

# The Changing Household and Housing Characteristics of Irvine, 2000-2016

A comprehensive project submitted in partial satisfaction of the requirements for the degree Master of Urban and Regional Planning.



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Disclaimer: This report was prepared in partial fulfillment of the requirements for the Master of Urban and Regional Planning degree in the Department of Urban Planning at the University of California, Los Angeles. It was prepared at the direction of the Department and of Irvine City Councilmember Melissa Fox as a planning client. The views expressed herein are those of the author and not necessarily those of the Department, the UCLA Luskin School of Public Affairs, UCLA as a whole, or the client.

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## **Executive Summary**

Irvine, California is a master-planned city in central Orange County. Since its incorporation on December 28, 1971, Irvine has grown from a sparsely populated former ranch into the third largest city in Orange County as a diverse population of families, young adults, and senior citizens now call the city home. Additionally, the city has become a regional jobs center that attracts workers and firms from across Southern California and the world seeking Irvine's friendly business environment and highly skilled workforce.

Like the rest of Orange County and other jobs-rich coastal counties across California though, Irvine today is experiencing a major shortage of affordable housing. Many reports about the California Affordable Housing Crisis have been recently published, but nothing specific to Irvine has been published in the last few years. This report therefore will provide an overview of changes to Irvine's households and housing characteristics during the 2000 to 2016 time period and use other neighboring cities, Orange County, and California as context. I will then propose a series of recommendations for the City of Irvine to follow to address its shortage of affordable housing while maintaining a high quality of life for its residents.

My key findings include that Irvine grew its population and housing stock at about three times the rate that Orange County did at 81.3% and 79% and bucked County and State trends as a majority of the new housing stock was multi-family. Despite the healthy amount of housing construction though, in real terms, gross rents grew by 25.6% and home values increased by 81.3%. This had the effect of lowering homeownership rates in the city from 60% in 2000 to 48.7% in 2016 and increasing the share of households that are mortgage and rent burdened across almost all income categories.

When looking for reasons for the skyrocketing costs of housing in Irvine, I found that household incomes weren't driving costs higher as they increased at lower levels than inflation and lower than several of its neighboring cities, Orange County, and California at large during the 2000 to 2016 time period. Neither were vacancy rates as they actually increased and ended higher than the countywide vacancy rate in 2016. I did find a potential answer when looking at the Regional Housing Needs Assessment

(RHNA). While Irvine and most other cities are on track to meet their moderate and high-income housing goals, no city in Orange County, including Irvine, is currently on track to meet their extremely/ very low and low income (affordable housing) goals and other cities were given far lower allocations than Irvine across the board.

Despite the severity of the affordable housing crisis, several positive trends were found in Irvine during the studied time period. In terms of its population, Irvine became a majority-minority city and aged at a slower rate than Orange County and California at large did. The Irvine's Master Plan, which has guided development in the city since its incorporation, is likely responsible for these positive trends as it has encouraged Irvine to build a healthy balance of single and multi-family housing that has kept the rate of growth in rents under the County average and that has made it possible to attract youth and lower-income minority households into Irvine.

In order to increase the supply of housing that is affordable to lower and middle income households while maintaining the high quality of life that residents enjoy, I am recommending that the Irvine City Council commit to the following actions:

1. Work With Other Cities in Orange County to Encourage Them to Voluntarily Welcome More Growth
2. If Irvine's Neighbors Do Not Voluntarily Start Welcoming More Growth, the Regional Housing Needs Assessment (RHNA) Must be Strengthened by the Passing of SB 828
3. Continue to Balance the Construction of Single and Multi-Family Housing Units in Irvine
4. Facilitate the Building of More Affordable Housing by Continuing to Support the Irvine Community Land Trust (ICLT)
5. Work Towards Having a Countywide Affordable Housing Trust Fund

## Introduction and Background

Irvine, California is a master-planned city in central Orange County. Formally incorporated as a city on December 28, 1971, Irvine was envisioned by the Irvine Company, which has owned much of the city's land since its pre-World War II ranch days, as a city of self-sustaining "villages" where people could shop, worship, drop off their kids at school, and enjoy open space without having to leave their neighborhoods. Since Irvine's incorporation, it has grown into the third largest city in Orange County with a 2016 population of 257,181 as well as a major jobs center that attracts workers from across the Southern California region to fill an estimated 251,234 jobs, (2015 estimate).<sup>1</sup>

While once an indistinguishable white residential suburb of Los Angeles, Irvine today has its own identity as a diverse population of families, young adults, and senior citizens call the city home. While most cities in Orange County have seen their growth rates significantly decline in recent decades as the amount of land available for new single-family homes has waned, Irvine has continued to rapidly grow its population by planning to accommodate growth by zoning for an increasingly diverse array of housing options to meet the demand for housing from its growing employment base.<sup>2</sup>

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<sup>1</sup> City of Irvine. History of the City. Retrieved March 17, 2018, from <https://legacy.cityofirvine.org/about/history.asp>

<sup>2</sup> Greater Irvine Chamber of Commerce Irvine Master Plan. Retrieved March 17, 2018 from <https://www.greaterirvinechamber.com/irvinechamber/irvine-master-plan>

Like the rest of Orange County and other jobs-rich coastal counties across California though, Irvine today is experiencing a major shortage of affordable housing.<sup>3</sup> Many reports about the California Affordable Housing Crisis have been recently published by entities such as the Legislative Analyst's Office, covering California statewide, the Southern California Association of Governments (SCAG), covering the Southern California region, and the Orange County Business Council (OCBC), covering Orange County, but nothing specific to Irvine has been published in the last few years. The City of Irvine's 2013 update of their Housing Element was the last time that a comprehensive report was published on housing in Irvine.<sup>4</sup> This report therefore will provide an overview of changes to Irvine's households and housing characteristics during the 2000 to 2016 time period and use other neighboring cities, Orange County, and California as context. I will then propose a series of recommendations for the City of Irvine to follow to address its shortage of affordable housing while maintaining the city's high quality of life.

## **Literature Review**

In preparation for my work analyzing changes in household and housing characteristics in Irvine and other jurisdictions, I looked at a wide array of relevant literature to inform my analysis. First, since Irvine's character is largely suburban, I reviewed the academic literature for studies done on recent household and housing changes in suburban communities, Second, I looked through various government,

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<sup>3</sup> California Legislative Analyst's Office. March 17, 2018, California's High Housing Costs: Causes and Consequences. Retrieved March 18, 2018 from <http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.aspx>.

<sup>4</sup> City of Irvine, Community Development Department. 2013, City of Irvine 2013-2021 Housing Element. Retrieved March 19, 2018 from <http://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=22223>

scholarly reports, and articles on the current affordable housing crisis in California, which has particularly affected the state's coastal counties, including Orange County. Lastly, I will review a variety of sources from reputable governmental and business advocacy organizations to understand what makes Irvine an attractive place to live and do business.

### **Changes in Suburban Communities**

According to Cooke and Denton, a suburb, in its most simple form, is defined as any part of a metropolitan area that is not part of a principal city with density being the major difference. Suburban communities typically have lower densities and principal cities have higher densities.<sup>5</sup> Many suburbs, despite increased development pressures in recent decades, have been able to maintain their lower levels of density because of a history of exclusionary zoning practices, according to Covington. In particular, suburban communities have used the power of single-family zoning, which bans the building of apartments, and thus helps to keep out lower income households and minorities out of communities who rely on multi-family housing to compete for expensive land in metropolitan areas. Many suburban communities today still have close to all of their land zoned exclusively for single-family homes and it is particularly prevalent in areas with active homeowner groups who have the time and resources available to organize against proposals for more multi-family housing developments in their neighborhoods.<sup>6</sup>

Despite the racialized history of American suburbs, they have been evolving over the last few decades. According to Howell and Timberlake, suburban communities across

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<sup>5</sup> Cooke, T. J., & Denton, C. December 8, 2014, The suburbanization of poverty? An alternative perspective. *Urban Geography*, 36(2), 300-313. Retrieved March 15, 2017 from <https://www.tandfonline.com/doi/abs/10.1080/02723638.2014.973224>

<sup>6</sup> Covington, K. L. April 9, 2015, Poverty suburbanization: Theoretical insights and empirical analyses. *Social Inclusion*, 3(2). Retrieved March 17, 2018 from <https://pdfs.semanticscholar.org/2773/031f9adf80c2b2a852ee5206599378ff10b7.pdf>



America are increasingly exhibiting characteristics similar to those of urban communities. They are no longer just bedroom communities for the well off.<sup>7</sup> According to Berube, Kneebone, and Nadeau, since the 1990s, low income and minority populations have increasingly relocated from central cities to suburban communities to take advantage of more affordable housing opportunities and access to better schools and employment opportunities.<sup>8</sup> This has been made possible through the reversal of generations of discriminatory tactics such as exclusionary zoning and racially restrictive covenants. Suburban communities increasingly are moving away from single-family zoning and are allowing for more density to encourage more affordable multi-family housing developments, according to Covington.<sup>9</sup>

### **California's Affordable Housing Crisis**

According to the Legislative Analyst's Office, the cost to buy or rent a home in California is higher than in every state except for Hawaii. In 2015, the average cost to buy a home in California was \$437,000, more than double the national average of \$179,000, and the average rent in California, at \$1,240 per month, was 50% higher than the nationwide average of \$840 per month. While there are many causal factors in play, the high costs of housing in California has been primarily driven by supply and demand side factors.

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<sup>7</sup> Howell, A. J., & Timberlake, J. M. June 5, 2015, Racial and ethnic trends in the suburbanization of poverty in US metropolitan areas, 1980–2010. *Journal of Urban Affairs*, 36(1), 79-98. Retrieved on June 5, 2017 from <https://onlinelibrary.wiley.com/doi/full/10.1111/juaf.12030>

<sup>8</sup> Berube, Kneebone, and Nadeu. Nov 3, 2011, The Re-Emergence of Concentrated Poverty: Metropolitan Trends in the 2000s. Brookings Institution. Retrieved May 28, 2018 from <https://www.brookings.edu/research/the-re-emergence-of-concentrated-poverty-metropolitan-trends-in-the-2000s/>

<sup>9</sup> Covington, K. L. April 9, 2015, Poverty suburbanization: Theoretical insights and empirical analyses. *Social Inclusion*, 3(2). Retrieved March 17, 2018 from <https://pdfs.semanticscholar.org/2773/031f9adf80c2b2a852ee5206599378ff10b7.pdf>

On the supply side, there is a clear trend of not building enough housing to meet demand, particularly in California's dense coastal metro areas where most of the jobs are at.<sup>10</sup> Between the years 2009 and 2014, according to a 2016 McKinsey report, California added 544,000 households, but only added 467,000 units of new housing.<sup>11</sup> Another report, published by the California Department of Housing and Community Development (HCD) in 2017, found that not a single region in California during the last full Regional Housing Needs Assessment (RHNA) built enough housing to meet its need with the two most populous regions, the Southern California Association of Governments (SCAG) and the Association of Bay Area Governments (ABAG) regions, only building 46% and 53% of their need during the 2003 to 2014 time period. While there has not been enough housing development across all income levels, with the exception of above moderate income housing, the 1.5 million unit shortfall statewide for very low and extremely low income renters is particularly acute. The low levels of housing construction have led to low rental housing vacancy rates throughout California, especially in coastal regions, and have contributed to increased rents and homelessness for our most vulnerable populations.<sup>12</sup>

On the demand side, incomes have failed to keep up with rising housing costs as the demand to live in California continues to increase, according to the Legislative

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<sup>10</sup> California Legislative Analyst's Office. March 17, 2018, California's High Housing Costs: Causes and Consequences. Retrieved March 18, 2018 from <http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.aspx>.

