and housing demand.** The Joint Center for Housing Studies forecasts that demand for new homes could total as many as 13.2 million units nationally between 2015 and 2025. Much of the demand will come from Baby Boomers, Millennials,<sup>10</sup> and immigrants.

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<sup>9</sup> These trends are based on information from: (1) The Joint Center for Housing Studies of Harvard University's publication "The State of the Nation's Housing 2013," (2) Urban Land Institute, "2011 Emerging Trends in Real Estate," and (3) the U.S. Census.

<sup>10</sup> There is no precisely agreed on definition for when the millennial generation started. Millennials are, broadly speaking, the children of Baby Boomers, born from the early 1980's through the early 2000's.

- **Changes in housing preference.** Housing preference will be affected by changes in demographics, most notably the aging of the Baby Boomers, housing demand from the Millennials, and growth of foreign-born immigrants.

- *Baby Boomers.* The housing market will be affected by continued aging of the Baby Boomers, the oldest of whom were in their late 60's in 2015 and the youngest of whom were in their early 50's in 2015. Baby Boomers' housing choices will affect housing preference and homeownership, with some boomers likely to stay in their home as long as they are able and some preferring other housing products, such as multifamily housing or age-restricted housing developments.
- *Millennials.* As Millennials age over the next 20 years, they will be forming households and families. In 2015, the oldest Millennials in their mid-20's and the youngest in their mid-teens. By 2035, Millennials will be between 35 and 55 years old.

Millennials were in the early period of household formation at the beginning of the 2007-2009 recession. Across the nation, household formation fell to around 600,000 to 800,000 in the 2007-2013 period, well below the average rate of growth in previous decades. Despite sluggish growth recently, several demographic factors indicate increases in housing growth to come. The Millennial generation is the age group most likely to form the majority of new households. While low incomes have kept current homeownership rates among young adults below their potential, Millennials may represent pent-up demand that will release when the economy fully recovers. As Millennials age, they may increase the number of households in their 30s by 2.4 to 3.0 million over the through 2025.

- *Immigrants.* Immigration and increased homeownership among minorities will also play a key role in accelerating household growth over the next 10 years. Current Population Survey estimates indicate that the number of foreign-born households rose by nearly 400,000 annually between 2001 and 2007, and accounted for nearly 30 percent of overall household growth. Beginning in 2008, the influx of immigrants was stanchied by the effects of the Great Recession. After a period of declines, however, the foreign born are again contributing to household growth. Census Bureau estimates of net immigration in 2011-12 indicate an increase of 110,000 persons over the previous year, to a total of nearly 900,000.

The growing diversity of American households will have a large impact on the domestic housing markets. Over the coming decade, minorities will make up a larger share of young households, and constitute an important source of demand for both rental housing and small homes. This makes the growing gap in homeownership rates between whites and blacks and whites and Hispanics troubling. Since 2001, the difference in homeownership rates between whites and blacks rose from 25.9 to 29.5 in 2013. Similarly the gap between white and Hispanic homeownership rates increased since 2008, from below 26%, to over 27% in 2013. This growing gap between racial and ethnic groups will hamper the country's homeownership rate as minority households constitute a larger share of the housing market.

- **Changes in housing characteristics.** The U.S Census Bureau's Characteristics of New Housing Report (2013) presents data that show trends in the characteristics of new housing

for the nation, state, and local areas. Several long-term trends in the characteristics of housing are evident from the New Housing Report:<sup>11</sup>

- *Larger single-family units on smaller lots.* Between 1990 and 2013 the median size of new single-family dwellings increased 25% nationally from 1,905 sq. ft. to 2,384 sq. ft., and 19% in the western region from 1,985 sq. ft. to 2,359 sq. ft. Moreover, the percentage of units smaller than 1,400 sq. ft. nationally decreased by almost half, from 15% in 1999 to 8% in 2012. The percentage of units greater than 3,000 sq. ft. increased from 17% in 1999 to 29% of new one-family homes completed in 2013. In addition to larger homes, a move towards smaller lot sizes is seen nationally. Between 1990 and 2013, the percentage of lots less than 7,000 sq. ft. increased from 27% of lots to 36% of lots.
- *Larger multifamily units.* Between 1999 and 2013, the median size of new multiple family dwelling units increased by 2% nationally and 3% in the western region. The percentage of new multifamily units with more than 1,200 sq. ft. increased from 28% in 1999 to 32% in 2013 nationally, and increased from 25% to 32% in the western region.
- *More household amenities.* Between 1990 and 2013, the percentage of single-family units built with amenities such as central air conditioning, 2 or more car garages, or 2 or more baths all increased. The same trend in increased amenities is seen in multifamily units.

## State Trends

Oregon's 2011-2015 Consolidated Plan includes a detailed housing needs analysis as well as strategies for addressing housing needs statewide.<sup>12</sup> The plan concludes that "Oregon's changing population demographics are having a significant impact on its housing market." It identified the following population and demographic trends that influence housing need statewide. Oregon is:

- Facing housing cost increases due to higher unemployment and lower wages, as compared to the nation.
- Since 2005, is experiencing higher foreclosure rates compared with the previous two decades.
- Losing federal subsidies on about 8% of federally-subsidized Section 8 housing units.
- Losing housing value throughout the State.
- Losing manufactured housing parks, with a 25% decrease in the number of manufactured home parks between 2003 and 2010.
- Increasingly older, more diverse, and has less affluent households.<sup>13</sup>

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<sup>11</sup> <https://www.census.gov/construction/chars/highlights.html>

<sup>12</sup> [http://www.ohcs.oregon.gov/OHCS/HRS\\_Consolidated\\_Plan\\_5yearplan.shtml](http://www.ohcs.oregon.gov/OHCS/HRS_Consolidated_Plan_5yearplan.shtml)

<sup>13</sup> State of Oregon *Consolidated Plan 2011 to 2015*.

[http://www.oregon.gov/ohcs/hd/hrs/consplan/2011\\_2015\\_consolidated\\_plan.pdf](http://www.oregon.gov/ohcs/hd/hrs/consplan/2011_2015_consolidated_plan.pdf)

## Regional and Local Demographic Trends that may affect housing need in Phoenix

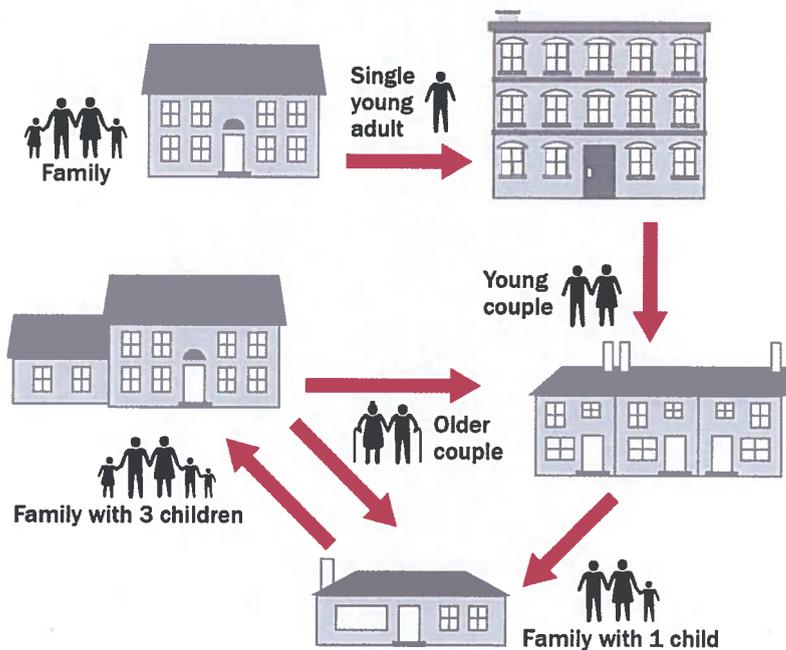
Demographic trends that might affect the key assumptions used in the baseline analysis of housing need are: (1) the aging population, (2) changes in household size and composition, and (3) increases in diversity.

An individual's housing needs change throughout their life, with changes in income, family composition, and age. The types of housing needed by a 20-year-old college student differ from the needs of a 40-year-old parent with children, or an 80-year-old single adult. As Phoenix's population ages, different types of housing will be needed to accommodate older residents. The housing characteristics by age data below reveal this cycle in action in Phoenix.

**Housing needs and preferences change in predictable ways over time, with changes in marital status and size of family.** Families of different sizes need different types of housing.

Exhibit 20. Effect of demographic changes on housing need

Source: ECONorthwest, adapted from Clark, William A.V. and Franz M. Diekmann, 1995, *Households and Housing*, New Brunswick, NJ: Center for Urban Policy Research.

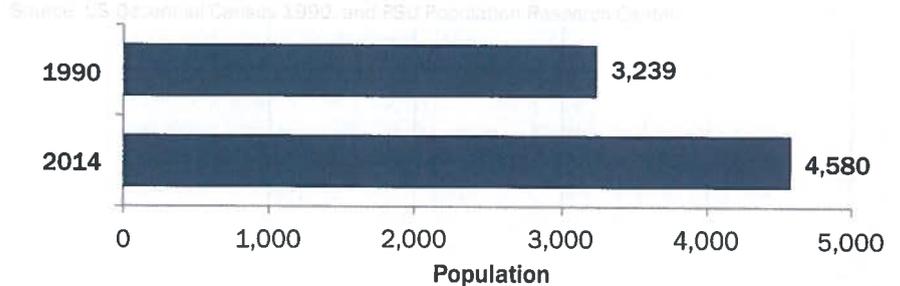


## Growing population

Phoenix's population grew by 41% between 1990 and 2014, adding about 1,300 new residents. Over this period, Phoenix's population grew at an average annual growth rate of 1.5%. **Phoenix's population growth will drive future demand for housing in Phoenix over the planning period.**

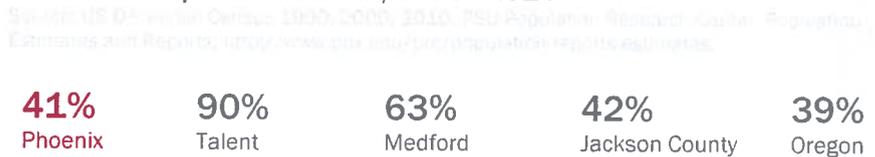
Since 1990, Phoenix's population has grown by roughly 1,300 people.

Exhibit 21. Population, Phoenix, 1990 - 2014



From 1990 to 2014, Phoenix's population grew by 41%, accounting for 2% of population growth in Jackson County.

Exhibit 22. Population Growth, 1990 - 2014



Phoenix's population grew at a similar rate to that of the county, region, and state.

Exhibit 23. Annual Average Rate of Growth, 1990 - 2014



Phoenix is projected to grow by 1,928 people from 2015 to 2035, at an average annual growth rate of 1.7%.

Extrapolating Phoenix's forecast to 2017 to 2037, Phoenix expects to grow by 1,929 people at an average annual growth rate of 1.6%.<sup>14</sup>

Exhibit 24. Forecast of Population Growth at the County-Level, 2015 - 2035



<sup>14</sup> This forecast of population growth is based on Phoenix's official population forecast from the Oregon Population Forecast Program. ECONorthwest extrapolated the 2015 population to 2017 and the 2035 population to 2037 based on the methodology specified in the following file (from the Oregon Population Forecast Program website): [http://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Population\\_Interpolation\\_Template.xlsx](http://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Population_Interpolation_Template.xlsx)

## Aging Population

This section shows two key characteristics of Phoenix's population, with implications for future housing demand in Phoenix:

- **Phoenix's population is older than the state and county, on average.** Phoenix has a larger share of elderly residents, and a relatively small share of people younger than 20 years. As Phoenix's elderly population grows, it will have increasing demand for housing that is suitable for elderly residents.

Demand for housing for retirees will grow over the planning period, as the Baby Boomers continue to age and retire. The State forecasts share of residents aged 60 years and older will account for more than one third of Jackson County's population, compared to around 28% in 2015.

The impact of growth in seniors in Phoenix will depend, in part, on whether seniors already in city continue to live in there as they retire. National surveys show that, in general, most retirees prefer to age in place by continuing to live in their current home and community as long as possible.<sup>15</sup> In addition, Jackson County is an area that has historically attracted retirees moving from other states and other areas. Some of these retirees may choose to locate in Phoenix, if housing is available.

**Growth in the number of seniors will result in demand for housing types specific to seniors, such as small and easy to maintain dwellings, assisted living facilities, or age-restricted developments.** Senior households will make a variety of housing choices, including: remaining in their homes as long as they are able, downsizing to smaller single-family homes (detached and attached) or multifamily units, or moving into group housing (such as assisted living facilities or nursing homes), as their health fails. The challenges that aging seniors face in continuing to live in their community include: changes in healthcare needs, loss of mobility, the difficulty of home maintenance, financial concerns, and increases in property taxes.<sup>16</sup>

- **Phoenix has a smaller population of younger people than the State average.** About 45% of Phoenix's population is under 40 years old, compared to 47% of Jackson County's population and the State average of 52%. The forecast for population growth in Jackson County shows the number of people under 20 years old decreasing by 1% and people between 20 and 39 increasing by 6%. People aged 40 to 59 are forecast to grow by about 18%. Assuming that the age distribution of Phoenix's population continues to resemble the County's, Phoenix will have relatively little growth in these age groups.

People currently aged 15 to 35 are referred to as the Millennial generation and account for the largest share of population in Oregon. By 2035, they will be aged 35 to 55. The forecast for Jackson County shows some growth (an 18%) in people roughly in the Millennials' age group.

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<sup>15</sup> A survey conducted by the AARP indicates that 90% of people 50 years and older want to stay in their current home and community as they age. See <http://www.aarp.org/research>.

<sup>16</sup> "Aging in Place: A toolkit for Local Governments" by M. Scott Ball.

Phoenix’s ability to attract people in this age group will depend, in large part, on whether the city has opportunities for housing that both appeals to and is affordable to Millennials.

In the near-term, Millennials may increase demand for rental units. The long-term housing preference of Millennials is uncertain. They may have different housing preferences as a result of the current housing market turmoil and may prefer smaller, owner-occupied units or rental units. On the other hand, their housing preferences may be similar to the Baby Boomers, with a preference for larger units with more amenities. Recent surveys about housing preference suggest that Millennials want affordable single-family homes in areas that offer transportation alternatives to cars, such as suburbs or small cities with walkable neighborhoods.<sup>17</sup>

A recent survey of people living in the Portland Region shows that Millennials, these younger residents, prefer single-family detached housing. The survey finds that housing price is the most important factor in choosing housing for younger residents.<sup>18</sup> The survey results suggest that Millennials are more likely than other groups to prefer housing in an urban neighborhood or town center. While this survey is for the Portland Region, it shows similar results as national surveys and studies about housing preference for Millennials.

**Growth in Millennials in Phoenix will result in increased demand for both affordable single-family detached housing, as well as increased demand for affordable townhouses and multifamily housing. Growth in this population will result in increased demand for both ownership and rental opportunities, with an emphasis on housing that is comparatively affordable. There is potential for attracting new residents to housing in downtown, especially if the housing is relatively affordable and located in proximity to services.**

**From 2000 to 2009-13 Phoenix’s median age increased from 41.0 to 50.9 years.**

Exhibit 25. Median Age, Years, 2000 to 2009-13

Source: US Census Bureau, 2000 Decennial Census Table B01102, 2009-13 ACS, Table B01102

2000	<b>41.0</b> Phoenix	34.3 Talent	37.0 Medford	39.2 Jackson County	36.3 Oregon
2009-13	<b>50.9</b> Phoenix	38.8 Talent	37.8 Medford	42.5 Jackson County	38.7 Oregon

<sup>17</sup> The American Planning Association, “Investing in Place; Two generations’ view on the future of communities.” 2014.

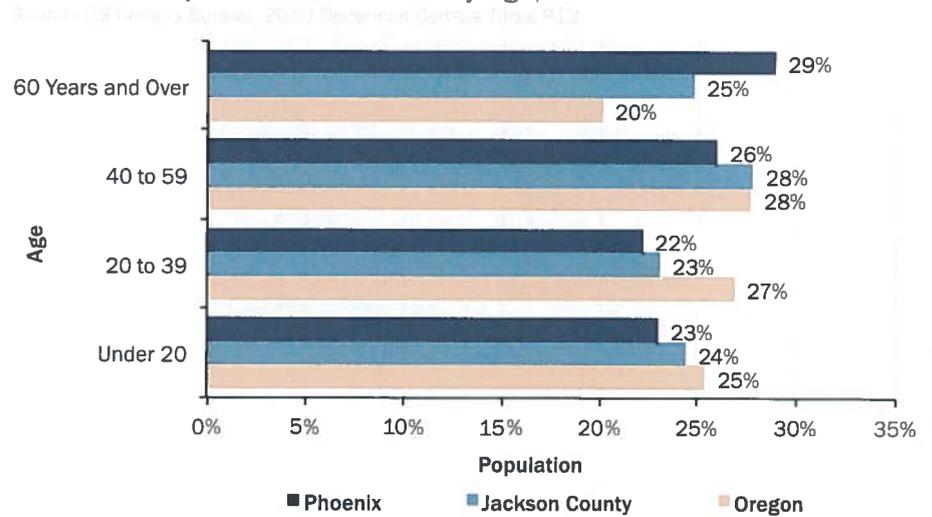
<sup>18</sup> “Access to Public Transportation a Top Criterion for Millennials When Deciding Where to Live, New Survey Shows,” Transportation for America.

“Survey Says: Home Trends and Buyer Preferences,” National Association of Home Builders International Builders

<sup>18</sup> Davis, Hibbits, & Midghal Research, “Metro Residential Preference Survey,” May 2014.

In 2010, about 48% of Phoenix residents were aged between 20 and 59.

Exhibit 26. Population Distribution by Age, 2010

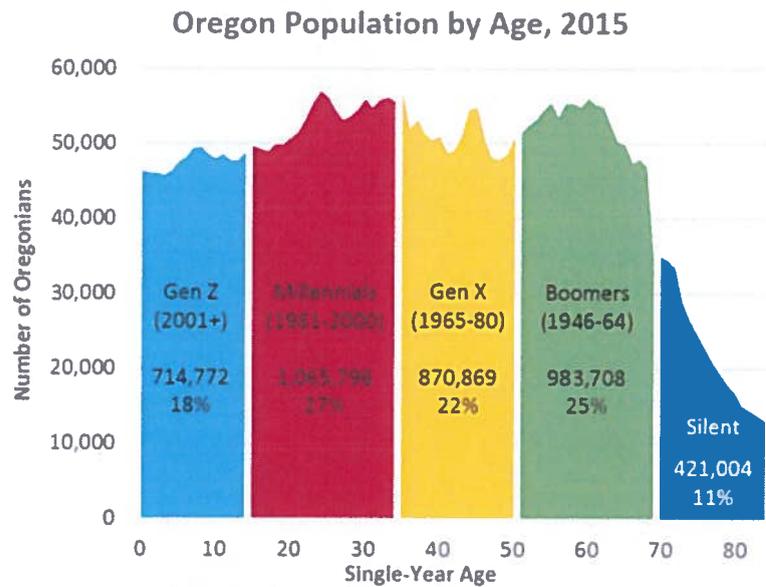


Oregon's largest age groups are the Millennials and the Baby Boomers.

By 2035, Millennials will be between 35 and 54 years old. Baby Boomers will be 71 to 89 years old.

Exhibit 27. Population Distribution by Generation and Age, Oregon, 2015

Source: Oregon Office of Economic Analysis, "Population, Demographics and Generations by Age Group," February 5, 2015. <http://oia.oregon.gov/pressroom/2015/02/05/population-demographics-and-generations>



Source: Oregon Office of Economic Analysis

The majority of population growth in Jackson County will be in people over 60 years old.

