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DATE: April 12, 2013
TO: Lisa Corrado and Andrew Roether, Southern Nevada Strong
CC: Scott Fregonese and Sarah Logiudice
FROM: Beth Goodman
SUBJECT: CLARK COUNTY HOUSING MARKET ANALYSIS, 2012-2035

1. Summary

Southern Nevada Strong contracted with ECONorthwest to assess housing demand and preferences in the Southern Nevada region. The purpose of the analysis was to estimate future housing demand by unit type and consider changes in demographics and employment growth that could have implications for future demand. It is intended to inform a larger sustainability planning process.

Recent housing market

Since 2000, population and housing growth in Clark County have outpaced the U.S. Low housing prices, driven by relatively low construction costs and available land, drew people to the 284,000 new homes (75% of which were single-family detached) built since 2000. During the nationwide housing boom, construction activity and prices increased rapidly in Clark County. When the national housing market fell, Clark County's housing market fell more severely than the rest of the nation. By 2013, median sales prices had decreased to $150,000, below the 2003 median sales price. The rapid price decrease put many households who purchased homes between 2003 and 2007 in a position where they owed more on their mortgage than their home is worth, which contributed to a spike in foreclosure activity. At this time, while new construction and sales of homes are still occurring, the housing market in Southern Nevada remains in a state of relative distortion. Foreclosure and investment activity pricing have caused a disconnect from direct consumer demand for different housing types, and uncertainty regarding timing for market stabilization and growth affects development and consumer decision-making.[1]

Future trends

While distortion in the current market complicates efforts to project housing supply and demand, the fundamental factors that most strongly correlate with housing choice remain unchanged: age of the head of household, size of the household, and income. ECONorthwest's analysis found that the following trends related to these factors might affect future housing demand in Clark County by 2035 and cause shifts in baseline trends:

- **The foreclosure crisis** will continue to affect demand over the next two to five years. The most significant impact that foreclosures will have is to decrease the percentage and

[1] Anecdotal evidence (collected via a roundtable with housing developers held in March of 2013) and the data in the remainder of this report support this summary of recent market condition.

number of homeowners. As credit restrictions decrease and individual credit scores recover, previous homeowners who are now renting will look to re-enter the housing market, changing the demand dynamic as recovery occurs.

- **Growth in retirees.** People over 65 will make up 20% of the population in 2035 (up from 12% in 2012). The aging of the population will decrease demand for single-family detached units and increase demand for housing types specific to seniors, such as assisted living facilities.
- **Growth in Echo Boomers.** Echo boomers, who were between of the age of 15 and 28 in 2012, are one of the fastest growing groups nationally and in Clark County. In the earlier part of the planning period, they will prefer rental housing. In the later years, some may choose to purchase homes, including small single-family detached housing, townhouses, or condominiums.
- **Growth in the Hispanic population.** A third of the County's population will be Hispanic by 2035, which will increase demand for more affordable housing for families, such as townhouses, affordable single-family detached units, or larger apartments.
- **A projected increase in real personal income** may support demand for homeownership, especially of single-family detached units. However, the employment forecast shows growth in higher-wage sectors (e.g., Health Care or Construction) but also growth in lower-wage sectors (e.g., Retail Trade or Arts and Entertainment). This suggests that the County will continue to have demand for both higher-cost housing and lower-cost housing.
- **Housing preferences and transportation costs** will affect the location of housing demand. Two of the groups forecast to grow the most, retirees and Echo Boomers, may generally prefer to live in areas where urban services (e.g., shopping) are easily accessible. In addition, gasoline prices are forecast to remain at existing levels or to increase through 2035.

Forecasting housing demand

To evaluate how future demographics could change demand for housing, ECONorthwest developed two forecasts of housing demand based on: (1) a continuation of historical trends, and (2) a change in housing demand based on expected changes in demographics. The forecasts illustrate a range of reasonable possible futures since each describes a likely outcome of housing supply and demand.