<sup>11</sup> McKinsey Global Institute. October 2016, A Tool Kit to Close California's Housing Gap: 3.5 Million Homes by 2025. McKinsey Global Institute. Retrieved on March 10, 2018 from <https://www.mckinsey.com/~/media/McKinsey/Global%20Themes/Urbanization/Closing%20Californias%20housing%20gap/Closing-Californias-housing-gap-Full-report.ashx>

<sup>12</sup> California Department of Housing and Community Development. January 22, 2017, California's Housing Future: Challenges and Opportunities. Final Statewide Housing Assessment 2025. Retrieved on April 1, 2018 from <http://www.hcd.ca.gov/policy-research/plans-reports/docs/California's-Housing-Future-Full-Public-Draft.pdf>

Analyst's Office. While California's median household income is about \$9,000 higher than the national median, the state also has the most households that are in poverty.<sup>13</sup> According to the 2017 California Department of Housing and Community Development (HCD) report, forty-three percent of all California households are considered low-income (0-80 percent of Average Median Income), with 29 percent of homeowners and 61 percent of renters falling into this category. High levels of poverty in California have helped lead to increasingly high rent burdens as 81% of low-income renter households in the state report to be rent burdened (more than 30% of their income going to rent) and 50% reporting to be severely rent burdened (more than 50% of their income going to rent).<sup>14</sup> In the six county SCAG region, which includes jobs rich Los Angeles and Orange counties, approximately 45% of homeowners and 55% of renters are paying more than 30% of their income on housing costs, according to SCAG's 2016 Regional Transportation and Sustainable Communities Strategy report.<sup>15</sup>

The shortage of housing that is affordable to low and middle income residents have contributed to falling homeownership rates in California, according to the Legislative Analyst's Office. Since high rental costs make it even harder to save up money to buy homes that are rapidly increasing in value, California's homeownership

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<sup>13</sup> California Legislative Analyst's Office. March 17, 2018, California's High Housing Costs: Causes and Consequences. Retrieved March 18, 2018 from <http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.aspx>.

<sup>14</sup> California Department of Housing and Community Development. January 22, 2017, California's Housing Future: Challenges and Opportunities. Final Statewide Housing Assessment 2025. Retrieved on April 1, 2018 from <http://www.hcd.ca.gov/policy-research/plans-reports/docs/California's-Housing-Future-Full-Public-Draft.pdf>

<sup>15</sup> Southern California Association Governments. April 7, 2016, 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Retrieved on March 5, 2018 from <http://scagtrpsecs.net/Documents/2016/final/f2016RTPSCS.pdf>

rate of 54% is the third lowest in the nation (behind only New York State and Nevada) and is the lowest it has been in the state since the 1940s.<sup>16</sup>

Additionally, the high costs of housing hurt the economic competitiveness of California businesses. According to the 2016 McKinsey report, California's high costs of housing is responsible for \$140 billion per year in lost economic output. The high costs of housing make it a less desirable place for workers to live making it harder to hire and retain highly skilled workers.<sup>17</sup> According to the Orange County Business Council, the high costs of housing in Orange County forces employers to pay their employees more and therefore hurts their profit margins. Workers who aren't compensated more end up commuting longer distances, often from Riverside and San Bernardino counties, spending more money on transportation costs, leaving less money to spend on goods and services to benefit the local economy. Despite the rapid job growth in Orange County, a lack of affordable housing is deterring entrepreneurs, recent college graduates, and experienced workers from moving to and staying in the area.<sup>18</sup>

Recommendations to increase the affordable housing supply in California are abundant. On the supply side, the McKinsey report points out that California has the capacity to add 225,000 units on vacant urban land currently zoned for multi-family, three million units of transit oriented development (TOD), up to 800,000 units of

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<sup>16</sup> California Legislative Analyst's Office. March 17, 2018, California's High Housing Costs: Causes and Consequences. Retrieved March 18, 2018 from <http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.aspx>.

<sup>17</sup> McKinsey Global Institute. October 2016, A Tool Kit to Close California's Housing Gap: 3.5 Million Homes by 2025. McKinsey Global Institute. Retrieved on March 10, 2018 from <https://www.mckinsey.com/~/media/McKinsey/Global%20Themes/Urbanization/Closing%20Californias%20housing%20gap/Closing-Californias-housing-gap-Full-report.ashx>

<sup>18</sup> Orange County Business Council. 2015, 2015 Orange County Workforce Housing Scorecard. Retrieved on March 11, 2018 from <https://www.ocbc.org/wp-content/uploads/2015/03/2015-Housing-Scorecard-FINAL-PAGES-3.20.15-small.pdf>

accessory dwelling units (ADUs) and other home additions, and one million more units could get built on underutilized parcels where the zoning code allows for greater densities, significantly more than enough to solve the supply problem.<sup>19</sup> According to the 2017 California Housing and Community Development (HCD) report, changes to state law could also help increase the supply of housing. Amongst others, the reports suggests strengthening the Housing Accountability Act, essentially the RHNA, the Density Bonus law, to encourage more affordable housing,, the Mitigation Fee Act, to charge fees based upon square feet instead of unit type, increased regional land use planning, and incentivize jurisdictions to comply with all state laws by withholding previous state resources if there is a lack of compliance.<sup>20</sup>

Since so many Californians are living in poverty though, the building of below market-rate housing is critically important when attempting to close the supply gap. In SCAG's 2016 Regional Transportation Plan/ Sustainable Communities Strategies, they compiled the following list of recommendations for their local jurisdiction to rapidly expand their affordable housing supply and thus build the kind of housing that is being most highly demanded:

1. Streamline the residential project permitting process

2. Reduced fees or waivers for affordable housing

development

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<sup>19</sup> McKinsey Global Institute. October 2016, A Tool Kit to Close California's Housing Gap: 3.5 Million Homes by 2025. McKinsey Global Institute. Retrieved on March 10,2018 from <https://www.mckinsey.com/~media/McKinsey/Global%20Themes/Urbanization/Closing%20Californias%20housing%20gap/Closing-Californias-housing-gap-Full-report.ashx>

<sup>20</sup> California Department of Housing and Community Development. January 22, 2017, California's Housing Future: Challenges and Opportunities. Final Statewide Housing Assessment 2025. Retrieved on April 1, 2018 from <http://www.hcd.ca.gov/policy-research/plans-reports/docs/California's-Housing-Future-Full-Public-Draft.pdf>

3. Reduce parking requirements, especially in transit rich areas
4. Adopt an affordable housing overlay zone
5. Preservation of mobile homes
6. Establish a housing trust fund
7. Add inclusionary zoning to the housing ordinance
8. Density Bonus ordinance
9. Increase density in transit-rich areas
10. Link a housing program with other policies such as active transportation and public health
11. Consider new building types and models, such as accessory dwelling units or small units
12. Establish a Community Revitalization and Investment Authority (per AB 2) or Enhanced Infrastructure Financing District (per SB 628)<sup>21</sup>

The City of Irvine also has its own long term plan to expand the affordable housing supply. The 2006 City of Irvine’s Housing Strategy and Implementation Plan established the Irvine Community Land Trust (ICLT) and through in-lieu fees from the city’s 2003 inclusionary housing ordinance, has the goal of building 5,000 affordable units by 2025. Additionally, the 2013 update of Irvine’s Housing Element, while including the ICLT, also calls for the removal of regulatory barriers to development, increase in allowable densities to allow for more mix-uses, and to work with for profit

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<sup>21</sup> Southern California Association Governments. April 7, 2016, 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Retrieved on March 5, 2018 from <http://scagrtpscscs.net/Documents/2016/final/f2016RTPSCS.pdf>

and non-profit housing developers to help preserve and expand the affordable housing supply, among other things.<sup>22</sup>

### **The Attractions of Living and Working in Irvine**

According to the City of Irvine 2013-2021 Housing Element, the city's commitment to following its Master Plan since its incorporation has enabled Irvine to maintain a vibrant, attractive, sustainable, and superb community for its residents. The Master Plan has done this through the creation of a series of villages that contain a diversity of housing options with close proximity to schools, shopping centers, open space, transportation corridors, and job centers. The plan has been welcoming to growth and enabled the flexibility that allowed for the Irvine Business Complex Residential Mixed Use Vision Plan, which has allowed the city of better balance jobs and housing by zoning mixed-use development within walking distance of Irvine's largest job center.<sup>23</sup>

While Irvine attracts people of all ages, it is particularly attractive to families with children. According to the Irvine Unified School District, its schools have consistently ranked as some of the best performing public schools in the nation as parents in Irvine work with teachers and school administrators to ensure their kids' success.<sup>24</sup> Additionally, Irvine has consistently been ranked as the safest city in America with a population over 100,000 making it a great place for families to live without fear of violent crime.

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<sup>22</sup> City of Irvine, Community Development Department. 2013, City of Irvine 2013-2021 Housing Element. Retrieved March 19, 2018 from <http://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=22223>

<sup>23</sup> City of Irvine, Community Development Department. 2013, City of Irvine 2013-2021 Housing Element. Retrieved March 19, 2018 from <http://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=22223>

<sup>24</sup> Irvine Unified School District. September 20, 2017, About IUSD, Retrieved on March 23, 2018 from <https://iusd.org/about/our-district/about-iusd>

Irvine's supportive business environment and location in central Orange County has turned the city into a major jobs center that attracts small and global firms. According to the Greater Irvine Chamber of Commerce, Irvine is home to over 250,000 jobs, 17,000 companies, including one-third of all Fortune 500 companies, and is a regional hub for the life sciences, information technology, aerospace, advanced manufacturing, and creative arts industries. Again, the Irvine Master Plan has made this possible by calling for strategically placed professional office buildings to ensure a steady jobs base in the city. Additionally, Irvine businesses are able to take advantage of the city's highly educated workforce and partnerships with the University of California, Irvine (UCI), which produces skilled graduates every year, to incubate new ideas and jobs.<sup>25</sup>

## **Methodology and Findings**

In order to look at trends in household and housing in Irvine during the 2000 to 2016 time period, I picked 13 different indicators that were prevalent in the literature and accessible to analyze. For each indicator below, I explained its importance, where the data was collected from, made graphs and charts, and explained the relevant trends in

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<sup>25</sup> Greater Irvine Chamber of Commerce. Irvine Master Plan. Retrieved March 17, 2018 from <https://www.greaterirvinechamber.com/irvinechamber/irvine-master-plan>



Irvine and in other jurisdictions to put the changes in Irvine into context. In addition, I made an effort to focus on the trends that drive and are likely a result of the current housing affordability crisis and put those items first.

