

Getting Squeezed: Urban Growth Boundaries, Changes in Housing Affordability, and Affordable Housing Barriers in Oregon and California

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ABSTRACT

Many studies have focused on the relationship between Urban Growth Boundaries (UGBs) and home prices. This study explores challenges to the production of affordable housing (for owners and renters) and whether they are intensified by the presence of a UGB. This study examines the extent to which the production of affordable housing, intended for households earning 80% of the Area Median Income (AMI) or less, is keeping up with the growth of low-income households by examining surpluses and deficits of affordable housing units over time. I also explore the barriers that impact the development of affordable housing to identify similarities between Oregon, a growth management state, and California, a non-growth management state.

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CHAPTER I: INTRODUCTION

Over the last several decades, rapid U.S. metropolitan growth has caused government officials to rethink and regulate how we manage growth. The low-density and leapfrog development characteristics of sprawl have caused multiple problems from traffic congestion, loss of open space, and high costs to taxpayers (Daniels and Lapping, 2005, p.7-8). Several states and cities have recognized the negative externalities of unregulated growth and have taken measures to better control it. These measures are known as growth management or smart growth policies, which seek to preserve open space and farmland and increase residential densities by promoting infill development (Anderson, 1998, p.1-2).

Oregon established a statewide growth-management law in 1973. The law requires each of the state's cities and metropolitan areas to create an urban growth boundary in order to control growth and separate urbanizable land from rural land. While California does not have a statewide growth management policy, numerous cities and counties have implemented their own urban containment policy throughout the last three decades.

Although urban growth boundaries are effective in managing sprawl and protecting natural areas, they may have unintended effects on housing affordability. Urban growth boundaries have the potential to impact the development of affordable housing within jurisdictions. It has been argued that reducing the supply of land available for housing limits the ability to meet market demand, which then results in increased housing prices (Anthony, 2006, p.123; Downs, 2002, p.8). However, others argue that other factors, not UGBs are to blame for rising housing prices. For instance, increased housing prices may reflect higher demand for a scarce commodity or reflect a constraint on supply.

Purpose and Contribution of this research

Many studies have focused on the relationship between UGBs and home prices. While many have concluded that UGBs do cause housing prices to increase, other studies have argued that it is erroneous to arrive at that conclusion given market trends that have seen increasing housing prices nationwide.

Despite the uncertainty of the relationship between UGBs and housing prices, it is important to identify what factors are causing housing prices to rise or hinder the development of affordable housing. Increased housing costs pose serious problems for cities and their residents. High housing costs place financial constraints on households. According to the U.S. Department of Housing and Urban Development (HUD), a household that spends more than 30 percent of their income on housing is considered cost burdened. A cost burdened household has less money available for essential things such as transportation, food, health care, and clothes.

While there has been extensive research on the relationship between UGBs and housing affordability, particularly in regard to home values, there is a need to examine how rental units are affected over time. There is also a need to explore challenges to the production of affordable housing and whether they are intensified by the presence of a UGB. This study examines the extent to which the production of affordable housing, intended for households earning 80% of the Area Median Income (AMI) or less, is keeping up with the growth of low-income households by examining surpluses and deficits of affordable housing units over time. This research also explores the barriers that impact the development of affordable housing to identify similarities between Oregon, a growth management state, and California, a non-growth management state.

In order to address these questions, this study compares changes in housing affordability in ten cities within Oregon and California. The cities included in the study are Bend, Corvallis, Eugene, Medford, and Salem in Oregon, and Chico, Davis, Modesto, Santa Rosa, and Stockton in California.

CHAPTER 2: LITERATURE REVIEW

The United States saw rapid suburbanization after World War II. Government policies, among other factors, contributed to the construction of homogenous housing developments on the fringes of cities. Low-density suburban developments have contributed to traffic congestion, inefficient use of infrastructure, and destruction of natural areas. Several states and cities have recognized the negative impacts of unregulated growth and have turned to growth management policies as the solution.

Growth management is the use of regulatory policies aimed to influence future growth in a more rational manner (Downs 2004). One growth management tool is urban growth boundaries (UGB), which limit development beyond a designated boundary. The general intent of urban growth boundaries are that they help to preserve natural land and farmland, result in the efficient use of infrastructure by encouraging development in already developed areas, allow jurisdictions to reinvest in established areas that may otherwise be neglected, and result in more efficient higher-density land use patterns that incorporate a mix of uses and public transportation (Pendall, Martin & Fulton, 2002). Efficiency plays an important role in growth management policies as UGBs can at times prevent leapfrog development patterns, which result in high infrastructure costs. Another benefit is that infill development can lessen issues of traffic congestion if people are given opportunities to live closer to their work, or if cities allow the construction of more affordable housing (Steinacker 2003). UGBs can also stimulate population and employment growth. For example, studies have also found that central cities with urban containment policies had higher employment rates and lower housing vacancy rates (Woo & Guldman 2011). In addition, UGBs may also deter overbuilding by limiting development, but that is not always the case.

Other studies have found that states with growth-management policies do a better job of achieving smart growth goals compared to states without such policies. For instance, a study of Oregon and Florida found that both states “[fared] better in containing urban sprawl, preserving farmland, providing more accessibility between land uses via the automobile and transit, consuming less energy, and minimizing tax increases” compared to Georgia, a “laissez-faire state” (Nelson 1999, p.126).

Despite their positive contributions and intentions, there are concerns that UGBs negatively impact landowners and housing markets. For instance, some people prefer to live far away from the city and prefer a homogenous suburban home to other options but a UGB may limit opportunities for those types of residences. Another consequence is the impact placed on landowners because they are unable to enter speculative land markets (Seltzer 2013). Voith and Crawford explain that smart growth policies never create “win-win” situations because not everyone benefits from increased prices (2004). Although rural landowners are not able to participate in the land market, owners of land within the UGB are able to take advantage of the scarcity of land and increase prices. However, it should be noted that other local land use controls such as zoning could also impact housing costs.

An intention of UGBs is that they will lead to compact and higher density development. However, some argue that higher density results in higher housing prices, loss of open space, and increased traffic congestion (Staley, Edgens, & Mildner, 1999). However, this argument does not account for the fact that many cities account for open space such as they do for residential and employment land when determining the UGB. In addition, land assembly within already developed areas poses an issue because acquisition, demolition, and site preparation costs are significantly higher in urban environments than in suburbs (Farris 2010).

The most studied aspect of UGBs is the impact they have on housing prices in jurisdictions that have implemented urban containment policies. Researchers have come to different conclusions on how they impact housing prices. One side argues that UGBs create a scarcity of land, which leads to higher demand and ultimately higher housing prices (Oregon Land Use Program; Seltzer 2013; Staley, Edgens, & Mildner, 1999). Those critical of UGBs often cite a constrained land base as the reason for increased prices within the UGB. However, Oregon's statewide growth management plan requires that cities ensure that UGBs include a 20-year supply of land. If UGBs affect the supply of housing then in theory it should lead to an increase in the price of land for housing, ultimately impacting affordability. For instance, a study found that a parcel's location inside the boundary increased its value per acre in Salem, Oregon (Nelson 1986, p.160). Other studies of states or jurisdictions with UGBs have found similar or conflicting results.

The impact of UGBs on housing prices has been studied extensively, particularly for Portland, Oregon because its housing prices rose dramatically in the 1980s and 1990s. A study by Downs (2002) of the Portland region found that housing prices increased faster than in other comparable areas between 1990 and 1994, but that the prices increased less rapidly during the next two decades. Researchers have speculated that the rapid rise in housing prices was a result of the implementation of the UGB. However, it is important to note that Portland was amidst an economic recession during the 1980's and 1990's, after the boundary was put in place (Nelson, Pendall, Dawkins, & Knapp, 2002). In addition, Downs' (2002) study came to the conclusion that a UGB can "can at least for a short period exert upward pressure on the rate of increase of housing prices" if other factors contribute to the demand for housing (p.29). Downs concludes that UGBs can cause housing price inflation for a short period of time, not permanently, as some opponents have suggested.

When examining whether UGBs were to blame for housing price increases in Portland, Phillips and Goodstein (2000) concluded that the price increases were likely the result of a "speculative bull market" taking advantage of an increase in demand (p.342). This implies that savvy landowners and developers saw that the UGB would provide an opportunity to drive up land prices. However, the demand surge may also be attributed to the quality of life in Portland, as few other Oregon cities saw comparable growth during the same period.

In another study on Portland housing prices, Myung-Jin Jun (2006) concluded that "being located inside or outside the UGB had no significant effect after controlling for other variables likely to affect housing price" (p.241). This differs from the theory that housing prices would be significantly higher within the UGB. Jun (2006)

also concludes that land scarcity and increased land prices don't necessarily result in higher housing prices. The study found that there was no significant difference between housing prices inside and outside the UGB meaning that they belong to a single housing market. This conclusion aligns somewhat with Downs' (2002) statement that "there is no simple relationship between containment programs and housing prices" (p.30). Therefore, while a UGB may impact prices, as Downs suggested they do, the severity may differ based on other factors or it may not have any effect at all.

Others argue that there is not a direct correlation between UGBs and increased housing prices, and suggest that other factors play a stronger role. One argument is that market demand ultimately determines housing prices because "housing prices depend more on the relative elasticity of demand" than other factors (Nelson, Pendall, Dawkins, & Knaap, 2002, p.153). Yet, others would argue that market demand increases once a UGB is established as Phillips and Goodstein (2000) suggest in their study.

The impact of urban containment policies on housing in California has not been studied as extensively as it has in Oregon. Nevertheless, a study found that "during the 1980s, more than 500,000 housing units in California were either not produced or displaced to another jurisdiction as a result of growth management policies" (Pendall & Fulton, 2002, p.300; Levine 1999). There has been speculation as to whether UGBs can negatively impact the economic vitality of jurisdictions by steering growth to other jurisdictions that do not have growth management policies. Such policies can affect housing affordability by altering the distribution of housing types and prices throughout a region (Voith and Crawford 2004). It is more likely to see this in California where a city with a UGB is located next to another without one, as opposed to Oregon.

Furthermore, a 1981 study in Petaluma, CA found that housing prices were significantly higher within the jurisdiction compared to nearby areas that had not implemented a UGB. The study also found that the production of low- and moderate-income housing had been curtailed in Petaluma as a result of growth control although the City had implemented measures to incentivize developers to produce affordable housing units (Nelson, Pendall, Dawkins, & Knaap, 2002).

Research also shows that a UGBs impact on housing affordability is a result of implementation. For instance, in a study on growth management counties in Washington, Maryland, Virginia, and New Jersey, Carlson and Mathur (2002) examined changes in rent, income, and cost-burden between 1990 and 2000. The rise in rents varied by state but they did find that housing affordability tended to decrease for low- and moderate-income families. The authors concluded that three factors "the force of law regarding fair share and inclusionary zoning, a full range of policies and programs, and the political will and support necessary to implement them in various combinations" played a role in increasing affordability and production of housing in growth management counties (Carlson & Mathur, 2002, p. 61). Therefore, Carlson and Mathur's findings imply that decreasing housing affordability is a larger issue if there is a lack of policies to ensure its development. In other words, proactive jurisdictions that implement a variety of

policies and programs to promote the development of affordable housing help to increase affordability.

In addition, Pendall and Fulton (2002) also argue that the impact of urban containment policies depends on their implementation. For instance, the authors argue that UGBs can have an inflationary effect and raise land prices the longer they are in effect and if they are tightly drawn around existing development. However, the inflationary effect can be mitigated if UGBs are drawn to accommodate sufficient land for future growth. Unlike Downs and Jun, Pendall and Fulton note that a tight boundary makes the scarcity of land even greater, which can lead to a more severe inflationary effect. This may be a larger issue for California since jurisdictions lack guidance and regulations from the state on UGB implementation. If a jurisdiction has not conducted an adequate buildable lands inventory, it is possible they have not adequately accommodated enough land for future growth of both single-family and multi-family developments. This issue could then unintentionally lead to higher land prices and possibly steer development to other jurisdictions.

Urban growth boundaries have the capacity to provide many benefits to jurisdictions that implement them. Some of the benefits of UGBs include the preservation of open space and a more efficient land use pattern that promotes public transportation and mixed-uses. UGBs also help jurisdictions achieve several smart growth goals. However, their impacts on land and housing prices are and will continue to be heavily criticized. There isn't a conclusive answer on the impact UGBs have on increasing housing prices within its boundary. Since there are many other factors that affect land and housing prices, it may not be possible to have a generalizable answer to the question. As studies have shown, a UGBs impact on housing prices varies based on economic downturns, statewide policies, speculative land markets, and implementation.

This study differs from previous studies by focusing on changes in home value and rents, the growth of low-income households, and the supply and demand of affordable housing in several cities in Oregon and California. In addition, the study allows for a comparison of areas that do and do not have a statewide growth management system to identify whether the presence of a UGB can heighten barriers to affordable housing.

CHAPTER 3: STATE APPROACHES TO GROWTH MANAGEMENT

Low-density suburban developments have contributed to traffic congestion, inefficient use of infrastructure, and destruction of natural areas. Several states (Oregon, Washington, Maryland, New Jersey, Florida) and cities have recognized the negative impacts of unregulated growth and have turned to growth management policies as the solution. One growth management tool is urban growth boundaries (UGB), which limit development within a designated boundary.

The general purposes and goals of urban growth boundaries are that they help to preserve natural land and farmland, result in the efficient use of infrastructure by encouraging development in already developed areas, allow jurisdictions to reinvest in established areas that may otherwise be neglected, and “the creation of higher-density land-use patterns that encourage a mix of uses and patronage of public transit, leading to a more efficient utilization of land in urbanized areas” (Pendall, Martin & Fulton, 2002, p.4). However, it is important to note that density is not a stated objective of Oregon’s land use system. Efficiency plays an important role in growth management policies. UGBs can prevent leapfrog development patterns, which result in high infrastructure costs. Infill developments may also help to lessen issues of traffic congestion if people are given opportunities to live closer to their work. UGBs can also deter over-building by limiting development.

Oregon’s growth management program began as a reaction to sprawl. The intentions of Senate Bill 10, which passed in 1969, were to conserve farm and forest land. Several years later (1973), Senate Bill 100 would implement Oregon’s current unique land use system. Along with protecting farm and forestland, the bill established a framework that would ensure that cities’ comprehensive plans would effectively shape land use outcomes. SB 100 also established 19 statewide planning goals ranging from citizen participation, housing, transportation, and economic development that local comprehensive plans must implement. Goal 14, Urbanization, sets the requirements for urban growth boundaries. The goal states that its purpose is:

“To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities” (Goal 14).

An urban growth boundary should designate a sufficient amount of land to accommodate for anticipated population and employment growth. Development is prohibited outside the boundary. In addition, cities are required to provide a 20-year supply of land within their UGBs to accommodate population, housing, and employment growth. Cities have an obligation to review their boundary every five years and expand them if necessary. Expansions are subject to review by the Department of Land Conservation and Development and approval by the Land

Conservation and Development Commission. One of the most lauded benefits of UGBs is their separation of urbanizable land from rural land, which has allowed Oregon to preserve much of its natural beauty. Oregon has succeeded in its goal of using UGBs to preserve land, but the issue on its impact on housing affordability is an issue that should continue to be monitored. Many scholars have researched this problem and the results vary and contradict each other (Downs 2002; Phillips and Goodstein 2000; Jun 2006; Nelson et al 2002).

Oregon's growth management policy acknowledges the importance of providing enough housing for its population. The state's housing goal, Goal 10, explains that:

“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” (Goal 10).

Therefore, Goal 10 requires cities to plan accordingly to meet the housing needs of all its residents, particularly to ensure there are enough units to house the population. However, it's important to note that most housing elements forecast new demand (housing that is built in response to market forces) (Parker and Goodman, 2011, p.A-3). Housing market demand refers to what households are willing to pay but is also closely tied to population growth. For instance, “Growth in population means growth in the number of households and implies an increase in demand for housing units. That demand is met, to the extent it is, primarily by the construction of new housing units by the private sector based on its judgments about the types of housing that will be absorbed in the market” (Parker and Goodman, 2011, A-2). This may pose a problem if the private market develops expensive single-family homes that aren't within the financial capabilities of the population. Buildable land inventories allow cities to identify whether they have the capacity to accommodate changes in housing or employment.

California does not have a state mandated growth management law, but many cities and counties have chosen to enact their own form of urban containment policy. For instance, a 1994 national survey of urban containment policies studied 1,000 jurisdictions within 25 metropolitan areas in the United States. Several of the jurisdictions were within the Los Angeles, San Francisco, and San Diego metropolitan areas and the survey found that “one-third of all urban boundaries were in California, and that virtually all counties surveyed had urban boundaries of some sort” (Pendall & Fulton, 2002, p.15). According to the survey, the majority of UGB measures have appeared in Alameda, Sonoma, and Ventura counties. Furthermore, “the state's lack of an Oregon-style growth management law means neither the county nor its cities must estimate or manage the land supply inside the boundary in order to account for future demand – and they have not done so” (Pendall & Fulton, 2002, p.23). The lack of regulation indicates that cities that do not plan accordingly will likely face obstacles in supplying enough land to meet its housing demand.

Given the lack of state oversight on UGBs, jurisdictions are free to implement their preferred form of urban containment policy, which differ to certain extents. The cities of Santa Rosa and Davis have implemented urban containment policies.

For instance, Santa Rosa has a 20-year UGB that has been in effect since 1996. The city initially had a five-year boundary that was ratified by voters in 1990. Santa Rosa's Growth Management Program limits the number of allotments (issuance of a building permit) annually. In addition, "the allotments are split evenly into two types: Reserve A and Reserve B. Reserve A allotments are for small units on small lots, multifamily units, for sale single family attached units in projects of 10 units per acre or more, units in mixed use projects, and affordable units. Reserve A was established to promote housing affordability and variety through the Growth Management Program. Reserve B allotments are for most other units, typically single family units" (City of Santa Rosa 2009-2012 Consolidated Plan, p. II-49). In addition, Reserve A type units are given priority, and the program allows for unused allotments to be added to the next year's allotments. In essence, the prioritization of Reserve A type units should allow the city to produce enough housing to meet demand.

Measure J is an ordinance that Davis voters passed on March 7, 2000. Essentially, Measure J allows for citizens to vote "on general plan land use map amendments that would convert any agricultural, open space, or urban reserve lands...to an urban or urban reserve land use designation" (City of Davis 2010-2015 Consolidated Plan, p.46). While it is not a UGB, Measure J accomplishes the goal of preserving open space until it is needed (or wanted) for urbanizable land.

In addition, Davis has a 1% Growth Policy, which implements an annual average growth guideline of one percent. The policy limits non-exempt housing units to a total 325 units per year. Exempt housing includes affordable housing units for very low-, low-, and moderate-income households. In its 2010-2015 Consolidated Plan, the City states that it doesn't believe the Policy will have a negative effect on housing production, nor its Regional Housing Need Allocation.

Any negative effects from failing to manage land supply may be mitigated by the presence of California's Regional Housing Need Allocation policy, which requires local governments to plan for anticipated growth (Regional Housing Need Assessment).

Governing bodies, such as City Council or Board of Commissioners, of a local government are required to adopt a comprehensive, long-term general plan for the city or county. Jurisdictions must incorporate a housing element as part of the general plan. Housing element law mandates that local governments "adequately plan to meet the existing and projected housing needs of all economic segments of the community" (Housing Elements). The notion behind the housing element is the realization that the private market cannot address housing needs on its own and that local governments can provide better opportunities for its development.

The Department of Housing and Community Development (HCD) determines the Regional Housing Needs Allocation (RHNA) by income category for the Council of Governments (COG). The RHNA identifies the number of housing units that jurisdictions must accommodate in their Housing Element for an eight-year period.

The COGs have the responsibility of allocating the share of housing to each jurisdiction. Population projections are derived from the Department of Finance. Jurisdictions are required to update their housing element to show how it will accommodate their share of housing determined by the RHNA.

HCD is required to review local housing elements for compliance. If it is not compliant, jurisdictions are given the opportunity to make changes in order to get certified. However,

“[If] the element is adopted without satisfying HCD-or fails to be updated at all- the city or county is regarded as out of compliance. Noncompliant communities are ineligible for certain affordable housing programs administered by HCD, such as the federal HOME Investment Partnerships Program and portions of the Community development Block Grant program, and the state Jobs/Housing Balance Improvement Incentive Grant” (Lewis, 2003, p.3).

The loss of funds should work as a disincentive to get local governments to comply with HCD’s requirements. HOME and CDBG funds are commonly used to help finance affordable housing developments. However, issues of noncompliance persist. For instance, in 2002, approximately one-third cities and one-fifth of counties had elements judged as noncompliant. (Lewis, 2003, p.3-4). Essentially this means that some local governments do not take their housing element seriously. Furthermore, if they are ineligible for affordable housing funds then they would likely not be able to assist with developing any affordable housing.

Both Oregon and California have implemented housing elements as part of their comprehensive and general plans. Both requirements speak to providing sufficient housing for projected population growth. However, California differs in that population growth is projected at a regional level and then distributed to local governments based off of a methodology determined by the COG and there are skepticisms to how efficient this system is. For instance,

“Some state officials argue that local governments are not energetic enough in planning for housing and are trying to deflect their fair share onto other jurisdictions. For their part, local officials often claim that the RHNA ‘quotas’ that they have been assigned are poorly justified, unrealistic, and unresponsive to the physical limitations of their communities” (Lewis, 2003, p.2).

It is clear that there is a disconnect between some local governments, their COG, and the state when it comes to the RHNA process and accommodating their share of housing. This disconnect leads them to want to pass their share of housing onto other cities. Ultimately it leads to an inefficient system because jurisdictions are not holding themselves accountable for their share.

Overall, despite California’s lack of a statewide growth management policy, cities are required to plan to meet the housing needs of its projected population. Likewise, while Oregon’s growth management policy prioritizes the preservation of land, cities are required to meet its population’s housing need.

CHAPTER 4: METHODOLOGY

For this project I conducted a time series analysis of the change in housing affordability for select cities in Oregon and California. This project takes a step further from existing research on the relationship between UGBs and housing affordability by examining whether affordable developments have been developed in pace with need. For the purposes of this study, “affordable” is measured by whether households are spending thirty percent or less of their income on housing. The project also explore barriers to development of affordable housing to identify whether challenges are intensified by urban growth boundaries and the availability of buildable sites.

The hypothesis of this study is that states with urban growth boundaries develop affordable housing at a rate slower than the growth of low-income households. The study takes U.S. and regional trends in poverty and low-income households into consideration. In addition, “low-income housing” refers to housing that is designated for households 80% of Area Median Income or less. To test this hypothesis, the research seeks to answer the following questions through a combination of a quantitative and qualitative approach.

Research Questions

1. Are cities in Oregon and California producing affordable housing at the same rate as the growth of low-income households?
 - a. How has the number of units available for low-income households changed over time for owner- and renter- occupied households?
2. To what extent are the barriers to developing affordable housing in Oregon and California similar or different?
 - a. Does the presence of urban containment policies, that seek to control growth and promote infill development, aid or hinder the production of affordable housing?

Study Areas

The research will compare five cities in Oregon and California. Since Portland has been studied extensively, the research examines other Metropolitan Planning Organizations in the state, which have a population of at least 50,000. The cities include:

- Eugene
- Salem
- Corvallis

- Bend
- Medford

Eugene, Salem, and Corvallis are located in the Willamette Valley. Eugene and Corvallis are home to the University of Oregon and Oregon State University. Both cities have significantly large student populations. Medford is located in southern Oregon. Bend is central Oregon's largest city and is also located on the east of the Cascade Range.

The following five California cities were chosen based on their comparability to the five Oregon areas. Specifically, they were chosen based on their population and their location.

- Davis
- Modesto
- Santa Rosa
- Chico
- Stockton

Chico and Davis are located in northern California and are also considered college towns as they are home to Chico State University and the University of California - Davis. Santa Rosa is located north of San Francisco. Stockton is located far east of San Francisco in the San Joaquin Valley. Modesto is located in the Central Valley, approximately 92 miles east of San Francisco.

Quantitative Approach

The study will conduct a mixed quantitative and qualitative approach to answer the following research questions. View Appendix G for a list of the Census tables and documents that were used for this project.

Are cities in Oregon and California producing housing at the same rate as the growth of low-income households?

a) How has housing affordability changed over time for owner- and renter- occupied households?

The first element of the study will identify changes in housing affordability and examine several indicators adopted from Carlson and Mathur (2004) to develop a profile of housing affordability using 1980, 1990, 2000 United States Census data and 2008-2012 5-Year Estimate American Community Survey (ACS) data obtained from Social Explorer.

- 1) The first set of indicators examines how the value of owner-occupied housing and rental housing has changed relative to median household income. Note that all values are adjusted for inflation to 2012 values with the U.S. Bureau of Labor Statistics' CPI inflation calculator.
 - Changes in median household income.
 - Absolute changes in the median price of owner-occupied housing.

- Absolute changes in median gross rent for renter-occupied housing.
- 2) The next group of indicators examines the change in affordability of owner and renter-occupied housing costs. The indicators examine the percentage of households in different income categories that were cost-burdened (spending more than 30 percent of their income on housing).
- Proportion of owner-occupied households paying more than 30 percent of income for housing costs.
 - Proportion of renter-occupied households paying more than 30 percent of income for housing costs.
- 3) The next group of indicators illustrate changes in affordability for owners and renters as well as changes in demand and supply of affordable housing. This indicator will show:
- 30% and 80% Area Median Income (AMI)
 - The number of households that fall within 30% and 80% AMI
 - Affordable monthly rent for both AMI levels
 - Estimated number of renter units given the affordable monthly rent
 - Estimate of affordable purchase for an owner-occupied unit
 - Estimated number of owner units given the affordable purchase amount
 - Surplus or deficit of units

The affordable monthly rent was derived by calculating 30 percent of a households' income. The estimated number of renter and owner units was calculated through summing the units that fall under the affordable monthly rent or home purchase. In order to avoid overestimating, the renter and owner units were extrapolated based on the percentage that the affordable monthly rent/home purchase consisted of within the interval. For instance, consider an affordable monthly rent of \$300 that falls within the interval of \$200 to \$500. The difference from the rent and first interval number is 100. This is then divided by the interval difference of 300 to get 33 percent. Next, just 33 percent of the units within that interval are counted as affordable for that rent.

Affordable purchase for an owner-occupied unit is calculated by multiplying 30% and 80% area median incomes by 2.5. The factor of 2.5 was used in a Housing Needs Analysis prepared for the City of Newport by ECONorthwest, which conducted a similar assessment (Parker and Goodman, 2011).

These indicators show whether cities are failing to provide sufficient housing for households at lower income levels. The indicators will demonstrate whether supply is keeping up with demand and whether there is a surplus or deficit of housing units that meet the 30% and 80% AMI levels.

The study examines building permit data from the Department of Housing and Urban Development (HUD) for single-family and multi-family households. The building permits issued are compared with overall population growth, the growth of low-income households, and affordable housing surpluses/deficits during the study period.

Qualitative Approach

The second element of the study seeks to answer the following questions through an analysis of the most recent Consolidated Plans and Impediments to Fair Housing documents produced by each city.

To what extent are the barriers to developing affordable housing in Oregon and California similar or different?

Does the presence of urban containment policies, that seek to control growth and promote infill development, aid or hinder the development of affordable housing?

Additional analysis includes a review of existing research that has examined regulatory barriers in developing low-income housing. This element results in an overview of general barriers that cities or affordable developers face, as well as specific barriers that apply to the study areas in Oregon and California. This allows for a comparison between the impacts that UGBs or other factors may have on affordable housing.