Exhibit 28. Fastest-growing Age Groups, Jackson County, 2010 - 2035

Source: Forward State Planning, "Population, Revenue, Labor, and Education Projections for Oregon 2010-2035"

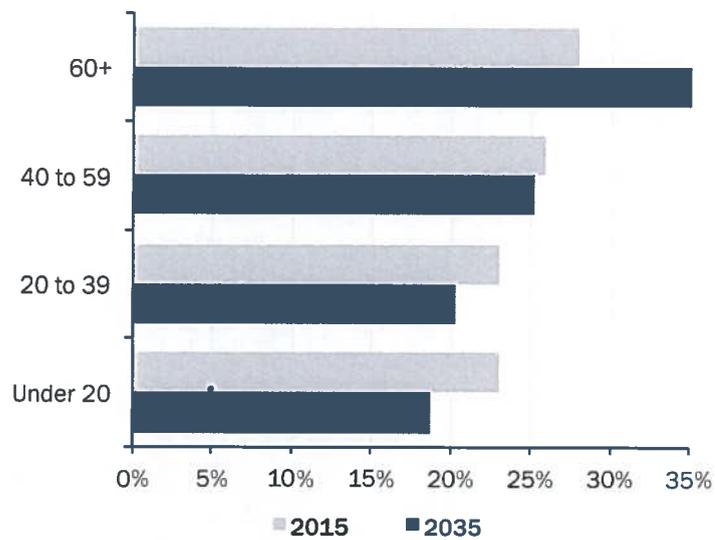
Age Group	Change	Number of People
Under 20	1% Decrease	-539 People
20-39 Yrs	6% Increase	3,124 People
40-59 Yrs	18% Increase	9,794 People
60+ Yrs	54% Increase	32,185 People

**While population growth is expected in all age groups, by 2035, residents older than sixty are expected make up a larger share of the population.**

The share of residents aged 60 years and older will account for nearly one third of Jackson County's population, compared to around 28% in 2010.

Exhibit 29. Population Growth by Age Group, Jackson County, 2010 - 2035

Source: Portland State University, Population Research Center, Jackson County, Forecast, June 30, 2015



### Increased Ethnic Diversity

Phoenix is becoming more ethnically diverse. The Hispanic and Latino population grew from 9% of Phoenix's population in 2000 to 13% of the population in the 2009-2013 period, adding more than 200 new Hispanic and Latino residents. In comparison to Jackson County and Oregon, Phoenix's population is more ethnically diverse.

Continued growth in the Hispanic and Latino population will affect Phoenix's housing needs in a variety of ways.<sup>19</sup> Growth in first and, to a lesser extent, second and third generation Hispanic and Latino immigrants will increase demand for larger dwelling units to accommodate the, on average, larger household sizes for these households. Households for Hispanic and Latino immigrants are more likely to include multiple generations, requiring more space than smaller household sizes. As Hispanic and Latino households integrate over generations, household size typically decreases and their housing needs become similar to housing needs for all households.

**Growth in Hispanic and Latino households will result in increased demand for housing of all types, both for ownership and rentals, with an emphasis on housing that is comparatively affordable.**

<sup>19</sup> The following articles describe housing preferences and household income trends for Hispanic and Latino families, including differences in income levels for first, second, and third generation households. In short, Hispanic and Latino households have lower median income than the national averages. First and second generation Hispanic and Latino households have median incomes below the average for all Hispanic and Latino households. Hispanic and Latino households have a strong preference for homeownership but availability of mortgages and availability of affordable housing are key barriers to homeownership for this group.

Pew Research Center. *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, February 7, 2012.

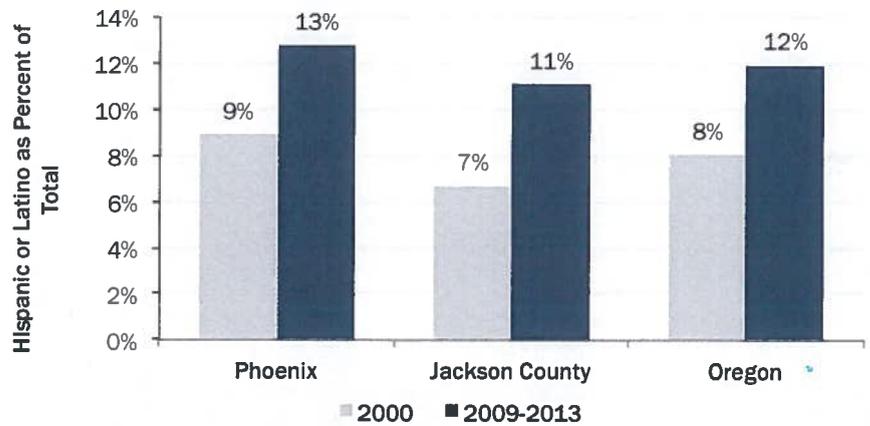
National Association of Hispanic Real Estate Professionals. *2014 State of Hispanic Homeownership Report*, 2014.

**Phoenix's Hispanic population has increased.**

The Hispanic population also grew in Jackson County, and Oregon.

Exhibit 30. Hispanic or Latino Population as a Percent of the Total Population, 2000 to 2009-2013

Source: US Census Bureau, 2000 Decennial Census Table P004, 2009-2013 ACS Table B03012



**Household size and composition**

Phoenix's household size and composition show that households in Phoenix are somewhat different from the county and statewide averages. Phoenix's households are smaller and a smaller percentage are family households with children.

**Phoenix's average household size is below that of the county and the state.**

Exhibit 31. Average Household Size, 2009-2013

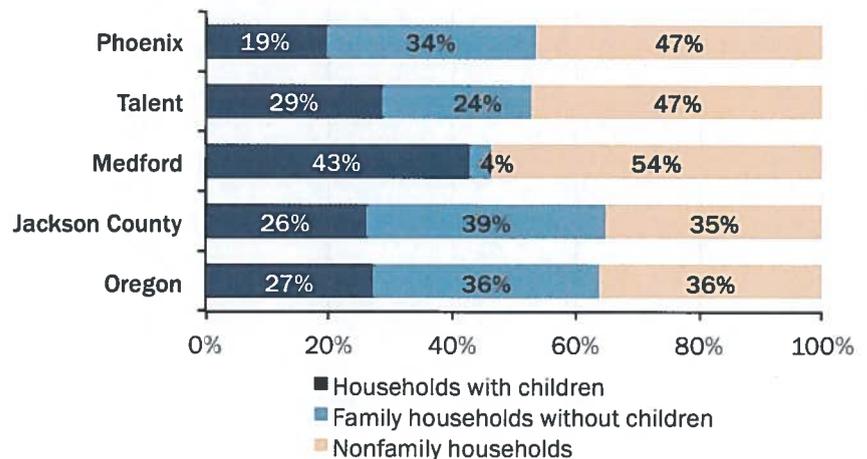
Source: US Census Bureau, 2013 ACS Table B25010



**Phoenix has a smaller share of households with children than Jackson County or Oregon.**

Exhibit 32. Household Composition, 2009-2013

Source: US Census Bureau, 2009-2013 ACS Table DP02



## Income of Phoenix Residents

Income is one of the key determinants in housing choice and households' ability to afford housing. Income for people living in Phoenix is slightly below the average in Jackson County and considerably below the state average.

In the 2009-13 period, Phoenix's median household income was below that of the county and the state.

Exhibit 33. Median Household Income, 2009-2013

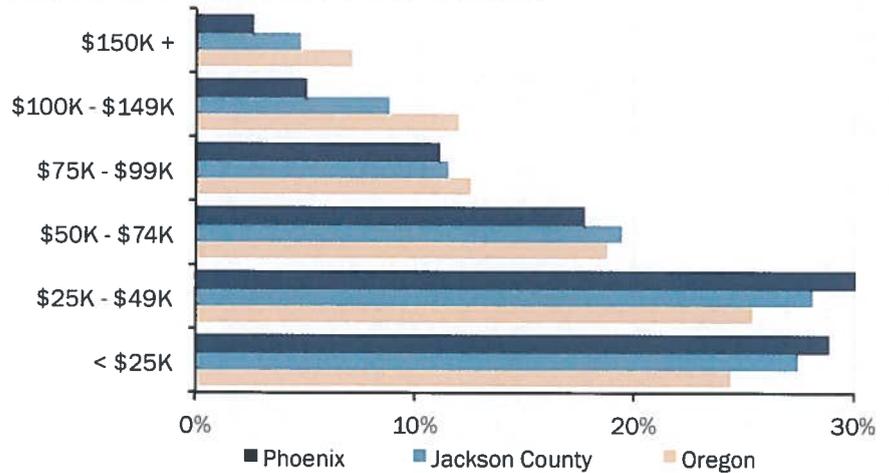
Source: US Census Bureau, 2009-2013 ACS, Table B01319



More than one third of Phoenix households earn between \$25,000 and \$49,000.

Exhibit 34. Household Income, Phoenix, Jackson County, Oregon, 2009-13

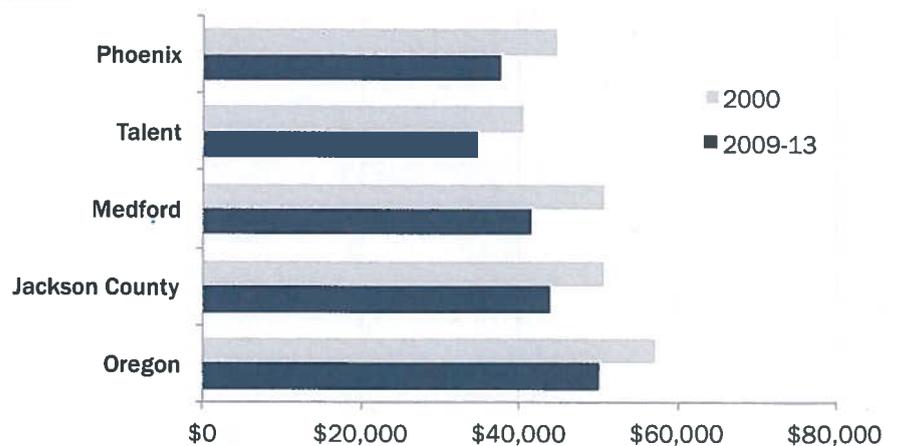
Source: US Census Bureau, 2009-2013 ACS, Table B19001



After adjusting for inflation, Phoenix's median household income decreased by 16% from 1999 to the 2009-13 period, from \$44,597 to \$37,558 per year.

Exhibit 35. Median Household Income, Oregon, Jackson County, Medford, Talent, Phoenix, 2000 to 2009-13, Inflation-adjusted

Source: US Census Bureau, 2000 Decennial Census, Table HCT011, 2009-2013 ACS, Table B01319



## Commuting trends

Phoenix is part of the complex, interconnected economy of the Southern Oregon. Of the more than 1,400 people who work in Phoenix, more than 95% of workers commute into Phoenix from other areas, most notably Medford, Central Point, and Ashland. More than 1,300 residents of Phoenix commute out of the city for work, mostly to Medford and Ashland.

### Phoenix is part of an interconnected regional economy

More than 1,400 people commute into Phoenix for work and nearly 1,400 people living in Phoenix commute out of the city for work.

### More than 90% of workers at businesses located in Phoenix live in Jackson County, mostly in areas outside of Phoenix.

Thirty-percent of people employed at businesses in Phoenix live in Medford, 6% live in Central Point, and 5% live in Phoenix and Ashland each.

### Three-quarters of residents of Phoenix work in Jackson County, most of them in cities outside of Phoenix.

Forty-five percent of residents of Phoenix work in Medford and 20% in Ashland. Six percent of Phoenix residents live and work in Phoenix.

Exhibit 36. Commuting Flows, Phoenix, 2012

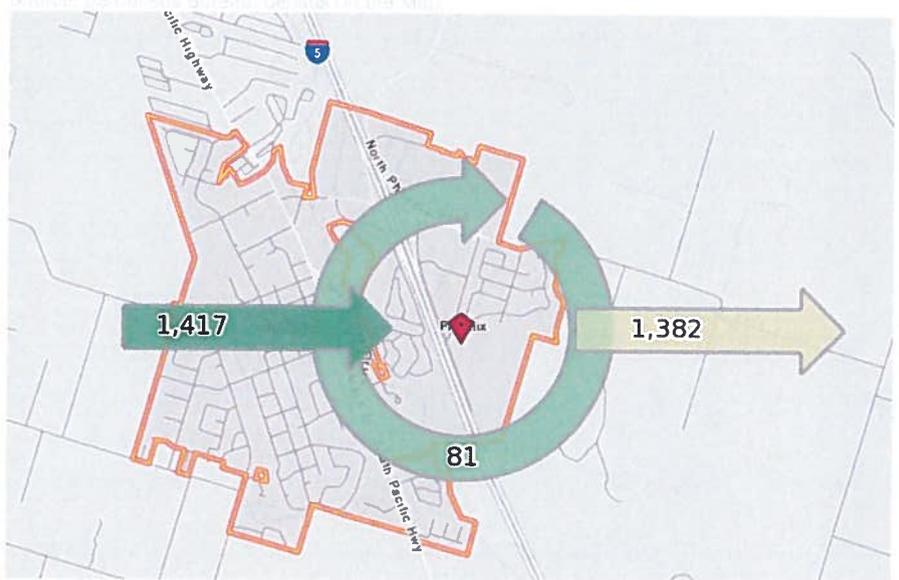


Exhibit 37. Places Where Workers at Businesses in Phoenix Lived, 2012

Source: US Census Bureau, Census of the Map



Exhibit 38. Places Where Phoenix Residents were Employed, 2011

Source: US Census Bureau, Census of the Map

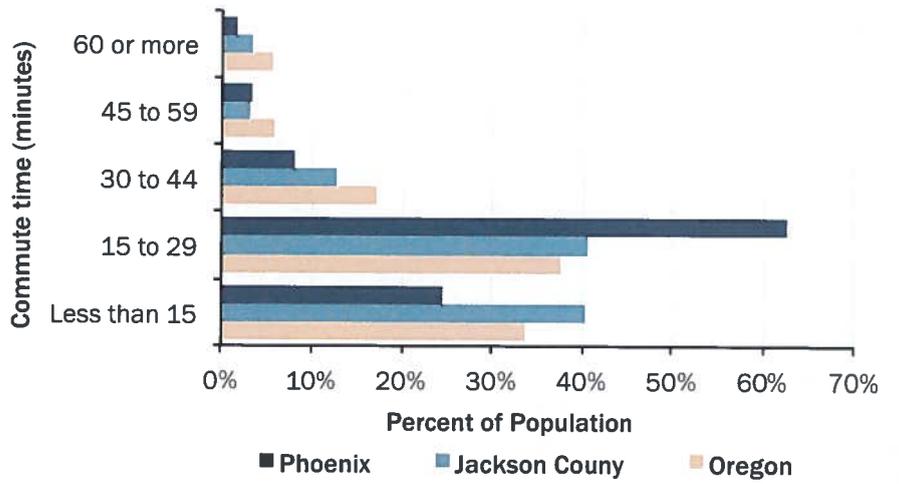


**Most Phoenix residents have a commute time that takes less than 30 minutes.**

About 87% of Phoenix residents have commute times less than 30 minutes, and only 2% commute for longer than one hour.

Exhibit 39. Commute Time by Place of Residence, Phoenix, Jackson County, Oregon, 2009-2013

Source: U.S. Census Bureau, 2009-2012 ACS Table B08303



## Regional and Local Trends Affecting Affordability in Phoenix

This section describes changes in sales prices, rents, and housing affordability in Phoenix and Jackson County since 2000.

### Changes in housing costs

Phoenix's housing sales prices are slightly higher than the Jackson County average, with a median sales price in \$244,000 in 2015, compared to Jackson County's overall average and other cities in the region. In general, Phoenix's housing prices changed with changes in housing price throughout the region, but staying slightly above most prices, except for those in Jacksonville.

**Phoenix's median home sales price is above the county average.**

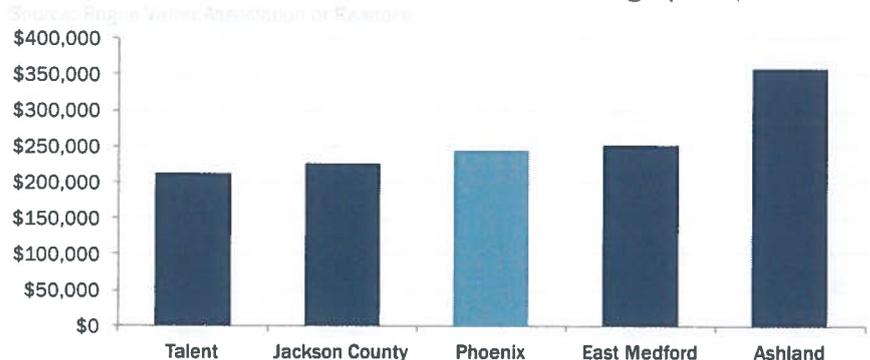
Exhibit 40. Median Home Sale Price, Phoenix, Jackson County, Talent, Ashland, East Medford, Total, 2015

Source: Regional Valley Association of Realtors, Real Estate Market Statistics  
<http://regionalvalleyrealtors.org/market-statistics/median-home-sale-price/>  
 Note: While using Regional Valley Association of Realtors' median home sale price data, County refers to the Association's "Within Totals" category for Jackson County.



**Phoenix's median home sale price was above most comparable cities in the region.**

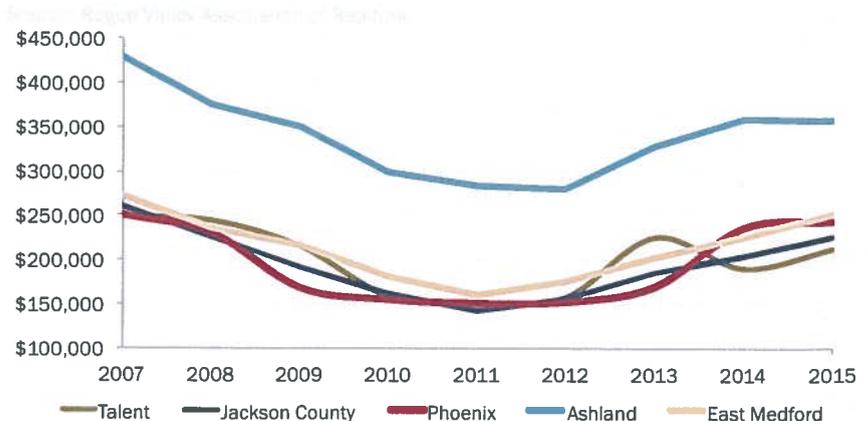
Exhibit 41. Median Sales Price, Phoenix-area Geographies, 2015



**Median home sales prices in Phoenix and across Jackson County declined since 2007, but have generally begun to recover starting in 2012.**

The median sales price in Phoenix in 2015 was nearly equal to the sales price at the height of the housing market bubble in 2007.

Exhibit 42. Median Sales Price, Phoenix, Jackson County, Talent, Ashland, East Medford, 2007-2015



**Housing costs have increased faster than income since 2000.**

The median value of a house in Phoenix was 3.0 times the median household income in 2000 and 4.2 times by the 2009-2013 period. The change in housing value compared to income was a little smaller in Phoenix than Jackson County.

Exhibit 43. Ratio of Housing Value to Income (Median to Median), 2000 to 2009-13<sup>20</sup>

Source: US Census Bureau, 2000 Decennial Census Tables H001E and H003 and 2009-2013 ACS, Tables B15013 and B25071

2000	<b>3.0</b> Phoenix	3.2 Talent	5.8 Ashland	3.6 Medford	3.6 Jackson County
2009-13	<b>4.2</b> Phoenix	4.7 Talent	7.6 Ashland	5.1 Medford	5.2 Jackson County

**Changes in rental costs**

Rent costs are relatively low in Phoenix, compared to Jackson County and other comparable cities in Oregon.