### **Population Growth**

The first indicator that I will discuss was the growth in population that Irvine experienced between the years 2000 and 2016. New people moving into a community can lead to significant changes. Rapid population growth is often associated with prominent levels of housing development, since new people need a place to call home, and that results in a change of neighborhood character as a community grows denser.

In order to measure the population growth in Irvine and to put it into context with other neighboring cities, Orange County, and California, annual population data was collected from the California Department of Finance. Irvine's annual population numbers for the years 2000 to 2016 are shown in Figure 1.1 below and jurisdictional comparisons are below that in Figure 1.2.

**Between 2000 and 2016, Irvine grew its population at a rate that far exceeded that of its neighboring cities, Orange County, and California at large.** According to the data, Irvine grew its population by 115,231 people during the studied time period, which represented a 81.3% increase as the population went from 141,695 to 256,926 people. To put Irvine's population growth into perspective, amongst other cities in Orange County during the studied time period, only Lake Forest, at 40%, grew anywhere near as much as Irvine did. Countywide, the population only grew by 12.4%, going from 2,831,799 to 3,183,011 (an increase of 351,212) people during the 2000 to 2016 time period. Therefore, **Irvine made up about a third of the entire population growth of**

**Orange County.** Similar to Orange County, California as a whole only grew its population by 16.4% as the state added 5,534,300 people as it went from 33,721,583 to 39,255,883 people.

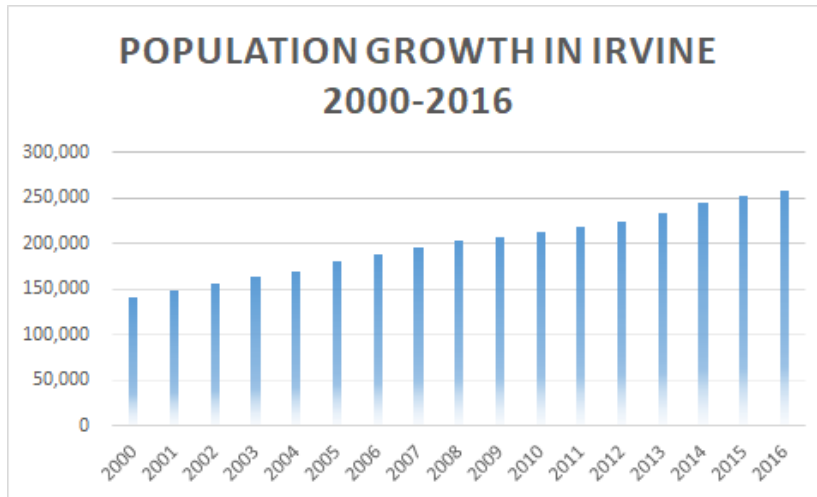


Figure 1.1 Source: California Department of Finance

*Population Growth in Irvine and Neighboring Jurisdictions - 2000 and 2016*

Jurisdiction	Population 2000	Population 2016	Numerical Change	Percent Change
Anaheim	325,906	354,167	28,261	8.7%
Garden Grove	164,260	176,318	12,058	7.3%
Huntington Beach	188,706	200,501	11,795	6.3%
<b>Irvine</b>	<b>141,695</b>	<b>256,926</b>	<b>115,231</b>	<b>81.3%</b>

Lake Forest	58,487	81,903	23,416	40%
Santa Ana	336,223	337,180	957	0.3%
Tustin	68,012	81,484	13,472	19.8%
<i>Orange County</i>	<i>2,831,799</i>	<i>3,183,011</i>	<i>351,212</i>	<i>12.4%</i>
<i>California</i>	<i>33,721,583</i>	<i>39,255,883</i>	<i>5,534,300</i>	<i>16.4%</i>

Figure 1.2 Source: California Department of Finance

### Housing Growth

Since I found that Irvine rapidly increased its population during the 2000 to 2016 time period, it made me wonder if the city built enough new housing units to accommodate for its growing population. If Irvine was successful at doing that, the increase in densities described above could make people nervous as they fear more traffic congestion, loss of parking, and potentially views and open space. Therefore, in order to see how much housing was added in Irvine during the studied time period, I acquired data from the California Department of Finance, which can be found in Figure 2.1 below. Additionally, Figure 2.2 below uses the same data source to put Irvine’s housing growth into context with other jurisdictions.

**The housing supply in Irvine expanded at roughly the same rate that the city grew its population during the 2000 to 2016 time period.** According to the data, Irvine added a total of 42,028 new housing units as the city went from 53,188 units in 2000 to 95,216 units in 2016. This represented a growth rate of 79%, which was just below the 81.3% population growth that Irvine experienced during the same time period.

Similar to population growth, Irvine’s growth in housing units far surpassed the other jurisdictions that I looked at with Lake Forest again being the closest city at 38.8%. Orange County’s largest city, Anaheim, grew its housing stock at just 7% as it went from

99,636 units to 106,626 units during the 2000 to 2016 time period. Countywide, only 109,106 units were added, representing a growth rate of 11.3%, which means that **Irvine added over a third of the new housing units in Orange County**. Once again, California grew at only a slightly faster rate than Orange County did at 14.7%.



Figure 2.1 Source: California Department of Finance

*Housing Growth in Irvine and Neighboring Jurisdictions- 2000 and 2016*

Jurisdiction	2000	2016	Numerical Change	Percent Change
Anaheim	99,636	106,626	6,990	7%
Garden Grove	46,687	47,761	1,074	2.3%
Huntington Beach	75,556	80,837	5,281	7%

<b>Irvine</b>	<b>53,188</b>	<b>95,216</b>	<b>42,028</b>	<b>79%</b>
Lake Forest	20,493	28,443	7,950	38.8%
Santa Ana	74,645	77,610	2,965	4%
Tustin	25,419	27,821	2,402	9.4%
<i>Orange County</i>	<i>967,089</i>	<i>1,076,195</i>	<i>109,106</i>	<i>11.3%</i>
<i>California</i>	<i>12,186,125</i>	<i>13,982,846</i>	<i>1,796,721</i>	<i>14.7%</i>

Figure 2.2 Source: California Department of Finance

### **Housing Units by Type**

Since Irvine was successful at expanding the housing supply to match the city’s robust population growth, the next logical indicator to analyze is the type of housing. Having a diversity of housing options is important for cities to have to be inclusive of different living preferences and life cycles of individuals and families. Therefore, using data that I collected from the California Department of Finance, I researched the housing units by type in Irvine, which can be seen in Figure 3.1 below, and compared that to other neighboring cities, Orange County, and California at large over the 2000 to 2016 time period, which can be seen in Figure 3.2 below.

**Single-family homes still represent a majority of the housing stock in Irvine, but multi-family homes are starting to catch up.** According to the data, Irvine had 33,995 single-family homes compared to 18,172 multi-family units in 2000. Move forward to 2016, there were 53,506 single-family homes compared to 40,545 multi-family units in the city. Multi-family units therefore increased their share of the total housing stock from 34.8% in 2000 to 43.1% in 2016. While there were other cities that I found such as Anaheim, Garden Grove, Huntington Beach, and Santa Ana that also

increased their share of multi-family units, more single-family than multi-family units were built County and Statewide.

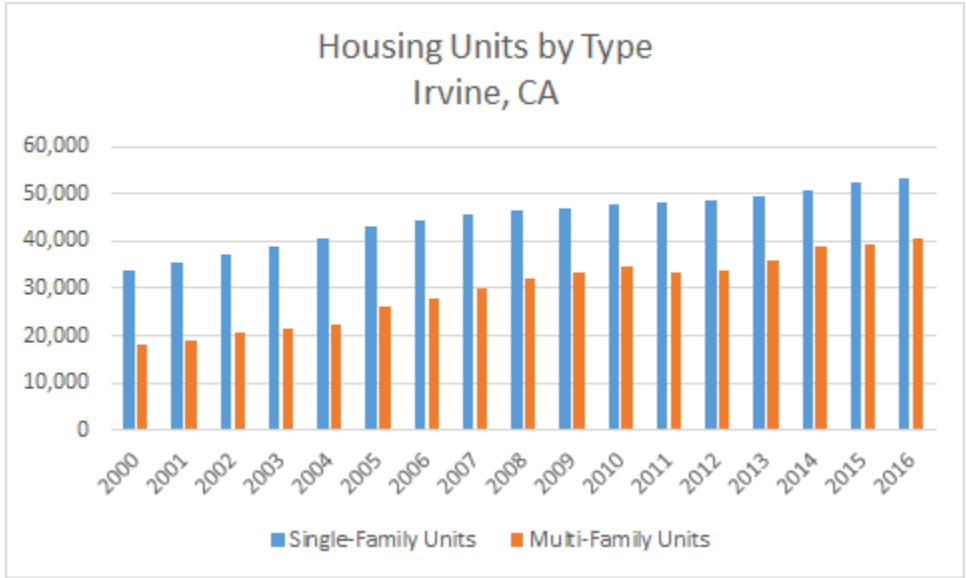


Figure 3.1 Source: California Department of Finance

*Housing Units by Type in Irvine and Neighboring Jurisdictions*

	2000		2016	
Jurisdiction	Single-Family	Multi-Family	Single-Family	Multi-Family
Anaheim	51,719	43,540	54,128	47,813
Garden Grove	30,845	14,024	31,322	14,812

Huntington Beach	46,421	26,093	48,473	29,277
<b>Irvine</b>	<b>33,995</b>	<b>18,172</b>	<b>53,506</b>	<b>40,545</b>
Lake Forest	13,696	5,513	19,333	7,834
Santa Ana	39,867	30,871	41,292	32,269
Tustin	11,443	13,073	13,123	13,789
<i>Orange County</i>	<i>612,433</i>	<i>322,226</i>	<i>673,582</i>	<i>369,109</i>
<i>California</i>	<i>7,789,617</i>	<i>3,827,274</i>	<i>9,072,533</i>	<i>4,349,458</i>

Figure 3.2 Source: California Department of Finance

### Gross Rents

Since Irvine expanded its housing supply at roughly the same rate as it expanded its population and coastal areas throughout California are currently facing an affordable housing crisis, I was interested in how gross rents changed in Irvine. Renters, unlike homeowners, are subject to changes in their rent due to market conditions and unexpected increases in rents can cause displacement of longtime residents who can no longer afford the rent. Therefore, I looked at Irvine’s median gross rents between 2000 and 2016, which can be seen in Figure 4.1 and compared the changes to other neighboring cities, Orange County, and California at large, which can be seen in Figure 4.2. The data was readily available from the 2000 Decennial US Census and from the American Community Survey.