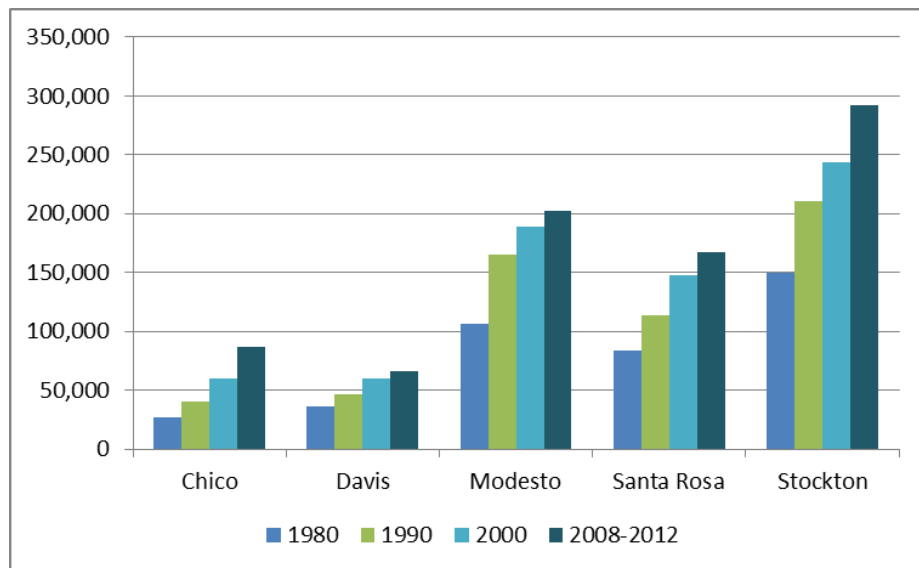
CHAPTER 5: REVIEW OF CHANGES IN HOUSING AFFORDABILITY

The following section is an overview of population growth, changes in median household income, house values, and rents for the ten study areas. The indicators demonstrate the extent to which housing affordability has changed over time throughout all ten study areas.

Changes in Population

All study areas have seen population growth throughout the last several decades, as Figures 1 and 2 illustrate. The populations in the California study areas have nearly doubled with the exception of Chico, whose population has tripled. Chico has had an annual percent change of 7.5 percent. Stockton has seen the largest population changes, with an additional 142,483 residents. Stockton has always developed more single-family units than multi-family throughout the study period (Appendix B, Figure E). Modesto has added the next largest amount (95,384) and Davis has added the least (28,926). Despite the steady growth in populations, both cities approved half as much building permits throughout 1990-1999 and 2000-2012 than they did during 1980-1989 (Appendix B, Figures C and D). In the case of Santa Rosa, this can be explained by the presence of their growth management policy.

Figure 1. Population Changes - California



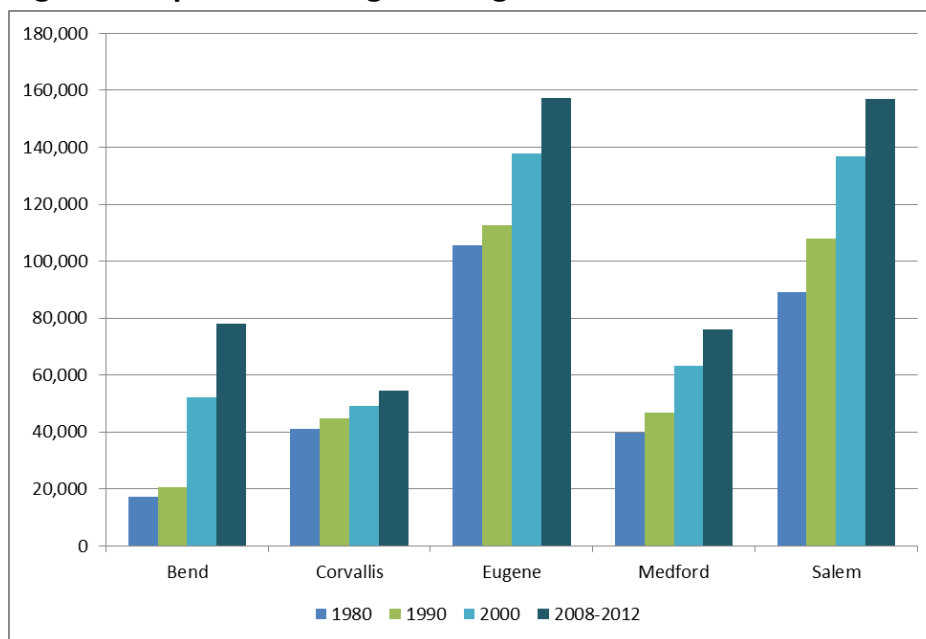
Source: U.S. Census Bureau. "Total Population, 1980; 1990, 2000, 2008-2012." Social Explorer.

Bend has seen the most drastic population increase of all study areas. As of 2012 estimates, its population 4.5 times larger than what it was in 1980. Bend's large population increase occurred in 2000, when it grew from a population of 20,469 to 52,029. Bend's population surge was in part due to the surrounding existing

development that the City annexed. Bend’s growth was also accompanied by a large growth in building permit approval, particularly for single-family dwellings. For instance, during each study period Bend approved at least twice as much single-family housing units than multi-family units (Appendix B, Figure F).

The cities of Medford and Salem nearly doubled from their 1980 population size. Salem has seen the most growth of all cities, adding 67,704 additional residents. Their building permit approval over time demonstrates that Salem and Medford have strong preferences for single-family dwellings (Appendix B, Figure I and J). Eugene has grown by 51,694 over the study period and remains the largest city of the Oregon study areas. Corvallis has the lowest annual percent change (1.1%) and its population has only increased by 13,731. Corvallis is the only city with a near 50/50 split of multi-family and single-family dwelling permit approval each decade (Appendix B, Figure G).

Figure 2. Population Changes - Oregon



Source: U.S. Census Bureau. “Total Population, 1980; 1990, 2000, 2008-2012.” Social Explorer.

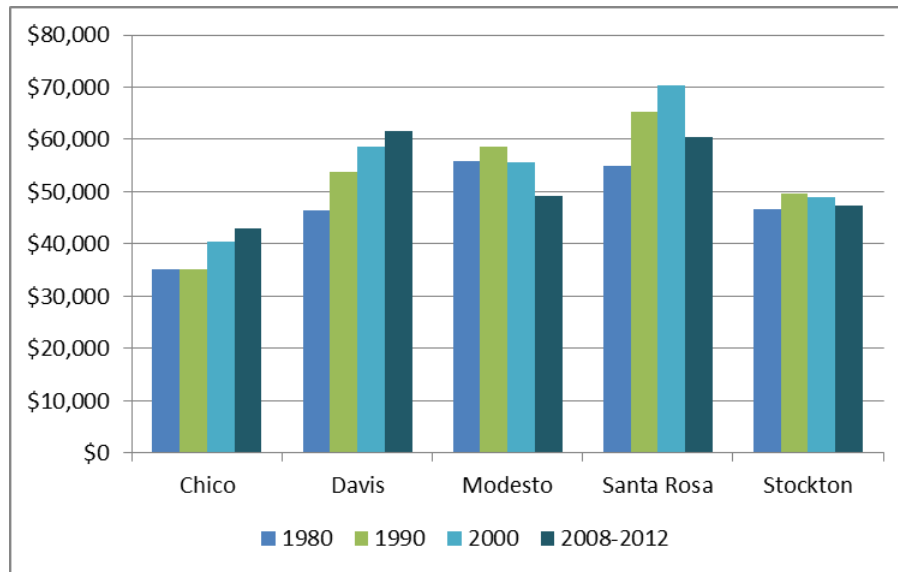
Median Household Income

The study areas have seen substantial increases in median household income (MHI) but several have also seen fluctuations that can be attributed to economic downturns. Note that all values are adjusted for inflation to 2012 values. Although Chico’s MHI decreased slightly in 1990 it has increased overall. As of the 2008-2012 ACS, Davis had the largest MHI of all study areas. Davis is the only city that has not seen fluctuations in MHI throughout the study period. On the other hand, Modesto has fluctuated the most of all cities. Modesto’s MHI of \$49,205 in 2008-2012 is \$6,566 less what it was in 1980.

Santa Rosa’s MHI steadily increased in 1990 and 2000 but its 2008-2012 MHI is approximately \$9,700 less than what it was in 2000. This suggests that Santa Rosa

was hit hard by the economic recession in 2008. Stockton’s MHI has also fluctuated, however, it has remained around the same range and has continuously had the second lowest MHI, followed by Chico.

Figure 3. Changes in Median Household Income - California



Source: U.S. Census Bureau. “Median Household Income, 1980; 1990; 2000; 2008-2012.” Social Explorer.

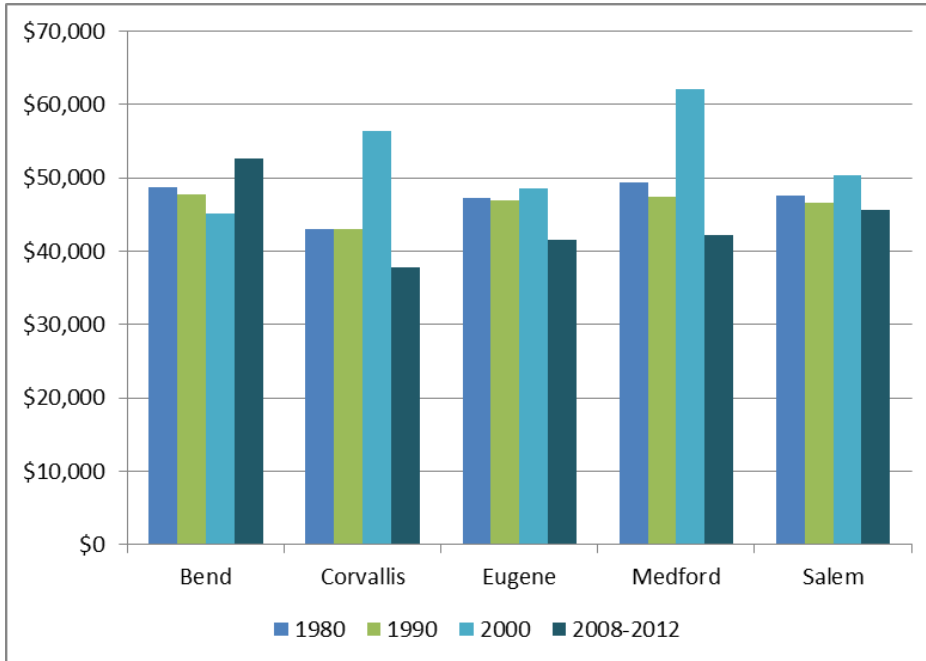
Note: Values are adjusted for inflation to 2012 values.

The majority of Oregon cities had median household incomes that reached its peak in 2000 and declined significantly in 2008-2012 (Figure 3). Bend is the exception to this trend. Bend’s MHI was steadily declining until 2008-2012 when it increased to \$52,601. Corvallis experienced a dramatic decrease in MHI from 2000 (\$56,383) to 2008-2012 (\$37,793). The decline in incomes after 2000 is likely the result of the Great Recession in 2007, which impacted employment and incomes significantly in its aftermath.

The City of Eugene reached its peak MHI in 2000, which decreased to \$41,525 in 2008-2012. Medford saw a large increase from 1990 (\$47,502) to a median household income of \$62,172 in 2000. However, in 2008-2012 Medford’s MHI decreased to \$42,244, its lowest median household income throughout all four decades. In addition, the City of Salem’s MHI decreased to \$45,564 in 2008-2012 from its peak of \$50,344 in 2000.

Overall, the majority of cities in both study areas follow the trend of reaching peak median household income levels in 2000 only to see significant decreases in 2008-2012. This trend is most likely the result of the burst in the housing bubble in 2007 that caused the Great Recession. In 2008 and 2009, “the U.S. labor market lost 8.4 million jobs, or 6.1% of all payroll employment” (The Great Recession). Chico, Davis, and Bend are the only exceptions to the trend of decreasing median household incomes. Changes in median household income levels indicate that compared to California cities, the Oregon study areas have been most negatively impacted by economic downturns. While Santa Rosa’s MHI decreased significantly in 2008-2012 it was still second highest of all study areas in that period.

Figure 4. Changes in Median Household Income - Oregon

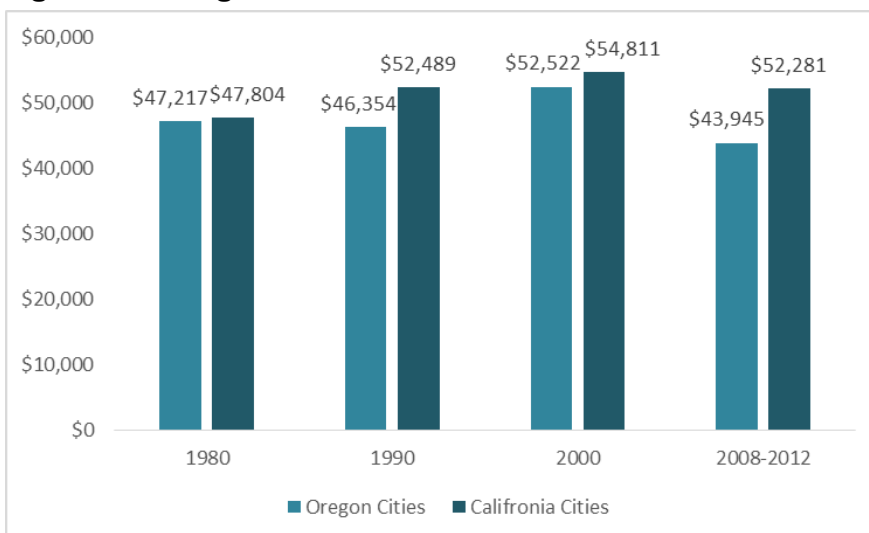


Source: U.S. Census Bureau. "Median Household Income, 1980; 1990; 2000; 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Figure 5 illustrates the average median household income by decade for Oregon cities and California cities. The average median household income of the five California cities has always been higher than Oregon's, however, the gap widens between the two throughout the study period. The large gap between the two in 2008-2012 further demonstrates that although all study areas were significantly impacted during the recession, that Oregon cities were hit the hardest.

Figure 5. Average Median Household Income



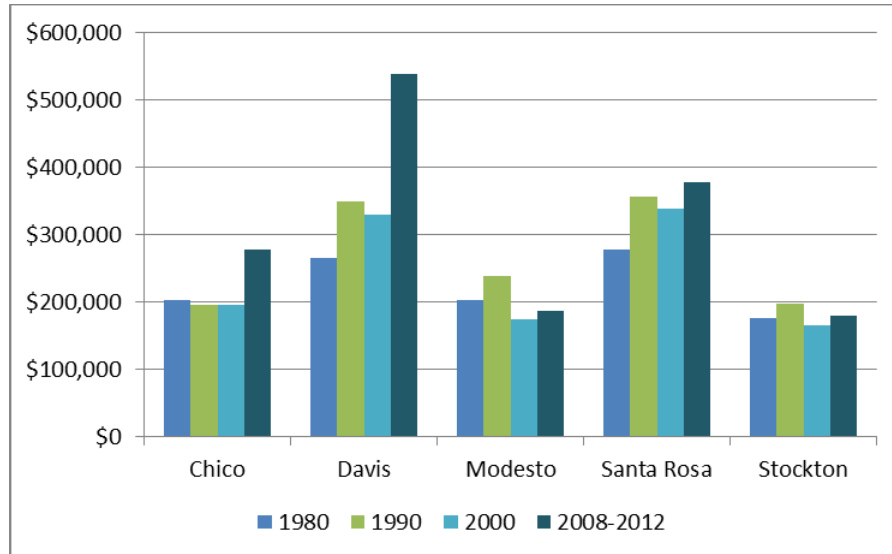
Source: U.S. Census Bureau. "Total Population, 1980; 1990; 2000; 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Median Owner-Occupied House Values

The following figures show changes in median owner-occupied house value (MHV) for all study areas. The median house values for all owner-occupied housing units in all study areas have fluctuated. Some have fluctuated more drastically than others.

Figure 6. Median House Value Changes – California



Source: U.S. Census Bureau. "Median Housing Unit Value, 1980"; "Median Value for Specified Owner-Occupied Units, 1990" ("Median House Value for All Owner-Occupied Housing Units, 2000; 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

The City of Davis experienced a significant increase in median house value from 2000 to 2008-2012. In 2000, the median house value was \$329,130, which then increased by 63 percent in 2008-2012 (Appendix A, Table 1). Likewise, Santa Rosa's MHV increased to \$377,000 in 2008-2012, its highest value throughout all four decades. Santa Rosa, along with Davis has consistently had one of the highest median house values.

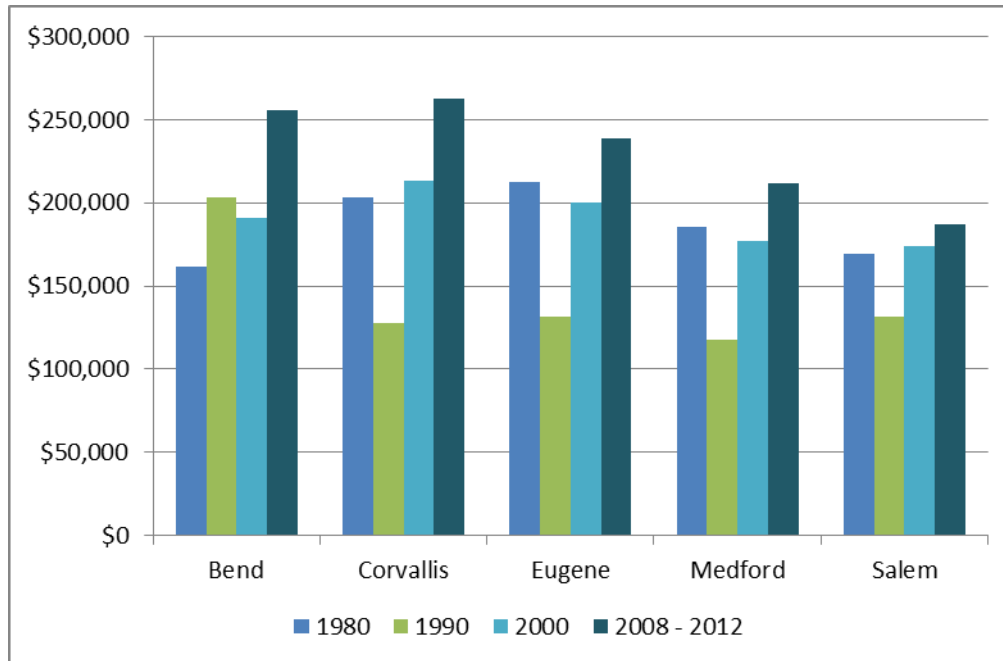
Chico's MHV had been relatively stable from 1980 and had only fluctuated slightly. However, during 2008-2012 the MHV increased by approximately \$81,000 to get to a value of \$276,900. This was the largest total increase of all California cities.

Modesto and Stockton have fluctuated similarly. For example, both experienced increases in values in 1990 followed by a decrease in 2000. During 2008-2012, Modesto's MHV was \$186,000, a substantial decrease from its highest value of \$238,650 in 2000. Stockton's MHV during 2008-2012 decreased by approximately \$18,000 from its highest value in 1990.

The common trend among the Oregon cities, with the exception of Bend is that values were relatively high in 1980 and in 1990 four of the cities experienced significant decreases in house values. For instance, from 1980 to 1990, Corvallis' median house value decreased by approximately \$75,854; Eugene's decreased by

\$81,000; Medford's decreased by \$68,000, and Salem's decreased by \$38,000. This trend was a result of the recession that Oregon experienced in the 1980s with the decline of the timber industry, which had previously played a large role in the state's economy (Mapes, 2011).

Figure 7. Median House Value Changes - Oregon



Source: U.S. Census Bureau. "Median Housing Unit Value, 1980"; "Median Value for Specified Owner-Occupied Units, 1990" ("Median House Value for All Owner-Occupied Housing Units, 2000; 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Bend is the only city whose median house value increased after 2000. It increased significantly by 34 percent (Appendix A, Table 1). In 2000, the median house values for Corvallis, Eugene, Medford, and Salem increased near or past their 1980 values. Bend is the only city that experiences a slight decline during this period.

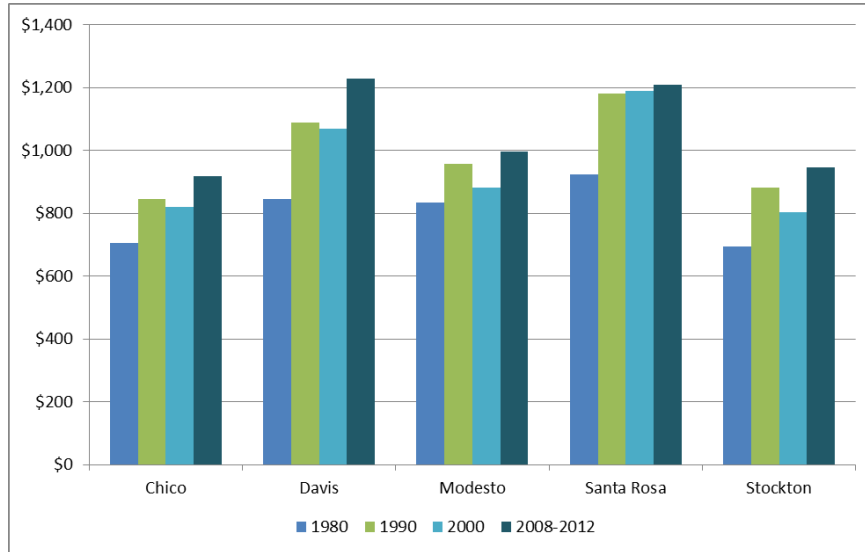
By 2008-2012 all Oregon cities' MHV's are at their highest. Corvallis had the highest MHV at \$262,300, followed by Bend (\$255,800) and Eugene (\$238,700).

In general, the data shows that for most cities, real home values increased significantly while real incomes declined.

Median Gross Rents

The following figures illustrate changes in median gross rent for all study areas. As Figure 8 shows, all rents have significantly increased from their 1980 levels. All cities but Santa Clara experienced a slight drop in rents in 2000. As Table 2 (Appendix A) demonstrates, the California study areas had rents increase a lot from 1980 to 1990. In comparison Oregon cities did not increase nearly as much.

Figure 8. Changes in Median Gross Rent - California

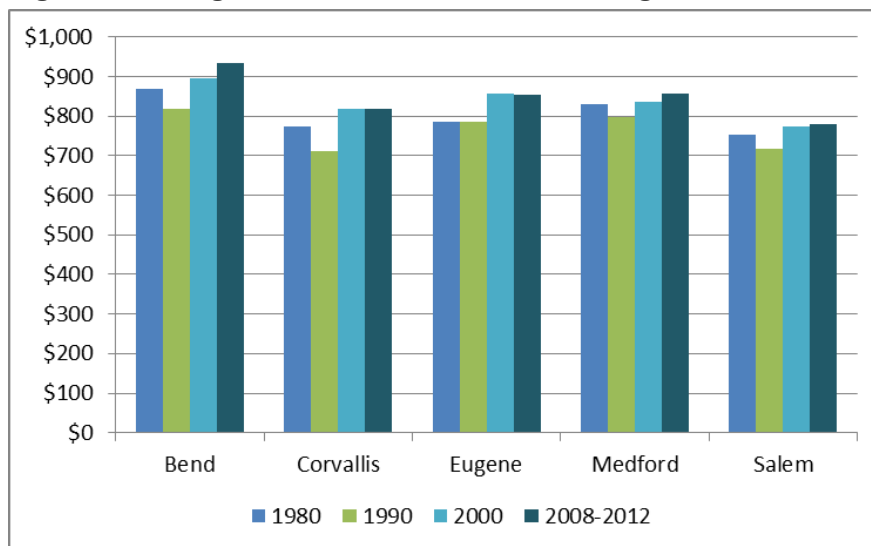


Source: U.S. Census Bureau. "Median Gross Rent, 1980; 1990; 2000; 2008-2012" Social Explorer. Note: Values are adjusted for inflation to 2012 values.

Davis has seen the biggest increase in rents overall. Its 2008-2012 rent is \$385 more than its 1980 value. The median gross rent for Davis in 2008-2012 was 15 percent more than what it was in 2000 (Appendix A Table 2). As of 2008-2012, Davis had the highest median gross rent (\$1,299), followed by Santa Rosa (\$1,209), Modesto (\$997), Stockton (\$946), and Chico (\$918).

The California cities have had rents increase by \$163 to \$385; in some periods cities have had rents increase by as much as 29 percent. The Oregon study areas have not had rents increase as drastically, instead they've increased by amounts between \$26 and \$65. In general, the Oregon study areas have seen much smaller increases in rents in comparison to the California study areas (Appendix A, Table 2).

Figure 9. Changes in Median Gross Rent - Oregon



Source: U.S. Census Bureau. "Median Gross Rent, 1980; 1990; 2000; 2008-2012" Social Explorer. Note: Values are adjusted for inflation to 2012 values.

As Figure 9 shows, Bend has consistently had the highest rents for each decade. Its 2008-2012 median gross rent of \$934 is followed by Medford (\$857), Eugene (\$854), Corvallis (\$819), and Salem (\$781).

In addition, there have not been significant fluctuation in rents. All cities experienced a slight drop in rents in 1990, which were followed by increases. 2008-2012 rents have remained near their 2000 values.

The contrast between all study areas is that Oregon rents have remained relatively stable compared to the selected cities in California.

CHAPTER 6. REVIEW OF COST BURDENED RENTER- AND OWNER-OCCUPIED HOUSEHOLDS

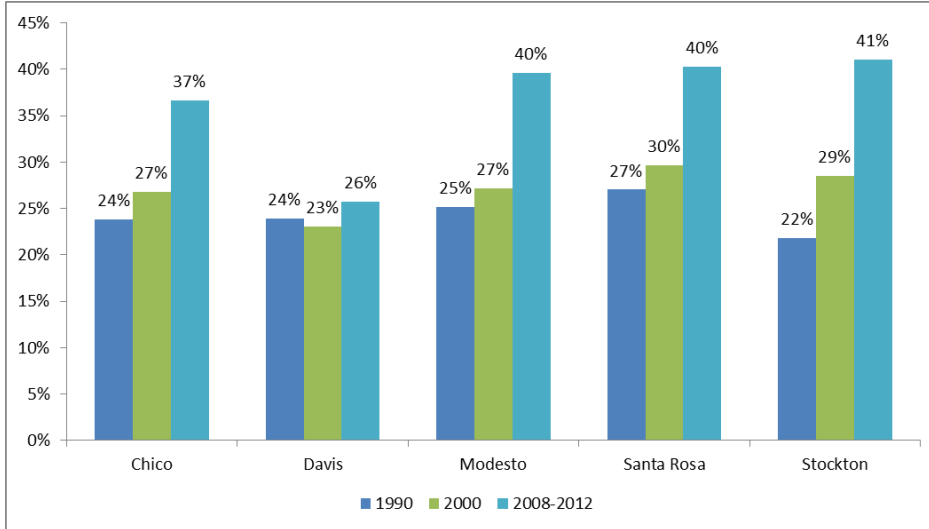
The following figures demonstrate the changes in the percentage of households that are spending 30 percent or more of their household income on rent or and housing costs (for owner-occupied households). The figures do not include data for 1980 because the Census data's intervals are different for that year. See Appendix C for the percentage of households spending 35 percent or more of their income on rent and housing costs in 1980.

Monthly Owner Costs as a Percentage of Household Income

The following figures show the percentage of owner-occupied households that are spending more than 30 percent of their incomes on housing costs. Overall, owner-occupied households are not as cost burdened as their renter household counterparts. Owner-occupied households typically tend to have higher incomes than renter-households. Despite this, all ten cities demonstrate an upward trend in the percentage of households that are cost burdened. If the trends continue, cities may get to a point where nearly half of the owner-occupied households are cost burdened.