**Median contract rent in Phoenix is about \$652.**

Exhibit 44. Median Contract Rent, 2009-2013

Source: US Census Bureau, 2009-2013 ACS, Table B2905B

<b>\$652</b> Phoenix	\$820 Talent	\$809 Ashland	\$739 Medford	\$745 Jackson County	\$749 Oregon
-------------------------	-----------------	------------------	------------------	-------------------------	-----------------

<sup>20</sup> This ratio compared the median value of housing in Phoenix to the median household income. Inflation-adjusted median owner values in Phoenix increased from \$132,279 in 2000 to \$158,000 in 2009-13. Over the same period, median income decreased from \$44,543 to \$37,558.

ECONorthwest surveyed multifamily rental complexes in Phoenix, Talent, and Medford to get a sense of rental prices and occupancy rates. The results showed that all the multifamily complexes were completely occupied, suggesting that the rental market in the southern part of the Rogue Valley is very tight.

**All of the multifamily complexes were fully occupied.**

Government-subsidized rents (highlighted in blue) averaged from \$420 to \$566 per unit. Market-rate rents were between \$800 and \$1,360 per month.

Exhibit 45. Rent survey findings

Source: ECONorthwest  
 Note: Blue shaded units are government-subsidized units  
 Note: (den) = townhomes

Project Name	Type of Units	Number of Units	Occupancy Rate (%)	Average Price	\$/ (S.F.)
<b>Phoenix</b>					
Rose Court Apartments	1B 1b	36	100%	\$566	\$0.85
Brookside Apartments	1B 1b	40	100%	\$566	\$0.85
Jarvis Village	1B 1b	12	100%	\$500	\$0.83
<b>Talent</b>					
Talent Patio Village	1B 1b	18	100%	\$420	\$0.70
	2B 1b	46	100%	\$470	\$0.57
Anderson Vista	2B 1b	20	100%	\$460	\$0.57
	3B 1.5b	12	100%	\$530	\$0.50
	4B 2 b	4	100%	\$590	\$0.48
Anjou Club	1B 1b	20	100%	\$800	\$1.33
	2B 1b	60	100%	\$900	\$1.05
	2B 2b	60	100%	\$950	\$0.98
	3B 2b gardens	30	100%	\$1,060	\$0.88
	2B 2b townh.	10	100%	\$1,090	\$0.81
<b>Medford</b>					
Charles Point	1B 1b		100%	\$795	\$0.97
	2B 1b		100%	\$805	\$0.99
	2B 1.5b		100%	\$805	\$1.01
	2B 2.5b townh.		100%	\$1,313	\$0.69
	3B 2.5b townh.	600	100%	\$1,363	\$0.73
Cedar Tree Apartments	1B 1b	37	100%	\$620	\$0.89
	2B 1b	37	100%	\$710	\$0.79
Four Seasons Apartments	1B 1b	9	100%	\$680	\$1.01
	2B 1b	14	100%	\$795	\$1.00
	2B 2b	16	100%	\$830	\$0.76
	2B 1.5b townh.	9	100%	\$870	\$0.82
	2B 2b +den	16	100%	\$925	\$0.74
Morningside Apartments	1B 1b	40	100%	\$900	\$0.92
	2B 1b	68	100%	\$775	\$0.96
Brentwood Apartments	studio	32	100%	\$640	\$1.31
	1B 1b	36	100%	\$715	\$1.11
	2B 1b	20	100%	\$780	\$0.93
Spring Street Apartments	1B 1b	50	100%	\$545	-
	2B 2b	6	100%	\$670	-
**Subsidized housing					

## Housing Affordability

A typical standard used to determine housing affordability is that a household should pay no more than a certain percentage of household income for housing, including payments and interest or rent, utilities, and insurance. HUD guidelines indicate that households paying more than 30% of their income on housing experience “cost burden,” and households paying more than 50% of their income on housing experience “severe cost burden.” Using cost burden as an indicator is consistent with the Goal 10 requirement to provide housing that is affordable to all households in a community.

About 44% of Phoenix’s households are cost burdened. About 68% of renter households are cost burdened, compared with 31% of homeowners. Cost burden rates in Phoenix are consistent with those in Jackson County for owner households and a higher percentage of renter households in Phoenix are cost burdened than in Jackson County.

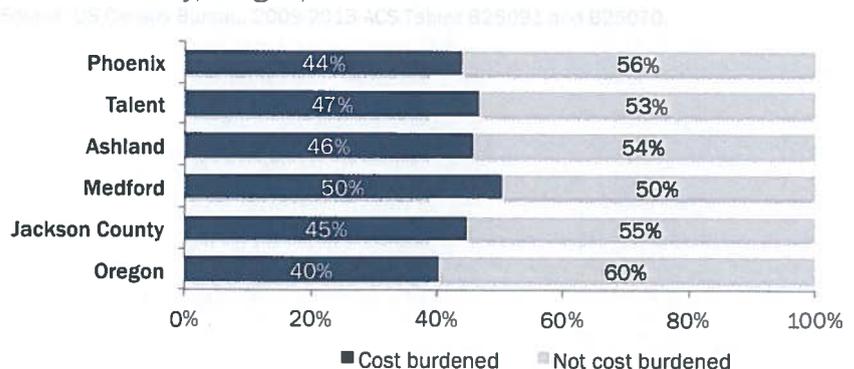
For example, more than one-quarter of Phoenix households have income of less than \$25,000 per year. These households can afford rent of less than \$625 per month or a home with a value of less than \$62,500. Most, but not all, of these households are cost burdened.

## Cost Burden

### About 44% of all households in Phoenix are cost burdened.

The percentages of cost burdened households in Jackson County and Medford are slightly higher than that of the Phoenix.

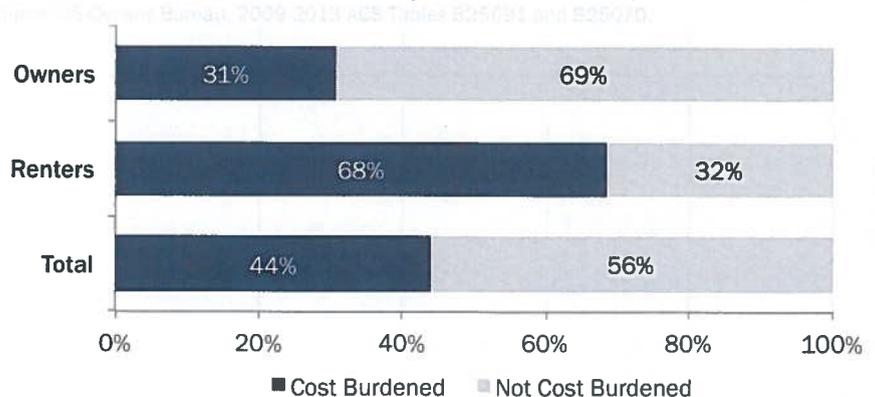
Exhibit 46. Housing Cost Burden Phoenix, Talent, Ashland, Medford, Jackson County, Oregon, 2009-13



### More than two thirds of Phoenix renters are cost burdened, compared to less than one third of homeowners.

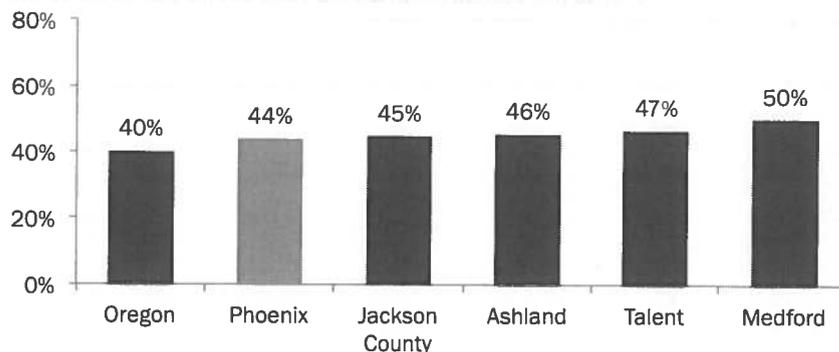
Cost burden rates are much higher among renters in Phoenix than among homeowners. In the 2009-13 period, about 68% of renters were cost burdened, compared to 31% of homeowners.

Exhibit 47. Housing Cost Burden by Tenure, Phoenix, 2009-13



Phoenix's percentage of cost-burdened homes is below that of Jackson County, Talent, and Medford, but above that of the state overall.

Exhibit 48. Housing Cost Burden, All Households, 2009-2013



While cost burden is a common measure of housing affordability, it does have some limitations. Two important limitations are:

- A household is defined as cost burdened if the housing costs exceed 30% of their income, regardless of actual income. The remaining 70% of income is expected to be spent on non-discretionary expenses, such as food or medical care, and on discretionary expenses. Households with higher income may be able to pay more than 30% of their income on housing without impacting the household's ability to pay for necessary non-discretionary expenses.
- Cost burden compares income to housing costs and does not account for accumulated wealth. As a result, the estimate of how much a household can afford to pay for housing does not include the impact of accumulated wealth a household's ability to pay for housing. For example, a household with retired people may have relatively low income but may have accumulated assets (such as profits from selling another house) that allow them to purchase a house that would be considered unaffordable to them based on the cost burden indicator. This issue is particularly important in Phoenix, where the population is substantially older than the average for Jackson County or Oregon.

Cost burden is only one indicator of housing affordability. Another way of exploring the issue of financial need is to review housing affordability at varying levels of household income.

Fair Market Rent for a 2-bedroom apartment in Jackson County is \$844.

Exhibit 49. HUD Fair Market Rent (FMR) by Unit Type, Jackson County, 2015

<b>\$617</b>	<b>\$624</b>	<b>\$844</b>	<b>\$1,244</b>	<b>\$1,402</b>
Studio	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom

**A household must earn at least \$16.23 per hour to afford a two-bedroom unit in Jackson County.**

More than 40% of households in Phoenix have an income below the affordable housing wage for Jackson County.

**Exhibit 50. Affordable Housing Wage, Jackson County, 2015**

Source: U.S. Department of Housing and Urban Development, *Tragedy Deferred: Unaffordable Housing in America*

**\$16.23/hour**

Affordable Housing Wage for two-bedroom Unit in Jackson County

**More than a third of Phoenix households have income less than \$27,950 and cannot afford a one-bedroom apartment at Jackson County's Fair Market Rent (FMR) of \$624 and nearly half of Phoenix households cannot afford a two-bedroom apartment at a Fair Market Rent of \$844.**

**Exhibit 51. Financially Attainable Housing, by Median Family Income (MFI) for Jackson County (\$55,900), Phoenix, 2015**

Source: U.S. Department of Housing and Urban Development, *U.S. Census Bureau, 2013 ACS Table B9001*

% of Ja. Co. MFI	<30%	30%-50%	50%-80%	80%-120%	>120%
Annual Income	<\$16,770	\$16,770-\$27,950	\$27,950-\$44,720	\$44,720-\$67,080	>\$67,080
Monthly Affdble. Housing Cost	<\$419	\$419-\$699	\$699-\$1,118	\$1,118-\$1,677	>\$1,677
Percent of Phoenix Households	23%	14%	20%	21%	22%
Attainable Owner Housing Types	None	Mfg. in parks	Townhome Duplex Mfg on lot	Townhome Single-family house	All housing types
Attainable Renter Housing Types	Subsidized Apartment	Apartment Mfg. in parks Duplex	Apartment Townhome Single-family house	Most Single-family houses	All housing types

**Phoenix currently has a deficit of housing affordable to households earning less than \$75,000.**

The deficit of housing for households earning less than \$25,000 results in these households living in housing that is more expensive than they can afford, consistent with the data about renter cost burden in Phoenix.

The housing types that Phoenix has a deficit of are more affordable housing types such as apartments, duplexes, tri- and quad-plexes, manufactured housing, townhomes, and smaller single-family housing.

**Exhibit 52. Rough Estimate of Housing Affordability, Phoenix, 2015**

Annual Income	<\$25K	<\$25K- \$50K	<\$50K- \$75K	<\$75K- \$100K	>\$100
HH in Phoenix	616 29%	740 35%	378 18%	237 11%	163 8%
Monthly Affdble. Housing Cost	<\$625	\$625- \$1,250	\$1,250- \$1,875	\$1,875- \$2,450	> \$2,450
Affdble. Owner Housing Cost	<\$62,500	\$62,500- \$125,000	\$125,000- \$187,500	\$187,500- \$245,000	> \$245K
Est. of Number of Owner Units in Phoenix	425	162	236	353	173
Est. of Number of Renter Units in Phoenix	141	556	86	3	0
HUD Fair Market Rent (2015)	Studio: \$617	1 bdrm: \$624 2 bdrm: \$844 3bdrm: \$1,244	4 bdrm: \$1,402		
Does Phoenix Have Enough Units?	<b>No Deficit: 51 units</b>	<b>No Deficit: 22 units</b>	<b>No Deficit: 56 units</b>	<b>Yes Surplus: 119 units</b>	<b>Yes Surplu: 10 unit</b>

## Summary of the Factors Affecting Phoenix's Housing Needs

The purpose of the analysis thus far has been to provide background on the kinds of factors that influence housing choice, and in doing so, to convey why the number and interrelationships among those factors ensure that generalizations about housing choice are difficult to make and prone to inaccuracies.

There is no question that age affects housing type and tenure. Mobility is substantially higher for people aged 20 to 34. People in that age group will also have, on average, less income than people who are older. They are less likely to have children. All of these factors mean that younger households are much more likely to be renters, and renters are more likely to be in multifamily housing.

The data illustrate what more detailed research has shown and what most people understand intuitively: life cycle and housing choice interact in ways that are predictable in the aggregate; age of the household head is correlated with household size and income; household size and age of household head affect housing preferences; income affects the ability of a household to afford a preferred housing type. The connection between socioeconomic and demographic factors and housing choice is often described informally by giving names to households with certain combinations of characteristics: the "traditional family," the "never marrieds," the "dinks" (dual-income, no kids), the "empty nesters."<sup>21</sup> Thus, simply looking at the long wave of demographic trends can provide good information for estimating future housing demand.

Thus, one is ultimately left with the need to make a qualitative assessment of the future housing market. The following is a discussion of how demographic and housing trends are likely to affect housing in Phoenix over the next 20 years:

- **Growth in housing will be driven by growth in population.** Between 2000 and 2014 Phoenix's population (within its city limits) grew by more than 1,300 people (41%). The population in Phoenix's UGB is forecast to grow from 5,142 to 7,072, an increase of 1,929 people (38%) between 2017 and 2037. Jackson County is expected to grow by approximately 44,000 people (21%) over the same period.<sup>22</sup>
- **Housing affordability will continue to be a key challenge in Phoenix.** Housing affordability is a challenge in Jackson County in general and particularly a challenge in the area between Medford and Ashland, where Phoenix is located. Housing prices are increasing faster than incomes in Jackson County, consistent with state and national challenges. Phoenix has a relatively small share of housing that is multifamily housing (less than a quarter of the City's housing stock) and much of the existing multifamily housing apartment buildings are government-subsidized affordable multifamily housing. Phoenix's key challenge over the

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<sup>21</sup> See *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* (June 1997).

<sup>22</sup> This forecast is based on Phoenix's official forecast from the Oregon Population Forecast Program for the 2015 to 2025 period, shown in Exhibit 24. ECONorthwest extrapolated the 2015 population to 2017 and the 2035 population to 2037 based on the methodology specified in the following file (from the Oregon Population Forecast Program website): [http://www.pdx.edu/prc/sites/www.pdx.edu.prc/files/Population\\_Interpolation\\_Template.xlsx](http://www.pdx.edu/prc/sites/www.pdx.edu.prc/files/Population_Interpolation_Template.xlsx).

next 20 year is providing opportunities for development of relatively affordable housing of all types of housing, from lower-cost single-family housing to market-rate multifamily housing.

- **Without substantial changes in housing policy, on average, future housing will look a lot like past housing.** That is the assumption that underlies any trend forecast, and one that allows some quantification of the composition of demand for new housing.

The City's residential policies can impact the amount of change in Phoenix's housing market, to some degree. If the City adopts policies to increase opportunities to build smaller-scale single-family and multifamily housing types, especially multifamily that is affordable to low- and moderate-income households, a larger percentage of new housing developed over the next 20 years in Phoenix may be relatively affordable. Examples of policies that the City could adopt to achieve this outcome include: allowing a wider range of housing types (e.g., duplex or townhouses) in single-family zones, ensuring that there is sufficient land zoned to allow single-family attached multifamily housing development, supporting development of government-subsidized affordable housing, and encouraging multifamily residential development in downtown. The degree of change in Phoenix's housing market, however, will depend on market demand for these types of housing in the southern part of Jackson County.

- **If the future differs from the past, it is likely to move in the direction (on average) of smaller units and more diverse housing types.** Most of the evidence suggests that the bulk of the change will be in the direction of smaller average house and lot sizes for single-family housing. This includes providing opportunities for development of smaller single-family detached homes, townhomes, and multifamily housing.

Key demographic and economic trends that will affect Phoenix's future housing needs are: (1) the aging of the Baby Boomers, (2) aging of the Millennials, and (3) continued growth in Hispanic and Latino population.

- *The Baby Boomer's population is continuing to age.* By 2035, people 60 years and older will account for 36% of the population in Jackson County (up from 28% in 2015). The changes that affect Phoenix's housing demand as the population ages are that household sizes decrease and homeownership rates decrease. Growth in retirees is the factor that is likely to have the biggest effect on Phoenix's housing market because this age group is expected to account for nearly three-quarters of the growth in Jackson County over the 20-year period.
- *Millennials will continue to age.* By 2035, Millennials will be roughly between about 35 years old to 55 years old. As they age, generally speaking, their household sizes will increase and homeownership rates will peak by about age 55. Between 2015 and 2037, Millennials will be a key driver in demand for housing for families with children.
- *Hispanic and Latino population will continue to grow.* The U.S. Census projects that by about 2040, Hispanic and Latino population will account for one-quarter of the nation's population. The share of Hispanic and Latino population in the western U.S. is likely to be higher. Hispanic and Latino population already accounts for about 13% of Phoenix's population. In addition, Hispanic and Latino population is generally younger than the U.S. average, with many Hispanic and Latino people belonging to the Millennial generation.

Hispanic and Latino population growth will be an important driver in growth of housing demand, both for owner- and renter-occupied housing. Growth in Hispanic and Latino population will drive demand for housing for families with children. Given the lower income for Hispanic and Latino households, especially first generation immigrants, growth in this group will also drive demand for affordable housing, both for ownership and renting.<sup>23</sup>

In summary, an aging population, increasing housing costs (although lower than the Region), housing affordability concerns for Millennials and the Hispanic and Latino populations, and other variables are factors that support the conclusion of need for a smaller and less expensive units and a broader array of housing choices. Growth of retirees will drive demand for small single-family detached and townhomes for homeownership, townhome and multifamily rentals, age-restricted housing, and assisted-living facilities. Growth in Millennials and Hispanic and Latino population will drive demand for affordable housing types, including demand for small, affordable single-family units (many of which may be ownership units) and for affordable multifamily units (many of which may be rental units).

- **No amount of analysis is likely to make the distant future completely certain: the purpose of the housing forecasting in this study is to get an approximate idea about the future so policy choices can be made today.** Economic forecasters regard any economic forecast more than three (or at most five) years out as highly speculative. At one year, one is protected from being disastrously wrong by the sheer inertia of the economic machine. But a variety of factors or events could cause growth forecasts to be substantially different.