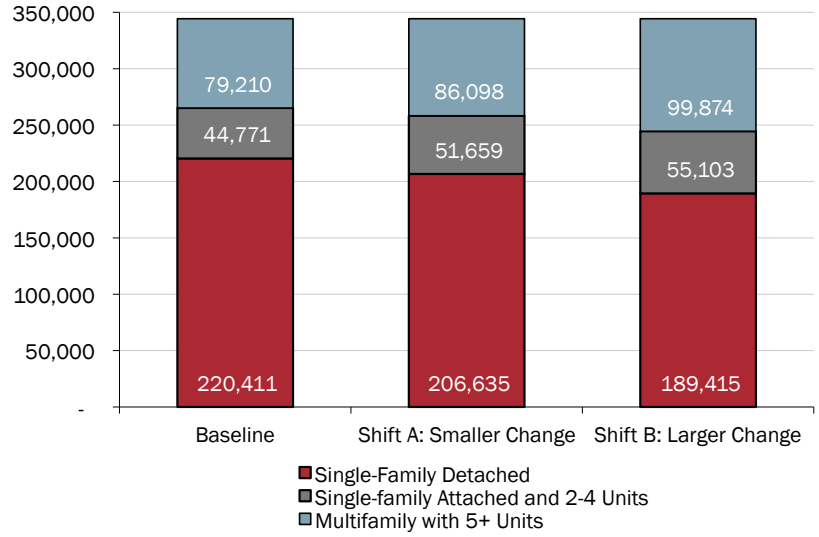
Based on a set of assumptions detailed in Section 6, Clark County is forecast to have 344,392 new housing units over the 2012 to 2035 period. These units will be built more slowly, with about nearly 15,000 units permitted per year, compared with the average of nearly 26,000 new dwellings permitted annually between 2000 and 2011. Table 1 shows a breakdown of the assumptions for the three potential forecasts.

Table 1. Assumptions by forecast

		Baseline – "Current Trends Continue"		Shift A – "Smaller Change"		Shift B – "Larger Change"	
		% of Total Housing Units	% Owner-occupied	% of Total Housing Units	% Owner-occupied	% of Total Housing Units	% Owner-occupied
% of total housing units	SF detached	64%	75%	60%	75%	55%	75%
	SF att. & 2-4 units	13%	32%	15%	32%	16%	35%
	MF with 5+ units	23%	8%	25%	8%	29%	12%
Total Homeownership		54%		52%		50%	
Base Assumptions		Population will increase by 866,000 people and 344,392 households from 2012 to 2035. The average household size will remain at 2.71 persons per household. Vacancy rates for all housing types will decrease to 9.0%, consistent with more typical vacancy rates in Clark County.					

Source: ECONorthwest, 2013.

Figure 1. Housing distribution by forecast type



Shift A is more likely if:

The foreclosure crisis resolves sooner.

Housing prices decrease less.

Personal incomes continue to grow.

People who grow older in or move to Clark County generally prefer and can afford to own and live in single-family detached housing.

Shift B is more likely if:

The foreclosure crisis takes longer to resolve.

Personal income stagnates or decreases in real dollars.

Housing preferences change so that renting attached housing is preferable.

Owning a single-family house is not financially attainable.

Source: ECONorthwest, 2013.

Relevance for short term development patterns

- Single-family homes will continue to dominate new construction activity, until demand decreases for these units.
- Given that many baby boomers are starting to retire, there may be latent demand for alternative housing types for seniors already living in the Southern Nevada region.

Relevance for long term development patterns

- Increasing population diversity could spur demand for less common housing types, including some that have limited availability in Southern Nevada currently. These include both owner-occupied and renter-occupied attached single-family homes.
- Specialized housing that caters to specific populations may be more in-demand. This could include assisted care, active living communities, homes for extended families, etc.
- Increasing transportation costs and available land within urbanized areas could increase the demand for infill development that is close to existing services. Successful development will require the region to overcome existing barriers to infill development.

Relevance for economic development

- The population and employment projections that underlie this analysis project that employment will grow faster than the population over the planning period. This could indicate changes in spending power, housing demand, and land needs for employment uses within the community. It also suggests that the region should focus on economic development activities aimed at increasing employment opportunities.
- The Health Care and Social Assistance sector is forecast to experience the largest growth rate (a 112% increase). There may be opportunities for housing close to medical facilities.
- Southern Nevada lost a significant number of construction jobs after construction activity slowed during the housing crisis. The construction sector is expected to double the number of jobs through 2035.
- A clearer understanding of where and how industries might grow could improve planning activities in the region by: (1) allowing the region to plan for an appropriate supply of industrial lands; (2) allowing the planning and development community to consider the housing preferences of future workers.