In California, Stockton, Santa Rosa, and Modesto contain the largest percentage of cost burdened owner-occupied households. Davis has the lowest percentage (20%) of cost burdened owner-occupied households, which is interesting given that their median house values are very high.

Figure 12. Cost Burdened Owner-Occupied Households – California

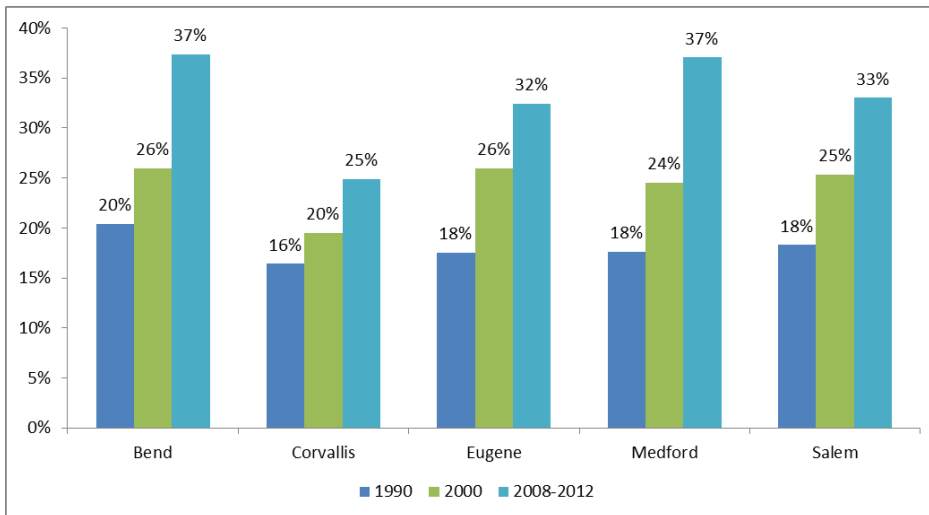


Source: U.S. Census Bureau. “Selected Monthly Owner Costs as a Percentage of Household Income, 1980; 2000”, “Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income, 1990; 2008-2012.” Social Explorer.

The Oregon study areas have a range of 32 percent and 37 percent of owner-occupied households that are considered cost burdened. Corvallis has the smallest amount (25%). Interestingly, all cities had similar percentages in 1980, and while they have all seen increases throughout time some have grown faster than others.

Bend and Medford are examples of cities whose cost burdened owner populations increased by at least 10 percent from 2000 to 2008-2012 (Figure 13).

Figure 13. Cost Burdened Owner-Occupied Households - Oregon



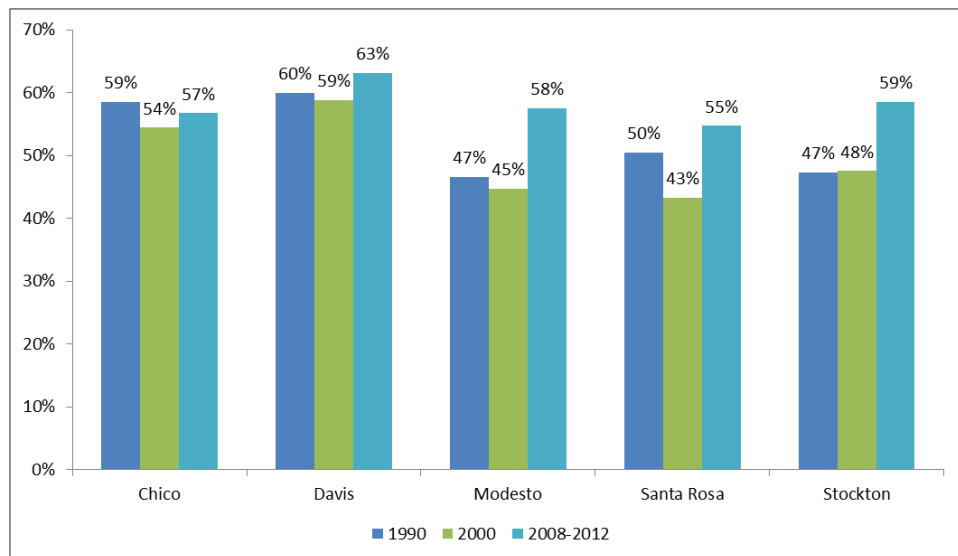
Source: U.S. Census Bureau. “Selected Monthly Owner Costs as a Percentage of Household Income, 1980; 2000”, “Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income, 1990; 2008-2012.” Social Explorer.

Monthly Renter Costs as a Percentage of Household Income

As Figure 10 shows, nearly half or more of each California cities' populations are spending 30 percent or more of their income on rent. Chico and Davis' high rates may be explained by the presence of a large student population.

However, since 2000 the percentage of cost-burdened renter households continued to increase. Stockton saw the largest increase in cost burdened households from 2000 to 2008-2012. For instance, in 2000 the rate was 48 percent and this increased to 59 percent, which makes it the second highest cost burdened city.

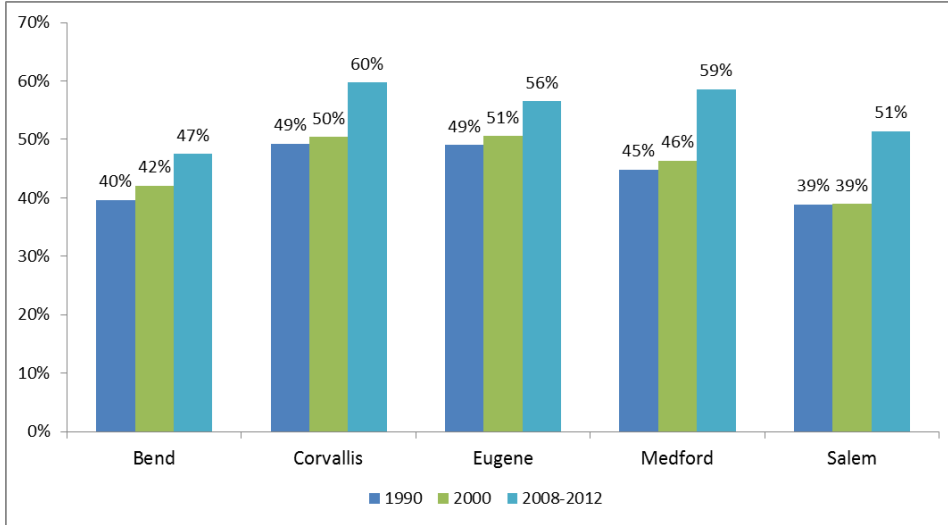
Figure 10. Cost Burdened Renter Households- California



Source: U.S. Census Bureau. "Gross Rent as a Percentage of Household Income, 1980; 1990; 2000; 2008-2012" Social Explorer.

Unlike the California cities which saw a decrease in cost burdened households in 2000, the Oregon study areas have seen a consistent increase in that regard. As of 2008-2012, Bend is the only city that does not have at least half of its renter households paying 30 percent or more of their income on rent. The City of Corvallis has the largest percentage of renter households (60%) that are cost burdened, followed by Medford (59%), and Eugene (56%).

Figure 11. Cost Burdened Renter Households - Oregon



Source: U.S. Census Bureau. "Gross Rent as a Percentage of Household Income, 1980; 1990; 2000; 2008-2012" Social Explorer.

Overall, the data illustrates that nearly half or more of the renter population is spending more than 30 percent of their income on rent. This implies that all cities' renters struggle with housing affordability.

CHAPTER 7: SUPPLY AND DEMAND OF AFFORDABLE HOUSING

In order to examine whether the study areas are producing sufficient housing to keep up with the growth of low-income households, this study takes a look at changes in housing affordability and households earning 80% and 30% of AMI.

HUD considers households that earn 30% AMI to be “Extremely-Low Income.” Households that earn 80% AMI are considered “Low Income.” However, housing for households earning 80% AMI can also be described as workforce housing. Workforce housing is typically defined as housing that is affordable to people with incomes between 60% and 100% AMI.

Figures A through D in Appendix E show how the percentage of households earning 80% AMI or less have changed from 1980 to 2008-2012. Generally, all ten study areas have around 40 percent of their population at 80% AMI or less. There are some fluctuations where cities experience a decrease in households at this level. For instance, from 1980 to 1990, Santa Rosa’s households at 80% AMI dropped from 42 to 31 percent (Appendix D, Figure A and B). From 1990 to 2000, Bend’s percentage of households decreased from 38 percent to 28 percent. Considering that both cities experienced substantial increases in rents during those periods, the decrease in “low-income” households may be attributed to households moving to more affordable cities.

The general trend among all ten cities is that the number of households earning at or below 80% and 30% AMI grew during each study period. Another trend is that the 30% and 80% Area Median Incomes are relatively stagnant. The majority of study areas experienced vast increases in median household income (Figure 3 and 4) in 2000. However, these cities also experienced dramatic decreases in median household income in 2008-2012, in some cases decreasing below their 1990 amount. This poses an affordability issue as more households were earning less. For instance, Modesto’s 80% AMI fell to \$39,364 in 2008-2012, its lowest amount of all four study periods. As a result, the City had a deficit of 8,127 units when it previously had a surplus of 1,339 units in 2000.

Overall, the estimated number of affordable renter and owner units do not increase at a rate to keep up with the growth of households at each AMI level. None of the ten study areas experience a surplus of affordable units for households at 30% AMI (Appendix D). In many cases, a city’s 2008-2012 deficit had more than tripled from the deficit it held in 1980 (Appendix D, Figures A through T).

Table 1. Surplus and Deficit of Affordable Housing Units for 80% AMI

	1980	1990	2000	2008-2012
Chico	348	2,754	2,054	4,514
Davis	272	2,279	1,843	3,427
Modesto	1,467	1,687	1,339	8,127
Santa Rosa	3,268	2,243	9,139	8,622
Stockton	1,126	2,845	668	8,831
Bend	50	147	634	2,976
Corvallis	295	739	458	349
Eugene	762	1,182	2,969	9,226
Medford	480	505	520	3,801
Salem	405	2,398	2,436	3,033

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990; 2000; 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

The cities of Medford, Eugene, Santa Rosa, and Chico exhibited a deficit of units for all the study periods for both AMI levels (Table 1). Corvallis and Davis had a surplus of affordable units in 1980 for households earning 80% AMI or less. Modesto and Bend has a surplus of affordable units in 1990. Modesto also had a surplus in 2000. Salem is the only city that had a consistent surplus of units from 1980 to 2000. However, by 2008-2012 Salem had a deficit of 3,033 units. During this same period, the 80% AMI decreased by approximately \$4,000 and there were an additional 4,692 households below that income level.

In addition, another issue is that the number of households grew during each period but at times the number of affordable units also decreased. For instance, in the case of Stockton, the number of renter units affordable to those earning 80% AMI decreased from 25,597 in 2000 to 20,929 in 2008-2012 (Appendix D Tables 11 and 13). On the other hand, several cities exhibited an increase in affordable renter units. For instance, Bend added an additional 4,391 affordable units from 2000 to 2008-2012. However, its population earning 80% AMI or less grew by approximately 7,000 households resulting in its largest deficit of 2,976 units.

A few cities were able to produce more affordable housing throughout each time period. Chico is one example of a city that produced more affordable housing over time, however, Figure B (Appendix D) demonstrates that the growth in affordable rents does not keep up with the growth of households in the 80% AMI category. In addition, Santa Rosa is another example of this trend. Despite producing more affordable housing the deficit gets larger because the population below 80% AMI continues to grow.

Compared to the other study areas, Eugene and Medford are two cities that supply a large amount of affordable units to meet demand (Appendix D, Figure P). Despite supplying sufficient housing for the majority of the population earning below 80% AMI in 1980 and 1990, the city's deficit grows larger each time period.

Modesto explains this affordability in its consolidated plan: "The reason that for-sale units are affordable to low-and moderate income households is a combination

of the low sales prices due to the housing market crash accompanied by the high number of foreclosed homes, and the historically low mortgage interest rates” (Modesto Consolidated Plan, p.34).

Households earning 30% AMI face similar affordability issues. As Table 2 shows, the general trend for most cities is that the deficits get larger during each period. Figures A through T (Appendix D) further illustrate that the number of low-income households continues to get increasingly larger.

When examining deficits at the 30% AMI level, Davis and Eugene stand out as cities with the largest deficits. However, this is likely attributed to their university student population as full-time students rely on loans and parents to support themselves.

Table 2. Deficit of Affordable Housing Units for 30% AMI

	1980	1990	2000	2008-2012
Chico	1,100	873	2,662	3,142
Davis	1,745	2,225	3,562	3,788
Modesto	2,847	4,912	5,165	6,065
Santa Rosa	3,094	3,953	3,174	4,580
Stockton	3,893	5,138	7,688	9,022
Bend	544	446	669	2,241
Corvallis	1,394	1,548	2,575	3,370
Eugene	3,494	3,670	5,979	8,259
Medford	1,194	1,405	1,845	2,642
Salem	2,368	1,810	2,648	4,220

Source: U.S. Census Bureau. “Median Household Income, 1980; 1990; 2000; 2008-2012”; “Gross Rent, 1980, 1990, 2000, 2008-2012”; “Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012”; “Household Income, 1980, 1990, 2000, 2008-2012.” Social Explorer.

The vast majority of affordable units are renter units. Affordable owner units ranged from 1 percent (Davis in 1980) and 31 percent (Bend in 2000). Figures A through T in Appendix D demonstrate that households at both income levels would likely rely on renting a unit than owning a home because there are much fewer owner units available.

However, high demand for rental units leads to a scarcity in supply as higher income owners compete with low-income households for housing. For instance, for the City of Chico, “Vacancy rates indicate that there is inadequate rental housing to meet the needs of the Chico population. According to [the North Valley property Owner’s Association’s], vacancy rates are 1.2%. Balance housing markets typically have vacancy rates of 5% to 8%. This increased rents while incomes for low-income households has remained stagnant” (Chico Consolidated Plan p.66). Other cities, such as Davis have exhibited low-vacancy rates because of high levels of housing demand.

CHAPTER 8: OVERVIEW OF BARRIERS TO AFFORDABLE HOUSING

It is clear that all study areas have varying levels of affordable housing issues. In order to understand what factors impact the development of affordable housing, this study analyzes the most recent approved Consolidated Plans and Analysis of Impediments to Fair Housing documents for all ten study areas. In addition, the analysis pays particular attention to whether the challenges may be attributed to the presence of a UGB.

Consolidated Plans are five-year plans required by the U.S. Department of Housing and Urban Development (HUD) for cities that receive Community Development Block Grant (CDBG) and Home Investment Partnerships Program (HOME) funds. Consolidated Plans serve as a strategy to address the needs of low- and moderate-income residents. Plans typically identify community needs and provide strategies to address those needs through the use of CDBG and HOME funds.

Cities are required to set priorities and goals to address the needs of low- and moderate- income residents. Typical housing priorities found throughout the Consolidated Plans include:

- Increasing the supply of affordable rental housing
- Providing home ownership opportunities
- Preserving existing affordable housing stock
- Continuing to support fair housing

The plans provide insight into what cities have identified as challenges to the development or preservation of affordable housing. Cities are required to identify their strategies to ameliorate negative impacts of public policies that may serve as barriers to affordable housing. Examples of such policies include “land use controls, tax policies affecting land, zoning ordinances, building codes, fees and charges, growth limitations, and policies affecting the return on residential investment” (City of Chico Consolidated Plan, p.127).

In general, cities did not call out specific policies that impacted affordable housing. For instance, the City of Davis does not consider any of its public policies related to land use controls as a barrier to affordable housing. Instead, Davis considers itself a leader in producing affordable housing. The City acknowledges that “since 1987, over 1,800 affordable units (both rental and ownership) have been built or approved within approximately 30 rental projects and close to 15 subdivisions” (City of Davis Consolidated Plan, p.69). However, their efforts are not enough as Table 15 (Appendix D) shows that in 2008-2012 the City of Davis had a deficit of 3,427 units for households earning 80% AMI or less.

The City of Modesto also did not believe that any of its policies adversely impact the City’s ability to accommodate housing needs. Likewise, Santa Rosa states that “it does not appear that growth management or a fixed UGB has significantly affected housing prices in Santa Rosa” (Santa Rosa Consolidated Plan, p. II-50). The

Plan also states that housing price increases over time cannot be attributed to either the growth management program or UGB.

Cities identified various barriers to affordable housing that were common among them but may not be related to the presence of UGB. For instance, Chico's Consolidated Plan explains that "the greatest barrier to producing affordable housing is not public policy or market conditions, but the scarcity of public funding"(p.172).

In addition, Modesto acknowledges that "many households do not have established credit or have poor credit histories, lack sufficient funds for move-in expenses, have disabilities or special needs, or consist of large families or single-female-headed households" (City of Modesto Analysis of Impediments to Fair Housing, p.v). This is likely a common barrier found among cities as low-income households compete with high income households for housing. Aside from affordability issues, low-income households face several obstacles (credit histories, first and last month's rent) before they are eligible to rent an apartment.

Bend's Consolidated Plan also identifies "various protected classes, including disability, familial status, age, and race" (p.65) are the populations in most need of affordable housing. Nonprofits generally attempt to develop housing for protected classes such as senior housing and ADA units. However, nonprofits experience significant challenges in developing affordable housing and it's common to find that cities are not able to accommodate those protective classes with appropriate housing.

Several cities also acknowledge that housing costs act as a barrier. For instance, the City of Eugene identifies an inadequate supply of affordable housing as a barrier. The City explains that "this is due to a combination of factors including inadequate income, a shortage of subsidized housing, an array of factors that add to housing costs including taxes, utility costs, interest rates, special fees and assessments" (Eugene-Springfield 2010 Fair Housing Plan, p.35). Some of the factors that add to housing costs are a result of city policies such as impact fees and building permit fees. High fees make it difficult to build affordable housing at a profitable rate.

In addition, the City of Salem's identified barriers include a "lack of affordable housing in desirable areas, long wait lists, and policies affecting return on residential investment" (Salem/Keizer Analysis of Impediments to Fair Housing 2014, p.4). Long wait lists are a common issue among housing authorities as lists are commonly thousands long. Cities generally do not produce enough subsidized affordable housing to meet demand, therefore, households may be on a waiting list for several years.

Cities have also acknowledged that the impacts of the recent recession and housing crash have created barriers to affordable housing. For instance, Bend explains that there have been increases in unemployment and under-employment. Many of the cities experienced an increased rate of housing production in the early 2000s before the recession, which was accompanied with an increase in rents and home values. The recession had a strong impact on the study areas' overall affordability. For example, "Diminishing housing affordability in Bay Area jurisdictions also increased the demand for housing in Modesto, resulting in increased housing

prices, housing cost burden, and lack of affordable housing production in Modesto” (Modesto Con Plan, p.28). It is possible that more of the study areas experienced this effect during the housing boom.

A common barrier identified throughout the Oregon cities was related to the availability of land. In its Analysis of Impediments to Fair Housing document, Bend lists the “Available Supply of Residential Land” as a barrier. The document, written in 2012, explains that the City attempted to expand its UGB in 2008 but was in the process of working on remand items. The document explains that the lack of additional land has limited supply, which ultimately impacts the availability of affordable land to construct housing. In addition, Bend identified land costs as its “single largest barrier to affordable housing” (City of Bend Consolidated Plan, p.35). Land may be hard to come by if prices are very high due to a lack of supply.

The City of Eugene identified that suitable sites “for future low-income housing construction are difficult to find, are expensive to acquire, and some may have constraints that limit development opportunities” (Eugene/Springfield Fair Housing Plan, p.35). Eugene explains that affordably developable land has decreased within the UGB as the population has grown. At the time the document was written, the City of Eugene was conducting land assessments to determine if there was an adequate supply of buildable land for the next 20 years. As of the date of this research, the City of Eugene has not officially expanded its UGB.

Moreover, the City of Medford lists a “lack of land suitable and zoned for multifamily housing central Medford” and “lack of land in central Medford within reach of non-profit developers of affordable housing” (City of Medford 2010-2014 Consolidated Plan, p. 6-17).

Corvallis also lists inadequate supply of housing as an impediment but does not go into detail about the issue. Instead, they explain that the City’s Land Development Code and Comprehensive Plan should facilitate, not prohibit, the development of housing.

Overall, there are several barriers to affordable housing that are common among all ten study areas and would likely be common across the United States. Cities did not call out specific growth management policies as barriers to affordable housing. The cities of Davis and Santa Rosa expressed that their growth management policies do not impact housing affordability. On the other hand, the Oregon study areas expressed that a lack of available land was a barrier to affordable housing. Several cities expressed that “suitable land” was an issue, meaning land that was zoned properly or located in areas near schools, transportation, or grocery stores. Additionally, in the case of Bend and Eugene, it appears that their issue lies with not being able to expand their boundary.

There are some barriers to affordable housing that low-income households face because their cities have become more expensive. Among these barriers are the issues of having good credit scores and competing with higher-income households for rental units. On the other hand, many of the study areas acknowledged in their Consolidated Plans that their housing authorities are just not able to keep up with the demand for affordable housing. In addition, they also acknowledged that high housing costs are an issue and that some of their development fees (impacts fees,

building permit fees, system development charges) may deter the development of affordable housing. In general, the identified barriers relate to housing costs (for both new development and rising rents/home values), and an inability to produce enough housing because the number of low-income households continues to grow.

CHAPTER 9: FINDINGS

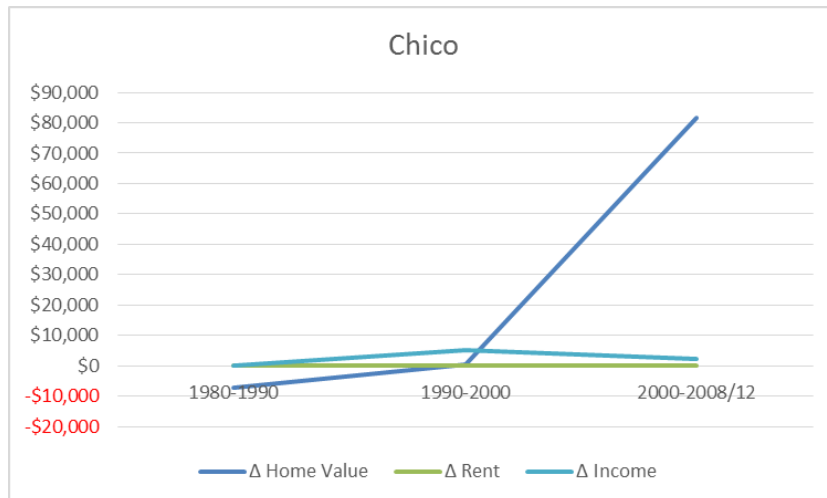
The hypothesis of this research was that states with UGBs would develop affordable housing at a rate slower than the growth of low-income households. Findings show that, regardless of the presence of a UGB, cities are increasingly becoming less affordable to households that earn 80% or less of Area Median Income.

Overall, all ten study areas have experienced increased home values and rents during the study period. These trends have been accompanied by median household incomes that have stagnated or fluctuated very little. The California and Oregon study areas had median households decrease significantly in 2008-2012. In all, the study areas experienced an increase in the percentage of cost burdened owner-occupied and renter-households, demonstrating the effects of rising housing costs and diminishing incomes.

The following figures illustrate the changes in the median value of owner-occupied housing units, median gross rents, and median households income throughout the three decades in the study period. See Appendix F for more details on the changes in values during each decade.

These figures demonstrate that median home values have increased substantially throughout the study period. The cities of Modesto (Figure 14), Santa Rosa (Figure 15), Stockton (Figure 16), Corvallis (Figure 18), Eugene (Figure 19), Medford (Figure 20), and Salem (Figure 21) are areas whose median household incomes decreased substantially during 2000 – 2008-2012.

Figure 12. Changes in Housing Costs and Incomes - Chico

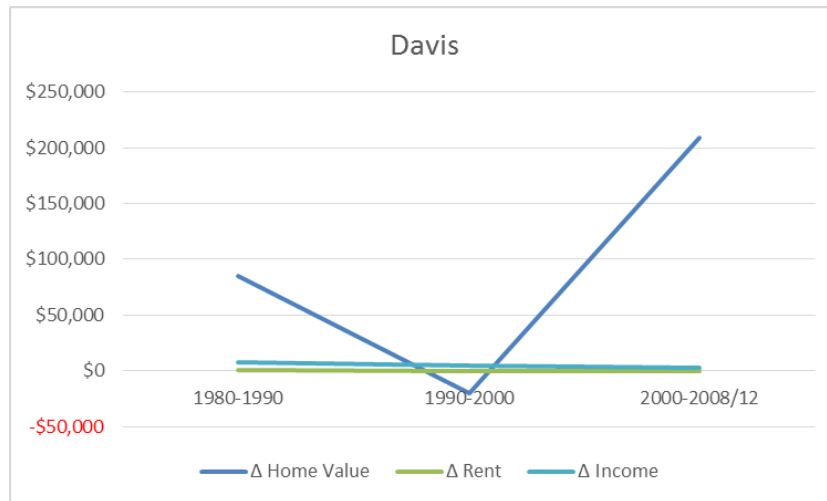


Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

With the exception of Chico, the California study areas had median owner-occupied home values decrease substantially during the 1990-2000 period. For instance, Modesto’s median home value decreased by \$64,770 during 1990-2000. On the other hand, with the exception of Bend, the Oregon study areas experienced significant decreases in median home values during 1980-1990, which was followed by substantial increases the following decade.

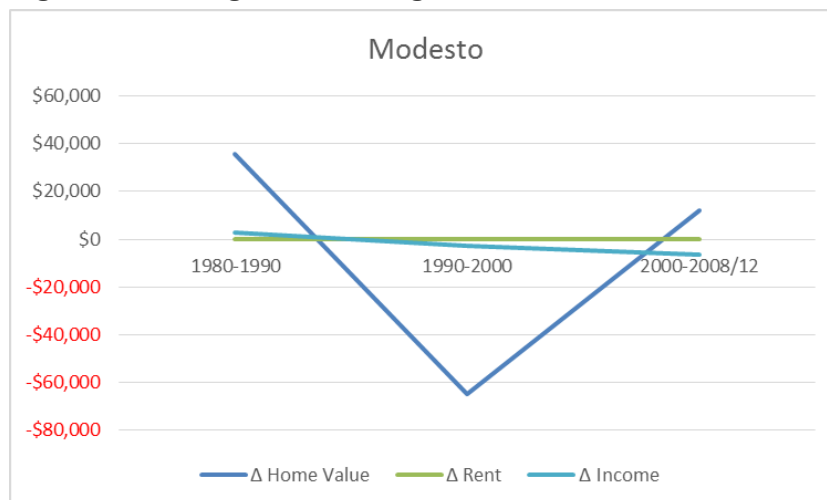
In addition, the trends seen throughout all ten cities is that changes in median rents were relatively stagnant. Several cities also experienced similar trends with changes in median household incomes, though there are several where diminishing incomes are more notable. Furthermore, it is clear that incomes have not been increasing at a rate to keep up with rising housing costs.