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<sup>23</sup> The following articles describe housing preferences and household income trends for Hispanic and Latino families, including differences in income levels for first, second, and third generation households. In short, Hispanic and Latino households have lower median income than the national averages. First and second generation Hispanic and Latino households have median incomes below the average for all Hispanic and Latino households. Hispanic and Latino households have a strong preference for homeownership but availability of mortgages and availability of affordable housing are key barriers to homeownership for this group.

Pew Research Center. *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, February 7, 2012.

National Association of Hispanic Real Estate Professionals. *2014 State of Hispanic Homeownership Report*, 2014.

## 5. Housing Need in Phoenix

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### Project New Housing Units Needed in the Next 20 Years

The results of the housing needs analysis are based on: (1) the official population forecast for growth in Phoenix over the 20-year planning period, (2) information about Phoenix's housing market relative to Jackson County and nearby cities, and (3) the demographic composition of Phoenix's existing population and expected long-term changes in the demographics of Jackson County.

#### Forecast for housing growth

This section describes the key assumptions and presents an estimate of new housing units needed in Phoenix between 2017 and 2037, shown in Exhibit 53. The key assumptions are based on the best available data and may rely on safe harbor provisions, when available.<sup>24</sup>

- **Population.** A 20-year population forecast (in this instance, 2017 to 2037) is the foundation for estimating needed new dwelling units. Phoenix will grow from 5,142 persons in 2017 to 7,072 persons in 2037, an increase of 1,929 people.<sup>25</sup>
- **Persons in Group Quarters.** Persons in group quarters do not consume standard housing units: thus, any forecast of new people in group quarters is typically derived from the population forecast for the purpose of estimating housing demand. Group quarters can have a big influence on housing in cities with colleges (dorms), prisons, or a large elderly population (nursing homes). In general, any new requirements for these housing types will be met by institutions (colleges, government agencies, health-care corporations) operating outside what is typically defined as the housing market. Nonetheless, group quarters require residential land. They are typically built at densities that are comparable to that of multiple-family dwellings.

The 2009-2013 American Community Survey shows that 1.9% of the City's population was in group quarters. **For the 2017 to 2037 period, we assume that 1.9% of new population, 37 people, will be in group quarters.**

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<sup>24</sup> A safe harbor is an assumption that a city can use in a housing needs analysis that the State has said will satisfy the requirements of Goal 14. OAR 660-024 defines a safe harbor as "... an optional course of action that a local government may use to satisfy a requirement of Goal 14. Use of a safe harbor prescribed in this division will satisfy the requirement for which it is prescribed. A safe harbor is not the only way, or necessarily the preferred way, to comply with a requirement and it is not intended to interpret the requirement for any purpose other than applying a safe harbor within this division."

<sup>25</sup> This forecast is based on Phoenix's official forecast from the Oregon Population Forecast Program for the 2015 to 2025 period, shown in Exhibit 24. ECONorthwest extrapolated the 2015 population to 2017 and the 2035 population to 2037 based on the methodology specified in the following file (from the Oregon Population Forecast Program website): [http://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Population\\_Interpolation\\_Template.xlsx](http://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Population_Interpolation_Template.xlsx).

- **Household Size.** OAR 660-024 established a safe harbor assumption for average household size—which is the figure from the most-recent decennial Census at the time of the analysis. According to the 2009-2013 American Community Survey,<sup>26</sup> the average household size in Phoenix was 2.22 people. **Thus, for the 2017 to 2037 period, we assume an average household size of 2.22 persons per household.**
- **Vacancy Rate.** The Census defines vacancy as: "Unoccupied housing units are considered vacant. Vacancy status is determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only." The 2010 Census identified vacant through an enumeration, separate from (but related to) the survey of households. The Census determines vacancy status and other characteristics of vacant units by enumerators obtaining information from property owners and managers, neighbors, rental agents, and others.

Vacancy rates are cyclical and represent the lag between demand and the market's response to demand for additional dwelling units. Vacancy rates for rental and multifamily units are typically higher than those for owner-occupied and single-family dwelling units.

OAR 660-024 established a safe harbor assumption for vacancy rate—which is the figure from the most-recent decennial Census. According to the 2009-2013 American Community Survey,<sup>27</sup> Phoenix's vacancy rate was 4.7%. **For the 2017 to 2037 period, we assume a vacancy rate of 4.7%.**

**Phoenix will have demand for 892 new dwelling units over the 20-year period, with an annual average of 45 dwelling units.**

Exhibit 53. Forecast of demand for new dwelling units, Phoenix UGB, 2017 to 2037

Change in persons	1,929
<i>minus</i> Change in persons in group quarters	37
<i>equals</i> Persons in households	1,892
Average household size	2.2
New occupied DU	852
<i>times</i> Aggregate vacancy rate	4.7%
<i>equals</i> Vacant dwelling units	40
<b>Total new dwelling units (2017-2037)</b>	<b>892</b>
<b>Annual average of new dwelling units</b>	<b>45</b>

<sup>26</sup> The 2009-2013 ACS data was the most up-to-date Census data when this housing needs analysis was developed in early 2016.

<sup>27</sup> The 2009-2013 ACS data was the most up-to-date Census data when this housing needs analysis was developed in early 2016.

## New housing units needed over the next 20 years

Exhibit 53 presents a forecast of new housing in Phoenix's UGB for the 2017 to 2037 period. This section determines the needed mix and density for new housing developed over this 20-year period in Phoenix.

Exhibit 54 shows that, in the future, the need for new housing developed in Phoenix will include more housing generally more affordable, with some housing located in walkable areas with access to services. This assumption is based on the following findings in the previous chapters:

- Demographic changes suggest moderate increases in demand for attached single-family housing and multifamily housing. The key demographic trends that will affect Phoenix's future housing needs are: (1) the aging of the Baby Boomers, (2) aging of the Millennials, and (3) continued growth in Hispanic and Latino population. Growth of these groups has the following implications for housing need in Phoenix:
  - *Baby Boomers.* Growth in the number of seniors will have the biggest impacts on demand for new housing through demand for housing types specific to seniors, such as assisted living facilities or age-restricted developments. These households will make a variety of housing choices, including: remaining in their homes as long as they are able, downsizing to smaller single-family homes (detached and attached) or multifamily units, moving into age-restricted manufactured home parks (if space is available), or moving into group housing (such as assisted living facilities or nursing homes), as their health fails. Minor increases in the share of Baby Boomers who downsize to smaller housing will result in increased demand for single-family attached and multifamily housing. Some Baby Boomers may prefer housing in walkable neighborhoods, with access to services.
  - *Millennials.* Growth in Millennial households is expected to account for a relatively small share in population growth in Jackson County over the next 20-years. To the extent that Millennials grow in Phoenix, this growth will result in increased demand for both ownership and rental opportunities, with an emphasis on housing that is comparatively affordable. Some Millennials may prefer to locate in traditional single-family detached housing, at the edges of Phoenix's UGB. Some Millennials will prefer to locate in in walkable neighborhoods, possibly choosing small single-family detached houses, townhouses, or multifamily housing.
  - *Hispanic and Latino population.* Growth in the number of Hispanic and Latino households will result in increased demand for housing of all types, both for ownership and rentals, with an emphasis on housing that is comparatively affordable. Hispanic and Latino households are more likely to be larger than average, with more children and possibly with multigenerational households. The types of housing that are most likely to be affordable to the majority of Hispanic and Latino households are existing lower-cost single-family housing, single-family housing with an accessory dwelling unit, and multifamily housing. In addition, growth in the number of farmworkers will increase need for affordable housing for farmworkers.
- About 44% of Phoenix's households have affordability problems, indicating a need for more affordable housing types. About half of Phoenix's households could not afford a two-bedroom apartment at HUD's fair market rent level of \$844. A household earning median

family income (\$55,900) could afford a home valued up to about \$140,000, which is considerably below the median sales price for single-family housing of about \$244,000 in Phoenix.

In addition, Phoenix has a small supply of multifamily housing, which accounts for less than one-quarter of the city's housing stock. Phoenix has few multifamily apartment buildings, two of which are government-subsidized apartment buildings. As a result, there are few choices for market-rate multifamily housing opportunities in Phoenix.

Continued increases in housing costs may increase demand for denser housing (e.g., multifamily housing or smaller single-family housing) or locating in less expensive areas in Southern Oregon, farther from employment centers. To the extent that denser housing types are more affordable than larger housing types, continued increases in housing costs will increase demand for denser housing.

These findings suggest that Phoenix's needed housing mix is for a broader range of housing types than are currently available in Phoenix's housing stock. The types of housing that Phoenix will need to provide opportunity for development of over the next 20-years are described above: smaller single-family detached housing (e.g., cottages or small single-family detached units), manufactured housing, "traditional" single-family detached housing, townhouses, duplexes and quadplexes, small apartment buildings, and larger apartment buildings.

Exhibit 54 shows a forecast of needed housing in the Phoenix UGB during the 2017 to 2037 period. The projection is based on the following assumptions:

- Phoenix's official forecast for population growth shows that the City will add 1,929 people over the 20-year period. Exhibit 53 shows that the new population will result in need for 892 new dwelling units over the 20-year period.
- The assumptions about the mix of housing in Exhibit 54 are:
  - Sixty-five percent of new housing will be single-family detached, a category which includes manufactured housing. Exhibit 9 shows that 75% of Phoenix's housing was single-family detached in the 2009-2013 period, with little change since 2000.
  - Five percent of new housing will be single-family attached. Exhibit 9 shows that 1% of Phoenix's housing was single-family attached in the 2009-2013 period, with little change since 2000.
  - Thirty percent of new housing will be multifamily. Exhibit 9 shows that 24% of Phoenix's housing was single-family attached in the 2009-2013 period, with little change since 2000.

**Phoenix will have demand for 892 new dwelling units over the 20-year period, with an annual average of 45 dwelling units.**

**Exhibit 54. Forecast of demand for new dwelling units, Phoenix UGB, 2017 to 2037**

Needed new dwelling units (2017-2037)	<b>892</b>
Dwelling units by structure type	
<i>Single-family detached</i>	
Percent single-family detached DU	<b>65%</b>
equals Total new single-family detached DU	<b>580</b>
<i>Single-family attached</i>	
Percent single-family attached DU	<b>5%</b>
equals Total new single-family attached DU	<b>45</b>
<i>Multifamily</i>	
Percent multifamily detached DU	<b>30%</b>
equals Total new multifamily DU	<b>267</b>
<b>Total new dwelling units (2017-2037)</b>	<b>892</b>

The forecast of new units does not include dwellings that will be demolished and replaced. This analysis does not factor those units in; it assumes they will be replaced at the same site and will not create additional demand for residential land.

Exhibit 57 allocates needed housing to plan designations in Phoenix. The allocation is based, in part, on the types of housing allowed in the zoning designations in each plan designation. Exhibit 57 shows:

- **Low Density Residential** will accommodate new single-family detached housing and a small amount of single-family attached.
- **Medium Density Residential**<sup>28</sup> will accommodate a mixture of new and lower density multifamily housing, such as duplexes or triplexes.
- **High Density Residential** will primarily accommodate multifamily, with a small amount of single-family attached housing.
- **Residential Hillside** will accommodate new single-family detached housing.

<sup>28</sup> Medium Density Residential includes 0.15 acres of land in Residential Employment, which is zoned R-2.

Exhibit 55. Allocation of needed housing by housing type and plan designation, Phoenix UGB, 2017 to 2037

Source: ECONorthwest  
 Note: Medium Density Residential uses plan 0.15 acres of land in Residential Employment, which is zoned R2  
 Note: 3-unit attached housing in High Density Residential is not included in multi-unit manufactured home rows

	Residential Plan Designation				Total
	Low-Density Residential	Medium-Density Residential*	High-Density Residential	Residential Hillside	
<b>Dwelling Units</b>					
Single-family detached	536	-	-	44	580
Single-family attached	9	18	18	-	45
Multifamily	-	115	152	-	267
<b>Total</b>	<b>545</b>	<b>133</b>	<b>170</b>	<b>44</b>	<b>892</b>
<b>Percent of Units</b>					
Single-family detached	60%	0%	0%	5%	65%
Single-family attached	1%	2%	2%	0%	5%
Multifamily	0%	13%	17%	0%	30%
<b>Total</b>	<b>61%</b>	<b>15%</b>	<b>19%</b>	<b>5%</b>	<b>100%</b>

Exhibit 56 presents the assessment of needed density for housing built in Phoenix over the 2015 to 2035 period. The assessment of needed density is based on a number of factors: (1) the types of housing and development densities allowed in each Plan Designation, (2) existing development by type of housing, (3) the densities by type of plan designation described in OAR 660-038 Table 2,<sup>29</sup> and (4) the range of housing need by income identified Exhibit 57, which includes need for housing for high income households to low- and very-low income households.

Phoenix uses the safe harbor in OAR 660-024-0040(10) to estimate land needed for streets and roads, parks, and schools, as described below.<sup>30</sup> As a result, Exhibit 57 converts from net densities to gross densities by decreasing densities by 25% in each plan designation.<sup>31</sup>

Exhibit 57 shows the following needed densities, in net and gross acres:

- **Low Density Residential:** 6.0 dwelling units per acre, with 25% of land used for rights-of-way, resulting in a density of 4.5 dwelling units per gross acre. Low Density Residential

<sup>29</sup> While Phoenix does not use the methodology described in OAR 660-038, the City did consider the densities described in Table 2. Phoenix's needed densities generally fit within the ranges described in Table 2. The exception is for Medium Density Residential. Table 2 shows a range of 10-12 dwelling units per acre for medium density. Phoenix's zoning code allows a maximum of about 10 dwelling units per acre for Medium Density Residential.

<sup>30</sup> OAR 660-024-0040(10) says: "As a safe harbor during periodic review or other legislative review of the UGB, a local government may estimate that the 20-year land needs for streets and roads, parks and school facilities will together require an additional amount of land equal to 25 percent of the net buildable acres determined for residential land needs under section (4) of this rule, and in conformance with the definition of "Net Buildable Acre" as defined in OAR 660-024-0010(6)."

<sup>31</sup> OAR 660-024-0010(6) uses the following definition of net buildable acre. "Net Buildable Acre" "...consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads." While the administrative rule does not include a definition of a gross buildable acre, using the definition above, a gross buildable acre will include areas used for rights-of-way for streets and roads, parks, and schools.

allows densities of between 5.5 and 7.25 dwelling units per net acre. The historical density of for single-family detached dwellings in Phoenix is 4.9 dwelling units per net acre.

- **Medium Density Residential:** 9.0 dwelling units per acre, with 25% of land used for rights-of-way, resulting in a density of 6.8 dwelling units per gross acre. Medium Density Residential allows densities of between 5.5 and 10.0 dwelling units per net acre.
- **High Density Residential – Multifamily Housing:** 23.0 dwelling units per acre, with 25% of land used for rights-of-way, resulting in a density of 17.3 dwelling units per gross acre. High Density Residential allows a minimum density of about 13 dwelling units per net acre.<sup>32</sup> The historical density of for multifamily dwellings in Phoenix is 22.8 dwelling units per net acre.
- **Residential Hillside:** 4.0 dwelling units per acre, with 25% of land used for rights-of-way, resulting in a density of 3.0 dwelling units per gross acre. The historical density for single-family detached dwellings on slopes in Phoenix are 3.9 dwelling units per net acre on slopes of 15-20%, and 3.2 dwelling units per acre on slopes of 21-25%.

Exhibit 56. Needed density for housing built in the Phoenix UGB, 2017 to 2037

Source: ECONorthwest  
 Note: DU = dwelling unit

Plan Designation	Net Density (du/acre)	Percentage of land for Rights-of-Way, Parks, and Schools	Gross Density (du/acre)
Low-Density Residential	6.0	25%	4.5
Medium-Density Residential	9.0	25%	6.8
High-Density Residential	23.0	25%	17.3
Residential Hillside	4.0	25%	3.0

<sup>32</sup> This minimum density assumes that three dwelling units are developed on a 10,000 square foot lot, which is the minimum lot size in HDR.

## Needed housing by income level

The next step in the housing needs analysis is to develop an estimate of need for housing by income and housing type. This requires an estimate of the income distribution of current and future households in the community. These estimates presented in this section are based on (1) secondary data from the Census, and (2) analysis by ECONorthwest.

The analysis in Exhibit 57 is based on American Community Survey data about income levels in Phoenix, using information shown in

Exhibit 51. Income is categorized into market segments consistent with HUD income level categories, using Jackson County's 2015 Median Family Income (MFI) of \$55,900. Exhibit 57 is based on current household income distribution, assuming approximately that the same percentage of households will be in each market segment in the future.

### More than half of Phoenix's future households will have income below 80% of Jackson County's median family income (less than \$45,000 in 2015 dollars).

This shows a substantial need for affordable housing types, such as government-subsidized affordable housing, manufactured homes, apartments, townhomes, duplexes, and small single-family homes.

Exhibit 57. Estimate of needed new dwelling units by income level, by Median Family Income (MFI) for Jackson County (\$55,900), Phoenix, 2017-2037

Source: U.S. Department of Housing and Urban Development  
U.S. Census Bureau, 2013 ACS Table B0021

% of Ja. Co. MFI	<30%	30%-50%	50%-80%	80%-120%	>120%
Annual Income 2015	<\$16,770	\$16,770-\$27,950	\$27,950-\$44,720	\$44,720-\$67,080	> \$67,080
Monthly Affdble. Housing Cost	<\$419	\$419-\$699	\$699-\$1,118	\$1,118-\$1,677	> \$1,677
Percent of Phoenix Households	23%	14%	20%	21%	22%
New Households 2017-2037	203	126	180	184	199
Attainable Owner Housing Types	None	Mfg. in parks	Townhome Duplex Mfg on lot	Townhome Single-family house	All housing types
Attainable Renter Housing Types	Subsidized Apartment	Apartment Mfg. in parks Duplex	Apartment Townhome Single-family house	Most Single-family houses	All housing types

## Need for government assisted and manufactured housing

ORS 197.303 requires cities to plan for government-assisted housing, manufactured housing on lots, and manufactured housing in parks.

- **Government-subsidized housing.** Government-subsidies can apply to all housing types (e.g., single family detached, apartments, etc.). Phoenix allows development of government-assisted housing in all residential plan designations, with the same development standards for market-rate housing. This analysis assumes that Phoenix will continue to allow government housing in all of its residential plan designations. Because government assisted housing is similar in character to other housing (with the exception being the subsidies), it is not necessary to develop separate forecasts for government-subsidized housing.
- **Manufactured housing on lots.** Phoenix allows manufactured homes on lots in in Low Density Residential designation (the R-1 zone), which is the zone where single-family detached housing is allowed. Phoenix does not have special siting requirements for manufactured homes. Since manufactured homes are subject to the same siting requirements as site-built homes, it is not necessary to develop separate forecasts for manufactured housing on lots.
- **Manufactured housing in parks.** OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial, or high density residential development. According to the Oregon Housing and Community Services' Manufactured Dwelling Park Directory,<sup>33</sup> Phoenix has four manufactured home parks within the City, with 386 spaces and six vacant spaces. The manufactured home parks are located in the High Density Residential Plan Designation.

ORS 197.480(2) requires Phoenix to project need for mobile home or manufactured dwelling parks based on: (1) population projections, (2) household income levels, (3) housing market trends, and (4) an inventory of manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial, or high density residential.