2. Introduction

The Southern Nevada Regional Planning Consortium (SPRPC) contracted with Fregonese Associates and ECONorthwest to assist with the creation of development scenarios as part of Southern Nevada Strong, a regional strategy for sustainable development. The goal of the project is to build a foundation for long-term economic success and community livelihood by better integrating reliable transportation, safe and affordable housing, and job opportunities throughout Southern Nevada.

To inform this work, ECONorthwest conducted technical analysis of housing demand and preferences in the Southern Nevada region. The purpose of the analysis was to estimate future housing demand and consider changes in employment growth that could have implications for future housing demand. The analysis was designed to:

- Understand how population growth and changes in population growth may affect housing demand in Clark County through in-migration of population from outside the region, changes in the region's ethnic composition, and changes in the region's age distribution.
- Examine the relationships between age, income, and ethnicity to understand how the expected demographic changes may affect the types of housing developed in the future.

The basis for this analysis is the University of Nevada's long-term forecast for overall population growth, which describes expected changes in the age distribution and ethnicity of the population in the future. The forecast also describes changes in employment growth that may have implications for future housing demand.

This memorandum examines the housing market conditions in Clark County, considering changes in the housing market since 2000 with a focus on the factors that are most closely linked to housing choice: income, age, and household composition. It presents two forecasts of future housing demand in Clark County: (1) demand based on current conditions and housing choice and (2) potential changes in demand based on expected demographic and economic changes in Clark County. The primary purpose of these forecasts is to provide information to Fregonese Associates in support of developing scenarios for future development in Clark County.

Organization of this memorandum

This memorandum is organized into the following sections:

- **Factors affecting housing choice** describes the primary demographic and economic factors that affect housing choice: income, age, and household composition.
- **Housing market conditions in Clark County** presents a brief summary of Clark County's housing market relative to Nevada and discusses changes in the housing market since 2000. This section summarizes potential effects of demographic and economic factors on future housing choice.

- **Housing forecast** presents two forecasts of housing demand in Clark County. One forecast assumes that housing conditions change relatively little from existing and historical conditions, besides continued recovery from the housing market crash. An alternative forecast assumes that housing demand will shift as a result of changing demographics, especially the aging of the population and growth in Hispanic population.
- **Appendices:**
  - **Appendix A** presents a summary of data as well as data tables and charts that describe the housing market in Clark County and selected cities within the County.
  - **Appendix B** presents a framework necessary to understand the factors that affect housing choice. This framework is the basis for the approach ECONorthwest used to forecast potential changes in housing growth in Clark County through 2035.

3. Factors affecting housing choice

This section presents a brief summary of the factors that affect housing choice. See Appendix B for a longer discussion of these factors.

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

One way to forecast housing demand is with detailed analysis of demographic and socioeconomic variables. With a fine-grained analysis and sufficiently complex data set, the analysis might find that each household has a unique and measurable set of preferences for housing. But no region-wide housing analysis can build from the preferences of every individual household.[2] Instead, most housing market analyses describe *categories* of households and assume that households have similar preferences.

Many demographic and socioeconomic variables affect housing choice. These include: age of householder, household composition (e.g., married couple with children or single-person household), size of household, ethnicity, race, household income, and accumulated wealth (e.g., real estate or stocks). However, the literature about housing markets finds that age of the householder, size of the household, and income are most strongly correlated with housing choice.[3]

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[2] In addition to not being able to measure the preferences of all existing households (now and in the future); one could not know what specific households would be migrating to the region.

[3] The research in this memorandum is based on numerous articles and sources of information about housing, including:

M. Dieleman. *Households and Housing*. New Brunswick, NJ: Center for Urban Policy Research. 1996.

- **Age of householder** is the age of the person identified (in the Census) as the head of household. Households make different housing choices at different stages of life. For example, a person may choose to live in an apartment when they are just out of high school or college, but if they have children, they may choose to live in a single-family detached house.
- **Size of household** is the number of people living in the household. Younger and older people are more likely to live in single-person households. People in their middle years are more likely to live in multiple person households (often with children).
- **Income** is the household income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and to household tenure (e.g., rent or own). A review of census data that analyzes housing types by income in most cities shows that as income increases, households are more likely to choose single-family detached housing types. Consistent with the relationship between income and housing type, higher income households are also more likely to own than rent.