Figure 13. Changes in Housing Costs and Incomes - Davis



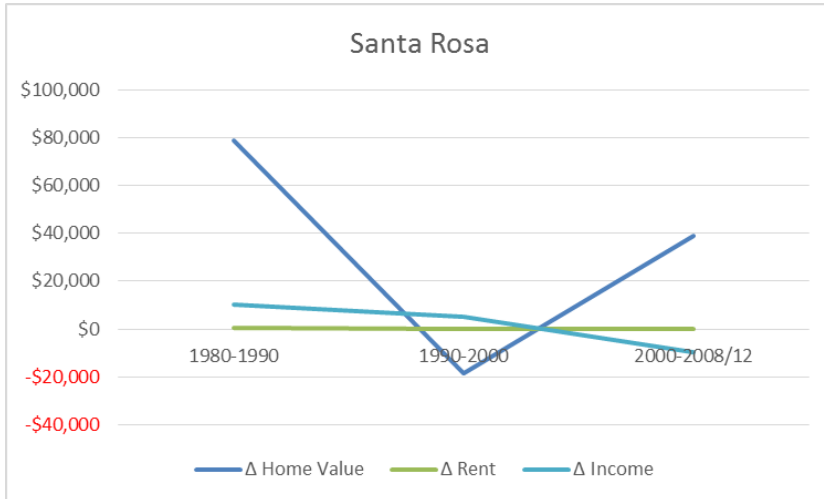
Source: U.S. Census Bureau. “Median Household Income, 1980; 1990, 2000, 2008-2012”; “Median Gross Rent, 1980, 1990, 2000, 2008-2012”; “Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012.” Social Explorer.

Figure 14. Changes in Housing Costs and Incomes - Modesto



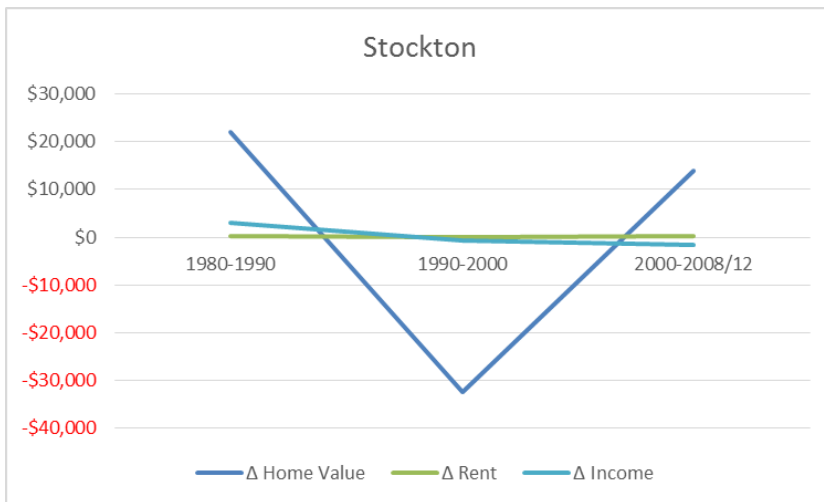
Source: U.S. Census Bureau. “Median Household Income, 1980; 1990, 2000, 2008-2012”; “Median Gross Rent, 1980, 1990, 2000, 2008-2012”; “Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012.” Social Explorer.

Figure I5. Changes in Housing Costs and Incomes – Santa Rosa



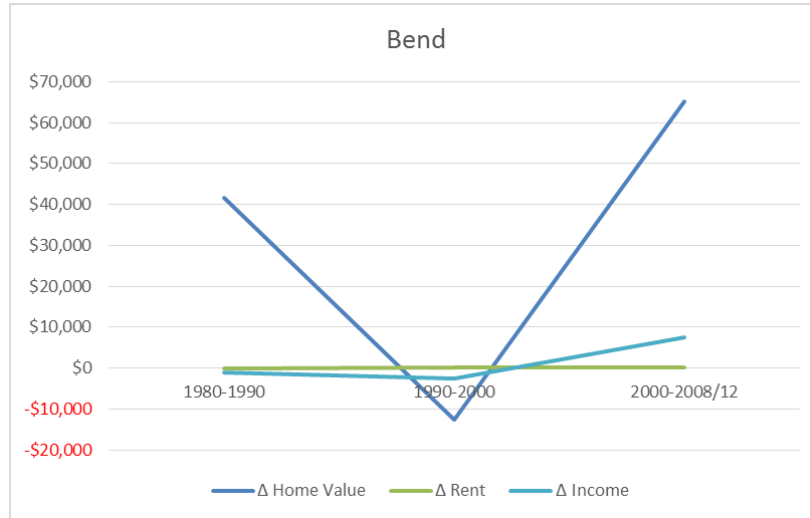
Source: U.S. Census Bureau. “Median Household Income, 1980; 1990, 2000, 2008-2012”; “Median Gross Rent, 1980, 1990, 2000, 2008-2012”; “Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012.” Social Explorer.

Figure I6. Changes in Housing Costs and Incomes - Stockton



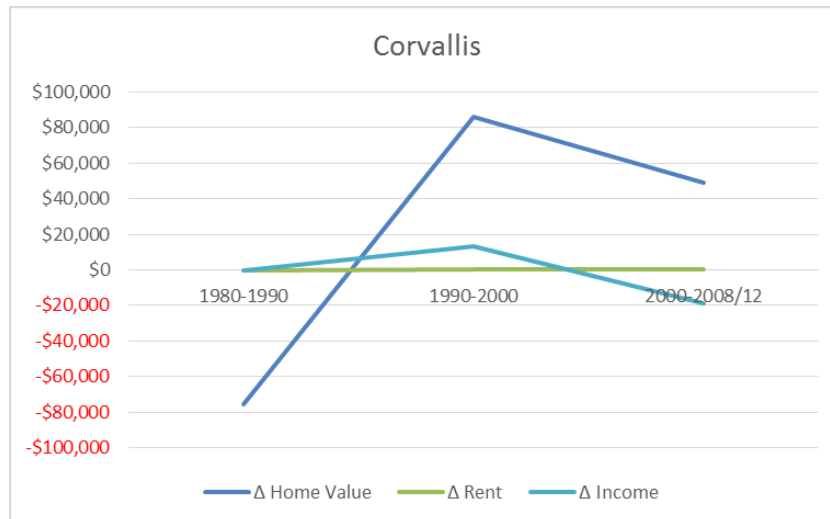
Source: U.S. Census Bureau. “Median Household Income, 1980; 1990, 2000, 2008-2012”; “Median Gross Rent, 1980, 1990, 2000, 2008-2012”; “Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012.” Social Explorer.

Figure 17. Changes in Housing Costs and Incomes - Bend



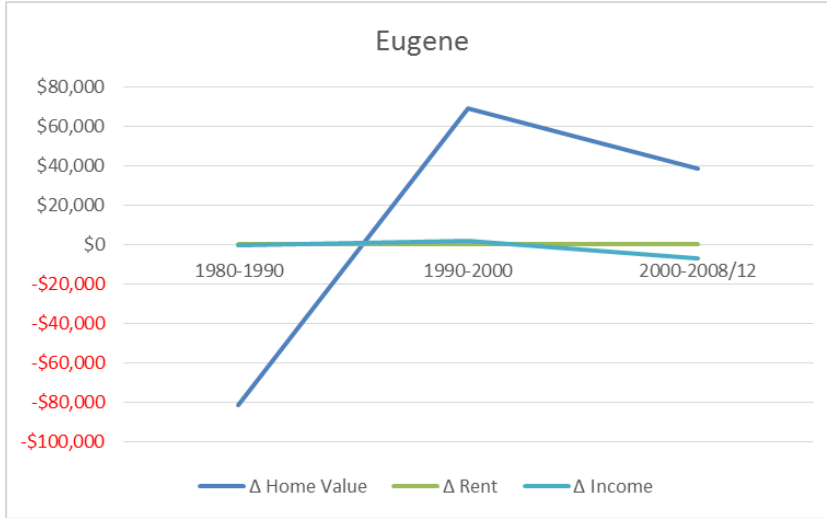
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure 18. Changes in Housing Costs and Incomes - Corvallis



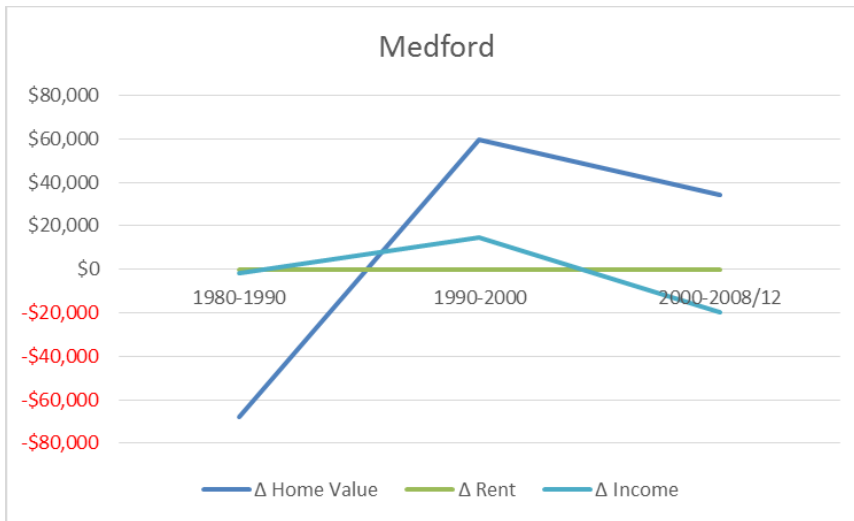
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure 19. Changes in Housing Costs and Incomes - Eugene



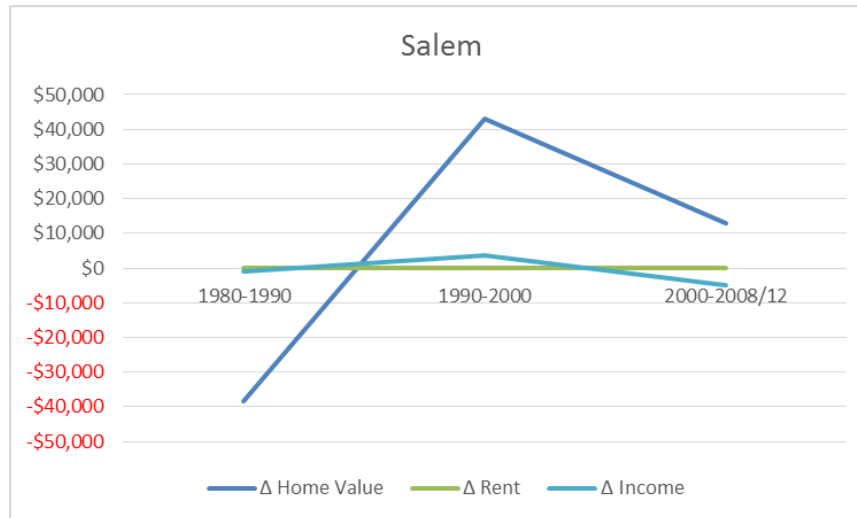
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure 20. Changes in Housing Costs and Incomes - Medford



Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure 2I. Changes in Housing Costs and Incomes - Salem



Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

This project also found that as the population has increased so has the number of households earning 80% and 30% AMI. In addition, as of the most recent study period (2008-2012), all cities had significant deficits in the number of affordable units. In many cases, the deficits were in the thousands and trends indicate that the deficits will continue to grow.

Oregon and California are required by state policies to plan to accommodate population growth and provide sufficient housing for populations at all income levels. The findings show that these areas are having difficulty meeting those requirements and face an uphill battle to ever do so. Part of the issue lies in that cities are not able to keep up with the demand for affordable housing because the number of low-income households continues to grow significantly.

It would be erroneous to say that an increasing lack of affordability is attributed to the presence of a UGB because all study areas demonstrated that they have significant affordability issues. There are several reasons to explain why cities are unable to supply enough affordable housing to meet demand. The first is that housing costs for renters and owners, rose faster than incomes. The second reason is that market trends such as housing booms and crashes have greatly impacted affordability. This is evident when examining changes in incomes and surpluses/deficits of affordable housing from 2000 to 2008-2012. For instance, high costs of living in the San Francisco Bay Area has caused residents to search for housing in cheaper areas such as Modesto. However, in turn the increase in demand has made finding affordable housing more difficult as low-income households are forced to compete with households with higher incomes. Third, cities have little control over other factors that impact affordability such as actions of landlords and landowners and under- and unemployment.

However, it is interesting to note that several Oregon cities identified availability of land as a barrier to affordable housing. In the cases of Eugene and Bend, this

barrier appeared to be a cause of not having enough affordable or appropriate land to meet housing needs. It appears that the issue may lie in that cities are not able to complete the UGB expansion process in time to avoid high demand for land and subsequent high land values.

Overall, it is clear that cities are having difficulty producing enough affordable housing to meet demand regardless of the presence of an urban growth boundary or policies that require jurisdictions to plan to meet the housing needs of its population, such as Goal 10 in Oregon and the Regional Housing Need Allocation in California.

CHAPTER 10: CONCLUSION: RECOMMENDATION AND IMPLICATIONS FOR FURTHER RESEARCH

Overall, the findings in this research likely reveal a trend that is occurring nationwide. As cities become increasingly more expensive, many more households are experiencing difficulty finding housing where they are not forced to pay more than 30 percent of their income on housing. As a result, cities are experiencing a growing deficit between households earning 80% or less of AMI and housing units that are affordable to them.

There are several tools that cities may try to implement to produce more affordable housing. Given the difficulty that non-profits face in developing affordable housing, the task cannot be solely left up to them. More aggressive measures that cities can take include inclusionary zoning, density bonuses, and rent stabilization programs. Given that the study areas identified housing development costs as an issue, cities should also make an effort to donate land to housing authorities and non-profits for low-income and multi-family developments because it would help make development more affordable.

Cities should also consider evaluating impact fees, building permit fees, and other fees that increase the cost of housing and deter developers from producing affordable housing. Lowering developer fees would make it easier to develop affordable housing and make a profit.

Oregon cities appeared to have an issue with a lack of availability of land. Therefore, it would be beneficial for cities to examine whether this is a result of a long UGB expansion process or whether they need to improve how they plan for a 20-year supply of land.

Future research should examine the extent to which aggressive measures to produce affordable housing helps cities decrease the deficit of affordable units. This project did not examine the extent to which the study areas use measures such as inclusionary housing ordinances or density bonuses. It would be valuable to see how much more affordable housing is developed when cities take advantage of various measures to produce it.

Future research should also continue to examine the impacts of UGBs in California at a regional level, given that jurisdictions with UGBs are commonly located next to jurisdictions that don't.

In addition, future research should also examine the relationship between the cost of new housing and square footages. If new housing is particularly large, then it's likely rented or sold at a high value and would then increase competition for older and less costly housing units. This may imply that cities should consider producing smaller housing units in order to produce more affordable housing options.

Lastly, considering that the economic recession in 2008 has had serious implications on housing markets, affordability, and the growth of low-income households, future research should examine whether the deficit of affordable housing units continues to increase for homeowners and renters.

APPENDICES

Appendix A – Housing Affordability Indicators

Population Changes

Table A. Population Changes for California Cities

Year	Chico	Davis	Modesto	Santa Rosa	Stockton
1980	26,603	36,640	106,602	83,320	149,779
1990	40,079	46,209	164,730	113,313	210,943
2000	59,954	60,308	188,856	147,595	243,771
2010	86,391	65,616	201,986	167,207	292,262
Population Change	59,788	28,976	95,384	83,887	142,483
Annual % Change	7.5%	2.6%	3.0%	3.4%	3.2%

Source: U.S. Census Bureau. "Total Population, 1980; 1990, 2000; 2008-2012." Social Explorer.

Table B. Population Changes for Oregon Cities

	Bend	Corvallis	Eugene	Medford	Salem
1980	17,263	40,960	105,624	39,603	89,233
1990	20,469	44,757	112,669	46,951	107,786
2000	52,029	49,322	137,893	63,154	136,924
2010	78,128	54,691	157,318	75,902	156,937
Population Change	60,865	13,731	51,694	36,299	67,704
Annual % Change	11.8%	1.1%	1.6%	3.1%	2.5%

Source: U.S. Census Bureau. "Total Population, 1980; 1990; 2000; 2008-2012." Social Explorer.

Table C. Median Value – Owner Occupied Housing Units

	Bend	Corvallis	Eugene	Medford	Salem
1980	\$161,792	\$203,504	\$212,352	\$185,492	\$169,376
1990	\$203,315	\$127,650	\$131,165	\$117,475	\$131,165
2000	\$190,578	\$213,486	\$200,100	\$177,330	\$174,294
2008-2012	\$255,800	\$262,300	\$238,700	\$211,800	\$187,200

Source: U.S. Census Bureau. "Median Housing Unit Value, 1980"; "Median Value for Specified Owner-Occupied Units, 1990" ("Median House Value for All Owner-Occupied Housing Units, 2000; 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table D. Median Value – Owner Occupied Housing Units

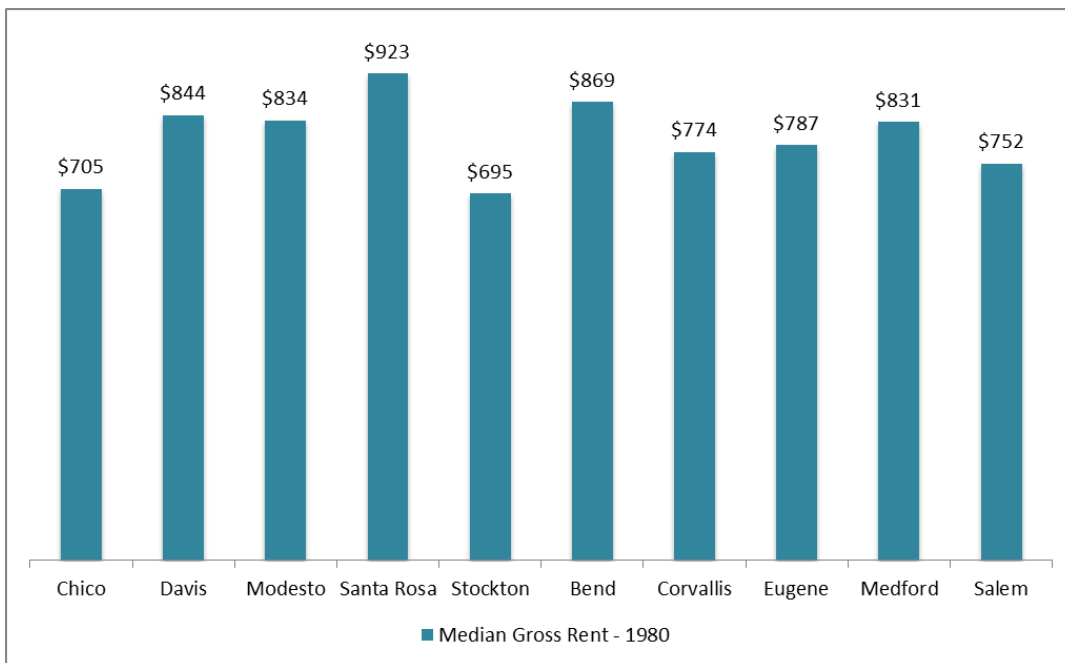
	Chico	Davis	Modesto	Santa Rosa	Stockton
1980	\$202,240	\$264,492	\$202,872	\$278,080	\$175,380
1990	\$194,990	\$349,650	\$238,650	\$356,680	\$197,395
2000	\$195,408	\$329,130	\$173,880	\$338,100	\$164,910
2008-2012	\$276,900	\$538,000	\$186,000	\$377,000	\$178,900

Source: U.S. Census Bureau. "Median Housing Unit Value, 1980"; "Median Value for Specified Owner-Occupied Units, 1990" ("Median House Value for All Owner-Occupied Housing Units, 2000; 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Median Gross Rents

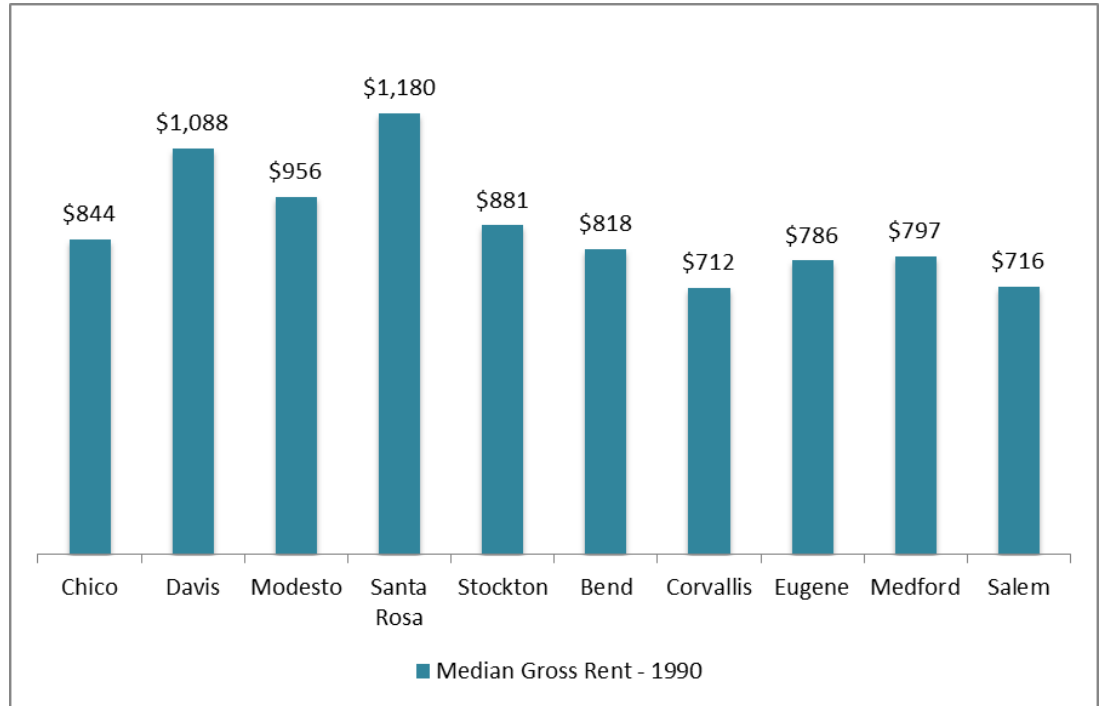
Figure E. Median Gross Rents in 1980



Source: U.S. Census Bureau. "Median Gross Rent, 1980" Social Explorer.

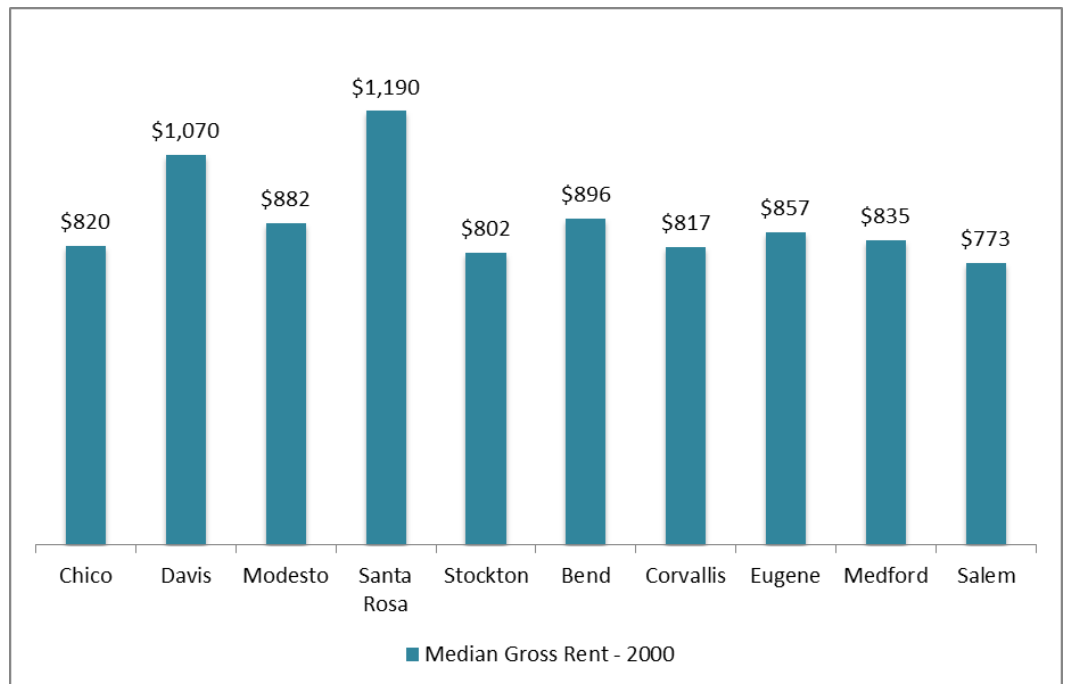
Note: Values are adjusted for inflation to 2012 values.

Figure F. Median Gross Rents in 1990



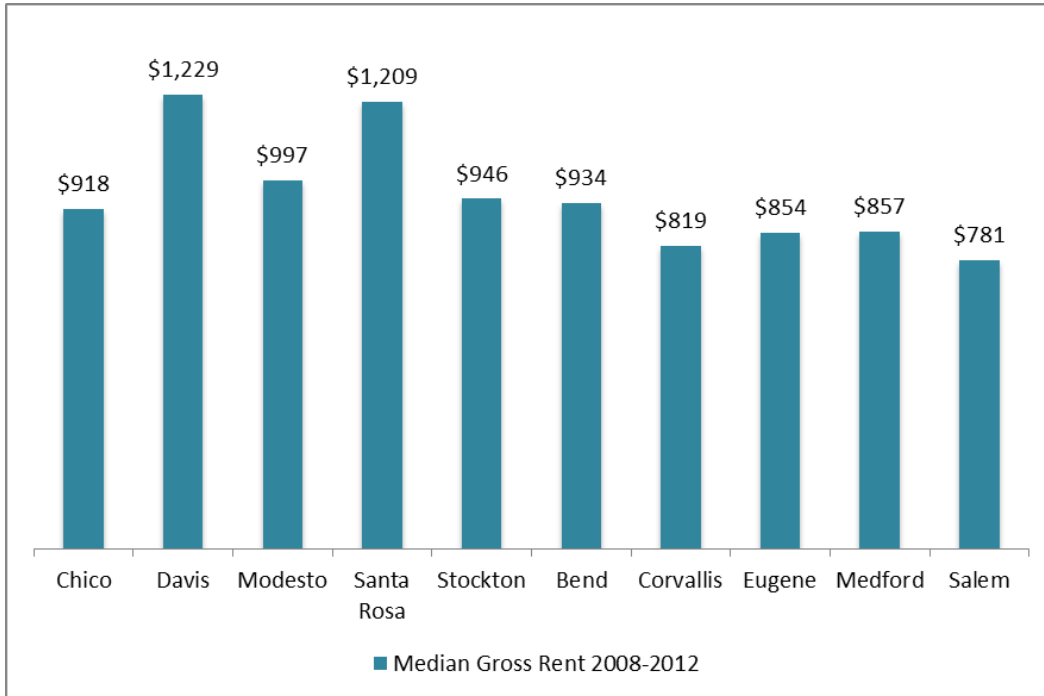
Source: U.S. Census Bureau. "Median Gross Rent, 1990" Social Explorer.
Note: Values are adjusted for inflation to 2012 values.

Figure G. Median Gross Rents in 2000



Source: U.S. Census Bureau. "Median Gross Rent, 2000" Social Explorer.
Note: Values are adjusted for inflation to 2012 values.