**Median gross rents in Irvine increased significantly, but by less than the increase experienced in neighboring cities, Orange County, and California at large.**

According to the data, Irvine’s rents went up by 25.6% during the 2000 to 2016 time period as median gross rents in real terms went up from \$1,272 to \$1,598.11 (in 2000 Dollars). Gross rents were trending up until the Great Recession hit in 2008 and then they

declined until 2012, when rents started to increase rapidly through the end of the studied time period. While Irvine’s rents were and still are higher than that of Orange County’s and California’s, the 32.9% increase in rent (from \$923 to \$1,226.91) for Orange County and 31.1% increase (from \$747 to \$979.67) for California were noticeably higher than the rate the rent increased in Irvine during the studied time period. Among the neighboring cities that I looked at, only Santa Ana, Orange County’s second largest city and one of the most economically disadvantaged communities in Southern California, had rents stay fairly flat.

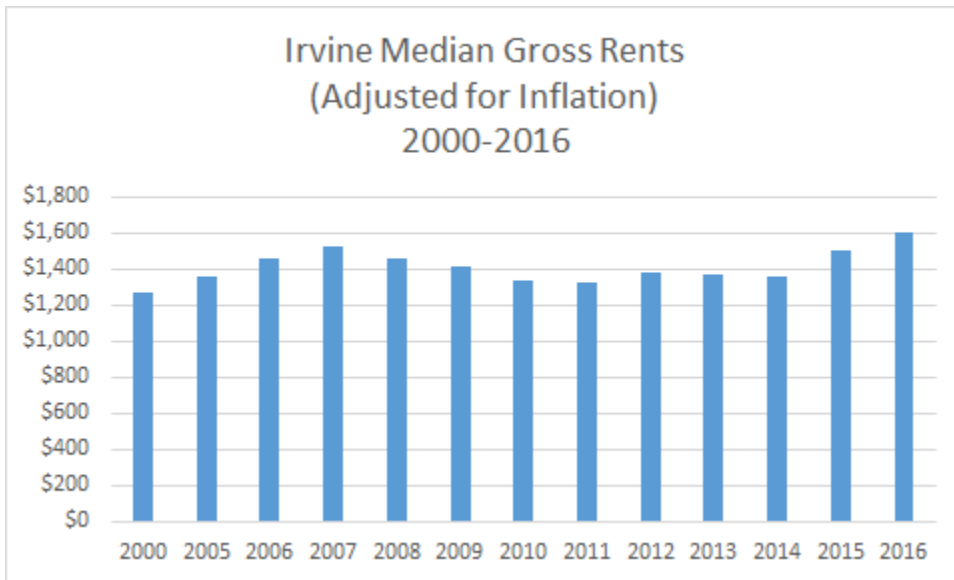


Figure 4.1 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

*Median Gross Rents in Irvine and Neighboring Jurisdictions- 2000 and 2016*

Jurisdiction	2000	2016	Numerical Change	Percent Change
Anaheim	\$818.00	\$1,060.90	\$242.90	29.7%
Garden Grove	\$827.00	\$1,056.62	\$229.62	27.8%



Huntington Beach	\$985.00	\$1,259.68	\$274.68	27.9%
<b>Irvine</b>	<b>\$1,272.00</b>	<b>\$1,598.11</b>	<b>\$326.11</b>	<b>25.6%</b>
Lake Forest	\$1,085.00	\$1,392.20	\$307.20	28.3%
Santa Ana	\$815.00	\$1,024.56	\$209.56	25.7%
Tustin	\$925.00	\$1,244.72	\$319.72	34.6%
<i>Orange County</i>	<i>\$923.00</i>	<i>\$1,226.91</i>	<i>\$303.91</i>	<i>32.9%</i>
<i>California</i>	<i>\$747.00</i>	<i>\$979.67</i>	<i>\$232.67</i>	<i>31.1%</i>

Figure 4.2 Sources: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

### Home Values

Just like with gross rents, home values are another important indicator that I looked at given Irvine’s robust population and housing growth and the current affordable housing crisis. While a rise in home values are not likely to directly lead to displacement, they can make it harder for renters with lower incomes to become homeowners and could lead to a less diverse population as those who move into the neighborhood are disproportionately higher income. Therefore, I looked at changes to home values in Irvine, which can be seen in Figure 5.1, and compared them to neighboring cities, Orange County, and California for the 2000 to 2016 time period, which can be seen in Figure 5.2 below. The data was once again readily accessible from the 2000 Decennial US Census and the American Community Survey.

**Home values in Irvine increased significantly during the 2000 to 2016 time period, but at roughly the same rate as they did in Orange County as a whole. When**

adjusted for inflation, home values in Irvine went up by 81.3% from \$316,800 to \$574,265.98 (in 2000 Dollars), according to the data. Just like with rents, they were steadily going up until 2008, when the housing bubble burst, and then homes started increasing in value again in 2012. The increase in home values that Irvine experienced during the studied time period were similar to the countywide trend. Orange County home values increased in real terms from \$253,000 in 2000 to \$466,252.68 in 2016, representing an increase of 84.3%. Statewide, home values increased only by 60.9%, dwarfed by the increase in home values experienced by Irvine and Orange County homeowners.

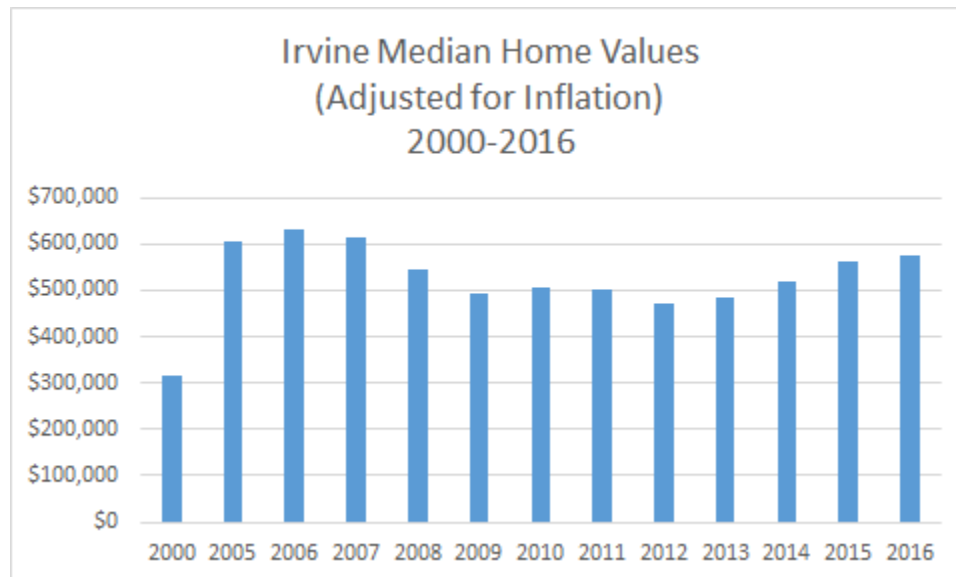


Figure 5.1 Sources: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

*Median Home Values in Irvine and Neighboring Jurisdictions- 2000 and 2016 (Adjusted for Inflation)*

Jurisdiction	2000	2016	Numerical Change	Percent Change
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Anaheim	\$204,000	\$390,515.12	\$186,515.12	91.4%
Garden Grove	\$194,500	\$379,542.79	\$185,042.79	95.1%
Huntington Beach	\$292,000	\$516,269.40	\$224,269.40	76.8%
<b>Irvine</b>	<b>\$316,800</b>	<b>\$574,265.98</b>	<b>\$257,465.98</b>	<b>81.3%</b>
Lake Forest	\$258,500	\$433,549.44	\$175,049.44	67.7%
Santa Ana	\$173,300	\$328,884.84	\$155,584.84	89.8%
Tustin	\$273,300	\$406,189.87	\$132,889.87	48.6%
<i>Orange County</i>	<i>\$253,000</i>	<i>\$466,252.68</i>	<i>\$213,252.68</i>	<i>84.3%</i>
<i>California</i>	<i>\$211,500</i>	<i>\$340,213.41</i>	<i>\$128,713.41</i>	<i>60.9%</i>

Figure 5.2 Sources: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

### Homeownership Rates

The affordable housing crisis in California has had major consequences in communities. That is why after finding that the costs of buying a home in Irvine skyrocketed during the 2000 to 2016 time period, I was interested in finding out how homeownership rates fared in the city. Homeownership has long been encouraged in the United States as a way to get households to feel more invested in their communities and as a way to generate wealth. Therefore, I collected homeownership rates for Irvine, which can be seen in Figure 6.1 below, and compared the rates to other neighboring cities, Orange County, and California as a whole, which can be seen in Figure 6.2 below. The data was easily acquired from the 2000 Decennial US Census and the American Community Survey.

**Homeownership rates in Irvine declined significantly between 2000 and 2016 and did so more than they did in neighboring cities, Orange County, and California at large.** According to the data, Irvine had a homeownership rate of 60% in 2000 and it declined to 48.7% by 2016. This was a greater than the 61.4% to 56.6% countywide decline in homeownership and larger than all of the other studied neighboring cities. Additionally, California only experienced a 56.9% to 53.6% decline in its rate of homeownership.