The State of the Nation's Housing 2010. The Joint Center for Housing Studies of Harvard University. 2010.

The Case for Multi-family Housing. Urban Land Institute. 2003

E. Zietz. *Multi-family Housing: A Review of Theory and Evidence.* Journal of Real Estate Research, Volume 25, Number 2. 2003.

E. Birch. *Who Lives Downtown.* Brookings Institution. 2005.

C. Rombouts. *Changing Demographics of Homebuyers and Renters.* Multi-family Trends. Winter 2004.

J. McIlwain. *Housing in America: The New Decade.* Urban Land Institute. 2010.

M. Lerner. *The New American Renters.* Multi-family Trends. May/June 2006.

W. Hudnut III. *Impact of Boomer Retirement on Sprawl.* Urban Land, February 2005.

D. Myers and S. Ryu. *Aging Baby Boomers and the Generational Housing Bubble*. Journal of the American Planning Association. Winter 2008.

M. Riche. *The Implications of Changing U.S. Demographics for Housing Choice and Location in Cities.* The Brookings Institution Center on Urban and Metropolitan Policy. March 2001.

L. Lachman and D. Brett. *Generation Y: America's New Housing Wave.* Urban Land Institute. 2010.

AARP. *Home and Community Preferences of the 45+ Population*. 2010.

AARP. *Approaching 65: A Survey of Baby Boomers Turning 65 Years Old*. 2010.

U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin: 2000 to 2050. Bureau of the Census.

ECONorthwest's analysis of 2000 Census Public Use Microdata Sample (PUMS) data for Oregon and counties within Oregon.

U.S. Census data for 1990, 2000, and American Community Survey data.

3.1 National trends affecting housing mix

The national demographic trends that will affect housing demand across the U.S., as well as Nevada and Clark County, are:

- **Aging of the baby boomers.** By 2035, the youngest baby boomers will be over 70 years old. By 2035, people 65 years and older are projected to account for about 21% of the U.S. population, up from about 12% of the population in 2000.
- **Growth in echo boomers.** Echo boomers are a large group of people (Generation Y) born from the late-1970's to early 2000's, with the largest concentration born between 1982 and 1995. By 2035, echo boomers will all be older than 40 years old, with the oldest echo boomers over 50 years old. The echo boomers will form households and enter their prime earnings years during the 20-year planning period.
- **Increase in diversity.** The Hispanic population is the fastest growing ethnic groups in the U.S. By 2035, first and second-generation Hispanics are projected to account for about 23% of the U.S. population, an increase from about 13% of the U.S. population in 2000. Growth in the Hispanic population will be the result of natural increase (more births than deaths) and immigration from other countries. About 90% of the County's working-age population growth through 2035 will be accounted for by immigrants and their U.S.-born children.[4]

4. Trends affecting housing growth and change in housing mix in Clark County

Tables 2-4 summarize the factors affecting housing choice in Clark County through 2035.

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

Table 2. Baby boomers (Age in 2012: 46 to 65 years old; Age in 2035: 71 to 90 years old)