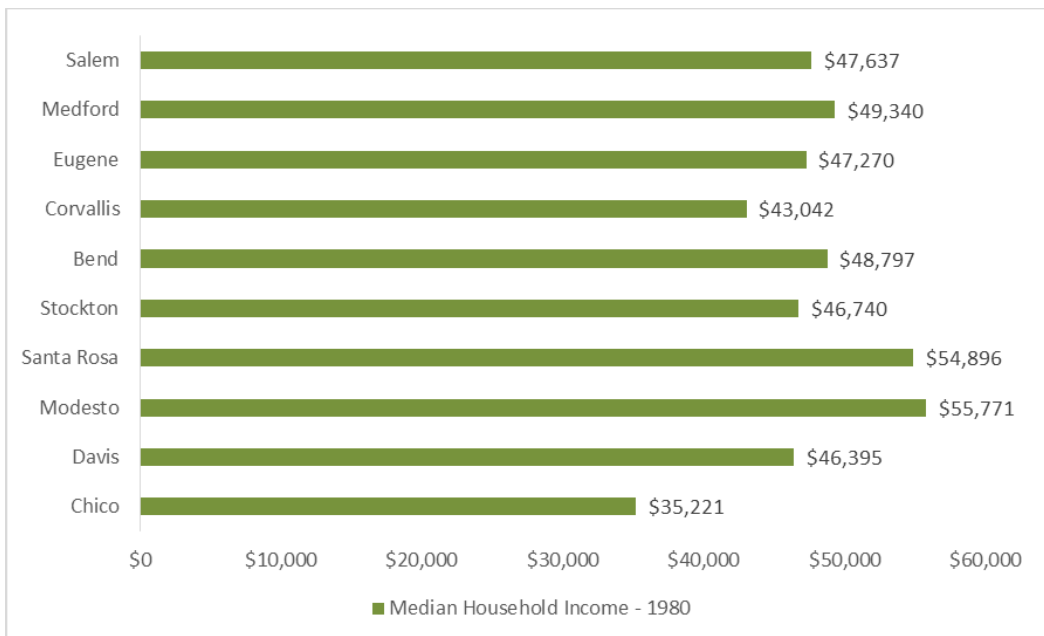
Figure H. Median Gross Rents in 2008-2012



Source: U.S. Census Bureau. "Median Gross Rent, 2008-2012" Social Explorer.
 Note: Values are adjusted for inflation to 2012 values.

Median Household Income by Year

Figure I. Median Household Income in 1980



Source: U.S. Census Bureau. "Median Household Income, 1980." Social Explorer.
 Note: Values are adjusted for inflation to 2012 values.

Figure J. Median Household Income in 1990



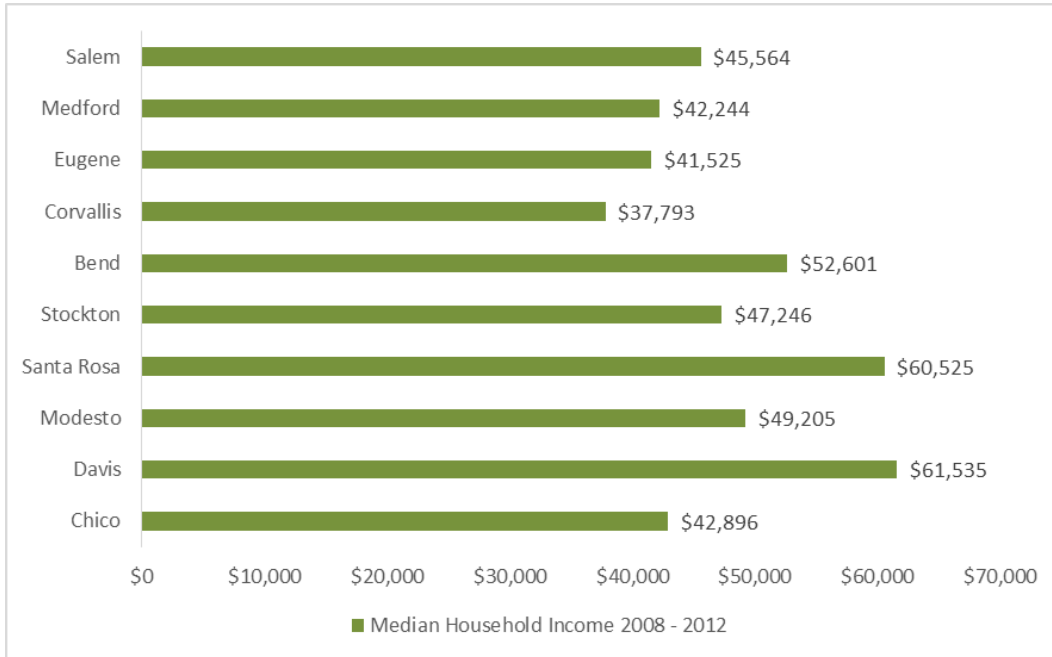
Source: U.S. Census Bureau. "Median Household Income, 1990." Social Explorer.
Note: Values are adjusted for inflation to 2012 values.

Figure K. Median Household Income in 2000



Source: U.S. Census Bureau. "Median Household Income, 2000." Social Explorer.
Note: Values are adjusted for inflation to 2012 values.

Figure L. Median Household Income in 2008-2012



Source: U.S. Census Bureau. "Median Household Income, 2008-2012." Social Explorer.
 Note: Values are adjusted for inflation to 2012 values.

Median Owner-Occupied Household Values and Gross Rents

Table I. Changes Median Owner-Occupied Household Values

	1980	1990	Δ 80-90	2000	Δ 80-90	2008-2012	Δ 00-08/12
Chico	\$202,240	\$194,990	-4%	\$195,408	0%	\$276,900	42%
Davis	\$264,492	\$349,650	32%	\$329,130	-6%	\$538,000	63%
Modesto	\$202,872	\$238,650	18%	\$173,880	-27%	\$186,000	7%
Santa Rosa	\$278,080	\$356,680	28%	\$338,100	-5%	\$377,000	12%
Stockton	\$175,380	\$197,395	13%	\$164,910	-16%	\$178,900	8%
Bend	\$161,792	\$203,315	26%	\$190,578	-6%	\$255,800	34%
Corvallis	\$203,504	\$127,650	-37%	\$213,486	67%	\$262,300	23%
Eugene	\$212,352	\$131,165	-38%	\$200,100	53%	\$238,700	19%
Medford	\$185,492	\$117,475	-37%	\$177,330	51%	\$211,800	19%
Salem	\$169,376	\$131,165	-23%	\$174,294	33%	\$187,200	7%

Source: U.S. Census Bureau. "Median House Value For All Owner-Occupied Housing Units, 1980; 1990; 2000; 2008-2012", "Median Gross Rent, 1980; 1990; 2000; 2008-2012." Social Explorer.
 Note: Values are adjusted for inflation to 2012 values.

Table 2. Changes in Median Gross Rent

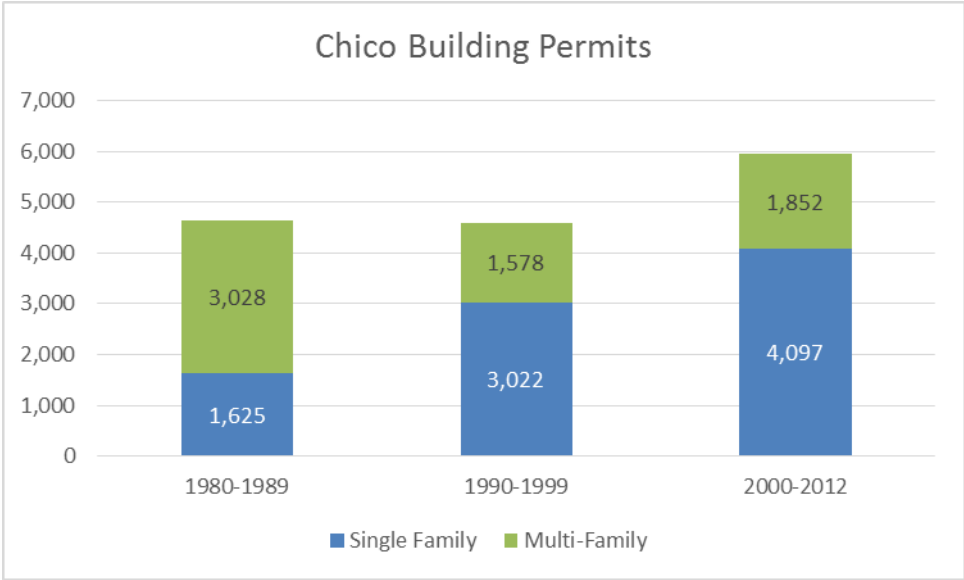
	1980	1990	Δ 80-90	2000	Δ 90-00	2008-2012	00-08/12
Chico	\$705	\$844	20%	\$820	-3%	\$918	12%
Davis	\$844	\$1,088	29%	\$1,070	-2%	\$1,229	15%
Modesto	\$834	\$956	15%	\$882	-8%	\$997	13%
Santa Rosa	\$923	\$1,180	28%	\$1,190	1%	\$1,209	2%
Stockton	\$695	\$881	27%	\$802	-9%	\$946	18%
Bend	\$869	\$818	-6%	\$896	10%	\$934	4%
Corvallis	\$774	\$712	-8%	\$817	15%	\$819	0%
Eugene	\$787	\$786	0%	\$857	9%	\$854	0%
Medford	\$831	\$797	-4%	\$835	5%	\$857	3%
Salem	\$752	\$716	-5%	\$773	8%	\$781	1%

Source: U.S. Census Bureau. "Median House Value For All Owner-Occupied Housing Units, 1980; 1990; 2000; 2008-2012", "Median Gross Rent, 1980; 1990; 2000; 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

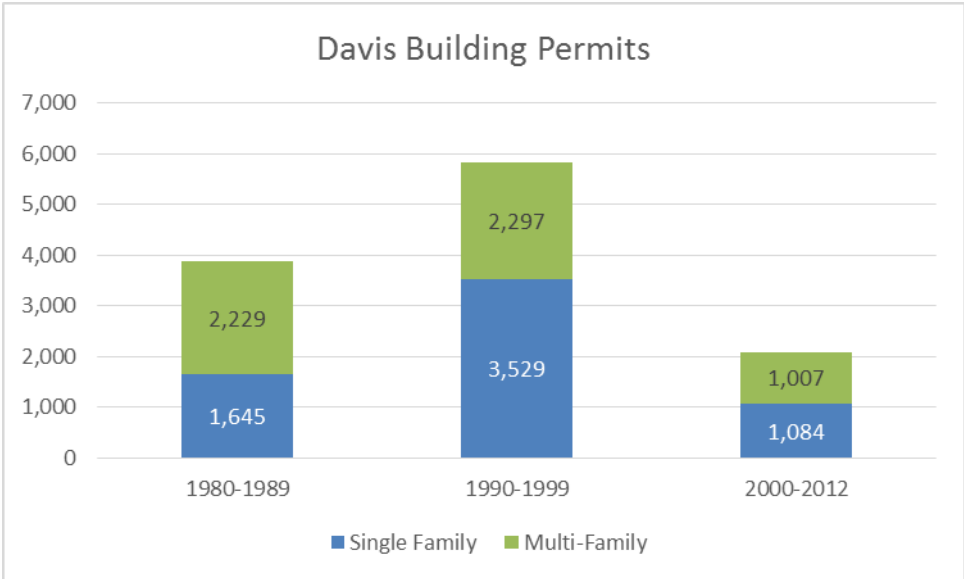
Appendix B – Building Permits

Figure A. Chico Building Permits



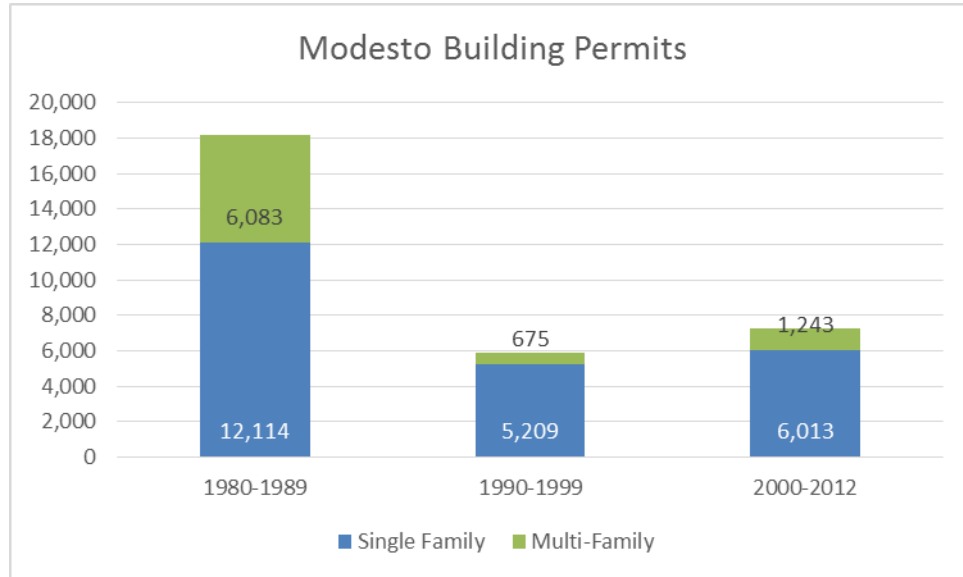
Source: SOCDS Building Permits Database

Figure B. Davis Building Permits



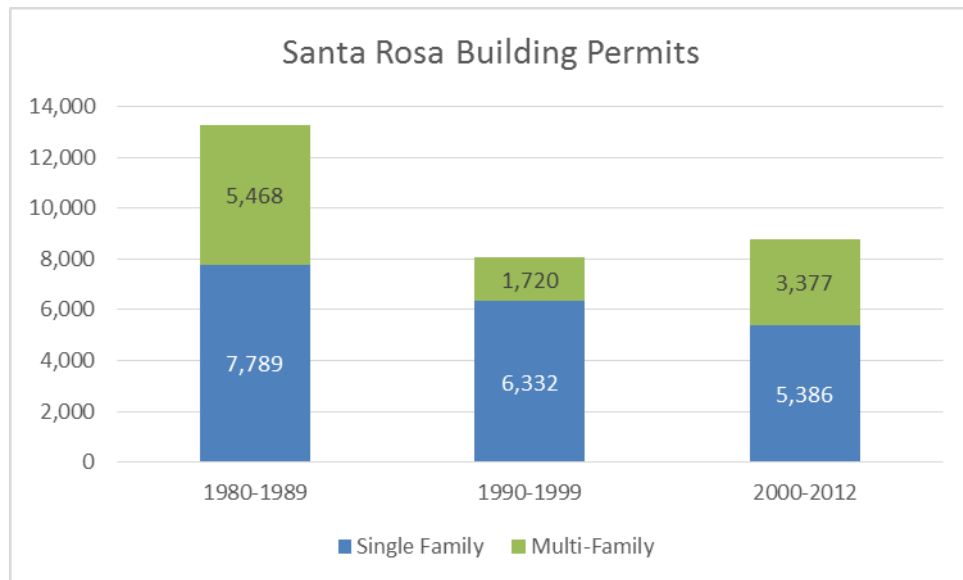
Source: SOCDS Building Permits Database

Figure C. Modesto Building Permits



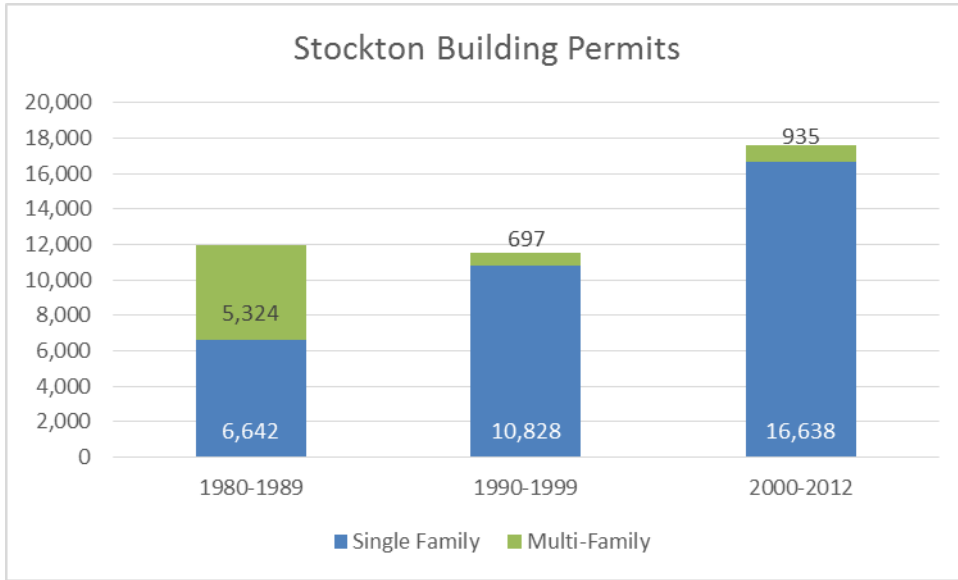
Source: SOCDs Building Permits Database

Figure D. Santa Rosa Building Permits



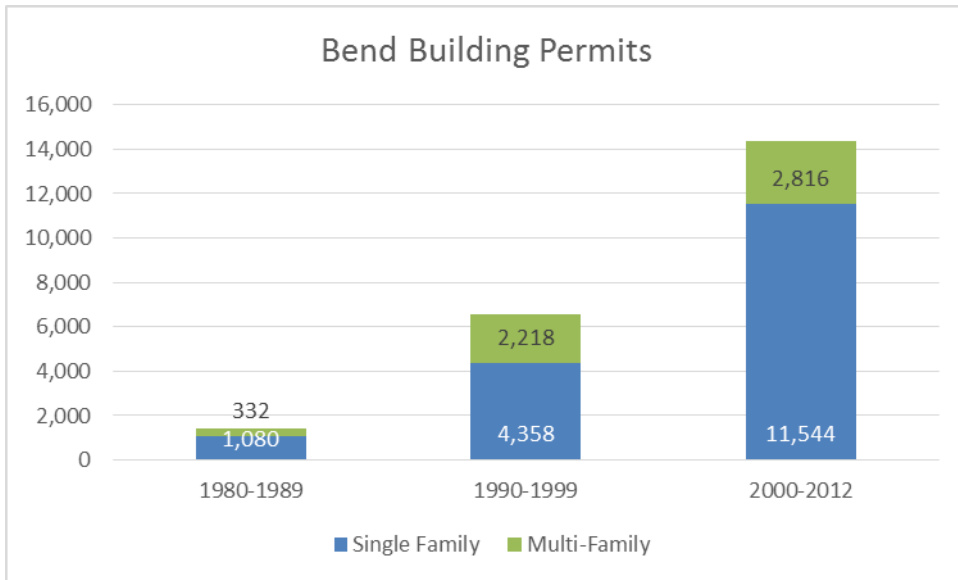
Source: SOCDs Building Permits Database

Figure E. Stockton Building Permits



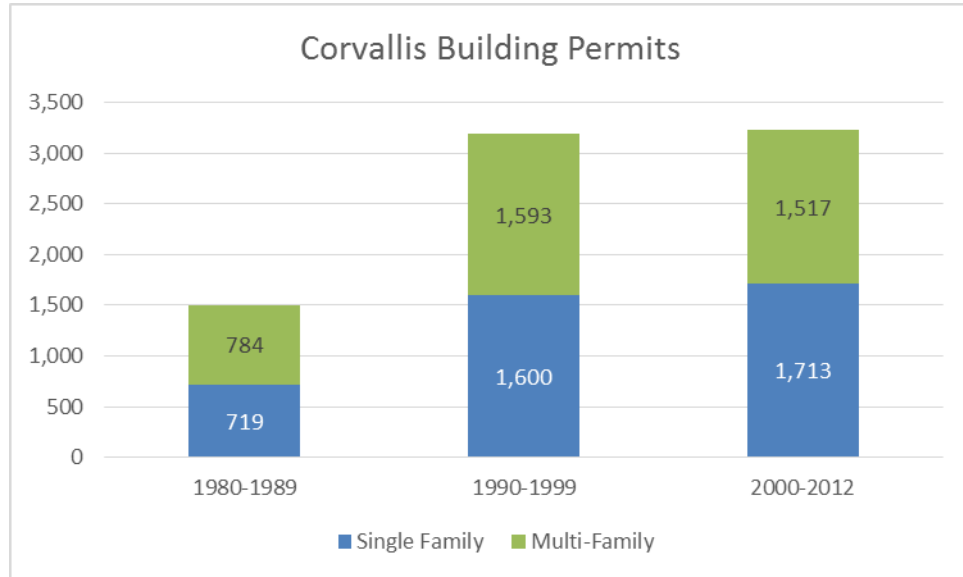
Source: SOCDs Building Permits Database

Figure F. Bend Building Permits



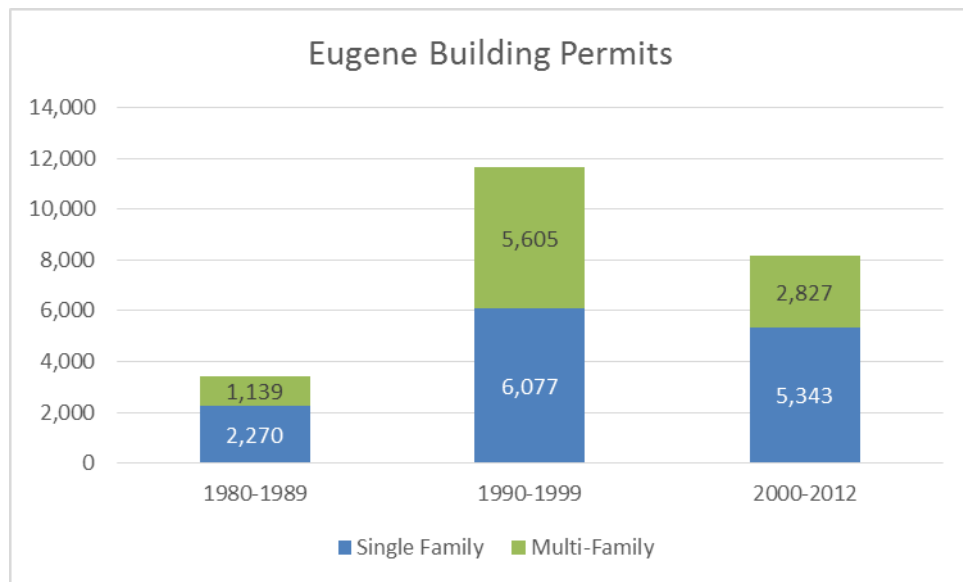
Source: SOCDs Building Permits Database

Figure G. Corvallis Building Permits



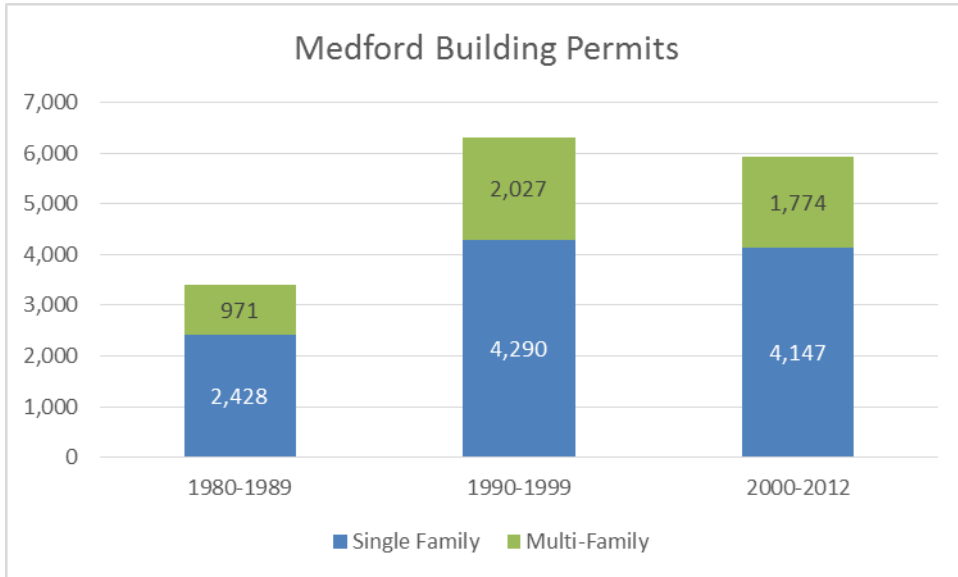
Source: SOCDs Building Permits Database

Figure H. Eugene Building Permits



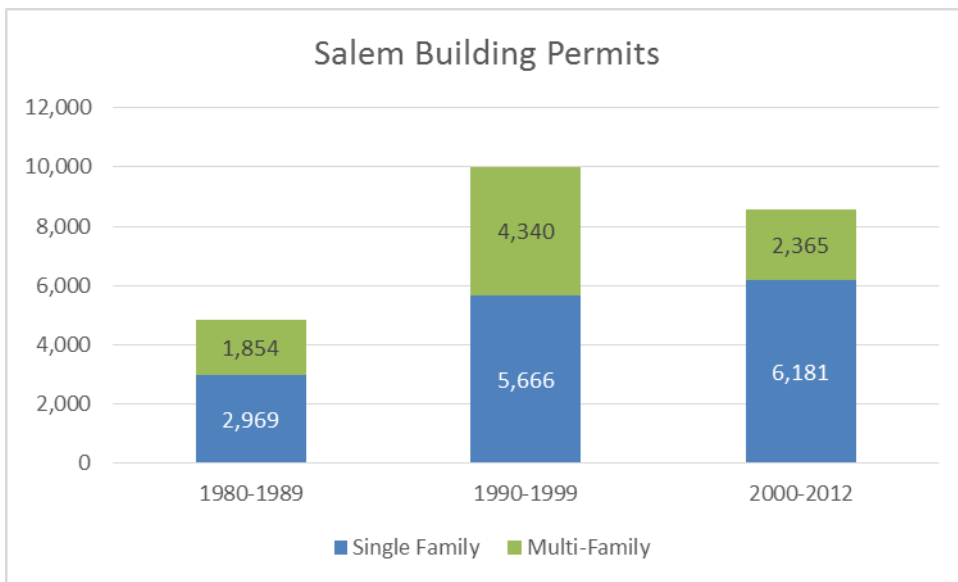
Source: SOCDs Building Permits Database

Figure I. Medford Building Permits



Source: SOCDs Building Permits Database

Figure J. Salem Building Permits

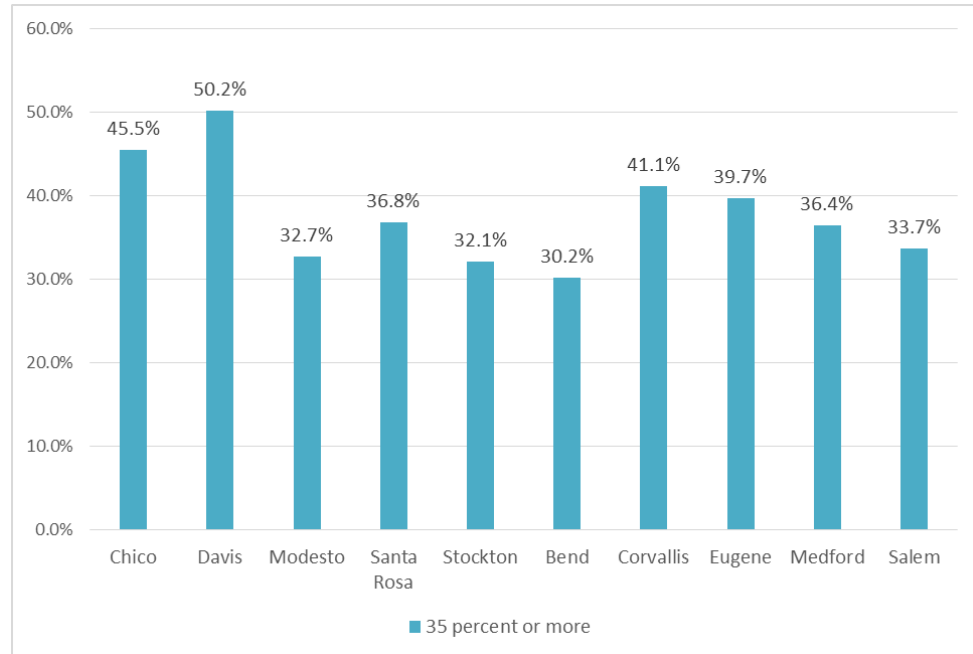


Source: SOCDs Building Permits Database

Appendix C – Cost Burdened Households

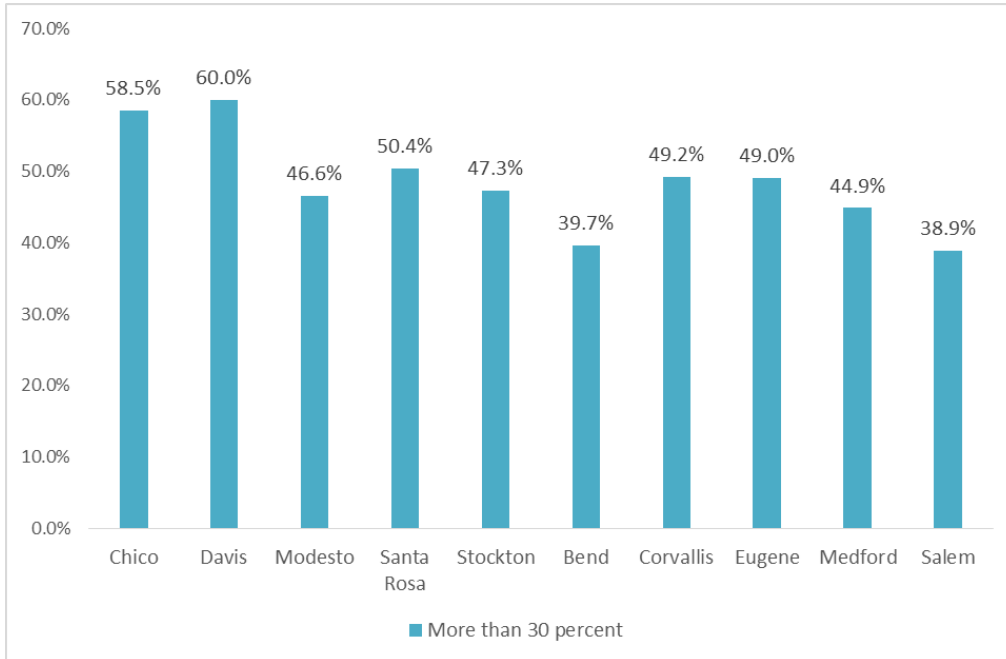
The following figures show the percentage of renter and owner-occupied households spending more than 30 percent of their income on housing costs.