- Exhibit 53 shows that the Phoenix area will grow by 892 dwelling units over the 2017 to 2037 period.
- Analysis of housing affordability (in Exhibit 56) shows that about 37% of Phoenix's new households will be low income, earning 50% or less of the region's median family income. One type of housing affordable to these households is manufactured housing.
- Manufactured housing in parks accounts for about 20% (about 386 dwelling units) of Phoenix's current housing stock.
- National, state, and regional trends since 2000 showed that manufactured housing parks were closing, rather than being created. For example, between 2000 and 2015, Oregon had 68 manufactured parks close, with more than 2,700 spaces. Of these 13 parks (336 spaces)

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<sup>33</sup> Oregon Housing and Community Services, Oregon Manufactured Dwelling Park Directory, <http://o.hcs.state.or.us/MDPCRParcs/ParkDirQuery.jsp>

that closed were in Jackson or Josephine counties. Discussions with several stakeholders familiar with manufactured home park trends suggest that over the same period, few to no new manufactured home parks have opened in Oregon.

- Exhibit 56 shows that the households most likely to live in manufactured homes in parks are those with incomes between \$16,700 and \$28,000 (30% to 50% of median family income), which include 14% of Phoenix households. However, households in other income categories may live in manufactured homes in parks.

Manufactured home park development is an allowed use in High Density Residential. The national and state trends of closure of manufactured home parks and the fact that no new manufactured home parks have opened in Oregon in over the last 15 years demonstrate that development of new manufactured home parks in Phoenix is unlikely. In addition, residential land prices in Phoenix have increased by 5% annually between 1999 and 2016, making it less economically feasible to open a new manufactured home park. In contrast, the annual average inflation rate over the same period was 2.6%.

Our conclusion from this analysis is that development of new manufactured home parks in Phoenix over the planning period is unlikely over the 2017-2037 period. It is, however, likely that manufactured homes will continue to locate on individual lots in Phoenix. The forecast of housing in Exhibit 54 assumes that no new manufactured home parks will be opened in Phoenix over the 2017-2037 period. The forecast includes new manufactured homes on lots in the category of single-family detached housing.

- Over the next 20-years (or longer) one or more manufactured home parks may close in Phoenix, as a result of manufactured home park landowners selling or redeveloping their land for uses with higher rates of return, rather than lack of demand for spaces in manufactured home parks. Manufactured home parks contribute to the supply of low-cost affordable housing options, especially for affordable homeownership.
- While there is statewide regulation of the closure of manufactured home parks designed to lessen the financial difficulties of this closure for park residents,<sup>34</sup> the City has a role to play in ensuring that there are opportunities for housing for the displaced residents. The City's primary role is to ensure that there is sufficient land zoned for new multifamily housing and to reduce barriers to residential development to allow for development of new, relatively affordable housing. The City may use a range of policy to encourage development of relatively affordable housing, such as allowing a wider range of moderate density housing (e.g., duplexes or cottages) in the Low Density Residential designation, using tax credits to support affordable housing production, developing an inclusionary zoning policy, or partnering with a developer of government-subsidized affordable housing.

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<sup>34</sup> ORS 90.645 regulates rules about closure of manufactured dwelling parks. It requires that the landlord must do the following for manufactured dwelling park tenants before closure of the park: give at least one year's notice of park closure, pay the tenant between \$5,000 to \$9,000 for each manufactured dwelling park space, and cannot charge tenants for demolition costs of abandoned manufactured homes.

## 6. Residential Land Sufficiency within Phoenix

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This chapter presents an evaluation of the sufficiency of vacant residential land in Phoenix to accommodate expected residential growth over the 2017 to 2037 period. This chapter includes an estimate of residential development capacity (measured in new dwelling units) and an estimate of Phoenix's ability to accommodate needed new housing units for the 2017 to 2037 period, based on the analysis in the housing needs analysis. The chapter ends with a discussion of the conclusions and recommendations for the housing needs analysis.

### Framework for the Capacity Analysis

The buildable lands inventory summarized in Chapter 2 (and presented in full in Appendix A) provides a *supply* analysis (buildable land by type), and Chapter 5 provided a *demand* analysis (population and growth leading to demand for more residential development). The comparison of supply and demand allows the determination of land sufficiency.

There are two ways to get estimates of supply and demand into common units of measurement so that they can be compared: (1) housing demand can be converted into acres, or (2) residential land supply can be converted into dwelling units. A complication of either approach is that not all land has the same characteristics. Factors such as zone, slope, parcel size, and shape, can all affect the ability of land to accommodate housing. Methods that recognize this fact are more robust and produce more realistic results. This analysis uses the second approach: it estimates the ability of vacant residential lands within the UGB to accommodate new housing. This analysis, sometimes called a "capacity analysis,"<sup>35</sup> can be used to evaluate different ways that vacant residential land may build out by applying different assumptions.

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<sup>35</sup> There is ambiguity in the term *capacity analysis*. It would not be unreasonable for one to say that the "capacity" of vacant land is the maximum number of dwellings that could be built based on density limits defined legally by plan designation or zoning, and that development usually occurs—for physical and market reasons—at something less than full capacity. For that reason, we have used the longer phrase to describe our analysis: "estimating how many new dwelling units the vacant residential land in the UGB is likely to accommodate." That phrase is, however, cumbersome, and it is common in Oregon and elsewhere to refer to that type of analysis as "capacity analysis," so we use that shorthand occasionally in this memorandum.

## Phoenix Capacity Analysis Results

The capacity analysis estimates the development potential of vacant residential land to accommodate new housing based on the needed densities by the housing type categories shown in Exhibit 56.

Exhibit 58 shows that **Phoenix vacant residential land has capacity to accommodate approximately 251 new dwelling units**, based on the following assumptions:

- **Buildable residential land.** The capacity estimates start with the number of buildable acres in residential Plan Designations as shown in Chapter 2.
- **Needed densities.** The capacity analysis assumes development will occur at needed densities (as opposed to historical observed densities). Those densities were derived from historical levels and the needed densities shown in Exhibit 56. The overall average density for Phoenix will be 4.8 dwelling units per gross acre.

Exhibit 58. Estimated housing development potential on vacant residential lands, number of dwelling units, Phoenix UGB

Source: Buildable Lands Inventory from City of Phoenix, Expenditures by ECONorthwest  
www.econorthwest.com

Plan Designation	Buildable/ Suitable Acres	Gross Density (du/acre)	Dwelling Units Capacity
Low-Density Residential	26.7	4.5	120
Medium-Density Residential*	9.3	6.8	63
High-Density Residential	1.4	17.3	24
Residential Hillside	14.7	3.0	44
<b>Total</b>	<b>52.2</b>	<b>4.8</b>	<b>251</b>

The estimated capacity in Exhibit 58 does not include assumptions about redevelopment opportunities.

## Residential Land Sufficiency

The next step in the analysis of the sufficiency of residential land within Phoenix is to compare the demand for housing by Plan Designation (

Exhibit 55) with the capacity of land by Plan Designation (Exhibit 58).

Exhibit 59 shows that Phoenix has a deficit of capacity in most residential plan designations:

- **Low Density Residential:** Phoenix has a deficit of capacity for about 425 dwelling units, or 94 gross acres of land to accommodate growth over the 2017-2037 period.
- **Medium Density Residential:** Phoenix has a deficit of capacity for about 70 dwelling units, or 10 gross acres of land to accommodate growth.
- **High Density Residential:** Phoenix has a deficit of capacity for about 146 dwelling units, or 8 gross acres of land to accommodate growth.
- **Residential Hillside:** Phoenix has sufficient land in Residential Hillside to accommodate growth.

Exhibit 59. Comparison of capacity of existing residential land with demand for new dwelling units and land deficit, Phoenix UGB, 2017-2037

Source: Buildable Land Inventory from City of Phoenix. Calculations by ECONorthwest  
Notes: One dwelling unit.

Plan Designation	Housing Sufficiency		
	Dwelling Units Capacity of Buildable Land	Needed Dwelling Units (2017-2037)	Surplus or Deficit of Dwelling Units
Low-Density Residential	120	545	-425
Medium-Density Residential	63	133	-70
High-Density Residential	24	170	-146
Residential Hillside	44	44	0
<b>Total</b>	<b>251</b>	<b>892</b>	<b>-641</b>

## Conclusions and Recommendations

The key conclusions of the Housing Needs Analysis are that:

- **Phoenix has an existing deficit of affordable housing.** More than one-third of Phoenix's existing households are low- or very-low income, with income below \$28,000. Phoenix has a deficit of housing that is affordable to households in these income ranges. The types of housing affordable to these households are government subsidized housing, manufactured homes, smaller single-family detached housing (e.g., cottages or "tiny houses"), duplexes or quadplexes, and apartments.

In addition, 40% have income between \$28,000 and \$67,000. Phoenix also has a deficit of housing that is affordable to households in these income ranges. The types of housing affordable to these households are manufactured homes on lots, apartments, duplexes or quadplexes, townhomes, or single-family housing.

- **Phoenix's housing market is strongly impacted by the housing market in the Rogue Valley.** Phoenix is relatively small, accounting for 2% of Jackson County's population, and located between Medford (with more than 76,000 people) and Ashland (with more than 20,000 people). On average, both housing costs and rental costs are lower in Phoenix than in Medford, and substantially lower than in Ashland.

While the percentage of households who are cost burdened<sup>36</sup> is as similar in Phoenix as in Medford or Ashland (between 45% and 50% of households), household incomes are generally lower than in Phoenix than in Medford or Ashland. In addition, most residents who live in Phoenix work in Medford or Ashland.

This information suggests the role that Phoenix plays in the Rogue Valley housing market is as a place where housing is comparatively more affordable and workforce housing is generally more available. Given Phoenix's small size, relative to Medford or Ashland, and commuting patterns within the Rogue Valley, Phoenix is going to continue to have demand for affordable lower-income and workforce housing.

- **Phoenix's demographics are changing, consistent with regional and national trends, with changes affecting the types of housing needed over the next 20 years.** Demographic changes suggest moderate increases in demand for relatively affordable attached single-family housing and multifamily housing. The key demographic trends that will affect Phoenix's future housing needs are: (1) the aging of the Baby Boomers, (2) aging of the Millennials, and (3) continued growth in Hispanic and Latino population. Growth of these groups has the following implications for housing need in Phoenix:
  - *Baby Boomers.* Growth in the number of seniors will have the biggest impacts on demand for new housing through demand for housing types specific to seniors, such as assisted living facilities or age-restricted developments. These households will make a variety of housing choices, including: remaining in their homes as long as they

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<sup>36</sup> HUD guidelines indicate that households paying more than 30% of their income on housing experience "cost burden."

are able, downsizing to smaller single-family homes (detached and attached) or multifamily units, or moving into group housing (such as assisted living facilities or nursing homes), as their health declines. Minor increases in the share of Baby Boomers who downsize to smaller housing will result in increased demand for single-family attached and multifamily housing. Some Baby Boomers may prefer housing in walkable neighborhoods with access to services.

- *Millennials.* Growth in this population will result in increased demand for both ownership and rental opportunities, with an emphasis on housing that is comparatively affordable. Some Millennials may prefer to locate in traditional single-family detached housing, at the edges of Phoenix's UGB. Some Millennials will prefer to locate in housing closer to Downtown, or in walkable neighborhoods, possibly choosing small single-family detached houses, townhouses, or multifamily housing. These households will be a primary driver of increased demand for smaller, less expensive housing types.
- *Hispanic and Latino population.* Growth in the number of Hispanic and Latino households will result in increased demand for housing of all types, both for ownership and rentals, with an emphasis on housing that is comparatively affordable. Hispanic and Latino households are more likely to be larger than average, with more children and possibly with multigenerational households. The types of housing that are most likely to be affordable to the majority of Hispanic and Latino households are existing lower-cost single-family housing, single-family housing with an accessory dwelling unit, and multifamily housing. In addition, growth in the number of farmworkers will increase need for affordable housing for farmworkers.
- **Phoenix is planning for a shift in the mix of housing developed in Phoenix.** Phoenix's existing housing stock is 75% single-family detached, 24% multifamily, and 1% single-family attached. Within these broad housing types, Phoenix's housing stock is a mixture of housing types. For example, Phoenix's single-family detached housing ranges from mobile and manufactured housing to more affordable single-family detached housing, to higher-amenity, single-family detached housing.

Phoenix is planning for a change in the mix of housing in response to the need for more affordable housing and the demographic changes that suggest demand for a wider variety of housing types. Phoenix's needed housing mix for development over the 2017-2037 period is 65% single-family detached, 30% multifamily, and 5% single-family attached.

- **Phoenix's needed housing densities are roughly consistent with the City's historical densities.** The City's existing densities range from 6 dwelling units per net acre in Low Density Residential, to 23 dwelling units per net acre in High Density Residential. Given the mix of housing that Phoenix is planning for, the average density for newly built housing will be about 7.3 dwelling units per net acre or 4.8 dwelling units per gross acre.
- **The City's density assumptions do not meet the requirements of the RPS Regional Plan.** The RPS resulted in agreements from each city in the region about "committed densities" for residential development in land in areas within the UGB but outside the city limits and in the Urban Reserve Areas (URAs). Phoenix' committed density is 6.6 dwelling units

per gross acre (or 8 dwelling units per net acre) for the 2010-2035 period. For the 2036-2060 period, Phoenix' committed density is 7.6 dwelling units per gross acre, a 15% increase over the committed density for the 2010-2035 period.<sup>37</sup>

The capacity analysis in Exhibit 58 result in a density of 4.8 dwelling units per gross acre across the UGB. Much of the land outside the city limits but inside the UGB is Low Density, Residential Hillside, and Medium Density Residential. The assumed densities on Low Density Residential and Residential Hillside (4.5 and 3.0 dwelling units per gross acre respectively) do not meet Phoenix' committed density of 6.6 dwelling units per gross acre through 2035. Phoenix will need to develop policies to meet the RPS committed densities, such as land use efficiency measures to increase development density.

- **Phoenix has a deficit of land to accommodate housing in all residential plan designations except for Hillside Residential.** Ninety-four acres are in Low Density Residential, 10 in Medium Density Residential, and eight acres in High Density Residential.
- **Phoenix has a range of options to address the residential deficits: (1) adopt policies to increase land use efficiency, (2) expand the UGB, or (3) do both.** OAR 660-024-0050(4) says: "Prior to expanding the UGB, a local government must demonstrate that the estimated needs cannot reasonably be accommodated on land already inside the UGB." Meeting the standard requires a city to evaluate policies to increase land use efficiency.

The City's policy options for increasing land use efficiency and providing opportunities for development of relatively affordable housing include: ensuring that enough land is zoned for residential development to meet the need in each plan designation, eliminating barriers to residential development, evaluating opportunities for increasing development density (e.g., allowing smaller lot sizes in some zones), allowing a wider range of housing types (e.g., cottage housing), identifying opportunities for denser multifamily development (e.g., redevelopment of an underused site in downtown), and providing infrastructure in a cost-effective way. The City also has options for supporting development of affordable housing, such as partnering with nonprofit housing providers on development of government-subsidized housing, providing property tax breaks for development of desired housing (e.g., affordable workforce multifamily housing), or providing flexibility in development standards for desired housing developments.

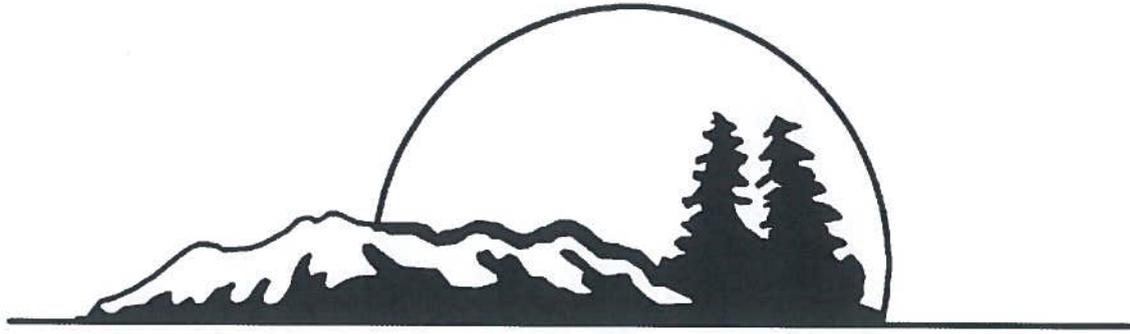
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<sup>37</sup> Greater Bear Creek Valley Regional Plan, page 2-11 to 2-12.

## Appendix A: Buildable Lands Inventory

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This appendix presents the residential buildable lands inventory report developed by the City of Phoenix. The results of the buildable lands inventory are summarized in Chapter 2.



# City of Phoenix Residential Buildable Lands Inventory



February 2016

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## Introduction

This document summarizes the Residential Buildable Land Inventory analysis for the Phoenix Urban Growth Boundary (UGB). It addresses Statewide Planning Goal 10. Goal 10, and its accompanying administrative rules set out a process to estimate future housing needs and to analyze the supply and demand for residential land needed to accommodate future growth.

### Goal 10: Housing

To provide for the housing needs of citizens of the state:  
Buildable lands for residential use shall be inventoried and plans shall encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density.

The purpose of this study is to determine whether there is a sufficient amount of suitable land to meet future housing demands within the existing UGB. In order to make decisions regarding this primary question, the study identifies lands that are designated and suitable for residential development - a Residential Buildable Land Inventory (RBLI). This RBLI is based on land information as of October 2015.

## Background

The City of Phoeni, located in the central part of the Rogue Valley in Southern Oregon, is approximately two Miles south of Medford's city limits along the Interstate 5 corridor.

The Urban Growth Boundary for the City was initially acknowledged by Jackson County in 1978 (see Map 1). The population following those decades has risen from 3,480 in 1990 to 4,514 in 2014, an increase of almost 30% over the last 25 years.

The Land Use Element, which describes the future purposes and function of land within the City's Urban Growth Boundary (see Map 2), of the City of Phoenix's Comprehensive Plan was last updated on March 2, 1998 (Ordinance No. 788) as part of a parcel-by-parcel analysis to determine buildable lands within the City's Urban Growth Boundary.

In 2002, the City conducted another land use inventory which was based on data provided by RVCOG. However, this study was never adopted into the Comprehensive Plan.

As part of the revision for the draft of the Greater Bear Creek Valley Regional Plan (RPS), Davis Wright Tremaine & CSA Planning provided findings to revise the numbers in said draft plan which were based on the City's Buildable Lands Inventory.

## Overview

By 2035, Phoenix is projected to have a population of 6,883 based on the Coordinated Population Forecast prepared by Portland State University in 2015. In order to plan for this projected growth, the City will conduct several planning studies. These studies will be completed as individual projects, as described below, to meet timing considerations of the City.