Demographic trends		Baby boomers are the fastest growing segment of the County's population. • People over 65 are forecast to grow from 12% of the County's population in 2012 to 20% in 2035. • Growth in people over 65 years old in Clark County will result in growth of nearly 330,000 people in this age group in the County or 40% of population growth over the 2012 to 2035 period.
Effect of trends on household choice	**Age of household head**	Clark County's older householders are more likely to be homeowners. • Homeownership peaks for householders 65 to 74. More than 74% of householders 65 to 74 are homeowners • Homeownership begins to decrease for householders over 75 years old. About 71% of householders over 75 in Clark County are homeowners. • A majority of people over 45 years old express an interest in remaining in their home or in their community as long as possible.[5]
	Household size and composition	Household size decreases with age after the household head reaches age 55 in Clark County. • About 66% of households with householders 55 to 64 years old have two or more persons. • About 61% of households with householders 65 to 74 years old have two or more persons. • About 53% of households with householders 75 years and older have two or more persons • Growth in households with householders 65 years and older will result in growth in single-person households. More than one-third of households 65 years and older were single-person households in 2000 and 2011. Nearly half of households 75 years and older were single-person in 2000 and 2011.
	Household income	Clark County's household income peaks between age 45 to 64. • Household income decreases after age 65; median income for households age 45 to 64 was $53,307 compared to $39,555 for people age 65 and older. • Households with householders over age 65 have lower than average household income, about 78% of the County's median household income. • Lower income does not necessarily result in greater problems with housing affordability or lower homeownership rates for people over age 65 because some householders over age 65 have paid off their mortgage. For households who have paid off their mortgage, lower income does not necessarily result in lower disposable income or affect their ability to continue to own their home.
	Potential effect on housing demand	The major impact of the aging of the baby boomers on demand for new housing will be through demand for housing types specific to seniors, such as assisted living facilities. Baby boomers will make a range of housing choices in Clark County: • Many will choose to remain in their homes as long as they are able. • As their health fails, some will choose to move to group housing, such as assisted living facilities or nursing homes. • Some may downsize to smaller single-family homes (detached and attached) or multi-family units. These will be a mixture of owner and renter units.6 • Some may choose to move to retirement or age-restricted communities.

[5] Multiple studies show that people over age 45 prefer to stay in their home or community as long as possible, including multiple surveys by AARP (see http://www.aarp.org/research/surveys). The AARP survey *Home and Community Preferences of the 45+ Population* shows that 85% of respondees want to stay in their current residence and community as long as possible.

[6] The AARP survey *Approaching 65: A Survey of Baby Boomers Turning 65 Years Old* of people 65 years old shows that about 15% of responding households are planning to downsize to smaller homes over the next few years.

Table 3. Echo Boomers (Age in 2012: 15 to 28 years old; Age in 2035: 40 to 51 years old)

Demographic trends		• Echo boomers are one of the fastest growing segments of Clark County's population. • By 2035, forecasts are that there will be approximately 280,000 additional people aged 25-64. • Growth in people 25 to 64 years year old will result in about 34% of total population growth over the 2012 to 2035 period.
Effect of trends on household choice	**Age of household head**	• About 84% of householders age 25 and 67% of householders age 25 to 34 were renters in Clark County. • Homeownership rates increase for householders age 35 to 44. About 33% of householders aged 25-34. The rate jumps to 45% between 35 and 44.
	Household size and composition	• Household size increases until the household head reaches 54 years old.[7] • More than three-quarters of households between with heads of household between 15 and 54 years old had two or more persons in 2000 and 2011. • In 2000, the share of one-person households increased from about 20% for households younger than 44 years old to about one-quarter of households 45 to 64 years old. This pattern appears to be true in 2011.
	Household income	• Younger households have lower income on average in Clark County. • About one-third of households under 25 (which includes college students) had income less than $25,000, while 71% had an income less than $50,000. • About 49% of households between 25 and 44 had income of less than $50,000. • Households between 25 and 44 years have higher than average income, at about 105% of Clark County's median household income.
	Potential effect on housing demand	Growth in echo boomers will result in increased demand for all housing types in Clark County. Recent research hypothesizes that echo boomers may make different housing choices than their parents as a result of the on-going recession and housing crisis. This suggests that echo boomers will prefer to rent and will prefer to live in multi-family housing, especially in large cities.[8] Other studies suggest that the majority of echo boomers prefer to own a single-family home.[9] Our conclusion based on review of recent research is that the majority of echo boomers are not likely to make fundamentally different housing choices than previous generations as they age and have families, though a relatively larger portion of them may ultimately prefer smaller homes with fewer square feet that are closer to urban centers. • Echo boomers are likely to choose to rent a multi-family unit when they are under 30 years. Though some may prefer this type of unit, it is also likely to be necessitated by lower income. • As they establish careers, receive increased incomes, and form families, a large share of echo boomers in Clark County will likely choose to live in an owner-occupied single family house. • Recent articles suggest that echo boomers who prefer single-family units may prefer (or only be able to afford) smaller single-family units. • Some echo boomers may prefer to live in housing closer to the economic center(s) of Clark County as a result of economic necessity, especially if gasoline continues to be comparatively expensive, or through lifestyle choices.