Figure A. Cost Burdened Renter Households in 1980



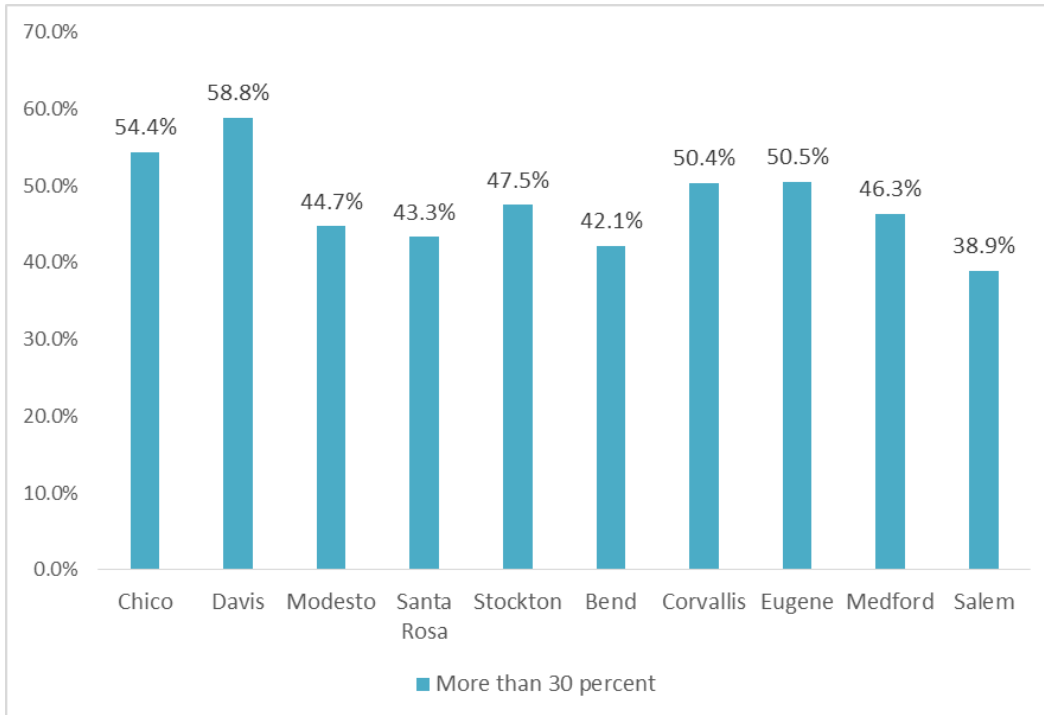
Source: U.S. Census Bureau. "Gross Rent as a Percentage of Household Income, 1980." Social Explorer.

Figure B. Cost Burdened Renter Households in 1990



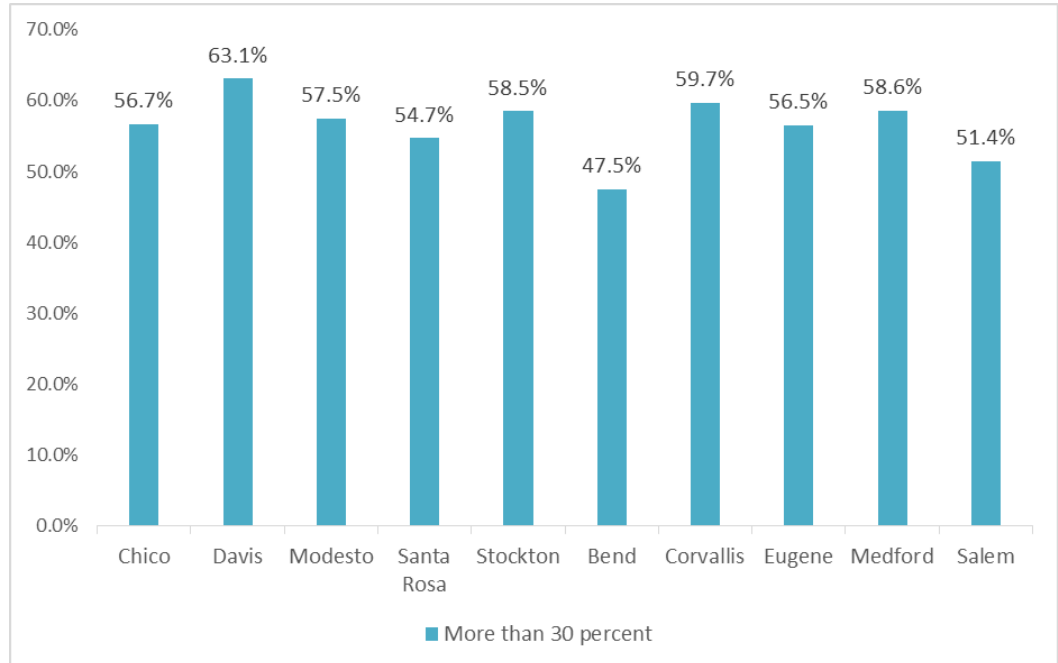
Source: U.S. Census Bureau. "Gross Rent as a Percentage of Household Income, 1990." Social Explorer.

Figure C. Cost Burdened Renter Households in 2000



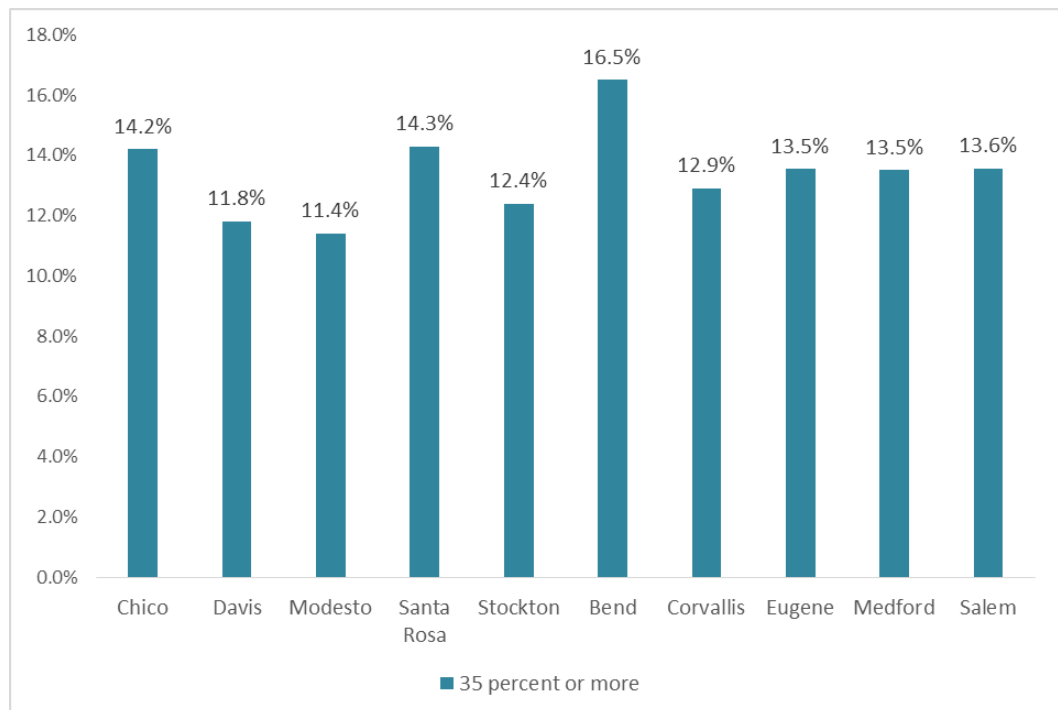
Source: U.S. Census Bureau. "Gross Rent as a Percentage of Household Income, 2000." Social Explorer.

Figure D. Cost Burdened Renter Households In 2008-2012



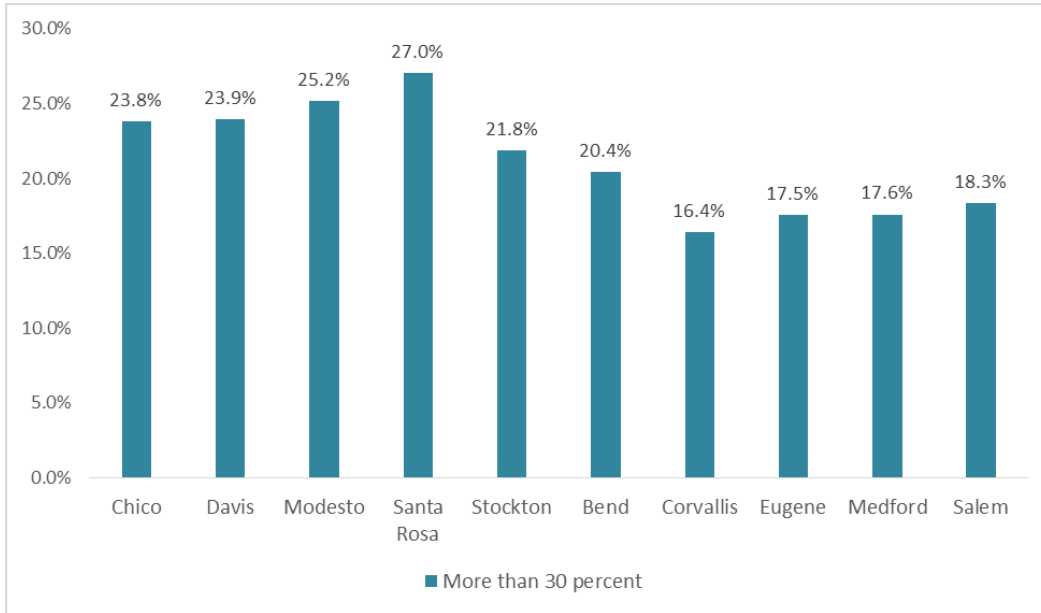
Source: U.S. Census Bureau. "Gross Rent as a Percentage of Household Income, 2008-2012." Social Explorer.

Figure E. Cost Burdened Owner-Occupied Households in 1980



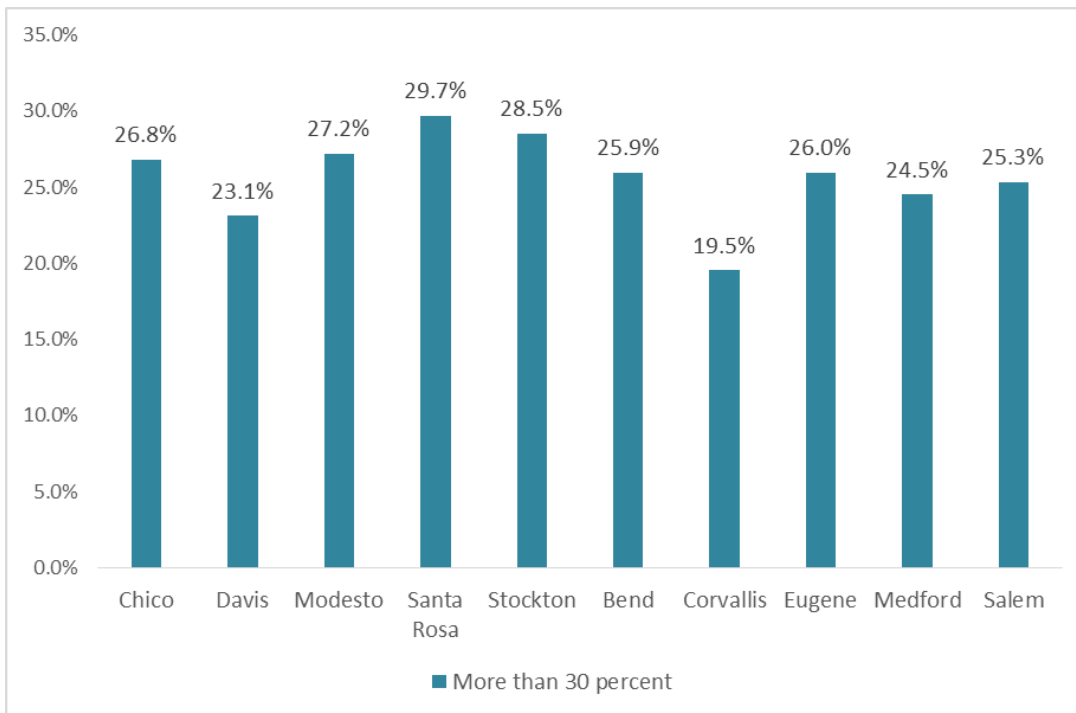
Source: U.S. Census Bureau. "Selected Monthly Owner Costs as a Percentage of Household Income, 1980." Social Explorer.

Figure F. Cost Burdened Owner-Occupied Households in 1990



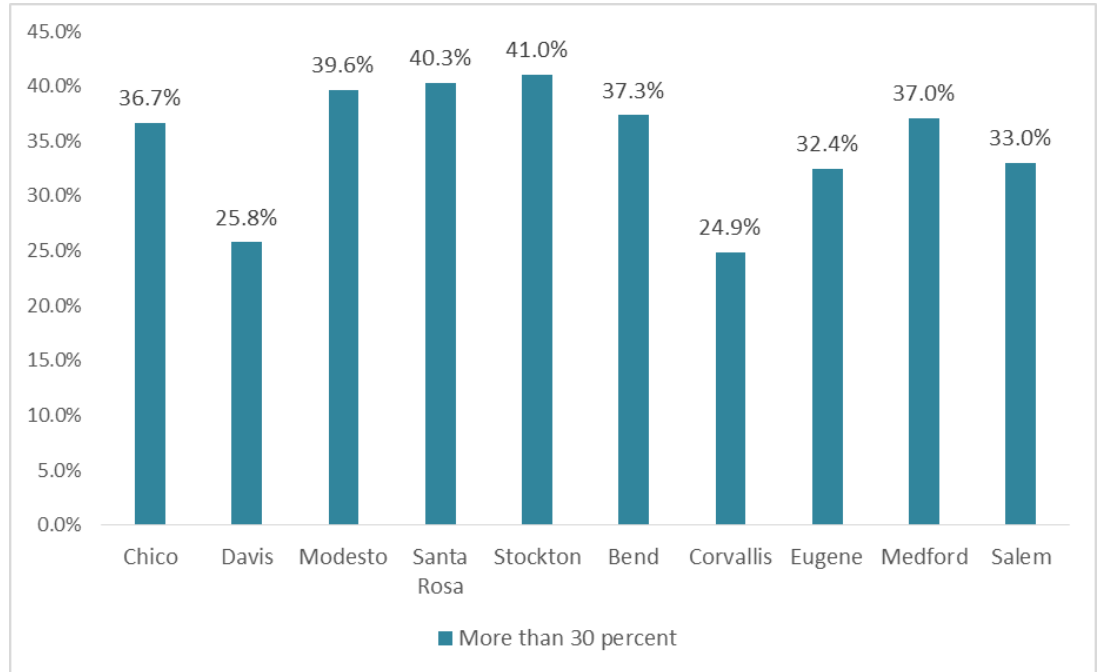
Source: U.S. Census Bureau. "Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income, 1990." Social Explorer.

Figure G. Cost Burdened Owner-Occupied Households in 2000



Source: U.S. Census Bureau. "Selected Monthly Owner Costs as a Percentage of Household Income, 2000." Social Explorer.

Figure H. Cost Burdened Owner-Occupied Households in 2008-2012



Source: U.S. Census Bureau. "Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income, 2008-2012." Social Explorer.

Appendix D – Supply and Demand of Affordable Housing

Table 1. Supply and Demand of Affordable Housing (30% AMI in 1980)

Affordability Gap for Households in California Earning 30% AMI - 1980					
	Chico	Davis	Modesto	Santa Rosa	Stockton
30% AMI	\$10,043	\$13,229	\$15,903	\$15,653	\$13,328
Households Earning Below 30% AMI	1,389	1,940	4,373	3,772	7,363
Percent of households	23.9%	17.2%	18.5%	11.3%	16.5%
Affordable Monthly Rent	\$251	\$331	\$398	\$391	\$333
Est. Number of Renter Units	285	192	1,452	639	3,209
Estimate of Affordable Purchase Owner-Occupied Unit	\$25,100	\$33,100	\$39,800	\$39,100	\$33,300
Est. Number of Owner Units	4	4	73	39	261
Surplus (Deficit)	(1,100)	(1,745)	(2,847)	(3,094)	(3,893)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 2. Supply and Demand of Affordable Housing (30% AMI in 1980)

Affordability Gap for Households in Oregon Earning 30% AMI - 1980					
	Bend	Corvallis	Eugene	Medford	Salem
30% AMI	\$14,639	\$12,913	\$14,181	\$14,802	\$14,291
Households Earning Below 30% AMI	806	1,934	5,758	1,822	4089
Percent of households	11.5%	13.2%	13.6%	11.7%	11.9%
Affordable Monthly Rent	\$366	\$323	\$355	\$370	\$357
Est. Number of Renter Units	242	528	2,230	590	1642
Estimate of Affordable Purchase Owner-Occupied Unit	\$36,600	\$32,300	\$35,500	\$37,000	\$35,700
Est. Number of Owner Units	20	13	34	37	79
Surplus (Deficit)	(544)	(1,394)	(3,494)	(1,194)	(2,368)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 3. Supply and Demand of Affordable Housing (80% AMI in 1980)

Affordability Gap for Households in California Earning 80% AMI - 1980					
	Chico	Davis	Modesto	Santa Rosa	Stockton
80% AMI	\$26,782	\$35,278	\$42,407	\$41,742	\$35,540
Households Earning Below 80% AMI	4,325	5,818	15,573	13,464	23,010
Percent of households	46.5%	45.0%	41.7%	42.7%	44.1%
Affordable Monthly Rent	\$670	\$882	\$1,060	\$1,044	\$889
Est. Number of Renter Units	3,880	6,057	12,788	9,815	20,809
Estimate of Affordable Purchase Owner-Occupied Unit	\$67,000	\$88,200	\$106,000	\$104,400	\$88,900
Est. Number of Owner Units	97	33	1,318	380	3,327
Surplus (Deficit)	(348)	272	(1,467)	(3,268)	1,126

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 4. Supply and Demand of Affordable Housing (80% AMI in 1980)

Affordability Gap for Households in Oregon Earning 80% AMI - 1980					
	Bend	Corvallis	Eugene	Medford	Salem
80% AMI	\$39,038	\$34,434	\$37,816	\$39,472	\$38,110
Households Earning Below 80% AMI	2,875	5,989	17,376	6,290	13,508
Percent of households	40.9%	40.8%	41.1%	40.3%	39.5%
Affordable Monthly Rent	\$976	\$861	\$945	\$987	\$953
Est. Number of Renter Units	2,420	6,204	16,021	5,053	12,327
Estimate of Affordable Purchase Owner-Occupied Unit	\$97,600	\$86,100	\$94,500	\$98,700	\$95,300
Est. Number of Owner Units	405	80	594	757	1,587
Surplus (Deficit)	(50)	295	(762)	(480)	405

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 5. Supply and Demand of Affordable Housing (30% AMI in 1990)

Affordability Gap for Households in California Earning 30% AMI - 1990					
	Chico	Davis	Modesto	Santa Rosa	Stockton
30% AMI	\$10,548	\$16,119	\$17,594	\$19,556	\$14,916
Households Earning Below 30% AMI	1,747	2,685	6,792	5,002	8,299
Percent of households	11.3%	14.9%	11.7%	10.9%	12.0%
Affordable Monthly Rent	\$264	\$403	\$440	\$489	\$373
Est. Number of Renter Units	841	423	1,660	986	2,947
Estimate of Affordable Purchase Owner-Occupied Unit	\$26,369	\$40,298	\$43,985	\$48,891	\$37,291
Est. Number of Owner Units	33	38	221	64	214
Surplus (Deficit)	(873)	(2,225)	(4,912)	(3,953)	(5,138)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 6. Supply and Demand of Affordable Housing (30% AMI in 1990)

Affordability Gap for Households in Oregon Earning 30% AMI - 1990					
	Bend	Corvallis	Eugene	Medford	Salem
30% AMI	\$14,312	\$12,883	\$14,080	\$14,251	\$14,006
Households Earning Below 30% AMI	882	2,763	6,844	2,412	4,849
Percent of households	10.3%	16.4%	14.8%	12.8%	11.8%
Affordable Monthly Rent	\$358	\$322	\$352	\$356	\$350
Est. Number of Renter Units	404	1,191	3,095	960	2,880
Estimate of Affordable Purchase Owner-Occupied Unit	35,780	32,207	35,200	35,627	\$35,015
Est. Number of Owner Units	33	24	78	48	159
Surplus (Deficit)	(446)	(1,548)	(3,670)	(1,405)	(1,810)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 7. Supply and Demand of Affordable Housing (80% AMI in 1990)

Affordability Gap for Households in California Earning 80% AMI - 1990					
	Chico	Davis	Modesto	Santa Rosa	Stockton
80% AMI	\$28,127	\$42,985	\$46,918	\$52,150	\$39,777
Households Earning Below 80% AMI	6278	7613	20,568	14,122	27662
Percent of households	40.6%	42.4%	35.4%	30.8%	40.1%
Affordable Monthly Rent	\$703	\$1,075	\$1,173	\$1,304	\$994
Est. Number of Renter Units	3,401	5,231	19,697	11,436	21,734
Estimate of Affordable Purchase Owner-Occupied Unit	\$70,318	\$107,462	\$117,294	\$130,376	\$99,442
Est. Number of Owner Units	123	104	2,558	443	3,084
Surplus (Deficit)	(2,754)	(2,279)	1,687	(2,243)	(2,845)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 8. Supply and Demand of Affordable Housing (80% AMI in 1990)

Affordability Gap for Households in Oregon Earning 80% AMI - 1990					
	Bend	Corvallis	Eugene	Medford	Salem
80% AMI	\$38,165	\$34,354	\$37,546	\$38,002	\$37,350
Households Earning Below 80% AMI	3,273	7,016	19,101	7,609	16,098
Percent of households	38.3%	41.7%	41.2%	40.3%	39.1%
Affordable Monthly Rent	\$954	\$859	\$939	\$950	\$934
Est. Number of Renter Units	2,534	5,460	14,289	5,235	12,595
Estimate of Affordable Purchase Owner-Occupied Unit	\$95,412	\$85,884	\$93,866	\$95,004	\$93,374
Est. Number of Owner Units	886	818	3,630	1,870	5,900
Surplus (Deficit)	147	(739)	(1,182)	(505)	2,398

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 9. Supply and Demand of Affordable Housing (30% AMI in 2000)

Affordability Gap for Households in California Earning 30% AMI - 2000					
	Chico	Davis	Modesto	Santa Rosa	Stockton
30% AMI	\$12,155	\$17,576	\$16,723	\$21,086	\$14,678
Households Earning Below 30% AMI	3,557	4,180	7,799	5,897	11,236
Percent of households	15.2%	18.2%	12.0%	10.5%	14.3%
Affordable Monthly Rent	\$304	\$439	\$418	\$527	\$367
Est. Number of Renter Units	666	420	1,723	1,762	2,581
Estimate of Affordable Purchase Owner-Occupied Unit	\$30,386	\$43,940	\$41,808	\$52,714	\$36,694
Est. Number of Owner Units	229	198	911	962	967
Surplus (Deficit)	(2,662)	(3,562)	(5,165)	(3,174)	(7,688)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 10. Supply and Demand of Affordable Housing (30% AMI in 2000)

Affordability Gap for Households in Oregon Earning 30% AMI - 2000					
	Bend	Corvallis	Eugene	Medford	Salem
30% AMI	\$13,526	\$16,915	\$14,588	\$18,652	\$15,103
Households Earning Below 30% AMI	1,408	3,597	8,438	3,894	5,156
Percent of households	6.7%	18.4%	14.5%	15.4%	10.2%
Affordable Monthly Rent	\$338	\$423	\$365	\$466	\$378
Est. Number of Renter Units	263	710	1,644	1,535	1464
Estimate of Affordable Purchase Owner-Occupied Unit	\$33,814	\$42,287	\$36,470	\$46,629	\$37,758
Est. Number of Owner Units	476	313	815	515	1,044
Surplus (Deficit)	(669)	(2,575)	(5,979)	(1,845)	(2,648)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 11. Supply and Demand of Affordable Housing (80% AMI in 2000)

Affordability Gap for Households in California Earning 80% AMI - 2000					
	Chico	Davis	Modesto	Santa Rosa	Stockton
80% AMI	\$32,412	\$46,870	\$44,595	\$56,228	\$39,140
Households Earning Below 80% AMI	9,488	9,751	25,709	21,293	32,246
Percent of households	40.5%	42.5%	39.4%	38.0%	41.0%
Affordable Monthly Rent	\$810	\$1,172	\$1,115	\$1,406	\$979
Est. Number of Renter Units	6,810	7,443	20,064	9,725	25,597
Estimate of Affordable Purchase Owner-Occupied Unit	\$81,030	\$117,174	\$111,488	\$140,570	\$97,850
Est. Number of Owner Units	624	466	6,984	2,429	7,317
Surplus (Deficit)	(2,054)	(1,843)	1,339	(9,139)	668

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 12. Supply and Demand of Affordable Housing (80% AMI in 2000)

Affordability Gap for Households in Oregon Earning 80% AMI - 2000					
	Bend	Corvallis	Eugene	Medford	Salem
80% AMI	\$36,068	\$45,106	\$38,901	\$49,738	\$40,275
Households Earning Below 80% AMI	5,997	9,172	22,975	12,364	18,170
Percent of households	28.5%	46.9%	39.6%	49.0%	35.9%
Affordable Monthly Rent	\$902	\$1,128	\$973	\$1,243	\$1,007
Est. Number of Renter Units	3,722	8,792	16,927	8,760	15,873
Estimate of Affordable Purchase Owner-Occupied Unit	\$90,170	\$112,766	\$97,252	\$124,344	\$100,688
Est. Number of Owner Units	1,640	837	3,079	3,084	4,733
Surplus (Deficit)	(634)	458	(2,969)	(520)	2,436

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 13. Supply and Demand of Affordable Housing (30% AMI in 2008-2012)

Affordability Gap for Households in California Earning 30% AMI - 2008-2012					
	Chico	Davis	Modesto	Santa Rosa	Stockton
30% AMI	\$12,869	\$18,461	\$14,762	\$18,158	\$14,174
Households Earning Below 30% AMI	4,475	4,452	8,803	7,296	12,214
Percent of households	13.4%	18.7%	12.9%	11.8%	13.5%
Affordable Monthly Rent	\$322	\$462	\$369	\$454	\$354
Est. Number of Renter Units	541	501	1,309	1,516	1,900
Estimate of Affordable Purchase Owner-Occupied Unit	\$32,127	\$46,151	\$36,904	\$45,394	\$35,435
Est. Number of Owner Units	792	162	1,429	1,201	1,292
Surplus (Deficit)	(3,142)	(3,788)	(6,065)	(4,580)	(9,022)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 14. Supply and Demand of Affordable Housing (30% AMI in 2008-2012)

Affordability Gap for Households in Oregon Earning 30% AMI - 2008-2012					
	Bend	Corvallis	Eugene	Medford	Salem
30% AMI	\$15,780	\$11,338	\$12,458	\$12,673	\$13,669
Households Earning Below 30% AMI	3,613	3,948	10,855	3,798	7279
Percent of households	11.2%	18.5%	16.5%	12.5%	12.6%
Affordable Monthly Rent	\$395	\$283	\$311	\$317	\$342
Est. Number of Renter Units	671	201	1,455	609	1456
Estimate of Affordable Purchase Owner-Occupied Unit	\$39,451	\$28,345	\$31,144	\$31,683	\$34,173
Est. Number of Owner Units	700	377	1,141	547	1,604
Surplus (Deficit)	(2,241)	(3,370)	(8,259)	(2,642)	(4,220)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Note: Values are adjusted for inflation to 2012 values.