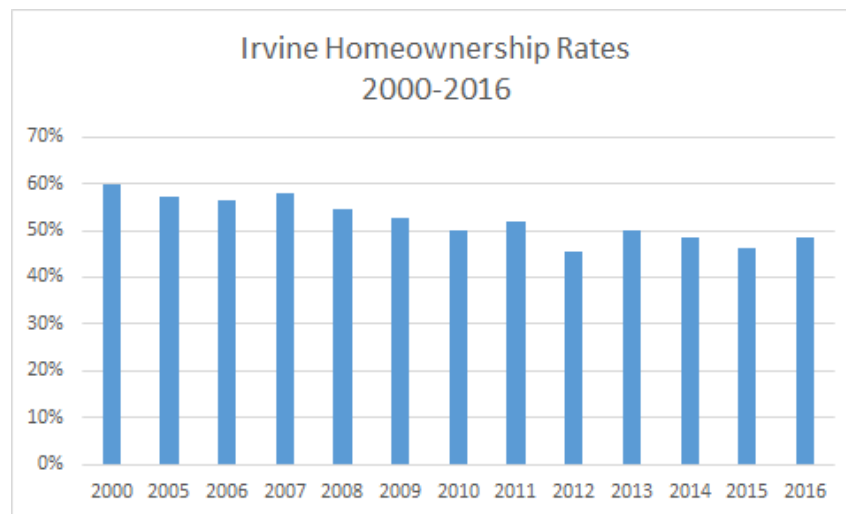


Figure 6.1 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

*Homeownership Rates in Irvine and Neighboring Jurisdictions- 2000 and 2016*

Jurisdiction	2000	2016
Anaheim	50%	41.5%
Garden Grove	59.6%	51.1%
Huntington Beach	60.6%	59.7%
<b>Irvine</b>	<b>60%</b>	<b>48.7%</b>
Lake Forest	72%	68.5%

Santa Ana	49.3%	44.6%
Tustin	49.6%	45.2%
<i>Orange County</i>	<i>61.4%</i>	<i>56.6%</i>
<i>California</i>	<i>56.9%</i>	<i>53.6%</i>

Figure 6.1 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

### **Mortgage Burdens**

Since I found that homeownership rates were down in Irvine, I was curious as to what is happening to those who are fortunate to actually be a homeowner. Therefore, the next indicator I looked at were the changes in mortgage burdens that Irvine homeowners faced during the 2000 to 2016 time period. More money being spent on housing costs is highly problematic as that means less money being spent on other important household goods and services. Using the California Department of Housing and Community Development’s (HCD) definition of a mortgage burdened household, 30% or more of a household’s income going to rent, I then acquired income and mortgage data from the 2000 Decennial US Census and the American Community Survey to look at changes in Irvine, which can be seen below in Figure 7.1, and for neighboring cities, Orange County, and California at large, which can be seen in Figure 7.2

**The share of households that were mortgage burdened in Irvine increased more than in the studied neighboring cities, Orange County, and California at large during the 2000 to 2016 time period.** According to the data, 33.7% of Irvine’s households were mortgage burdened in 2000 and that number rose to 44.3% by 2016. To

put that change into context, the closest neighboring city in terms of increased mortgage burdens was Garden Grove, which went up from 36.6% to 43.4%. Orange County as a whole saw its share of mortgage burdened households go up from 36% to 40.1%. California at large only experienced a small increase going from 36.5% to 38.1%. I suspect that Irvine’s and Orange County’s sharp increase in mortgage burdens, especially leading up to the Subprime Mortgage Crisis in 2008, might be associated with higher foreclosure rates, but more research will have to be done to prove that.

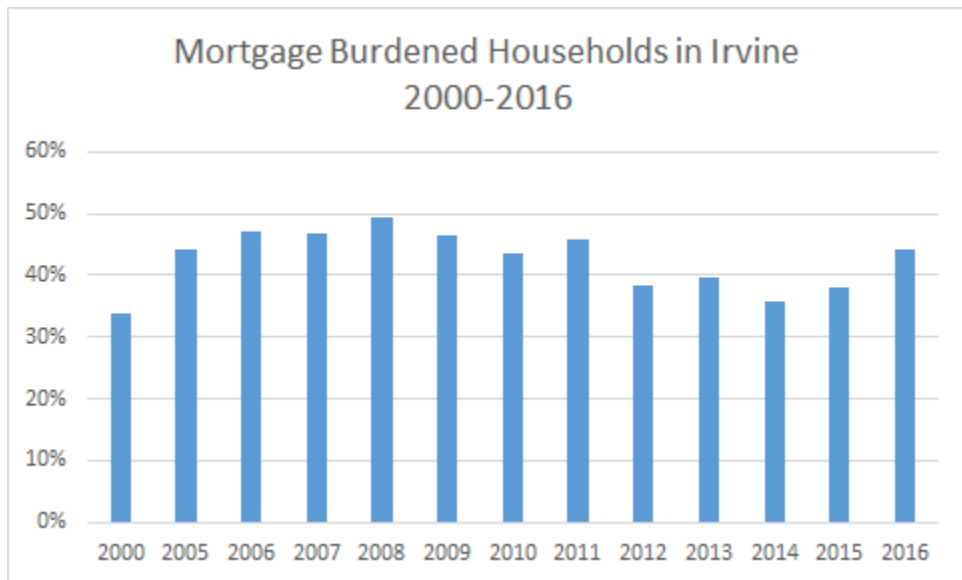


Figure 7.1 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

*Mortgage Burdened Households in Irvine and Neighboring Jurisdictions- 2000 and 2016*

Jurisdiction	2000	2016
Anaheim	37.3%	44.0%
Garden Grove	36.6%	43.4%
Huntington Beach	34.0%	38.6%

<b>Irvine</b>	<b>33.7%</b>	<b>44.3%</b>
Lake Forest	33.3%	32.5%
Santa Ana	40.1%	38.2%
Tustin	31.8%	36.4%
<i>Orange County</i>	<i>36.0%</i>	<i>40.1%</i>
<i>California</i>	<i>36.5%</i>	<i>38.1%</i>

Figure 7.2 Source: US Census and the American Community Survey 1 Year Estimates

### **Rent Burdens**

Just like with mortgages, HCD recommends that rents should be no more than 30% of household incomes. Therefore, I used the same data sources to research the rents burdens in Irvine, which can be seen in Figure 8.1, and compared their changes to that of other neighboring cities, Orange County, and California at large (see Figure 8.2 below) during the 2000 to 2016 time period. Additionally, rent burdens by income are below in Figure 8.3 and 8.4, for the years 2000 and 2016 respectfully, for Irvine, Orange County, and California.

**There was a significant increase in the amount of rent burdened households in Irvine, but that increase was less than in the other studied neighboring cities, Orange County, and California at large.** According to the data, between 2000 and 2016, the share of Irvine households that were considered rent burdened increased from 39% to 45.8%. While that increase is not insignificant, Anaheim, Garden Grove, Huntington Beach and Santa Ana each saw their share of rent burdened households go up by at least 10%. Anaheim had the biggest observed increase in rent burdened households

going from 42% in 2000 to 58.3% in 2016. Irvine’s increase is also dwarfed by Orange County’s increase of 38.3% to 49.8% and California’s increase of 36.8% 47.6%.

When rent burdens were broken down by income category, every type of income, across all three jurisdictions (Irvine, Orange County, and California) saw an increase in the percent that are rent burdened during the 2000 to 2016 time period. The one exception was for Irvine renters making less than \$35,000. The other notable trend was that across all three jurisdictions you would have had to make at least \$75,000 to likely avoid being rent burdened by 2016.

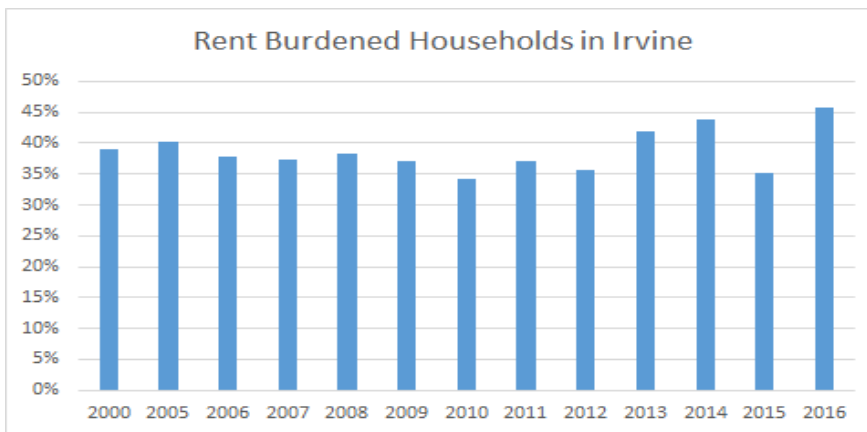


Figure 8.1 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

*Rent Burdened Households in Irvine and Neighboring Jurisdictions- 2000 and 2016*

Jurisdiction	2000	2016
Anaheim	42.0%	58.3%
Garden Grove	41.9%	57.3%
Huntington Beach	34.1%	48.1%



<b>Irvine</b>	<b>39.0%</b>	<b>45.8%</b>
Lake Forest	39.8%	49.2%
Santa Ana	41.1%	52.9%
Tustin	37.1%	41.7%
<i>Orange County</i>	<i>38.3%</i>	<i>49.8%</i>
<i>California</i>	<i>36.8%</i>	<i>47.6%</i>

Figure 8.2 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

*Rent Burdened Households by Income Category in Irvine, Orange County, and California -2000*

	Irvine	Orange County	California
Total Households	20,469	360,598	4,921,581
Under \$35,000 (%)	7547 (36.9%)	152,007 (42.2%)	2651715 (53.9%)
<i>Percent Rent Burdened</i>	<i>75.7%</i>	<i>78.9%</i>	<i>68.3%</i>
\$35,000-74,999 (%)	7083 (34.6%)	143310 (39.7%)	1594115 (32.4%)
<i>Percent Rent Burdened</i>	<i>45.9%</i>	<i>21.4%</i>	<i>16%</i>
\$75,000+ (%)	5,839 (28.5%)	65,281 (18.1%)	675,751 (13.7%)
<i>Percent Rent Burdened</i>	<i>2.8%</i>	<i>2%</i>	<i>2.7%</i>

Figure 8.3 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

*Rent Burdened Households by Income Category in Irvine, Orange County, and California -2016*

	Irvine	Orange County	California
Total Households	48,427	447,586	6,000,750
Below \$35,000 (%)	12,918 (26.7%)	119,647 (26.7%)	2,151,589 (35.9%)

Percent Rent Burdened	73.3%	88.2%	87.9%
\$35,000-74,999 (%)	12,462 (25.7%)	151,363 (33.8%)	1,873,462 (31.2%)
Percent Rent Burdened	90%	73.8%	56%
\$75,000+ (%)	23,000 (47.5%)	171,463 (38.3%)	1,838,693 (30.6%)
Percent Rent Burdened	24.2%	14.7%	11.6%

Figure 8.4 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

### **Household Incomes**

After finding significant increases in mortgage and rent burdens, I wanted to see if household incomes changed in a way that might be driving those increases. Therefore, I collected median household income data for Irvine (from the previous year) from the Decennial 2000 US Census and the American Community Survey, which can be seen in Figure 9.1 below. I then, in order to put changes to Irvine’s household incomes into context, gathered the data for neighboring cities, Orange County, and California at large, which can be seen in Figure 9.3. Lastly, to see how the change in household incomes compared to the change in gross rents, I used the same data sources to look at Irvine and the other jurisdictions, which can be seen below in Figure 9.2 and 9.4 respectfully.