Table 1: Historical & Projected Population for Jackson County

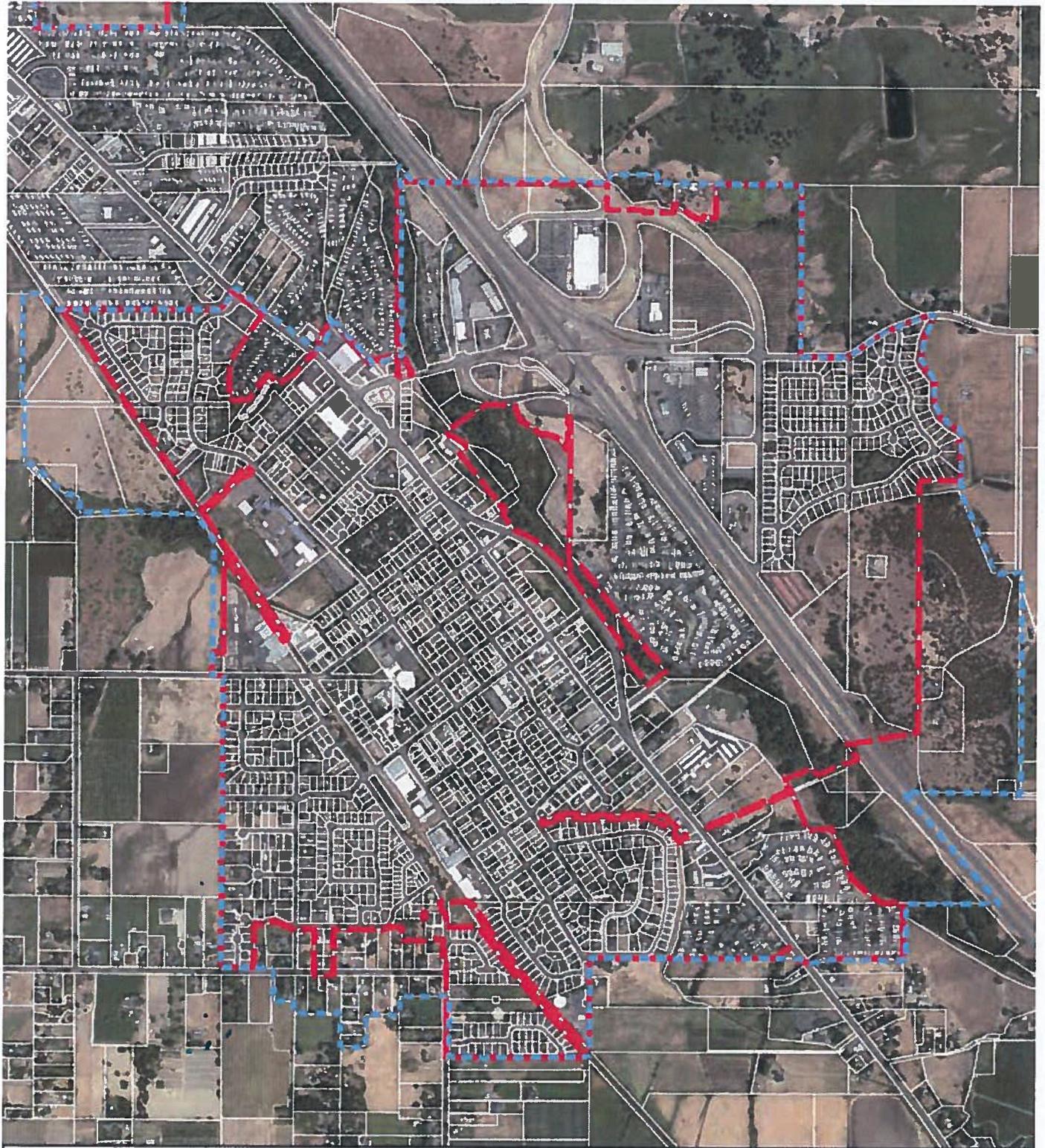
	Historical			Forecast				
	2000	2010	AAGR (2000-2010)	2015	2035	2065	AAGR (2015-2035)	AAGR (2035-2065)
<b>Jackson County</b>	<b>181,269</b>	<b>203,206</b>	<b>1.1%</b>	<b>211,275</b>	<b>255,840</b>	<b>306,858</b>	<b>1.0%</b>	<b>0.6%</b>
Ashland <sup>1</sup>	20,023	20,626	0.3%	20,905	23,183	24,138	0.5%	0.1%
Butte Falls	440	423	-0.4%	421	437	447	0.2%	0.1%
Central Point	13,310	17,736	2.9%	18,329	22,680	27,485	1.1%	0.6%
Eagle Point	4,952	8,508	5.6%	9,657	14,839	18,669	2.2%	0.8%
Gold Hill	1,181	1,228	0.4%	1,267	1,496	2,018	0.8%	1.0%
Jacksonville	2,256	2,785	2.1%	2,927	4,316	6,687	2.0%	1.5%
Medford	67,865	76,581	1.2%	80,024	99,835	124,582	1.1%	0.7%
<b>Phoenix</b>	<b>4,379</b>	<b>4,774</b>	<b>0.9%</b>	<b>4,955</b>	<b>6,883</b>	<b>9,775</b>	<b>1.7%</b>	<b>1.2%</b>
Rogue River	2,544	2,714	0.6%	2,838	3,705	5,545	1.3%	1.4%
Shady Cove	2,528	3,050	1.9%	3,168	4,343	6,105	1.6%	1.1%
Talent	5,683	6,123	0.7%	6,411	9,020	14,290	1.7%	1.5%
Outside UGB's	56,108	58,658	0.4%	60,373	65,104	67,119	0.4%	0.1%

Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC)

<sup>1</sup> For simplicity each UGB is referred to by its primary city's name.

1. Residential Buildable Land Inventory (RBLI): Identify the amount of built, vacant, potential infill, potential redevelopable and environmentally constrained land within the existing UGB.
2. Commercial and Industrial Buildable Land Inventory (CIBLI): Identify the amount of built, vacant, potential infill, potential redevelopable and environmentally constrained employment land within the existing UGB.
3. Housing Needs Analysis: Determine the amount of residential land needed to meet future housing demand at appropriate densities and housing types. The analysis is based on historical and future population change, demographics, and development trends. The HNA will address Statewide Planning Goal 10 - Housing Requirements.
4. Economic Opportunities Analysis (EOA): Estimate the types and amounts of industrial and commercial development and land that will be needed to accommodate forecasted economic growth as well as economic development objectives.
5. Land Sufficiency Analysis: Compare the land inventories (supply) with Statewide Planning Goal 9 (Economic) and Goal 10 (Housing) land need estimates (demand).
6. UGB Expansion Analysis: Conduct analysis per Goal 14 - Urbanization location factors, if UGB expansion is needed.
7. Comprehensive Plan & Map Amendments & Adoption: Prepare finding and incorporate the results of these studies and any policy changes into Comprehensive Plan text and Map for local adoption.

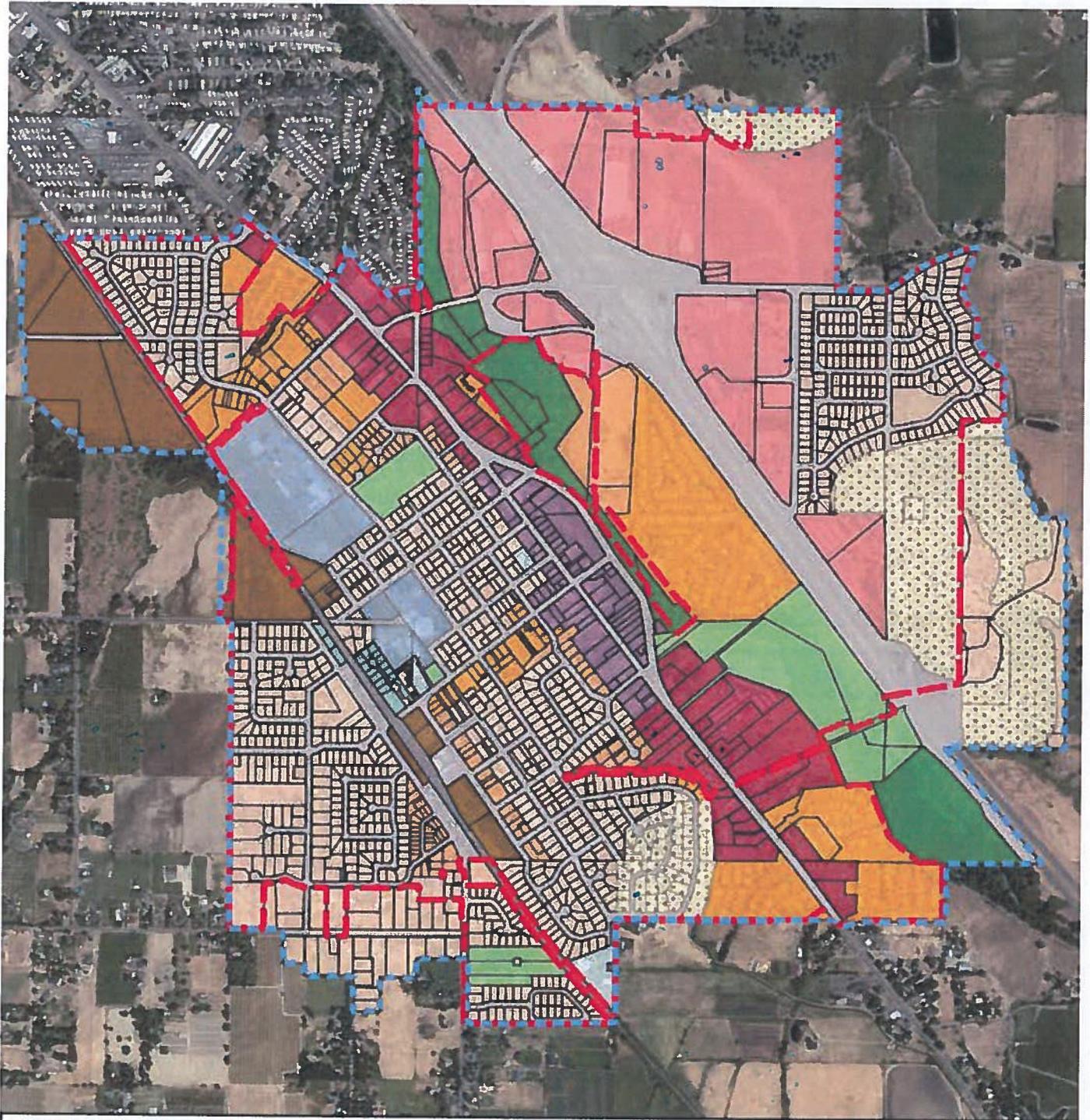
# Map 1 - 2015 Aerial



## Legend

 UGB  CityLimits  Taxlots

## Map 2 - Comprehensive Plan Designations



### Legend

- |  |  |  |
|--|--|--|
|  UGB                  |  High Density Residential   |  Railroad               |
|  City Limits          |  Industrial                 |  Residential Employment |
| <b>Plan Designations</b>   |  Interchange Business       |  Residential Hillside   |
|  Bear Creek Greenway  |  Low Density Residential    |  Road                   |
|  City Center District |  Medium Density Residential |  Schools                |
|  Commercial           |  Park & Open Space          |  Taxlots                |
|  |  Public                     |  |

## Residential Buildable Land Inventory

This chapter summarizes the methodology, assumptions, and results of the City of Phoenix's Residential Buildable Land Inventory. The RBLI inventories the supply of buildable land with the Urban Growth Boundary, both inside and outside the city limits. For the purposes of this inventory, buildable land includes vacant land, excluding land that is determined unbuildable or constrained by federal, state, or local regulations as well as developed land that is likely to be redeveloped. The inventory is important because it helps determine:

- Quantity and quality of vacant residential lands; and
- Capacity of the existing UGB to accommodate additional residential development.

The RBLI inventories lands by Phoenix's Comprehensive Plan Designations and ultimately estimates the number of dwelling units that can be accommodated within the UGB.

The City of Phoenix has five residential Plan Designations in the Comprehensive Plan:

- Low-Density Residential
- Medium-Density Residential
- High-Density Residential
- Residential Hillside
- Residential Employment

Residential development is allowed in all the residential plan designations, although there may be some mixed use development that combines residential uses with permitted commercial development in the Residential Employment plan designation.

### Comprehensive Plan - Land Use Element

**Residential Employment:** Lands designated as residential employment lie adjacent to the railroad along Colver Road, between First and Fourth Streets. This plan designation takes the concept of "home office" to the next logical level; allowing very low traffic generating business uses in conjunction with single-family residential uses... Developments will be reviewed through the planned unit development process. Individual businesses will be subject to performance standards that limit noise, non-resident employment levels, outside storage, storage of hazardous chemicals, and hours of operation.

The following inventory uses a methodology suggested by *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* produced by the Transportation and Growth Management Program (TGM) of the Oregon Department of Transportation (ODOT) and the Oregon Department of Land Conservation and Development (DLCD). The steps used in this methodology have been followed to the greatest extent possible, given the data available for the City of Phoenix.

The results are based on the analysis of Geographic Information System (GIS) data provided by Jackson County, aerial photography, and field checking by City of Phoenix staff.

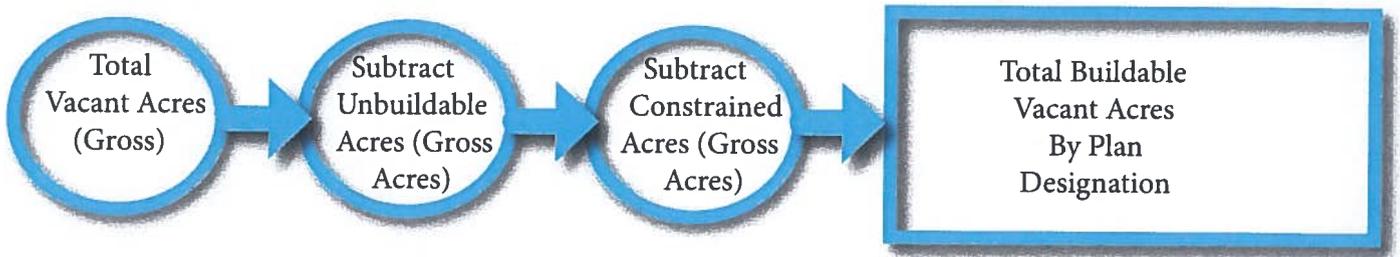
## Methodology

### Definitions

The following definitions were used to identify buildable land for inclusion in the inventory:

- *Buildable Land* means residentially designated land within the urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available and necessary for residential uses (OAR 660-008-0005 (2)).
- *Constrained Land* includes parcels with significant physical, environmental or infrastructure limits to development. Development constraints include, but are not limited to, wetlands, environmentally sensitive areas such as slope, topography, infrastructure deficiencies, parcel fragmentation, or natural hazards (OAR 660-008-0005 (2)).
- *Developed Land* is land that is developed at densities, or with uses consistent with the zoning district in which it falls and which include improvements that make it unlikely to redevelop in the near future.
- *Partially Vacant land* includes those parcels with some buildings or improvements on it, but with vacant portions large enough to accommodate additional development, based on the size of the lot, zoning designations, and/or value of land and improvements. The Safe Harbor in OAR 660-024-0050 was used for the purpose of this RBLI.
- *Unbuildable Land* includes land that is under the minimum legal building lot size for the underlying zoning district, land that has no access, or land that is already committed to other uses by policy. For the purpose of this study, lots with no potential for future automobile access, and lots that are committed to other uses by policy are considered unbuildable.
- *Vacant Land* consists of parcels with no permanent structures or improvements.
- A *Gross Buildable Acre* consists of 43,560 square feet of residentially buildable land that includes future public right-of-ways, private streets, public utility easements or public open space.
- A *Net Buildable Acre* is an acre of vacant land after land has been dedicated for public right-of-way, private streets, public utility easements or public open space. A net vacant acre has 43,560 square feet available for construction.

## Process



In narrative form, the process includes:

1. An update existing land use and plan designations in GIS. Using the most current data, a determination of gross vacant acres, including fully or partially vacant parcels is made.
2. Determination of unbuildable land.
3. Determination of constrained land.
4. Determination of percentage of acres needed for public facilities. This results in total buildable vacant acres by Plan Designation. Total Buildable Vacant residentially designated land is carried forward to which is added Partially Vacant residentially designated land, also described in the flow chart below.
5. The result of this last function is Total Residential Developable Acres.



## Gross Vacant Acreage

The first step to determine the gross vacant acreage for the RBLI was to identify all land within the City of Phoenix's UGB as the land base. This step was necessary in order to establish a baseline or total number of acres to work with.

Table 2 shows total acres within the UGB as of July 2015. According to GIS analysis, Phoenix has approximately 1,102 gross acres or 1.73 square miles within its UGB. This includes all plan designations of the Comprehensive Plan, all public right-of-way, and all environmentally constrained lands (surface bodies of water, hillsides, floodplains, etc).

The remainder of the RBLI analysis focuses on residentially designated land only. The following Residential Plan Designations are identified in the Comprehensive Plan:

- Residential Employment
- Residential Hillside
- Low-Density Residential
- Medium-Density Residential
- High-Density Residential

**Table 2: Acres in UGB by Plan Designation**

Plan Designation	Acres	Percentage
Bear Creek Greenway	44.21	4.08%
City Center District	23.86	2.16%
Commercial	68.30	6.19%
Industrial	69.41	6.29%
Interchange Business	132.77	12.04%
Park & Open Space	46.09	4.18%
Public	4.32	0.39%
Railroad	11.91	1.08%
Residential Employment	3.12	0.28%
Roads	198.64	18.02%
Schools	29.06	2.63%
Residential Hillside	92.49	8.39%
Low-Density Residential	242.87	22.03%
Medium-Density Residential	31.69	2.87%
High-Density Residential	103.36	9.37%
<b>Total</b>	<b>1,102.10</b>	<b>100.00%</b>

Table 3 below shows that approximately 473.53 acres or 43% are in one of the five residential designations. Map 3 depicts residential Comprehensive Plan Designations for Phoenix.

**Table 3: Total Residential Acres by Plan Designation**

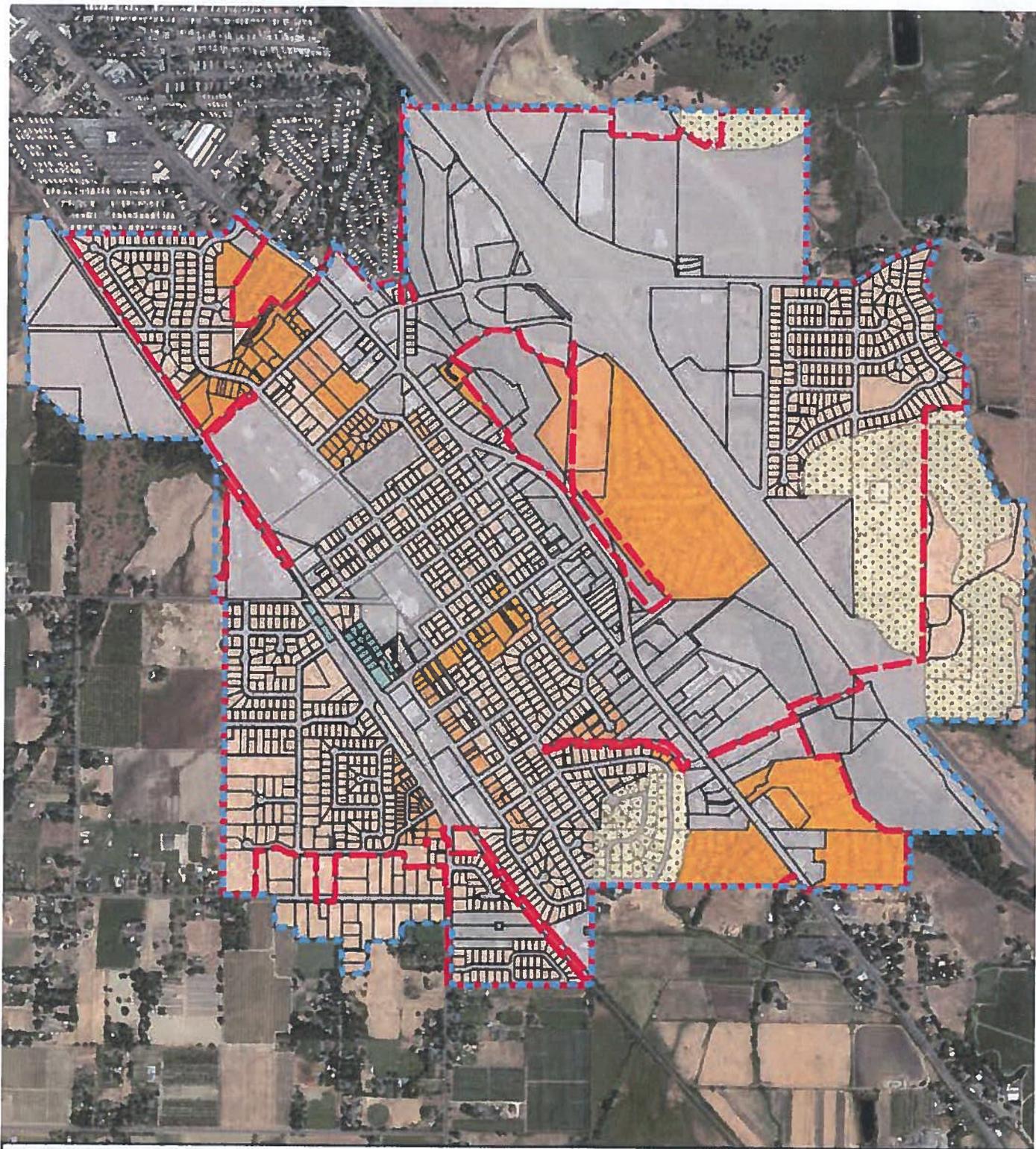
Plan Designation	Acres	Percentage
Residential Employment	3.12	0.66%
Residential Hillside	92.49	19.53%
Low-Density Residential	242.87	51.29%
Medium-Density Residential	31.69	6.69%
High-Density Residential	103.36	21.83%
<b>Total</b>	<b>473.53</b>	<b>100.00%</b>

In order to determine how much land is available for future residential development, it is necessary to categorize residential land into the following categories (as defined above):

- Developed,
- Vacant,
- Partially Vacant, and
- Environmentally Constraint.