[7] Information about household size and composition by age for Echo Boomers is a combination of 2000 Census data and 2011 American Community survey. The 2010 Decennial Census and 2011 American Community Survey group people aged 15 to 54 into one group, making analysis of housing size information impossible.

[8] Examples of such research include *Housing in America: The New Decade* from the Urban Land Institute or *The Rise of the Non-Traditional Household* from Multi-family Trends.

[9] A national survey of Echo Boomers in 2010 shows that: two-thirds of Echo Boomers expect to own their home by 2015, that nearly two-thirds expect to live in a single-family home, one-quarter expects to live in an apartment or condominium. These results are from the Urban Land Institute study *Generation Y: America's New Housing Wave.*

Table 4. Change in ethnic composition[10]

Demographic trends		The Hispanic population is the fastest growing ethnic group in Clark County. It is expected to grow at twice the rate of total population growth between 2012 and 2035 • The Hispanic population grew from 22% of the population in Clark County in 2000 to 29% in 2010. • By 2035, 33% of Clark County's population is expected by be Hispanic. • Nationally, about half of Hispanic population growth is expected to be the result of immigration (people moving to the U.S.) and half from growth of second-generation immigrants (people born in the U.S. to first generation immigrants)
Effect of trends on household choice	**Age of household head**	Clark County's Hispanic population has a different age structure than the overall population. In 2012 median age for Hispanics in Clark County was 26 years, compared to 35 years for all residents of Clark County. In the U.S., the average age of first generation Hispanic immigrants was 41, compared with the average of 37 years. The average age of second generation Hispanic immigrants in the U.S. was 28.
	Household size and composition	Hispanic households are more likely to have children and have more persons per household but they are less likely to be homeowners. • 44% of Hispanic households in Clark County had children under 18 years, compared with the County average of 30% of households. • About 14% of Hispanic households had more than one occupant per room, compared with 5% of all households in Clark County. • Average household size for Hispanic households in Clark County was 3.7 persons per household, compared with the County average of 2.7 persons per household. • About 46% of Hispanic households are owners, compared with an ownership rate of 57% for all households in Clark County. • Nationally, about 43% of first generation Hispanic households own their homes and 50% of second generation Hispanic households own their homes.
	Household income	Hispanic households in Clark County have lower than average income, with household income of $39,100, which was 81% of median income ($48,200). The following national housing trends are likely to apply to immigrant households in Clark County: • First generation Hispanic households generally have lower income, in part as a result of their relatively young age and as result of generally lower educational achievement. • Second generation Hispanics generally have higher incomes and educational attainment than first generation Hispanics but lower than the U.S. average. • In 2012, the national median household income for first generation Hispanic households was $34,600, compared to $48,400 for second generation Hispanic households, compared with the U.S. average of $58,200.
	Potential effect on housing demand	Growth in Hispanic households may result in increased demand for lower cost single-family and multi-family housing in Clark County. • Housing affordability is a problem for many households in Clark County. Affordability is likely to be a more common problem for Hispanic households, especially first generation Hispanic immigrants, because immigrants have lower income on average. • First generation Hispanic immigrants are likely to choose multi-family housing, in part because that is what they can afford. • Homeownership increases the longer immigrants stay in the U.S. Longer-term first generation immigrants and second-generation immigrants may become home owners, depending on their ability to afford owning a home. • Homeownership increases for second-generation immigrant households.