**Household incomes in Irvine increased at lower levels than inflation and lower than several of its neighboring cities, Orange County, and California at large** during the 2000 to 2016 time period. According to the data, the median household income for Irvine (in January 2000 dollars) declined by \$2,592.19 or 3.6% to \$69,464.81. To put Irvine’s lack of household income growth into perspective, of the six

neighboring cities that I studied (Anaheim, Garden Grove, Huntington Beach, Lake Forest, Santa Ana, and Tustin) plus Orange County and California, only Garden Grove (-5.2%), Huntington Beach (-5.4%), and Tustin (-8.9%) had greater inflation-adjusted household income losses. The former two have seen their populations rapidly age perhaps meaning that less of their residents are in the workforce and that could be a strong explanatory factor for the real income losses. Countywide, the median household income, declined in real terms as well going from \$47,493 to \$48,263.25 (in January 2000 dollars), which represents a loss of \$517.05 or 0.9%. California though increased its household incomes in real terms it increased from \$47,493 to \$48,263.28 in January 2000 dollars, which is an increase of \$770.28 or 1.6%. Additionally, **Irvine and the other jurisdictions that I studied experienced far greater increases in rents than household incomes, meaning that rising housing costs are mostly to blame for the increase in rent burdened households across all jurisdictions.**

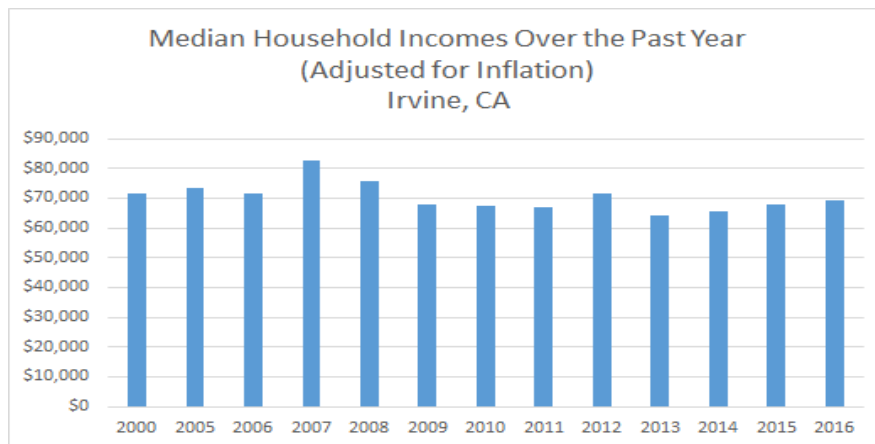


Figure 9.1 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

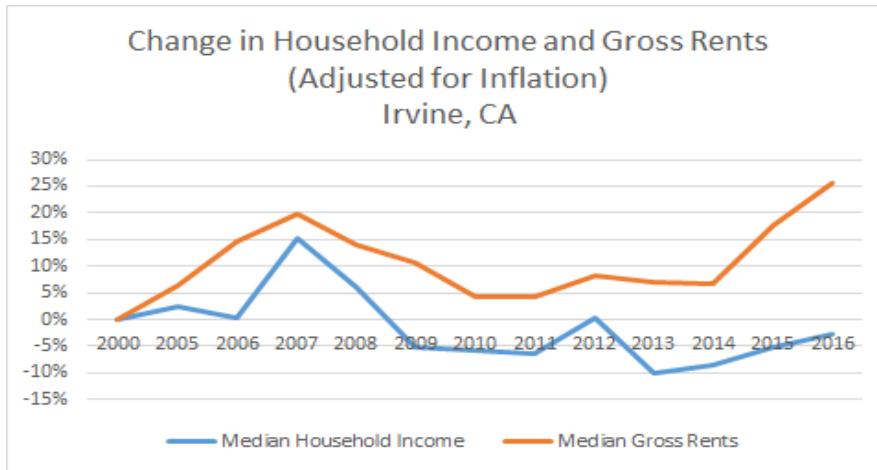


Figure 9.2 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

*Median Household Incomes over the Previous Year in Irvine and Neighboring Jurisdictions (Adjusted for Inflation)*

Jurisdiction	2000 (January 2000 Dollars)	2016 (January 2000 Dollars)	Numerical Change	Percent Change
Anaheim	\$47,122	\$45,929.88	-\$1,192.12	-2.5%
Garden Grove	\$47,754	\$45,290.06	-\$2,463.94	-5.2%
Huntington Beach	\$64,824	\$61,353.84	-\$3,470.16	-5.4
<b>Irvine</b>	<b>\$72,057</b>	<b>\$69,464.81</b>	<b>-\$2,592.19</b>	<b>-3.6%</b>
Lake Forest	\$67,967	\$71,645.74	\$3,678.74	5.4%
Santa Ana	\$43,412	\$44,099.50	\$687.50	1.6%
Tustin	\$55,985	\$51,014.91	-\$4,970.09	-8.9%
<i>Orange County</i>	<i>\$58,820</i>	<i>\$58,302.95</i>	<i>-\$517.05</i>	<i>-0.9%</i>
<i>California</i>	<i>\$47,493</i>	<i>\$48,263.28</i>	<i>\$770.28</i>	<i>-1.6%</i>

Figure 9.3 Source: 2000 US Census and the American Community Survey 2016 1 year estimates

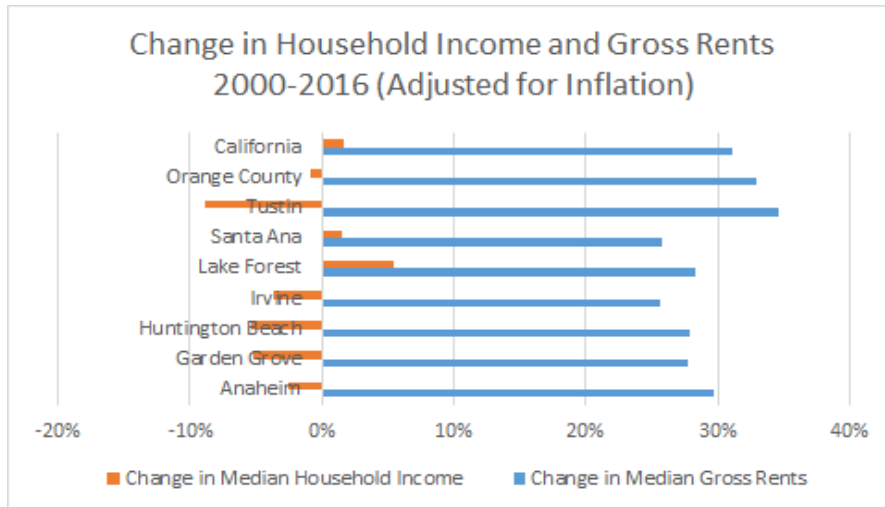


Figure 9.4 Source: 2000 US Census and the American Community Survey 2016 1 year estimates

### Vacancy Rates

After finding that home values and rents skyrocketed in Irvine during the 2000 to 2016 time period despite a rapid increase in the housing supply, I wanted to find indicators that would help explain that. Therefore, the next indicator that I looked at were the change in vacancy rates. The vacancy rates are an important measurement that usually influences the cost of housing. A low vacancy rate indicates a tight housing market, which usually leads to rising housing costs, and vice versa for a market with a high vacancy rate. Best practices state that a 2% vacancy rate for owned homes and a 5% vacancy rate for rentals is indicative of a healthy housing market that balances the supply and demand for housing.<sup>26</sup> In order to analyze the vacancy rates in Irvine, I acquired data from the 2000 Decennial US Census and the American Community Survey. Figure 10.1 below has the data for Irvine and to put the numbers into context, I compared them to

<sup>26</sup> City of Irvine, Community Development Department. (2013). *City of Irvine 2013-2021 Housing Element*. Irvine, CA. Retrieved on May 28, 2018 from <http://webadmin.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=22682>

other neighboring cities, Orange County, and California, which can be seen in Figures 10.2-10.4 below.

**Vacancy rates in Irvine increased and ended higher than in almost all of the other studied jurisdictions, for both owner and renter-occupied units,** between 2000 and 2016. According to the data, overall vacancy rates in Irvine increased from 4.7% in 2000 to 7.2% in 2016. The owner-occupied vacancy rate remained at 1.1% and renter-occupied units went up from 3.5% in 2000 to 4.7% in 2016, meaning that ample supply was likely added. Overall, vacancy rates increased sharply during the Great Recession, likely due to foreclosed homes as the uptick was mostly driven by owned homes, and then started to go down until increasing again in 2015. Among the other cities that I looked at, only Tustin had a higher overall vacancy rate higher than Irvine’s in 2000 and none were higher by 2016. Lower vacancy rates than Irvine existed in 2000 and 2016 across the board countywide and the opposite was true statewide.

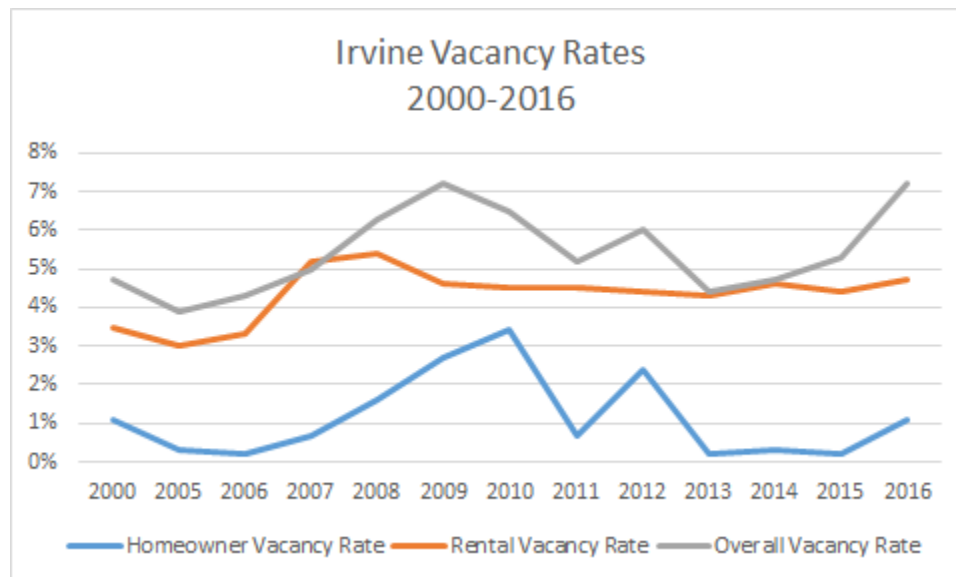


Figure 10.1 Source: 2000 Decennial US Census and the American Community Survey 2005-2016 1 Year Estimates

*Owner-Occupied Vacancy Rates in Irvine and Neighboring Jurisdictions- 2000 and 2016*

<i>Jurisdiction</i>	<i>2000</i>	<i>2016</i>
Anaheim	0.9%	0.1%
Garden Grove	0.7%	0.4%
Huntington Beach	0.9%	1.6%
<b>Irvine</b>	<b>1.1%</b>	<b>1.1%</b>
Lake Forest	0.8%	N/A
Santa Ana	0.8%	1.0%
Tustin	0.9%	0.0%
<i>Orange County</i>	<i>0.9%</i>	<i>0.1%</i>
<i>California</i>	<i>1.4%</i>	<i>1.3%</i>