Staff utilized a combination of data including aerial photography, building permit data, geodatabases, and field inspections to categorize residential land.

### Map 3 - Residential Plan Designations



**Legend**

-  UGB
-  City Limits

**Plan Designations**

-  High Density Residential
-  Medium Density Residential
-  Low Density Residential

-  Residential Employment
-  Residential Hillside
-  Non-Residential

## Residential Land Classifications

The following definitions were used to map and sort Phoenix’s residential properties into three classifications:

- *Developed Land* is land that is developed at densities, or with uses consistent with the current zoning designation in which the property is located and which include improvements or configuration that make it unlikely to construct additional dwelling units in the near future.
- *Vacant Land* consists of parcels with no permanent structures or improvements.
- *Partially Vacant land* includes those parcels with some buildings or improvements on it, but with vacant portions large enough to accommodate additional development, based on the size of the lot, zoning designations, and/or value of land and improvements.

Table 4 summarizes Total Residential Acres by Plan Designation within the UGB as of January 2016. Data shows there are 335 acres classified as developed (unavailable for development), 73 acres are classified as vacant, 47 acres as partially vacant, and 19 acres are classified as unbuildable.

Table 4: Total Classified Residential Acres by Plan Designation

Plan Designation (Residential)	Vacant Acres	Partially Vacant Acres	Developed Acres	Unbuildable Acres	Gross Acres
Residential Employment	0.15 Ac.	0.00 Ac.	2.97 Ac.	0.00 Ac.	3.12 Ac.
Residential Hillside	51.32 Ac.	14.75 Ac.	15.29 Ac.	11.13 Ac.	92.49 Ac.
Low-Density Residential	8.21 Ac.	28.42 Ac.	199.89 Ac.	6.35 Ac.	242.87 Ac.
Medium-Density Residential	11.75 Ac.	3.52 Ac.	15.85 Ac.	0.57 Ac.	31.69 Ac.
High-Density Residential	1.83 Ac.	0.00 Ac.	101.00 Ac.	0.53 Ac.	103.36 Ac.
<b>Total</b>	<b>73.26 Ac.</b>	<b>46.69 Ac.</b>	<b>335.00 Ac.</b>	<b>18.58 Ac.</b>	<b>473.53 Ac.</b>

Map 4 on page 14 shows Residential Land Classification (developed, vacant, and partially vacant) within the City’s UGB.

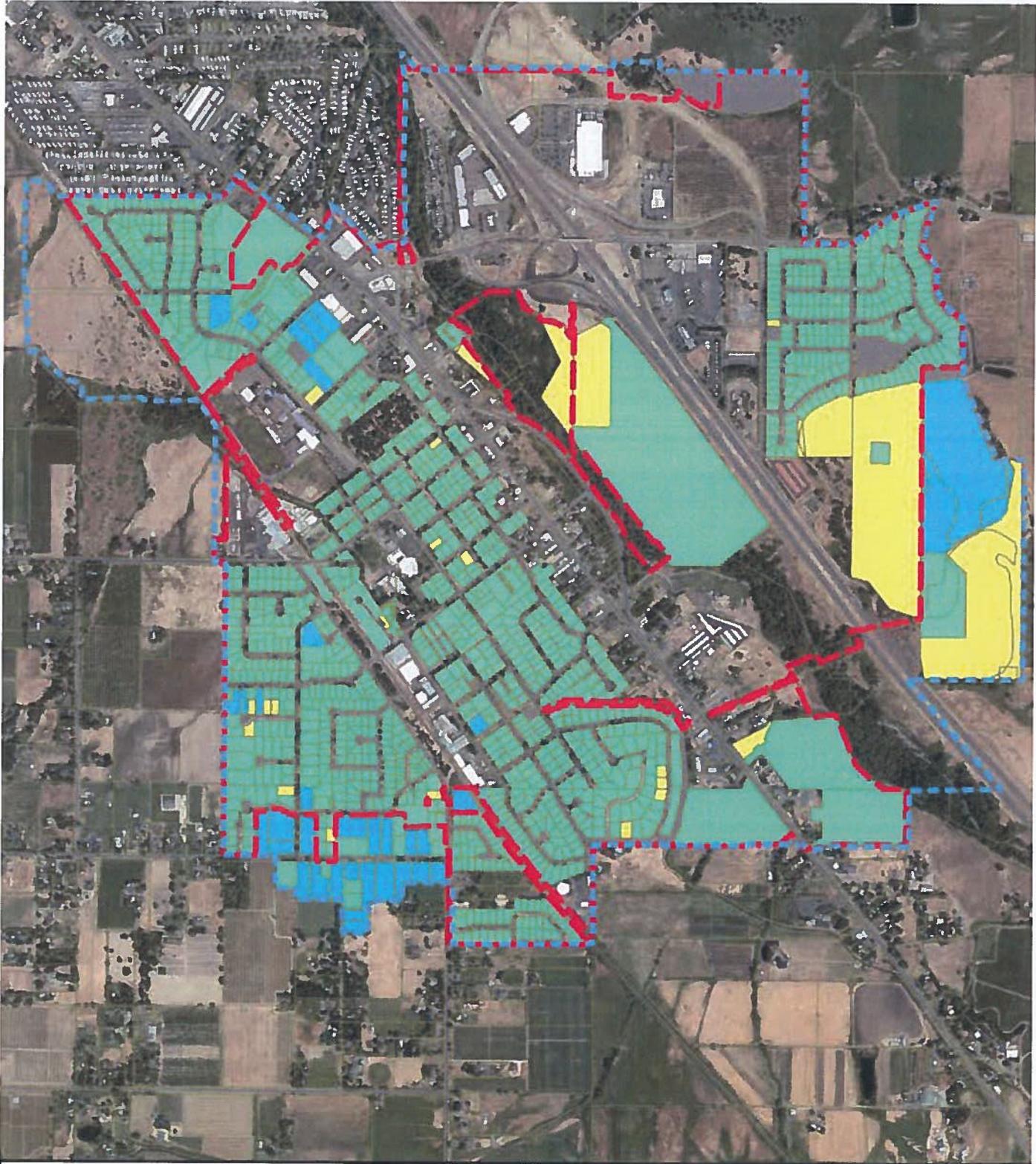
### Partially Vacant Land

To account for the potential development of partially vacant land, the undeveloped portion of the partially vacant lot was added to the gross vacant acreage. The Safe Harbor methodology, as described below, was used to do so. All partially vacant parcels, one-half acre or larger, with an existing dwelling unit on-site, were assigned one-quarter acre of developed residential land, whereas the remainder of the acreage was treated as vacant land. The total vacant acres were added to the vacant column of the land inventory.

#### Safe Harbor when conducting an inventory - OAR 660-024-0050

“(2) As safe harbors, a local government, (...), may use the following assumptions to inventory the capacity of buildable lands to accommodate housing needs: a) The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land.”

# Map 4 - Land Classifications



## Legend

### Residential Land Classifications

Developed

Partially Vacant

Undevelopable

Vacant

Taxlots

Table 5 summarizes the developed and vacant portions of Partially Vacant acres using the safe harbor methodology described above. Out of the total 46.69 acres of partially vacant land, 8.36 acres were determined to be developed and added to the “developed” classification. The remaining 38.33 acres were added to the “vacant” land classification.

**Table 5: Developed & Vacant Portions of Partially Vacant Land**

Plan Designation (Residential)	Total Partially Vacant Acres	Partially Vacant (Developed)	Partially Vacant (Vacant)
Residential Employment	0.00 Ac.	0.00 Ac.	0.00 Ac.
Residential Hillside	14.75 Ac.	0.25 Ac.	14.50 Ac.
Low-Density Residential	28.42 Ac.	7.11 Ac.	21.31 Ac.
Medium-Density Residential	3.52 Ac.	1.00 Ac.	2.52 Ac.
High-Density Residential	0.00 Ac.	0.00 Ac.	0.00 Ac.
<b>Total</b>	<b>46.69 Ac.</b>	<b>8.36 Ac.</b>	<b>38.33 Ac.</b>

Table 6 shows total vacant acres by plan designation with the addition of the partially vacant acres from Table 5. 38.33 Acres were added to the vacant acres inventory for a total of 111.59 acres.

**Table 6: Updated Total Vacant Acres**

Plan Designation (Residential)	Developed Acres	Vacant Acres	Partially Vacant Acres (Vacant)	Total Vacant Acres
Residential Employment	2.97 Ac.	0.15 Ac.	0.00 Ac.	0.15 Ac.
Residential Hillside	15.29 Ac.	51.32 Ac.	14.50 Ac.	65.82 Ac.
Low-Density Residential	199.87 Ac.	8.21 Ac.	21.31 Ac.	29.52 Ac.
Medium-Density Residential	15.85 Ac.	11.75 Ac.	2.52 Ac.	14.27 Ac.
High-Density Residential	101.00 Ac.	1.83 Ac.	0.00 Ac.	1.83 Ac.
<b>Total</b>	<b>334.98 Ac.</b>	<b>73.26 Ac.</b>	<b>38.33 Ac.</b>	<b>111.59 Ac.</b>

## Unbuildable and Constrained Land

Development of constrained land could affect the building cost, density, or other site-specific development factors. State policy gives jurisdictions the ability to decide what is unbuildable based on local development policies. The following section describes how these lands were handled in the Buildable Lands Inventory.

Physical constraints such as parcel size, steep slopes, wetlands, as well as riparian and floodway areas must be accounted for in determining whether land is realistically available for future development. For the purpose of this analysis some physical constraints rendered land unbuildable or constrained, and these acres were subtracted from the inventory. Proportional reductions were made to lands affected by multiple constraints.

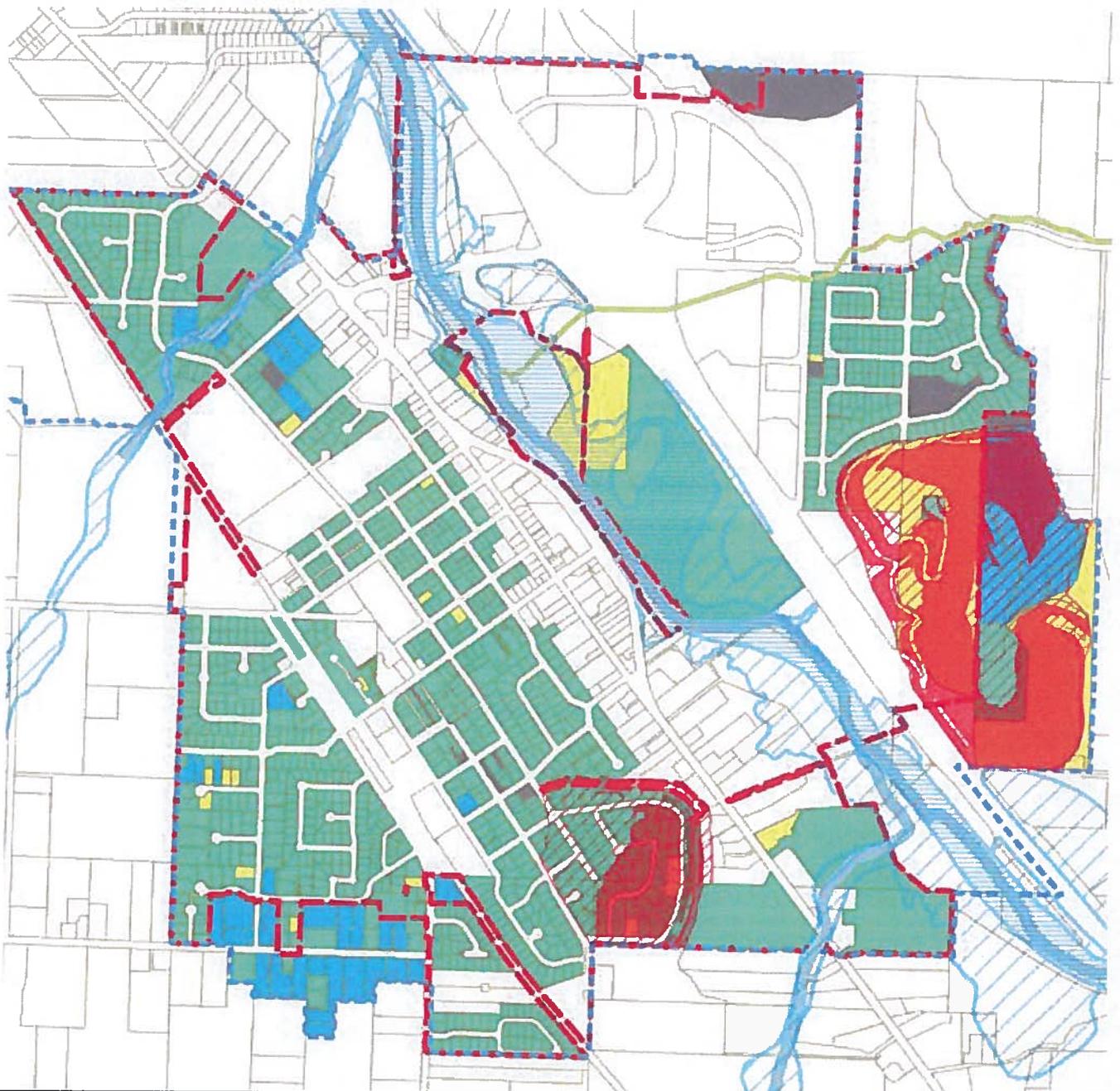
### Unbuildable Land

Map 5 on page 16 shows all unbuildable and constrained land within the Urban Growth Boundary.

#### Size

There are some parcels in the data file that are too small to be developed per Phoenix Land Development Code. These lands were considered unbuildable and were subtracted from the inventory.

## Map 5 - Development Constraints



### Legend

#### FEMA National Flood Hazard Designations

-  100 YEAR BOUNDARY
-  100 YEAR DETERMINED BFE
-  100 YEAR SHALLOW FLOODING
-  FLOODWAY

#### Hillsides

-  Medium Slope (15-24%)
-  Unbuildable Slope (25% and more)

#### Residential Land Classifications

-  Developed
-  Partially Vacant
-  Undevelopable
-  Vacant

#### Riparian Setbacks

-  Class 1 Stream
-  Class 2 Stream

## Slopes

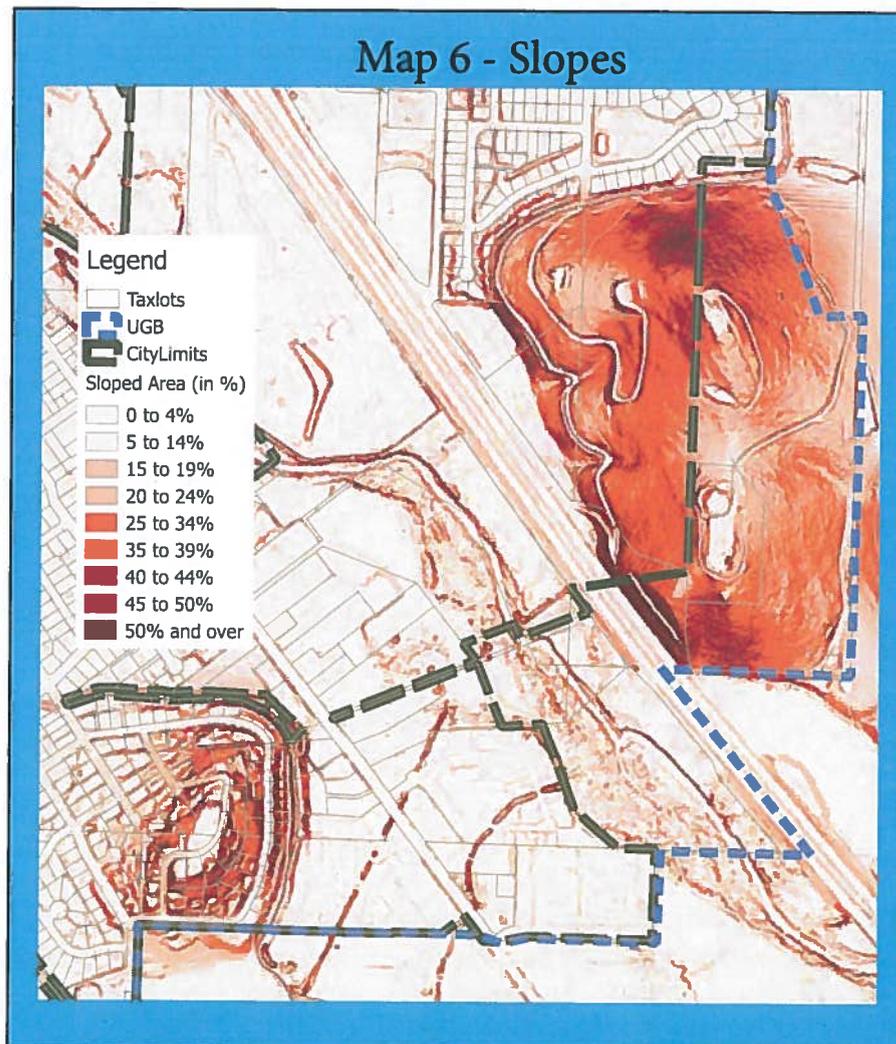
The majority of land in Phoenix is not constrained by slopes. It is anticipated that up to 25% slope will be built on. Even though the Phoenix Land Development Code allows for development to occur on lands that have slopes equal to or less than 35% (Chapter 3.7.4 - Hillside Lands), it is highly unlikely that development will occur on such lots due to additional expenses and difficulties of providing services and infrastructure to these lots, geotechnical constraints, adjacent offsite geological conditions, and local development standards that can require retention of 50% or more development sites in a natural, undisturbed state.

### DLCD - Division 8 - Interpretation of Goal 10 Housing

Definitions: "Buildable Land" means residentially designated land within the urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available and necessary for residential uses. Publicly owned land is generally not considered available for residential uses. Land is generally considered "suitable and available" unless it:

[...] (c) Has slopes of 25 percent or greater; [...]

In addition, Division 8 - Interpretation of Goal 10 Housing defines land as unbuildable if it has slopes of 25% or greater. Therefore, all land (48.54 Acres) with slopes of 25% and greater was removed from the gross vacant land inventory. LiDAR data was processed to establish hillside slopes. It is anticipated, that all land with up to 25% slope will be built at about the same density as flat land (see Page 18 - Slopes).