Table 15. Supply and Demand of Affordable Housing (80% AMI in 2008-2012)

Affordability Gap for Households in California Earning 80% AMI - 2008-2012					
	Chico	Davis	Modesto	Santa Rosa	Stockton
80% AMI	\$34,317	\$49,228	\$39,364	\$48,420	\$37,797
Households Earning Below 80% AMI	13,698	10,250	28,186	25,040	36,775
Percent of households	40.9%	43.1%	41.3%	40.3%	40.6%
Affordable Monthly Rent	\$858	\$1,231	\$984	\$1,211	\$945
Est. Number of Renter Units	7,666	6,378	14,490	13,638	20,929
Estimate of Affordable Purchase Owner-Occupied Unit	\$85,792	\$123,070	\$98,410	\$121,050	\$94,492
Est. Number of Owner Units	1518	444	5569	2781	7016
Surplus (Deficit)	(4,514)	(3,427)	(8,127)	(8,622)	(8,831)

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

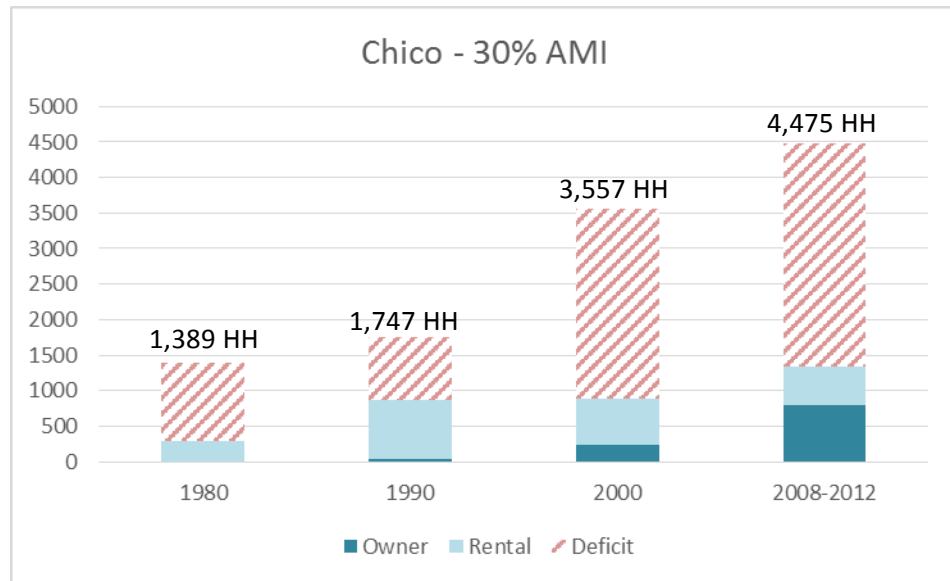
Note: Values are adjusted for inflation to 2012 values.

Table 16. Supply and Demand of Affordable Housing (80% AMI in 2008-2012)

Affordability Gap for Households in Oregon Earning 80% AMI - 2008-2012					
	Bend	Corvallis	Eugene	Medford	Salem
80% AMI	\$42,081	\$30,234	\$33,220	\$33,795	\$36,451
Households Earning Below 80% AMI	13,156	9,316	27,396	12,221	22,861
Percent of households	40.7%	43.6%	41.6%	40.1%	39.5%
Affordable Monthly Rent	\$1,052	\$756	\$831	\$845	\$911
Est. Number of Renter Units	8,653	8,235	15,817	6,953	16,377
Estimate of Affordable Purchase Owner-Occupied Unit	\$105,202	\$75,586	\$83,050	\$84,488	\$91,128
Est. Number of Owner Units	1526	733	2354	1467	3451
Surplus (Deficit)	(2,976)	(349)	(9,226)	(3,801)	(3,033)

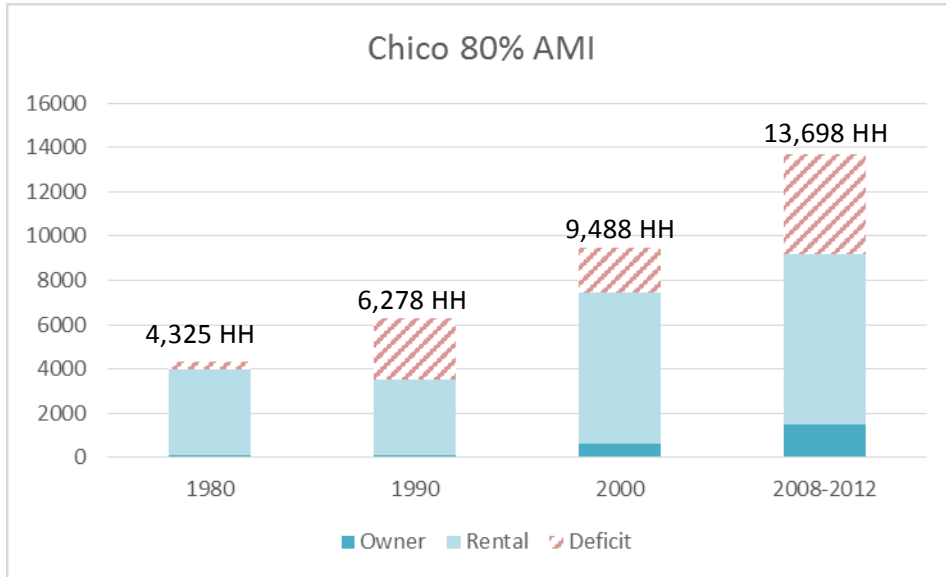
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure A. Affordable Housing Supply/Demand for Chico (30% AMI)



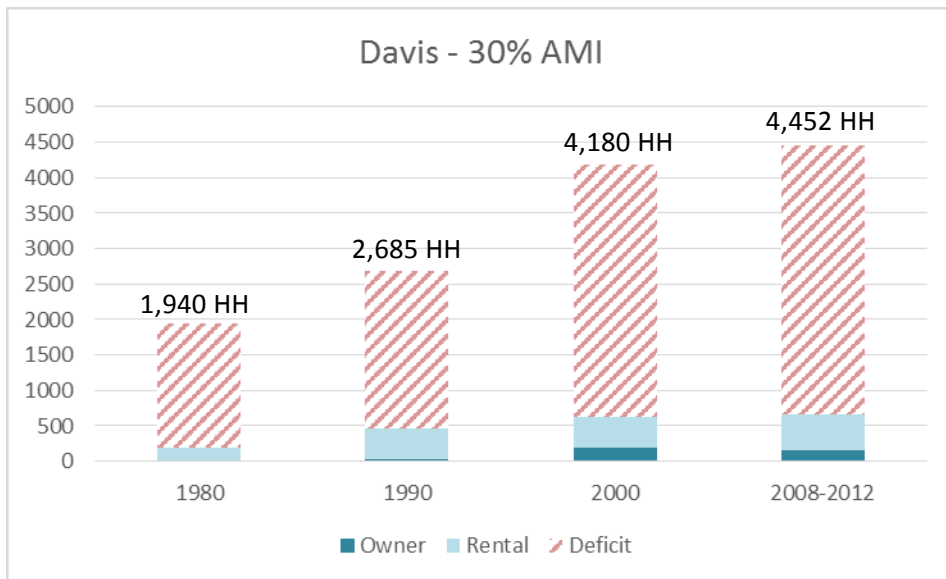
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure B. Affordable Housing Supply/Demand for Chico (80% AMI)



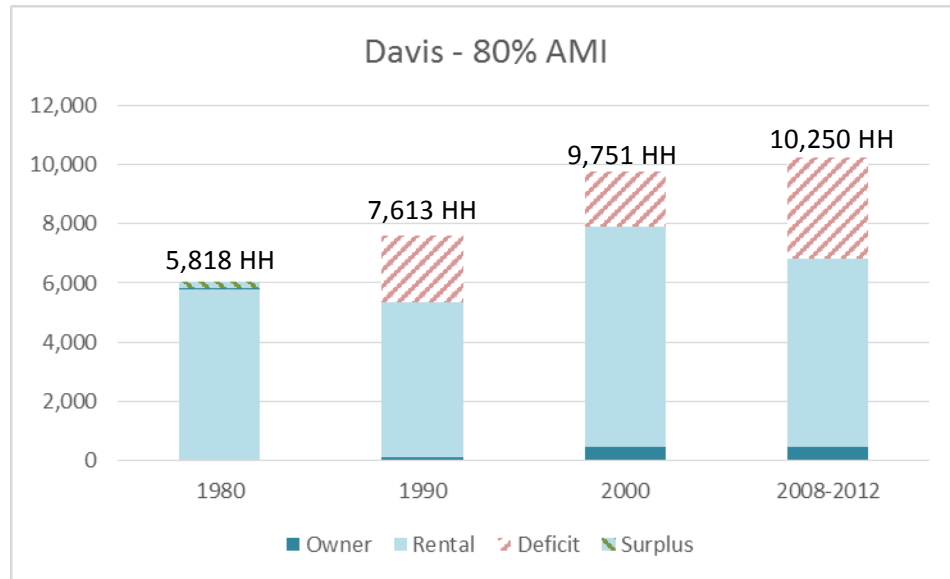
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure C. Affordable Housing Supply/Demand for Davis (30% AMI)



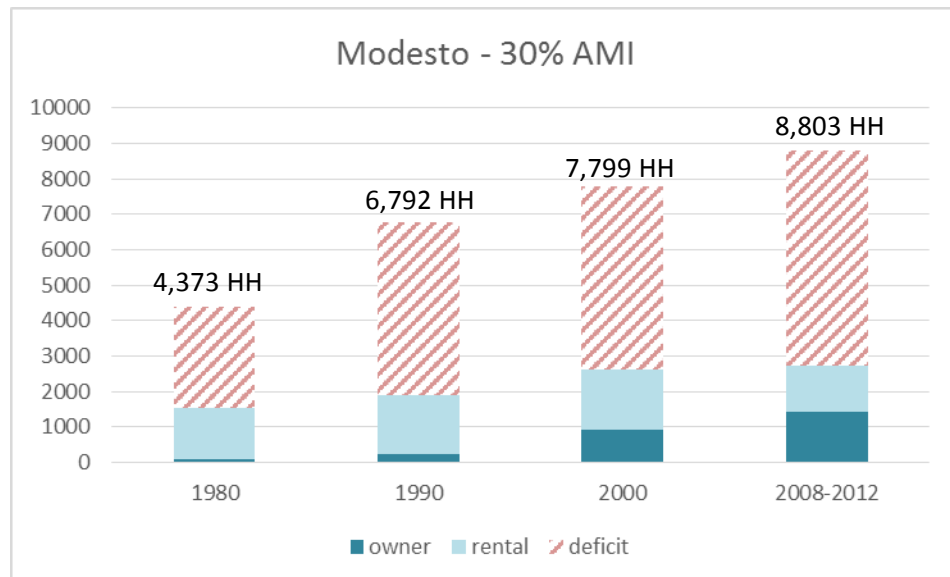
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure D. Affordable Housing Supply/Demand for Davis (80% AMI)



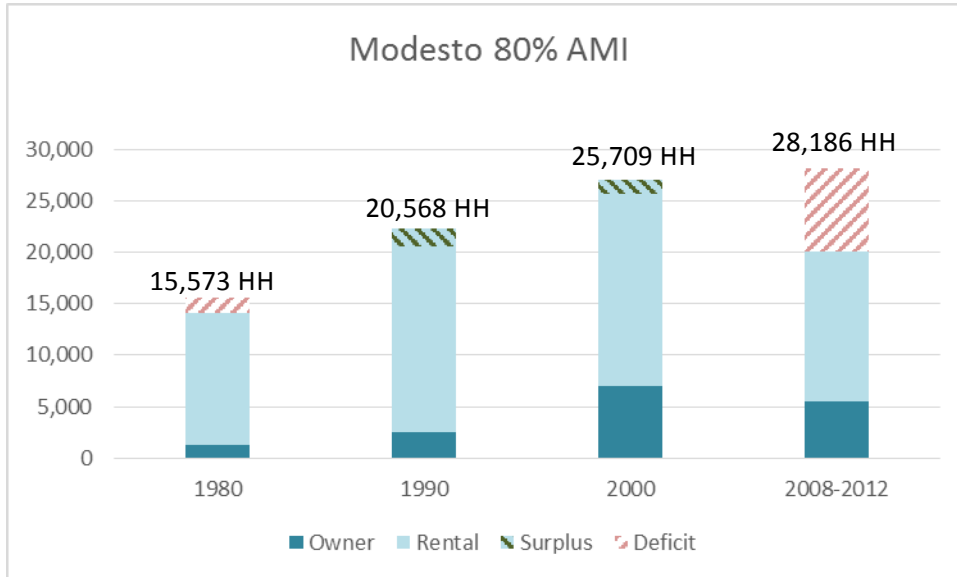
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure E. Affordable Housing Supply/Demand for Modesto (30% AMI)



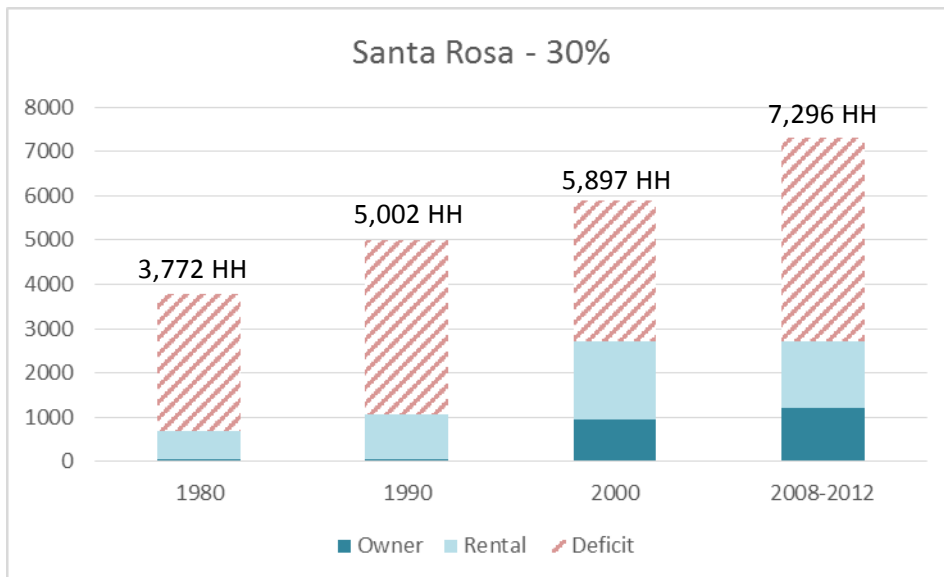
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure F. Affordable Housing Supply/Demand for Modesto (80% AMI)



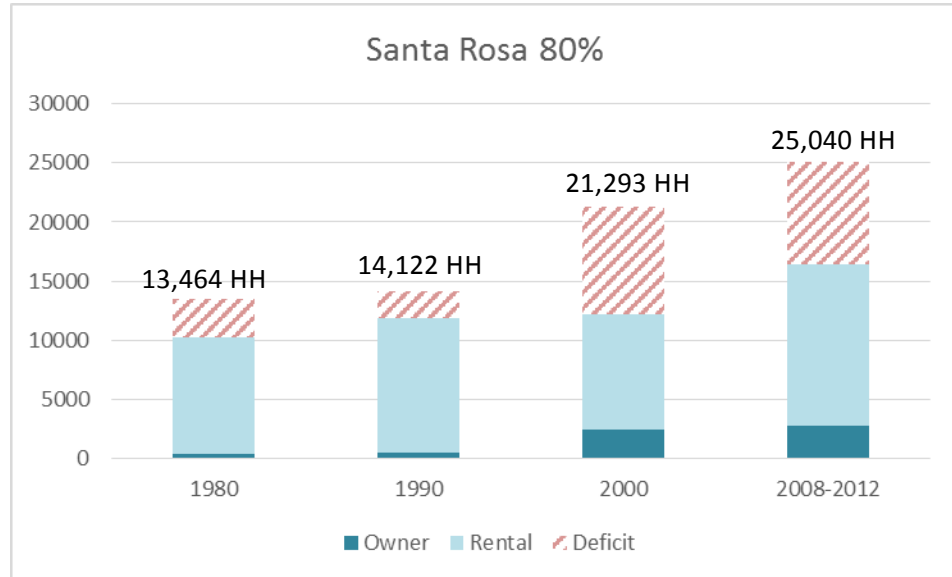
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure G. Affordable Housing Supply/Demand for Santa Rosa (30% AMI)



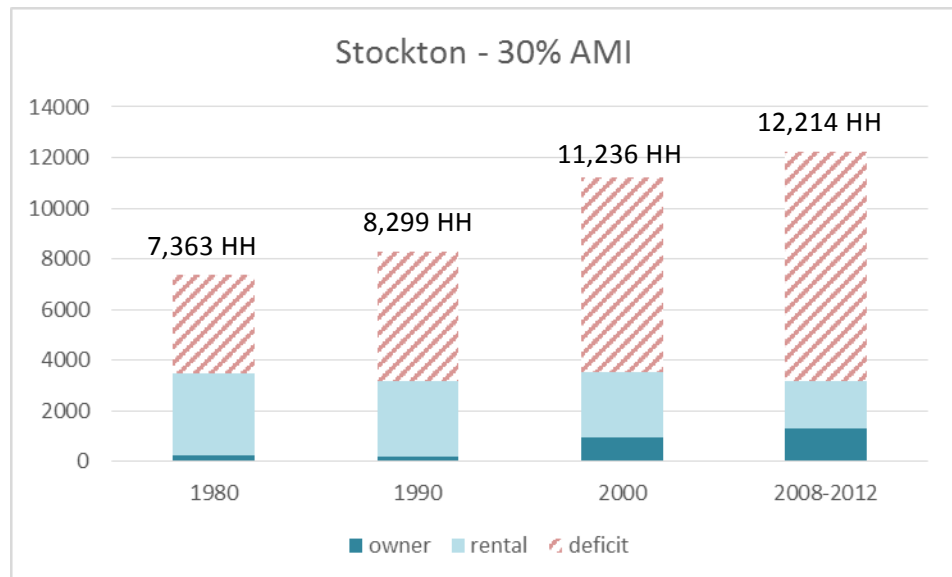
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure H. Affordable Housing Supply/Demand for Santa Rosa (80% AMI)



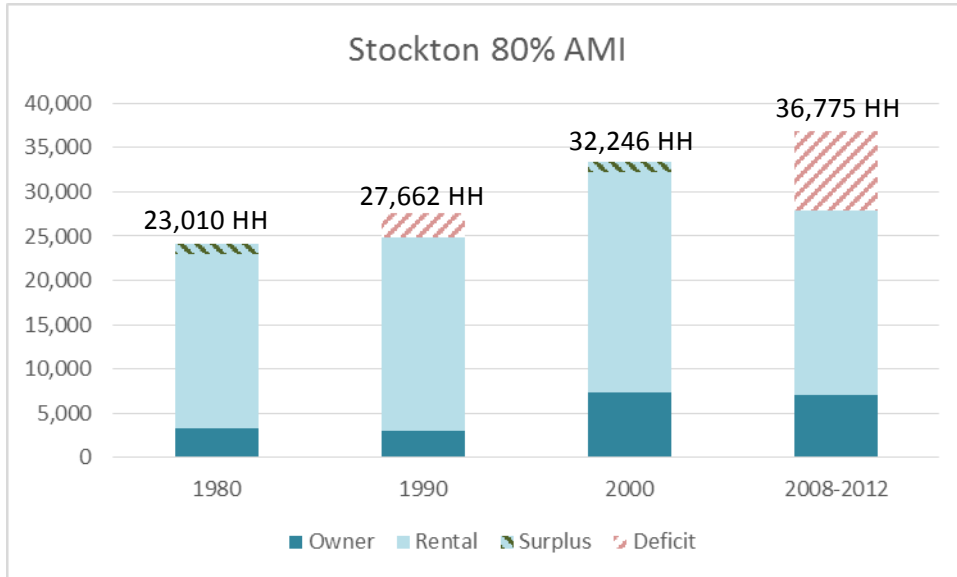
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure I. Affordable Housing Supply/Demand for Stockton (30% AMI)



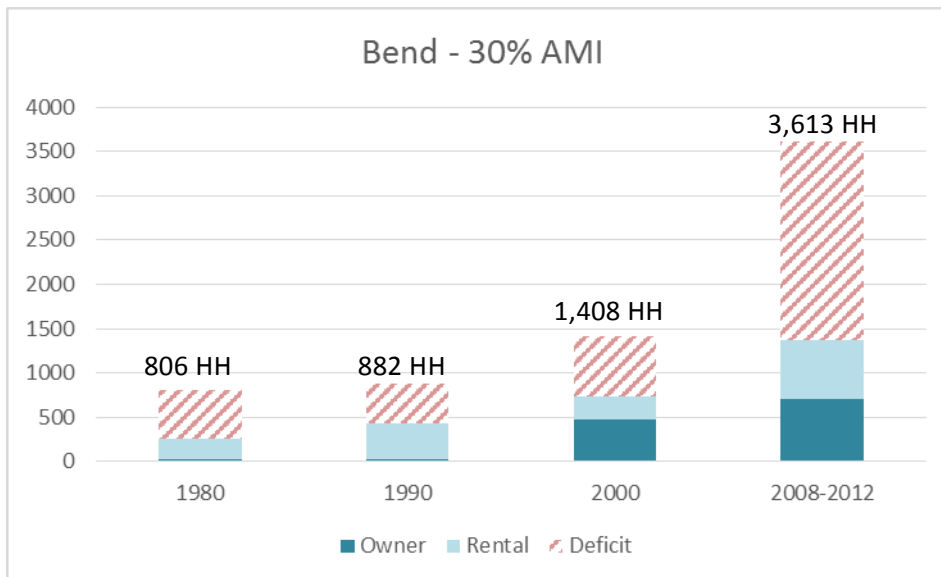
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure J. Affordable Housing Supply/Demand for Stockton (80% AMI)



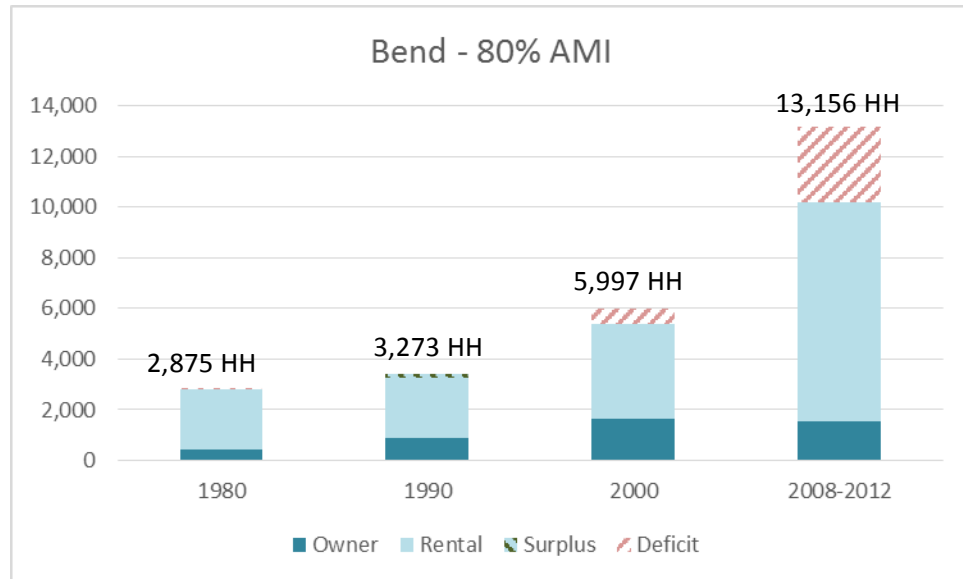
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure K. Affordable Housing Supply/Demand for Bend (30% AMI)



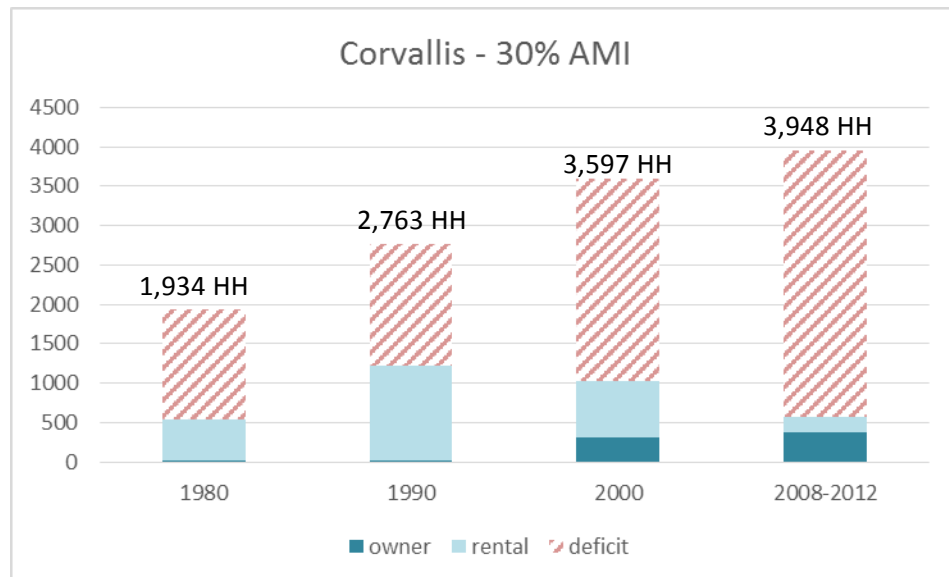
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure L. Affordable Housing Supply/Demand for Bend (80% AMI)