[10] This table contains information from the U.S. Census 2010 and 2011 American Community Survey. Information at the national (U.S.) level about Hispanics in this section is from the Pew Research Center report *Second-Generation Americans: A Portrait of the Adult Children of Immigrants.*

5. Housing conditions in Clark County

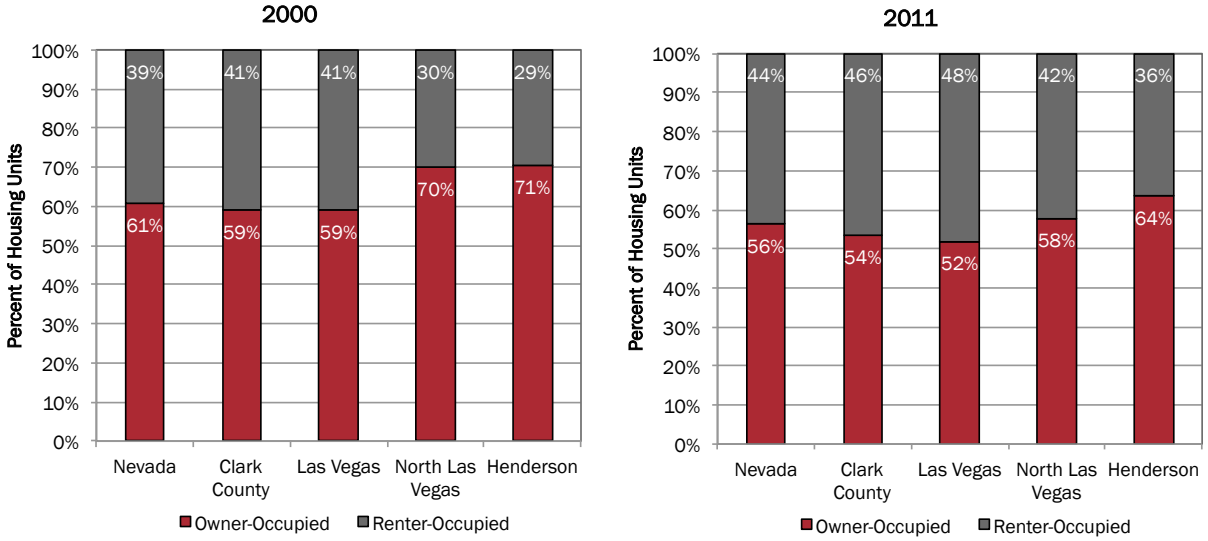
This section summarizes key information about Clark County's housing market, which will affect development in Clark County over the 2012 to 2035 period.

5.1 Housing tenure and mix

Figure 2 shows tenure in Clark County, Nevada, and the largest cities in Clark County for 2000 and 2011. Homeownership rates in Clark County declined from 59% in 2000 to 54% in 2011. This change is consistent with the statewide decline in homeownership from 61% to 56% in 2011. This change is also consistent with the national trend in declining homeownership rates.

Homeownership rates declined in Las Vegas (59% in 2000 to 52% in 2011), North Las Vegas (70% in 2000 to 58% in 2011), and Henderson (71% in 2000 to 64% in 2011).

Figure 2. Tenure, Nevada, Clark County, and selected cities, 2000 and 2011



Source: Decennial Census 2000 H004; American Community Survey 2011 B25003

Table 5 shows vacancy rates in Clark County and the largest cities in Clark County for 2010. Overall vacancy rates in 2010 were about 15% for the County, compared to 11.4% for the U.S. and 14.3% for Nevada. Clark County's recent vacancy rates are higher than historical rates, with a countywide vacancy rate of 11% in 2005 and 8.5% in 2000.

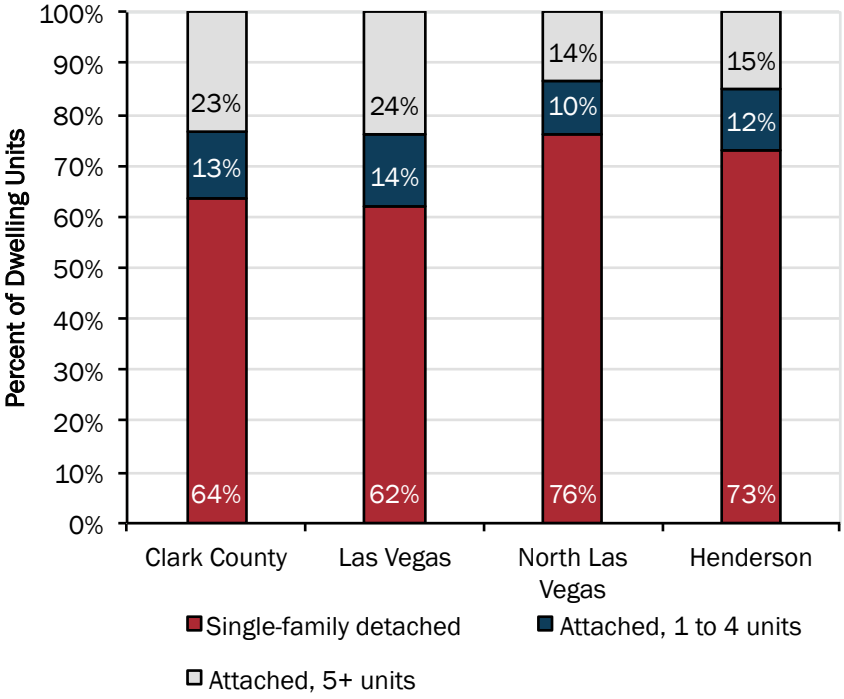
Table 5. Vacancy rates, 2010, Clark County and select cities