### Floodway

Regulatory floodways are established by existing Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIRM) maps. Given the City's Land Development Code prohibits development within the floodway, these acres were considered unbuildable and account for 3.86 acres removed from the inventory.

An explanation of all the parcels excluded from the inventory can be found in Appendix I.

Table 7 summarizes unbuildable acres, by Plan Designation. There are a total of 52.4 acres classified as unbuildable. These acres will be removed from the inventory of vacant land.

Table 7: Unbuildable Acres

Plan Designation (Residential)	Vacant Acres	Unbuildable Acres			Total Unbuildable Acres	Percent Unbuildable
		Slopes (>25%)	Floodway			
Residential Employment	0.15 Ac.	0.00 Ac.	0.00 Ac.	0.00 Ac.	0.00%	
Residential Hillside	65.82 Ac.	47.37 Ac.	0.00 Ac.	47.37 Ac.	71.97%	
Low-Density Residential	29.52 Ac.	1.17 Ac.	0.00 Ac.	1.17 Ac.	3.96%	
Medium-Density Residential	14.27 Ac.	0.00 Ac.	3.86 Ac.	3.86 Ac.	27.05%	
High-Density Residential	1.83 Ac.	0.00 Ac.	0.00 Ac.	0.00 Ac.	0.00%	
Total	111.59 Ac.	48.54 Ac.	3.86 Ac.	52.4 Ac.	46.96%	

### Constrained

Map 6 displays all constrained land within Phoenix's Urban Growth Boundary. The following constraints were analyzed for the RBLI:

#### Wetlands

No wetland areas were determined to be "locally significant" within any residential buildable land.

#### Flood Hazard

The Flood Insurance Study and accompanying Flood Insurance Rate Map designate and regulate land within the 100-year floodplain (flood hazard area). These lands are not constrained and are considered developable at standard densities since the City allows residential development within the floodplain if certain floodproofing standards are met and a floodplain permit has been issued. About 3.88 acres of 100-year floodplain lands were identified on vacant or partially vacant buildable lands inside the UGB. Appendix I shows a parcel-by-parcel list and the amount of acres subtracted as unbuildable.

#### Riparian Setback

The City of Phoenix Development Code applies a riparian setback on Class 1 (50 feet to banks) from and Class 2 (25 feet to banks) streams. 0.32 acres of land constrained by riparian areas was identified. These areas are 100% constrained (development is prohibited). All 0.32 acres were subtracted from the inventory. Riparian Areas that overlap with other constraints (i.e. 100-Year Flood Hazard Zone) were not identified to prevent double-counting the constraints.

#### Slopes

The majority of land in Phoenix is not constrained by slopes. Slopes 15% to 24% are considered constrained because they can only be developed at densities lower than residential developments on relatively flat land. City staff analyzed the single approved subdivision within the City that has been built on sloped land to determine the average density by slope category:

Staff calculated that the City has built single-family dwellings at an average rate of 4.89 dwelling units per net acre on non-sloped land. Land with slopes of 15-20% developed at an average density of 3.9 dwelling units per net acre (or 80% of average density) and 3.2 dwelling units per acre (or 65% of the average density) on land with slopes 21-25%.

To compare the calculated density from net to gross acre, an additional 25% will be removed for parcels larger than 1 acre (see Table 11) for Public Facilities needs at a later point.

Table 8 summarizes sloped land by Plan Designation and acres impacted as a result of the slope analysis. Land designated Low-Density Residential and Hillside Residential are the only plan designations affected by slopes within Phoenix's UGB. A total of 13.4 acres with a slope of 15-20% and 3.0 acres with a slope of 21-25% for a total of 16.4 acres are constrained land.

Table 8: Inventory of Constrained Land

Plan Designation (Residential)	Inventory of Sloped Land		Sloped Acres to be Removed		Net Sloped Acres (Vacant)	
	Slopes 15-20%	Slopes 21-25%	Slopes 15-20%	Slopes 21-25%	Slopes 15-20%	Slopes 21-25%
Residential Employment	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac
Residential Hillside	12.46 Ac.	3.51 Ac.	2.49 Ac.	1.23 Ac.	9.97 Ac.	2.28 Ac.
Low-Density Residential	5.20 Ac.	0.80 Ac.	1.04 Ac.	0.28 Ac.	4.40 Ac.	0.52 Ac.
Medium-Density Residential	0.00 Ac.	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac
High-Density Residential	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac
Total	17.66 Ac.	4.31 Ac.	3.53 Ac.	1.51 Ac.	14.37 Ac.	2.80 Ac.

Table 9 summarizes acres by constraints. There are a total of 8.44 residential acres with one or more environmental constraints. All parcels that are constrained by the 100-year flood hazard zone were analyzed individually to determine the percentage of buildable/unbuildable land since, as mentioned above, land in the 100-year flood hazard zone is generally buildable land.

In some cases constraints coexist within the same geographical coverage. In these cases, the area affected by constraints was not double counted. Appendix I shows a parcel-by-parcel list and the amount of acres subtracted as unbuildable.

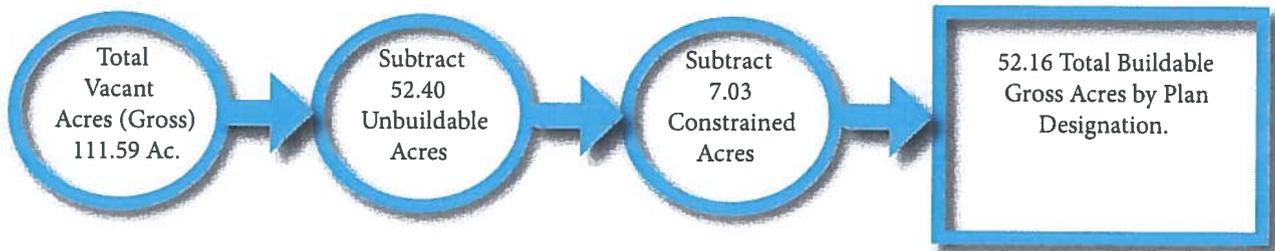
Table 9: Constrained Acres

Plan Designation (Residential)	Vacant Acres	Constrained Acres					Total Acres Constrained	Constrained Acres (Updated)*
		100-year Flood Hazard	Riparian Constraints	Slopes 15-20%	Slopes 21-25%			
Residential Employment	0.15 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac	0.00 Ac.	
Residential Hillside	65.82 Ac	0.00 Ac.	0.00Ac.	2.49 Ac.	1.23 Ac.	3.72 Ac.	3.72 Ac.	
Low-Density Residential	29.52 Ac.	0.16 Ac.	0.32 Ac.	1.04 Ac.	0.28 Ac.	1.80 Ac.	1.64 Ac.	
Medium-Density Residential	14.27 Ac.	2.52 Ac.	0.23 Ac.	0.00 Ac	0.00 Ac	2.75 Ac.	1.27 Ac.	
High-Density Residential	1.83 Ac.	0.80 Ac.	0.00 Ac.	0.00 Ac	0.00 Ac	0.80 Ac.	0.40 Ac.	
Total	111.59 Ac.	3.48 Ac.	0.55 Ac.	3.53 Ac.	1.51 Ac.	9.07 Ac.	7.03 Ac.	

\* See Appendix I for details

Table 10: Vacant Acres (Updated)

Plan Designation (Residential)	Vacant Acres	Unbuildable Constrained Acres (Table 9)	Total Unbuildable Acres (Table 7)	Combined Unbuildable Acres	Vacant Acres (Updated)
Residential Employment	0.15 Ac	0.00 Ac.	0.00 Ac	0.00 Ac.	0.15 Ac.
Residential Hillside	65.82 Ac	3.72 Ac.	47.37 Ac.	51.09 Ac.	14.73 Ac.
Low-Density Residential	29.52 Ac.	1.64 Ac.	1.17 Ac.	2.81 Ac.	26.71 Ac.
Medium-Density Residential	14.27 Ac.	1.27 Ac.	3.86 Ac.	5.13 Ac.	9.14 Ac.
High-Density Residential	1.83 Ac	0.40 Ac.	0.00 Ac.	0.40 Ac.	1.43 Ac.
Total	111.59 Ac.	7.03 Ac.	52.40 Ac.	59.43 Ac.	52.16 Ac.



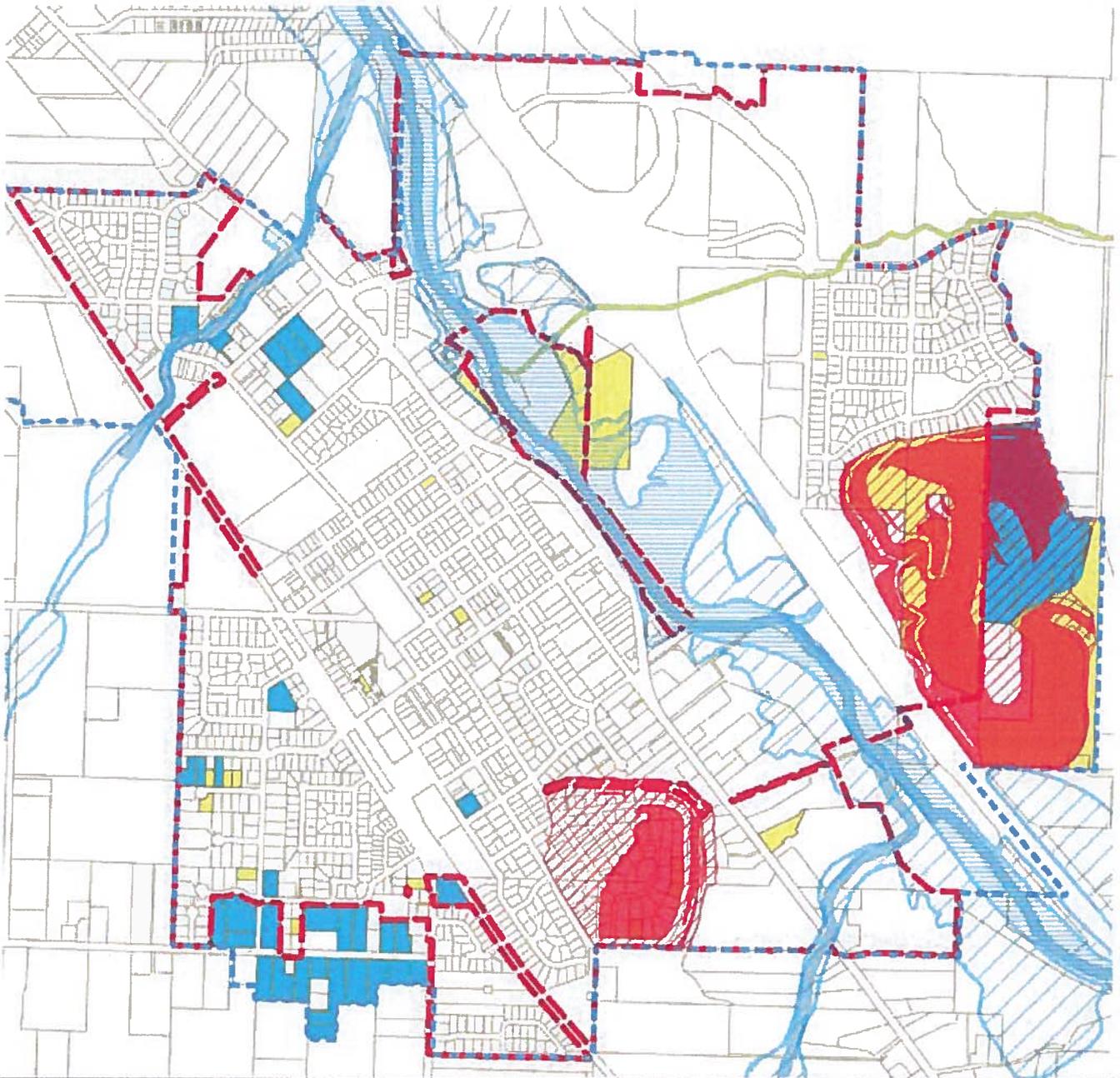
## Public Facilities Land Needs

This step is mostly relevant for larger undeveloped parcels: When development occurs, a portion of the undeveloped parcel will be needed for roads, right-of-way, and other public facilities. Smaller parcels generally have access to existing roadways.

This conversion from gross to net acres will be taken care of as part of the Housing Needs Analysis.

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## Map 7 - Vacant and Partially Vacant Parcels w/ Constraints



### Legend

- City Limits
- UGB

#### Residential Land Classifications

- Partially Vacant
- Vacant

#### Hillsides

- Medium Slope (15-24%)
- Unbuildable Slope (25% and more)

#### FEMA National Flood Hazard Designations

- 100 YEAR BOUNDARY
- 100 YEAR DETERMINED BFE
- 100 YEAR SHALLOW FLOODING
- FLOODWAY

#### Riparian Setbacks

- Class 1 Stream
- Class 2 Stream

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## Appendix I

Maplot	Size	BLI Classification	Plan Designation	Constrains	Explanation
381W09CA 200	1.39	Partially Vacant	Low-Density Residential	100-Year Flood Area & 50-Foot Riparian Setback	Has existing SFR. Lot-split possible. 0.14 Acres are constrained by 100-Year Flood Area and 0.32 by Riparian Setback along Creek. Constraints overlap. 0.32 acres are unbuildable.
381W09DB 4300	0.07	Unbuildable	Low-Density Residential	No Access & non-conforming lot (size)	Lot is landlocked and below minimum lot size for R-1.
381W09DB 4400	0.54	Unbuildable	Low-Density Residential	No Access	Lot is landlocked & no access available.
381W09DB 3400	0.05	Unbuildable	Low-Density Residential	non-conforming lot (size)	Lot is too small. Has existing mobile home.
381W16AA 3100	0.09	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W16AB 701	0.05	Unbuildable	Low-Density Residential	non-conforming lot (size)	Lot was created illegally as part of Chelsea Court subdivision. Lot is too small
381W10DB 2126	2.88	Unbuildable	Low-Density Residential	Park	Lot is Park for Subdivision.
381W10AC 200	0.91	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W10DB 2125	0.45	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W10CD 600	0.22	Vacant	Low Density Residential	Slope	Only small part (0.22) is in Low Density Residential designation. Rest 6.2 Acres is in Residential Hillside.
381W10 1801	5.97	Partially Vacant	Low-Density Residential	Slope	Lot is 20.72 Acres total. 5.97 Acres are classified Low-Density Residential. Has existing SFR. 0.42 Ac. are unbuildable because of slopes exceeding 25%. 5.26 Ac. are constrained by slopes between 15-24%.
381W10 1800	5.00	Vacant	Low-Density Residential	Slope	Lot is 22.31 acres total. 5.00 acres are classified as Low-Density Residential. 1.86 are not in UGB. 0.75 acres are unbuildable because of slopes exceeding 25%. 0.72 acres are constrained by slopes between 15-24%.
381W16AA 4000	0.09	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W16AA 4200	0.09	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W16AA 4900	0.14	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.

381W16AA 4300	0.28	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W15BC 9300	0.28	Unbuildable	Low-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W15BC 5200	0.05	Unbuildable	Low-Density Residential	No access & non-conforming lot (size)	Triangular shaped lot. Has no access and is too small. Lot is connected to adjacent residential lot.

Maplot	Size	BLI Classification	Plan Designation	Constrains	Explanation
381W10 3100	4.27	Vacant	Medium-Density Residential	Floodway & 100-Year Flood Area	2.27 Acres are in the Floodway and unbuildable. An additional 1.57 Acres are constrained by the 100-year flood area. Staff assumed that only 50% of the area constrained by 100-Year Flood Area is buildable land. 0.79 acres are unbuildable.
381W10 3200	7.57	Vacant	Medium-Density Residential	Floodway & 100-Year Flood Area	1.59 Acres are in the Floodway and unbuildable. An additional 0.95 Acres are constrained by the 100-year flood area. Staff assumed that only 50% of the area constrained by 100-Year Flood Area is buildable land. 0.48 acres are unbuildable.
381W16AD 1504	0.02	Unbuildable	Medium-Density Residential	Lot Size	Lot is too small and landlocked.
381W15BB 9300	0.54	Unbuildable	Medium-Density Residential	Irrigation Canal	Above ground irrigation canal
381W15BC 2601	0.19	Unbuildable	Residential Hill-side	Park	Lot is used as small park for subdivision.

Maplot	Size	BLI Classification	Plan Designation	Constrains	Explanation
381W09DB 6203	0.17	Unbuildable	High-Density Residential	100-Year Flood Area & 50-Foot Riparian Setback	Lot almost completely constrained by 100-Year Flood Area and Riparian Setback. Unbuildable.
381W09DA 3900	0.05	Unbuildable	High-Density Residential	100-Year Flood Area, access problems & lot size	Lot is about 75% constrained by 100-Year Flood Area and has no legal access at the moment. Lot is too small for development.
381W09DA 4000	0.80	Vacant	High-Density Residential	100-Year Flood Area & Access problems	Lot is completely constrained by 100-Year Flood Area and has no legal access at the moment. Staff assumed that only 50% of this area is buildable land. 0.40 acres are unbuildable.
381W16AA 2800	0.1	Unbuildable	High-Density Residential	Irrigation Canal	Above ground irrigation canal.
381W15B 3301	0.22	Unbuildable	High-Density Residential	100-Year Flood Area & 50-Foot Riparian Setback	Lot is to 95% constrained by 100-Year Flood Area and riparian setback. Considered unbuildable.

Maplot	Size	BLI Classification	Plan Designation	Constrains	Explanation
381W15BC 10800	1.48	Unbuildable	Residential Hill-side	Park and Access Road	Lot serves as Access Road for irrigation canal and parts are used for subdivision park.
381W10 1900	1.17	Unbuildable	Residential Hill-side	No Access	Lot is landlocked. No access.
381W10 401	0.22	Unbuildable	Residential Hill-side	No Access	Lot is now landlocked. No more access due to Fern Valley Interchange project.
381W10 502	2.28	Unbuildable	Residential Hill-side	No Access	Lot is now landlocked. No more access due to Fern Valley Interchange project.
381W10 507	5.79	Unbuildable	Residential Hill-side	No Access	Lot is now landlocked. No more access due to Fern Valley Interchange project.
381W15BC 2612	0.33	Vacant	Residential Hill-side	Slope	100% of lot is sloped at more than 25%.
381W15BC 2607	0.27	Vacant	Residential Hill-side	Slope	100% of lot is sloped at more than 25%.
381W15BC 2606	0.24	Vacant	Residential Hill-side	Slope	100% of lot is sloped at more than 25%.
381W15BC 2605	0.23	Vacant	Residential Hill-side	Slope	100% of lot is sloped at more than 25%.
381W10CD 600	5.98	Vacant	Residential Hill-side	Slope	1.94 Acres are unbuildable because of slopes exceeding 25%. The rest is constrained by slopes between 15 and 24%. Lot is 6.2 Acres total in size (see Low-Density Residential)
381W10 2000	26.37	Vacant	Residential Hill-side	Slope	20.93 Acres are unbuildable because of slopes exceeding 25%. The rest is constrained by slopes between 15 and 24%.
381W10 1801	14.75	Partially Vacant	Residential Hill-side	Slope	8.89 Acres are unbuildable because of slopes exceeding 25%. 5.58 Acres are constrained by slopes between 15 and 24%. 20.72 total. (see Low-Density Residential).
381W10 1800	15.45	Vacant	Residential Hill-side	Slope	14.54 Acres are unbuildable because of slopes exceeding 25%. The rest is constrained by slopes between 15 and 24%. 22.31 total - 1.86 not in UGB. (See Low-Density Residential).