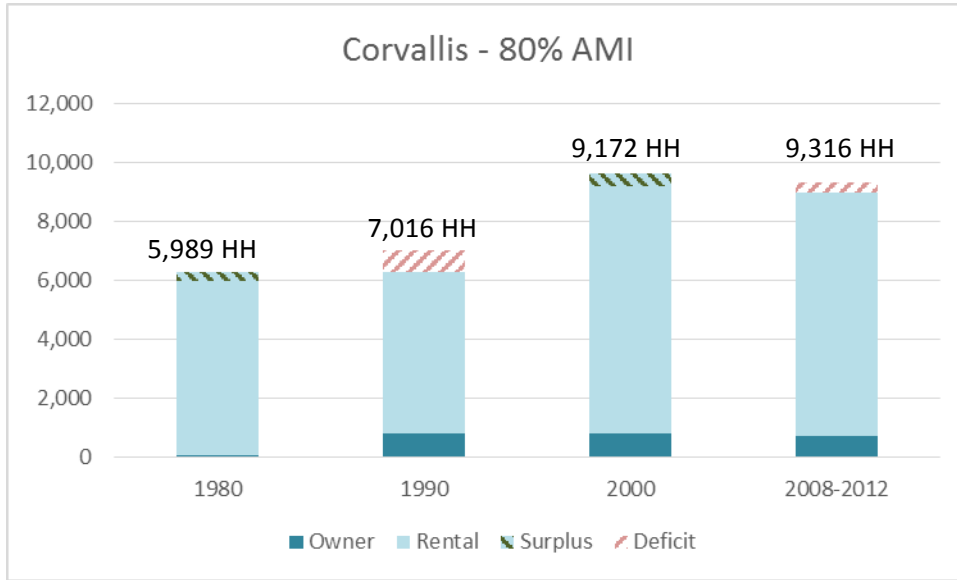
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure M. Affordable Housing Supply/Demand for Corvallis (30% AMI)



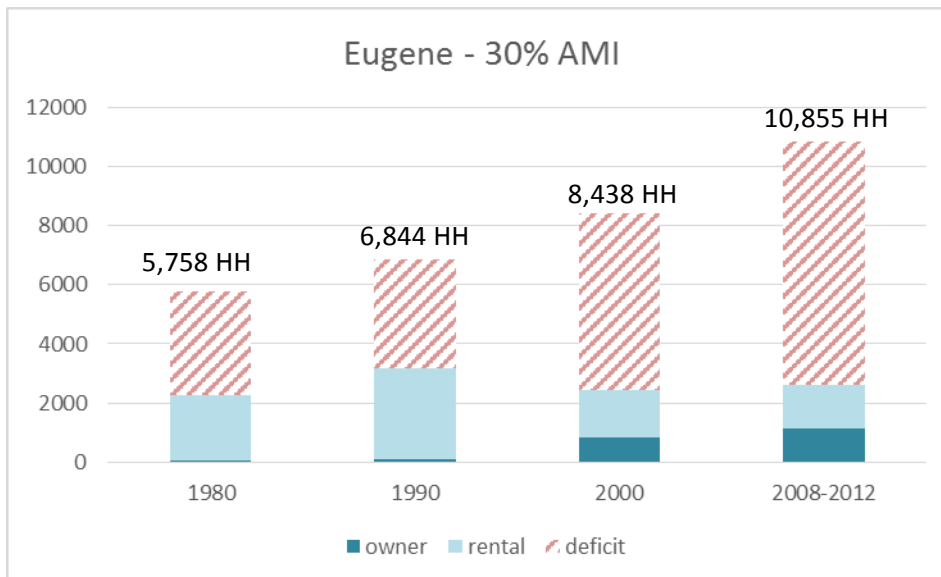
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure N. Affordable Housing Supply/Demand for Corvallis (80% AMI)



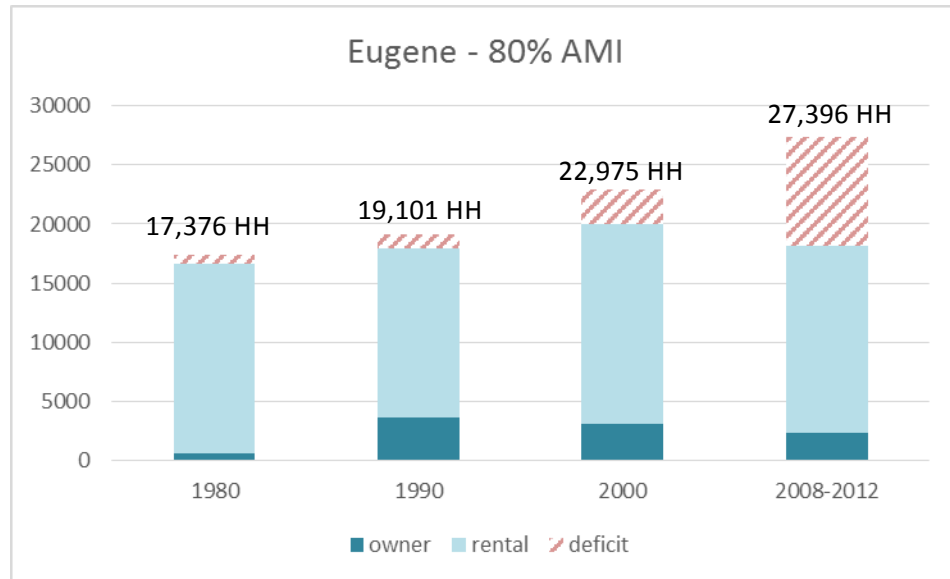
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure O. Affordable Housing Supply/Demand for Eugene (30% AMI)



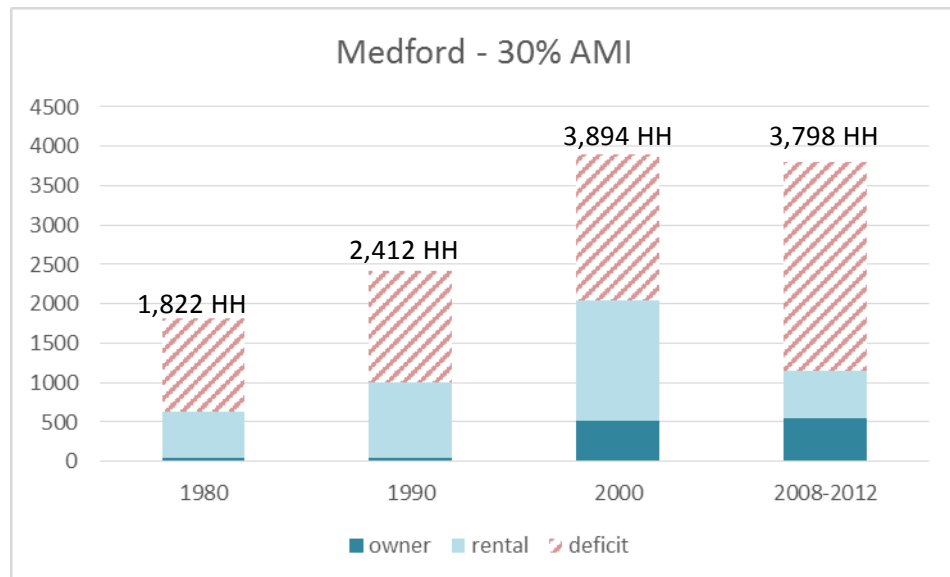
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure P. Affordable Housing Supply/Demand for Eugene (80% AMI)



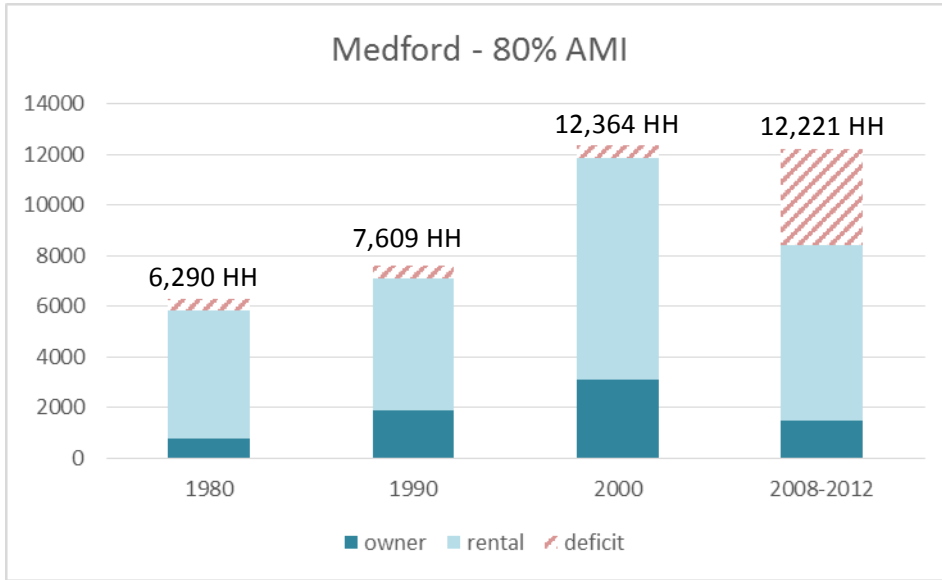
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure Q. Affordable Housing Supply/Demand for Medford (30% AMI)



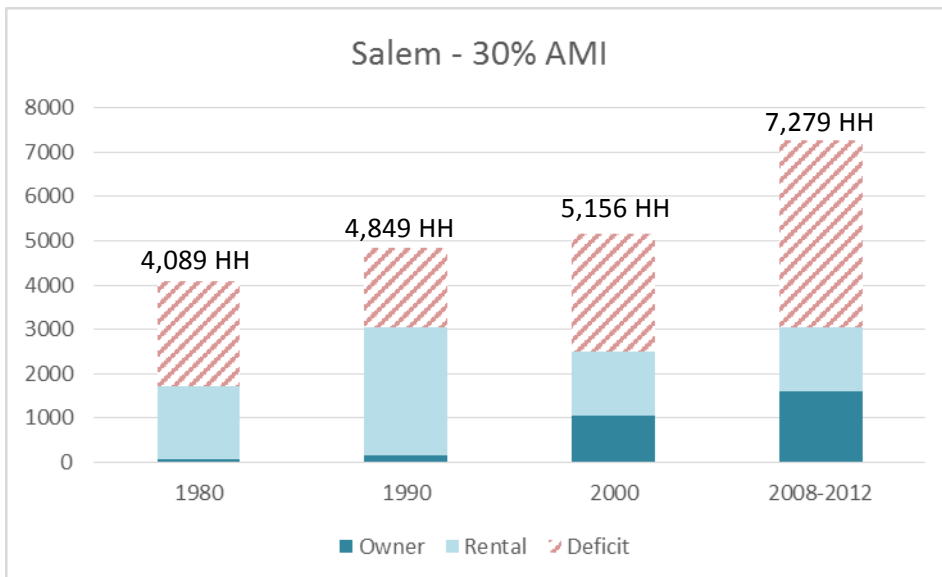
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure R. Affordable Housing Supply/Demand for Medford (80% AMI)



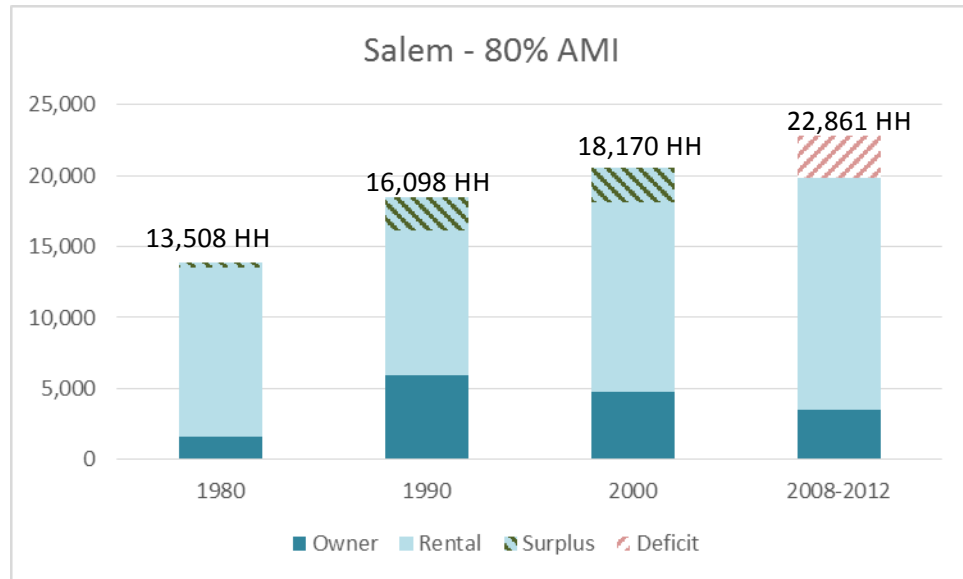
Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

Figure S. Affordable Housing Supply/Demand for Salem (30% AMI)



Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

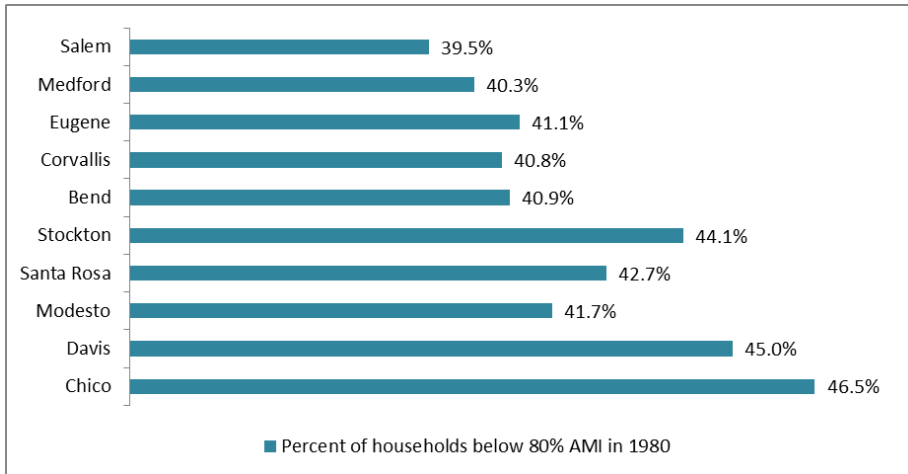
Figure T. Affordable Housing Supply/Demand for Salem (80% AMI)



Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012"; "Household Income, 1980, 1990, 2000, 2008-2012." Social Explorer.

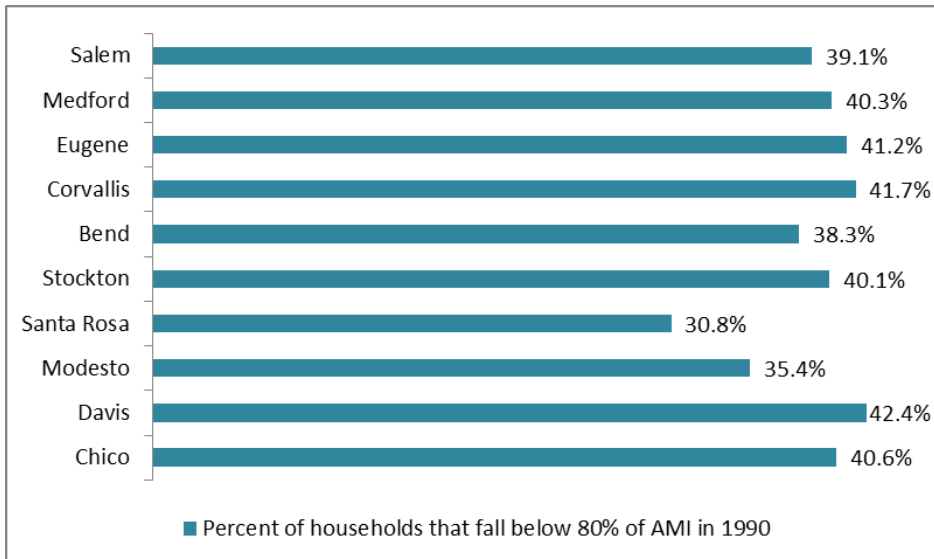
Appendix E – Percent of Households Below 80% AMI

Figure A. Households earning below 80% AMI in 1980



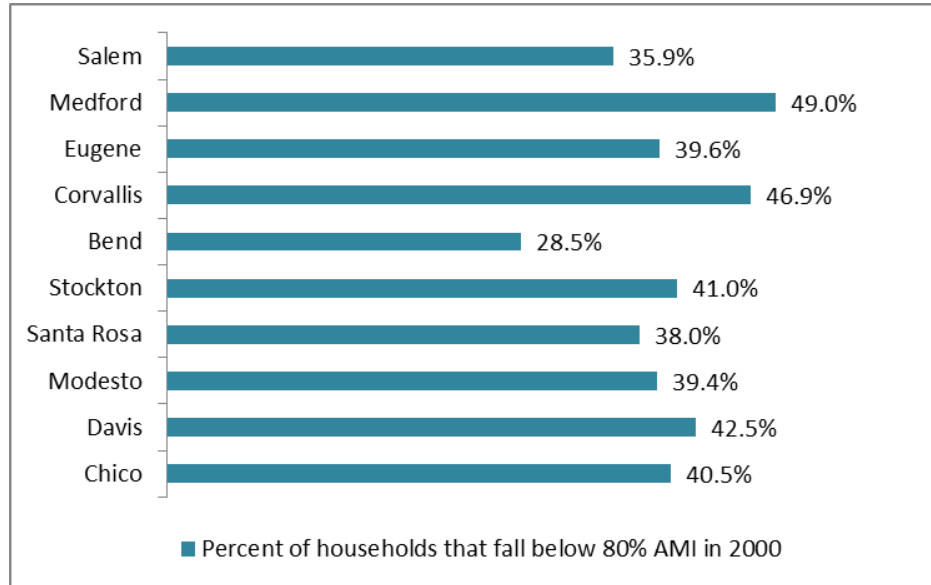
Source: U.S. Census Bureau. "Household Income, 1980; 1990; 2000; 2008-2012." Social Explorer.

Figure B. Households earning below 80% AMI in 1990



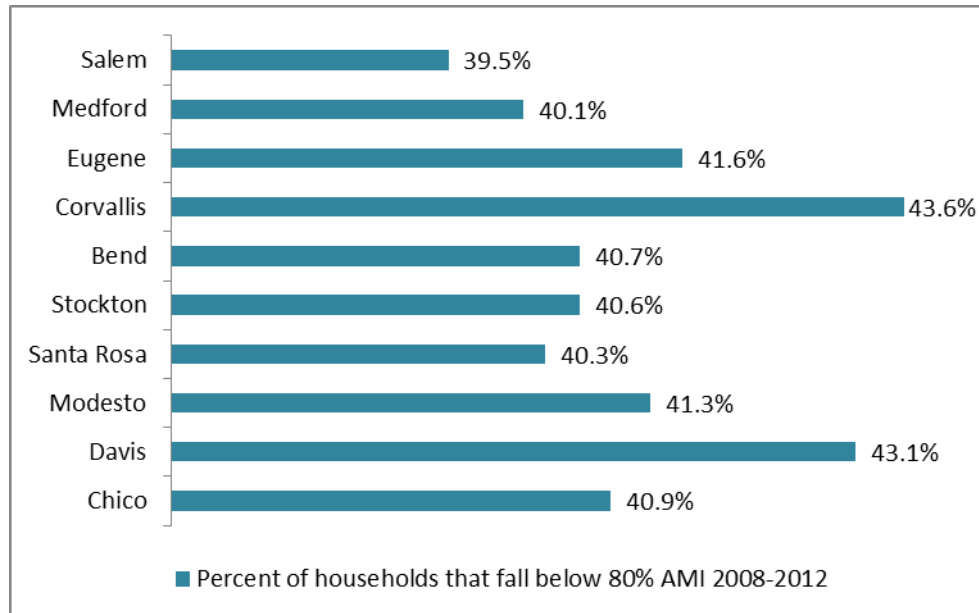
Source: U.S. Census Bureau. "Household Income, 1980; 1990; 2000; 2008-2012." Social Explorer.

Figure C. Households earning below 80% AMI in 2000



Source: U.S. Census Bureau. "Household Income, 1980; 1990; 2000; 2008-2012." Social Explorer.

Figure D. Households earning below 80% AMI 2008-2012



Source: U.S. Census Bureau. "Household Income, 1980; 1990; 2000; 2008-2012." Social Explorer.

Appendix F – Changes in Home Values, Rents, and Median Household Incomes

Note: The following figures show changes in median value of owner-occupied housing units, median gross rents, and median household incomes.

Table 1. Changes in Housing Costs and Incomes - Chico

Chico			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	-\$7,250	\$418	\$81,492
Δ Rent	\$139	-\$24	\$98
Δ Income	-\$62	\$5,356	\$2,381

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 2. Changes in Housing Costs and Incomes - Davis

Davis			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	\$85,158	-\$20,520	\$208,870
Δ Rent	\$244	-\$18	\$159
Δ Income	\$7,336	\$4,856	\$2,948

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 3. Changes in Housing Costs and Incomes - Modesto

Modesto			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	\$35,778	-\$64,770	\$12,120
Δ Rent	\$122	-\$74	\$115
Δ Income	\$2,876	-\$2,903	-\$6,539

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 4. Changes in Housing Costs and Incomes – Santa Rosa

Santa Rosa			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	\$78,600	-\$18,580	\$38,900
Δ Rent	\$257	\$10	\$19
Δ Income	\$10,292	\$5,097	-\$9,760

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 5. Changes in Housing Costs and Incomes - Stockton

Stockton			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	\$22,015	-\$32,485	\$13,990
Δ Rent	\$186	-\$79	\$144
Δ Income	\$2,981	-\$796	-\$1,679

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 6. Changes in Housing Costs and Incomes - Bend

Bend			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	\$41,523	-\$12,737	\$65,222
Δ Rent	-\$51	\$78	\$38
Δ Income	-\$1,091	-\$2,621	\$7,516

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 7. Changes in Housing Costs and Incomes - Corvallis

Corvallis			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	-\$75,854	\$85,836	\$48,814
Δ Rent	-\$62	\$105	\$2
Δ Income	-\$100	\$13,440	-\$18,590

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 8. Changes in Housing Costs and Incomes - Eugene

Eugene			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	-\$81,187	\$68,935	\$38,600
Δ Rent	-\$1	\$71	-\$3
Δ Income	-\$338	\$1,693	-\$7,101

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 9. Changes in Housing Costs and Incomes - Medford

Medford			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	-\$68,017	\$59,855	\$34,470
Δ Rent	-\$34	\$38	\$22
Δ Income	-\$1,838	\$14,669	-\$19,928

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Table 10. Changes in Housing Costs and Incomes - Salem

Salem			
	1980-1990	1990-2000	2000-2008/12
Δ Home Value	-\$38,211	\$43,129	\$12,906
Δ Rent	-\$36	\$57	\$8
Δ Income	-\$950	\$3,657	-\$4,780

Source: U.S. Census Bureau. "Median Household Income, 1980; 1990, 2000, 2008-2012"; "Median Gross Rent, 1980, 1990, 2000, 2008-2012"; "Home Value For All Owner-Occupied Housing Units, 1980, 1990, 2000, 2008-2012." Social Explorer.

Appendix G - Data

Census Data Tables

The following tables were downloaded from Social Explorer for this research project.

Social Explorer - Census 1980

- SE: T1. Total Population
- SE:T53. Median Household Income (In 1979 Dollars)
- STF1:T47. Median Housing Unit Value (In 1979 Dollars)
- STF3:T149. Median Gross Rent
- SE:T93. Gross Rent as Percentage of Household Income
- SE:T202. Selected Monthly Owner Costs as Percentage of Household Income
- STF1:T46. Housing Unit Value (In 1979 Dollars)
- SE:T52. Household Income (In 1979 Dollars)
- SE:T89. Gross Rent (In 1980 Dollars)

Social Explorer - Census 1990

- SE:T1. Total Population
- SE:T43. Median Household Income
- SE:T80. Median Value for Specified owner-occupied housing units
- SE: Median Gross Rent for Specified renter-occupied housing units paying cash rent
- SE: T83. Gross Rent As A Percentage of Household Income in 1989
- STF3:H58. Mortgage Status By Selected Monthly Owner Costs As a Percentage of Household Income in 1989
- SE:T79. House Value for Specified Owner-Occupied Housing Units
- SE:T41. Household Income in 1989
- SE:T81. Gross Rent for Specified renter-occupied housing units

Social Explorer - Census 2000

- SE:T1. Total Population
- SE:T93. Median Household Income In 1999 Dollars
- SE: T163. Median House Value For All Owner-Occupied Housing Units
- SE: T167. Median Gross Rent
- SF3:H69. Gross Rent As A Percentage Of Household Income in 1999
- SE:T174. Selected Monthly Owner Costs As A Percentage of Household Income in 1999
- SE:T162. House Value For All Owner-Occupied Housing Units
- SE:T92. Household Income in 1999
- SE:T165. Gross Rent (Housing Units with Cash Rent)

Social Explorer – ACS 2012 (5-Year Estimates)

- SE: T1. Total Population
- SE:T57. Median Household Income (In 2012 Inflation Adjusted Dollars)
- SE:T101. Median House Value For All Owner-Occupied Housing Units
- SE:T104. Median Gross Rent
- SE:T103. Gross Rent As a Percentage of Household Income In 2012
- SE:T109. Mortgage Status By Selected Monthly Owner Costs As A Percentage Of Household Income in 2012
- SE:T100. House Value For All Owner-Occupied Housing Units
- SE:T56. Household Income (In 2012 Inflation Adjusted Dollars)
- SE:T102. Gross Rent (Housing Units With Cash Rent)

Jurisdiction Plans

The following Consolidated Plans and Impediments to Fair Housing Documents were used for this research project.

- City of Chico 2015-2019 Consolidated Plan
- City of Davis 2010-2015 Consolidated Plan
- City of Modesto 2010-2015 Consolidated Plan
- City of Santa Rosa 2009-2014 Consolidated Plan
- City of Stockton 2010-2015 Consolidated Plan
- City of Bend 2009-2014 Consolidated Plan
- City of Corvallis Five Year Consolidated Plan (F 13-14 through FY 17-18)
- Eugene-Springfield Consolidated Plan 2010
- City of Medford 2010-2014 Consolidated Plan
- Salem-Keizer Housing and Community Development Consolidated Plan 2009-2013
- Analysis of Impediments To Fair Housing Choice, City of Chico, February, 2015
- City of Davis, Analysis of Impediments to Fair Housing
- City of Modesto Analysis of Impediments to Fair Housing (year???)
- Analysis of Impediments to Fair Housing Choice, City of Petaluma, City of Santa Rosa, County of Sonoma Fall 2005
- San Joaquin County and City of Stockton, 2010-2015 Analysis of Impediments to Fair Housing Choice
- City of Bend Analysis of Impediments to Fair Housing, October 2012
- Analysis of Impediments to Fair Housing and Fair Housing Plan For the City of Corvallis, December 15, 2012
- Assessment of the Impediments to Fair Housing and Fair Housing Plan Strategies, Eugene and Springfield, Oregon, April 13, 2010
- City of Medford Analysis of Impediments to Fair Housing, February 2010
- Analysis of Impediments to Fair Housing, City of Salem/Keizer HOME Consortium, September 2014.

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