Figure 10.2 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

*Rental Vacancy Rates in Irvine and Neighboring Jurisdictions- 2000 and 2016*

<i>Jurisdiction</i>	<i>2000</i>	<i>2016</i>
Anaheim	3.2%	2.4%
Garden Grove	2.0%	1.5%
Huntington Beach	2.0%	1.9%
<b>Irvine</b>	<b>3.5%</b>	<b>4.9%</b>
Lake Forest	4.1%	N/A

Santa Ana	1.9%	0.9%
Tustin	2.5%	1.0%
Orange County	3.0%	3.0%
California	3.7%	3.3%

Figure 10.3 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

*Overall Vacancy Rates in Irvine and Neighboring Jurisdictions- 2000 and 2016*

Jurisdiction	2000	2016
Anaheim	2.8%	4.0%
Garden Grove	0.2%	2.6%
Huntington Beach	2.6%	5.5%
<b>Irvine</b>	<b>4.7%</b>	<b>7.2%</b>
Lake Forest	2.3%	3.2%



Santa Ana	2.1%	2.2%
Tustin	6.5%	5.0%
Orange County	3.5%	5.3%
California	5.8%	7.9%

Figure 10.4 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

### **Regional Housing Needs Assessment (RHNA) Progress**

The next factor I looked at to see what might be driving the sharp increases in housing costs was the Regional Housing Needs Assessment (RHNA). In its simplest form, the RHNA is a state mandated planning process where local jurisdictions are required to update their housing elements in their General Plan every 8 years to adequately provide opportunities for housing development. Cities and counties are not required to actually approve their allocated amount, but are required to zone for their projected housing needs, at all income levels, as determined by their local Council of Governments (COG).<sup>27</sup> Despite the strong criticism of the RHNA, it is California’s signature housing law to ensure that enough housing gets built to meet the growing demand for housing across the state. Therefore, I decided to research Irvine’s progress towards meeting their housing targets by income category during the current 2013-2021 RHNA cycle and since housing is a regional issue, compared it to the progress made in neighboring jurisdictions and Orange County at large. Data was collected from the California Housing and Community Development Department’s (HCD) 5th Annual Progress Report Permit Summary, which measures housing construction permits by

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<sup>27</sup> Southern California Association of Governments. RHNA. Retrieved on May 24, 2018 from <http://rtpscs.scag.ca.gov/Pages/Regional-Housing-Needs-Assessment.aspx>

income (see Figure 11.1 and Figure 11.2 below), and the Statewide Determination Summary, which lists jurisdictions that are not on pace to meet their allocated housing goals and subject to streamlined development, as written in SB 35 (see Figure 11.3 and Figure 11.4 below). Both of these reports were released last February.

**Irvine was given a much larger RHNA allocation than its neighboring cities and has already exceeded their moderate and above moderate income housing goals.**

SCAG in 2013 assigned Irvine 12,149 total housing units that they had to plan for during the current 2013- 2021 RHNA cycle. According to the data, Irvine has already exceeded that total amount by 5,838 units. Irvine has accomplished this by building a significantly greater than allocated number of moderate and above moderate income (market rate) housing units. However, **the city is not on track to meet its allocated extremely/ very low and low income (affordable housing) goals** as they are nearly 4,000 units short on that. No other city in Orange County is on track to meet their affordable housing goals either, but most of them are on track to meet their market rate goals (except for a few such as Orange and Huntington Beach) and thus only subject to SB 35 streamlining for affordable units.

*Assigned RHNA Allocation and Progress by Income Category in Irvine (2013-2021 RHNA Cycle)*

Income Category	Assigned RHNA	Progress	Remaining
Extremely Low/Very Low (0% - 50% AMI)	2,817	883	1,934
Low (51% - 80% AMI)	2,034	3	2,031
Moderate (81% - 120% AMI)	2,239	10,815	-8,576

Above Moderate (over 120% AMI)	5,059	6,286	-1,227
<b>Total Units</b>	<b>12,149</b>	<b>17,987</b>	<b>-5,838</b>

Figure 11.1

Source: California Department of Housing and Community Development

*Total RHNA Allocation and Progress in Irvine and Neighboring Jurisdictions (2013-2021 RHNA Cycle)*

Jurisdiction	Assigned RHNA (Total Units)	% of County RHNA	Progress	Total Remaining
Anaheim	5,702	15%	3,892	1,810
Garden Grove	747	2%	173	574
Huntington Beach	1,353	3.6%	N/A	N/A
<b>Irvine</b>	<b>12,149</b>	<b>32%</b>	<b>17,987</b>	<b>-5,838</b>
Lake Forest	2,727	7.2%	1,839	888
Santa Ana	204	0.5%	719	-515
Tustin	1,227	3.2%	916	311
<i>Orange County</i>	<i>37,966</i>	<i>100.%</i>	<i>32,544</i>	<i>5,422</i>

Figure 11.2

Source: California Department of Housing and Community Development

*Jurisdictions Eligible for SB 35 Streamlining by Income Category*

Jurisdictions	≥10% Affordability	≥50% Affordability
Anaheim		Eligible
Garden Grove		Eligible
Huntington Beach	Eligible	Eligible
<b>Irvine</b>		<b>Eligible</b>
Lake Forest		Eligible
Santa Ana		Eligible
<i>Tustin</i>		Eligible
<i>Orange County</i>		<i>Eligible</i>

Figure 11.3 Source: California Department of Housing and Community Development

*Map of Jurisdictions Eligible for SB 35 Streamlining by Income Category*

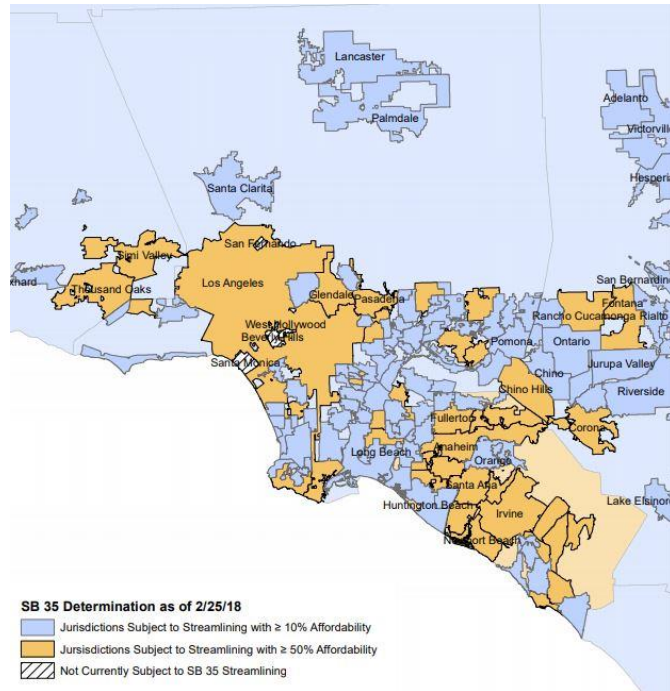


Figure 11.4 Source: California Department of Housing and Community Development (HCD)

## Race and Ethnicity

After researching the scale of the affordable housing crisis in Irvine, I was eager to find some positive trends that might have resulted from the city’s efforts to welcome more housing growth. The City of Irvine likes to tout its welcomeness of diversity and therefore I decided to look at how Irvine’s population has changed in terms of race and ethnicity between 2000 and 2016. In order to do that, I acquired the needed data from the 2000 Decennial US Census and the American Community Survey 2016 1 year estimates, which can be seen in Figure 12.1 below. Additionally, to put Irvine’s changes in race and ethnicities into context with County and Statewide trends, I used the same data sources to look at Orange County and California at large, which can be seen in Figures 12.2 and 12.3 respectfully below.

**In the 2000 to 2016 studied time period, Irvine became significantly more diverse and became a majority-minority city with a plurality of Asian residents.**

According to the data, Non-Hispanic Whites lost a large share of the population going from a 57% majority in 2000 to just 39.8% of city residents in 2016. Conversely, the percentage of the population that is Asian skyrocketed from just 29.8% of the population in 2000 to 43.1% of the population in 2016. Hispanics and Latinos also experienced gains during this same time period going from 7.4% to 11.4% of Irvine’s population. In contrast, Black and African Americans saw a slight decrease in their share of the population going from 1.4% in 2000 to 1% of Irvine’s population in 2016.

To put Irvine’s racial and ethnic changes into context, Orange County and California’s population become significantly less white during the 2000 to 2016 time period as well. The Non-Hispanic White population represented a 51.9% majority of Orange County’s population in 2000 and declined to 40.8% of the population by 2016, which roughly matched Irvine. A similar trend happened in California as the Non-Hispanic White population went from 47.7% of California’s population in 2000 to 37.5% in 2016. These changes were driven by different factors though as Irvine’s growing Asian population was responsible for their increase in diversity, while Orange County’s and California’s increasing diversity was driven by a roughly equal amount of growing Asian and Hispanic/ Latino populations.

*Race and Ethnicity in Irvine - 2000 and 2016*

Race/Ethnicity	2000	2016
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Non-Hispanic White	57%	39.8%
Non-Hispanic Black or African American	1.4%	1%
Non-Hispanic Asian	29.8%	43.1%
Hispanic/ Latino	7.4%	11.4%

Figure 12.1 Source: 2000 Decennial Census and the American Community Survey 2016 1 Year Estimates

*Race and Ethnicity in Orange County- 2000 and 2016*

Race/Ethnicity	2000	2016
Non-Hispanic White	51.9%	40.8%
Non-Hispanic Black or African American	1.6%	1.6%
Non-Hispanic Asian	13.3%	19.8%
Hispanic/ Latino	29.5%	34.1%

Figure 12.2 Source: 2000 Decennial Census and the American Community Survey 2016 1 year Estimates

*Race and Ethnicity in California- 2000 and 2016*

Race/Ethnicity	2000	2016
Non-Hispanic White	46.7%	37.5%
Non-Hispanic Black or African American	6.4%	5.5%
Non-Hispanic Asian	10.8%	14.1%
Hispanic/ Latino	32.4%	38.9%

Figure 12.3 Source: 2000 Decennial Census and the American Community Survey 2016 1 year Estimates

**Age**

The next indicator that I looked at in an attempt to find some positive indicators in Irvine was age. Generally speaking, a stable young population is preferred to ensure a steady of balance of workers and retirees and since Irvine has a lot of pride in its public school system, a healthy enrollment of students. Therefore, I researched changes in median ages and the age breakdowns in Irvine during the 2000 and 2016 time period and compared them to the data for Orange County and California to Irvine's numbers into context. The data was readily available from the 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates and can be seen in Figures 13.1 and 13.2 below.

**Median ages in Irvine have increased, but by a much smaller amount than they did in other neighboring cities, Orange County and California at large.**

According to the data, Irvine's median age increased from 33.1 to 34.6 during the 2000 to 2016 studied time period. This one and a half year increase in age, when put into context, is quite small compared to the other studied jurisdictions. In particular, Huntington Beach increased its age by nearly eight years during this time. Countywide, the median age increased by nearly four and a half years, more than double that of Irvine. Even California at large saw an increase of just over three years. In terms of the age breakdown, **all of the studied jurisdictions, including Irvine, increased its share of the senior population (65+) and lost some of its share of the youth population (0-17).** Irvine though fared better than most losing the least amount of its youth among all of the jurisdictions that I studied and only Garden Grove had a smaller increase in its share of seniors.

*Age Breakdowns in Irvine and Neighboring Jurisdictions in 2000*



Jurisdiction	Median Age	0-17	18-64	65+
Anaheim	30.3	30.8%	61.0%	8.2%
Garden Grove	32.3	28.5%	62.0%	9.5%
<b>Irvine</b>	<b>33.1</b>	<b>23.5%</b>	<b>69.3%</b>	<b>7.2%</b>
Lake Forest	35.1	27.0%	64.4%	8.6%
Santa Ana	26.5	34.2%	60.3%	5.5%
Tustin	31.8	26.8%	66.1%	7.1%
<i>Orange County</i>	<i>33.3</i>	<i>27.0%</i>	<i>63.1%</i>	<i>9.9%</i>
<i>California</i>	<i>33.3</i>	<i>27.3%</i>	<i>62.1%</i>	<i>10.6%</i>

Figure 13.1 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

*Age Breakdowns in Irvine and Neighboring Jurisdictions in 2016*

Jurisdiction	Median Age	0-17	18-64	65+
Anaheim	34.1	25.3%	63.1%	11.6%
Garden Grove	36.3	23.0%	65.1%	11.9%
<b>Irvine</b>	<b>34.6</b>	<b>22.7%</b>	<b>67.4%</b>	<b>9.9%</b>
Lake Forest	38.9	20.6%	66.0%	13.4%
Santa Ana	31.5	27.0%	64.6%	8.4%
Tustin	34.1	23.4%	66.4%	10.2%
<i>Orange County</i>	<i>27.7</i>	<i>22.5%</i>	<i>63.5%</i>	<i>14.0%</i>
<i>California</i>	<i>36.4</i>	<i>23.8%</i>	<i>63.2%</i>	<i>13.6%</i>

Figure 13.2 Source: 2000 Decennial US Census and the American Community Survey 2016 1 Year Estimates

### Summary of Findings

1. Population Growth: Irvine’s 81.3% population growth during the 2000 to 2016 time period represented nearly a third of the growth in Orange County
2. Housing Growth: Irvine’s 79% housing growth rate roughly match the city’s population growth of during the 2000 to 2016 time period and represented over a third of the new housing stock in Orange County
3. Housing Units by Type: Bucking County and Statewide trends, Irvine added more multi-family units than single-family homes during the 2000 to 2016 time period as percent of the housing stock that was multi-family increased from 34.8% to 43.1%

4. Gross Rents: Irvine's median gross rent increased by 25.6% (inflation-adjusted), which was less than the rent increases experienced by Orange County and California renters as a whole during the 2000 to 2016 time period
5. Home Values: Irvine home values increased by 81.3% (inflation-adjusted) during the 2000 to 2016 time period, which was similar to Orange County's 84.3% (inflation-adjusted) increase, but not California's 60.9% (inflation-adjusted) increase
6. Homeownership Rates: Irvine homeownership rates declined from 60% in 2000 to 48.7% in 2016, which was greater than the decline experienced by Orange County and California at large
7. Mortgage Burdens: The share of households that were mortgage burdened in Irvine increased more than in the studied neighboring cities, Orange County, and California at large during the 2000 to 2016 time period
8. Rent Burdens: With the exception of Irvine renters making less than \$35,000, the percent of rent burdened households increased across all income categories in Irvine, Orange County, and California during the 2000 to 2016 time period
9. Household Incomes: Irvine household incomes increased at lower levels than inflation (\$72,057 to \$69,464.81) and lower than several of its neighboring cities, Orange County, and California at large during the 2000 to 2016 time period. Additionally, change in rents was far greater than increases in household incomes in Irvine and all of the other studied jurisdictions meaning that increased rent burdens were driven mostly by rising rents

10. Vacancy Rates: Overall vacancy rates increased in Irvine during the 2000 to 2016 studied time period and ended higher than the studied neighboring cities and Orange County, but not California
11. Regional Housing Needs Assessment (RHNA) Progress: Irvine was given a much larger RHNA allocation than its neighboring cities and has already exceeded their moderate and above moderate income (market-rate) housing goals similar to most other Orange County cities. However, the city is not on track to meet its allocated extremely/ very low and low income (affordable housing) goals, which is similar to all other Orange County cities
12. Race and Ethnicity: Following County and Statewide trends, Irvine became more diverse between 2000 and 2016 and is now a majority-minority city with a plurality of Asian residents
13. Age: Irvine residents grew older during the 2000 to 2016 time period (33.1 to 34.6 median age), but aged less than Orange County and California as a whole amongst all age groups

### **Conclusions and Recommendations**

My research indicates that Irvine experienced significant changes to its household and housing characteristics during the 2000 to 2016 studied time period. The Irvine Master Plan, which has guided the city's development since its incorporation in 1971, has helped encourage the city to not only build enough housing to meet its population growth, but to increasingly build a healthy balance of single and multi-family housing. This has enabled Irvine to age less rapidly than the rest of Orange County and has also

made it possible for increased racial and ethnic diversity as its healthy business environment attracts workers from across Southern California and the world.

Like the rest of Orange County and coastal California though, Irvine today faces an affordable housing crisis as household incomes have failed to keep up with the rising costs of housing. This has caused an increase in the share of Irvine households that are mortgage and rent burdened and following County and Statewide trends, has contributed to falling rates of homeownership. While Irvine has been more welcoming to growth than other Orange County cities and is on track to meet their RHNA market-rate housing goals, they are not on track to meet their below market rate housing goals, like the rest of the cities in Orange County. Since housing is a regional issue, that might explain why despite Irvine's robust housing production (and increase in vacancy rates), rents and home values skyrocketed during the 2000 to 2016 time period.

In order to deal with the affordable housing crisis in Irvine, I am recommending that the following actions take place to lower the costs of housing while preserving the high quality of life that Irvine residents enjoy:

1. Work With Other Cities in Orange County to Encourage Them to Voluntarily Welcome More Growth

Given Irvine's status as a major regional jobs center with the available land to build housing, it makes sense that Irvine should accommodate growth to meet the growing demand to house workers near their jobs. During the 2000 to 2016 time period, the data indicates that Irvine roughly built enough housing to keep up with population growth, but home values and rents failed to stabilize despite the high levels of housing construction.

Housing is a regional issue though and since other cities in Orange County cities have been a lot less welcoming to growth than Irvine, the Irvine City Council should work with neighboring city councils to encourage them to build more housing options at all income levels. This can be done through City Council resolutions, the Orange County Council of Governments (OCCOG), and through informal meetings (that do not violate the Brown Act). If successful, Irvine will not just be the only city that is forced to bear the brunt of new housing development, but the added supply of housing will get the Orange County housing supply closer to what the actual demand is to live in Orange County, hopefully stabilizing housing costs.

2. If Irvine’s Neighbors Do Not Voluntarily Start Welcoming More Growth, the Regional Housing Needs Assessment (RHNA) Must be Strengthened by the Passing of SB 828

If other cities in Orange County do not voluntarily agree to welcome more growth, changes in state laws to force them to will become necessary to address the high costs of housing and a good place to start is by strengthening the Regional Housing Needs Assessment (RHNA). According to the latest progress report on cities’ status on meeting their RHNA allocation during the current 2013-2021 cycle, most cities in Orange County are on track to build enough housing to meet at least their market rate goals. While that is something to celebrate, the RHNA does not make cities makeup for goals that they didn’t meet in prior cycles and doesn’t account for local housing costs and jobs when making allocations. SB 828, a current piece of legislation making its way through the California Legislature, among other things, would force cities to zone enough land for to make up for goals missed in the previous eight- year cycle, double the land currently being

allocated to house very low and low income residents, increasing cities' allocation if state audits find shortages in communities, and increasing allocations in communities where housing costs are growing faster than wages.<sup>28</sup> The Irvine City Council should welcome the passage of this bill as Irvine has been one of the better actors when it comes to accommodating for growth and will get neighboring jurisdictions to be better actors.

3. Continue to Balance the Construction of Single and Multi-Family Housing Units in Irvine

Since Irvine built a balanced supply of single and multi-family units during the 2000 to 2016 time period, it has likely helped to increase the city's racial and ethnic diversity and to keep Irvine from aging as rapidly as the rest of Orange County and California. Multi-family units are typically where younger people live and the data shows that the cities that are building mostly single-family homes (or nothing at all) are aging the fastest. Therefore, Irvine should continue to permit a balanced supply of housing and upzone wherever feasible to allow for continued growth when there is no more vacant land (projected circa. 2025).

4. Facilitate the Building of More Affordable Housing by Continuing to Support the Irvine Community Land Trust (ICLT)

Despite vacancy rates in Irvine being higher than Orange County's vacancy rates, mortgage and rent burdens have gone up as wages have failed to increase as fast as the costs of housing. Additionally, Irvine is not currently on pace to meet their prescribed low income RHNA goals. Therefore, Irvine should build more affordable

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<sup>28</sup> Dillon, L. April 12, 2018. A little-known bill could reshape housing development across California. Retrieved on May 16, 2018 from <http://www.latimes.com/politics/la-pol-ca-under-the-radar-housing-bill-20180412-story.html>

housing to keep lower and middle class Irvine residents in Irvine. Irvine has an inclusionary housing ordinance already on the books, which was passed in 2003, and developers have to either make 10% of the units affordable or pay an in-lieu fee, which funds the Irvine Community Land Trust (ICLT), which started up in 2006.<sup>29</sup> The Irvine City Council should continue to support the ICLT both financially and policy wise to ensure that they are able to meet their goal of 5,000 units by 2025 and hopefully even surpass it.

#### 5. Work Towards Having a Countywide Affordable Housing Trust Fund

According to the latest RHNA update, all cities in Orange County, including Irvine, are not on pace to meet their prescribed low-income housing goals. Therefore, Orange County cities should establish a countywide affordable housing trust fund to bring public and private sector monies together to build more affordable housing.

### **Future Research**

While my research fully delved into many frequently used indicators of households and housing to understand how the character of Irvine changed between 2000 and 2016, more research is warranted. In addition to looking at more indicators over greater periods of time, other factors such as the Subprime Mortgage Crisis, foreign property investment, and state policies such as Prop 13 might very well have had a major effect on the Irvine housing market. These other factors, while not invalidating my research, will only help local and state policymakers better respond to the current

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<sup>29</sup> Civic Stone. March 14, 2006. City of Irvine Housing Strategy and Implementation Plan. Retrieved on May 28, 2018 from <https://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=8842>



affordable housing crisis that is gripping Irvine and other coastal communities across California.

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