	Clark County	Las Vegas	North Las Vegas	Henderson
Total housing units	840,343	243,701	76,073	113,586
Total occupied	715,365	211,689	66,499	101,314
Total vacant	124,978	32,012	9,574	12,272
Vacancy rate	14.9%	13.1%	12.6%	10.8%

Source: U.S. Census 2010 SF1 H3.

Figure 3 shows the mix of housing in Clark County and the largest cities in Clark County for 2011. About two-thirds of housing in Clark County was single-family detached (including mobile and manufactured housing). North Las Vegas and Henderson had the largest percentage of single-family detached housing, at 76% and 73% of housing respectively.

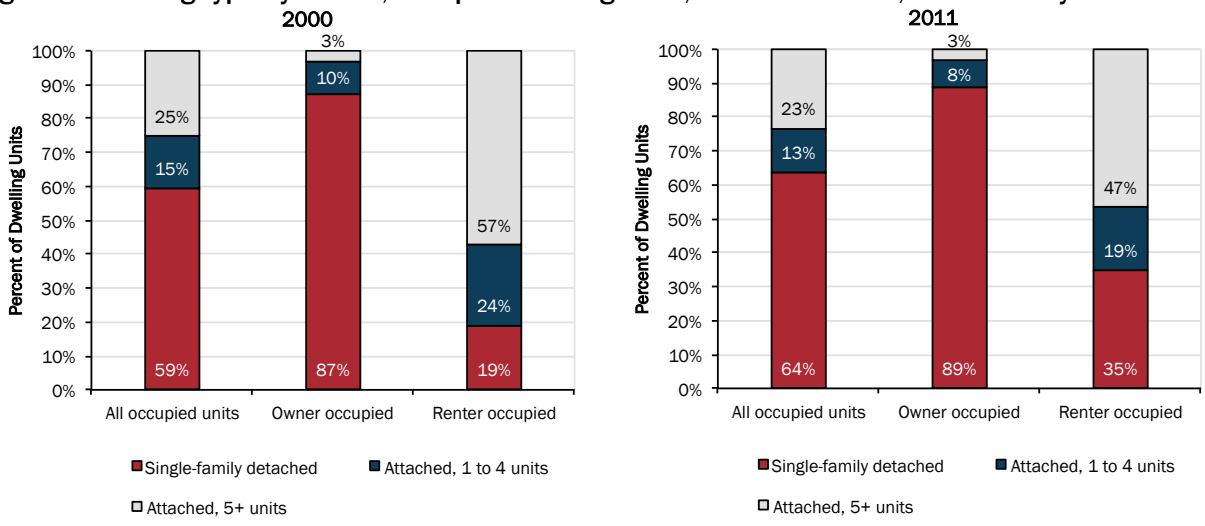
Figure 3. Housing type, occupied housing units, 2011, Clark County and select cities



Source: American Community Survey 2011 B25032.

Figure 4 shows housing mix by type of housing and tenure in Clark County in 2000 and 2011. More than 85% of owner-occupied units were single-family detached units in 2000 and 2011. The share of single-family detached rental units increased from 19% in 2000 to 35% of renter-occupied units in 2011. This increase may be a side effect of the housing market conditions.

Figure 4. Housing type by tenure, occupied housing units, 2000 and 2011, Clark County



The key conclusions about housing tenure and mix are:

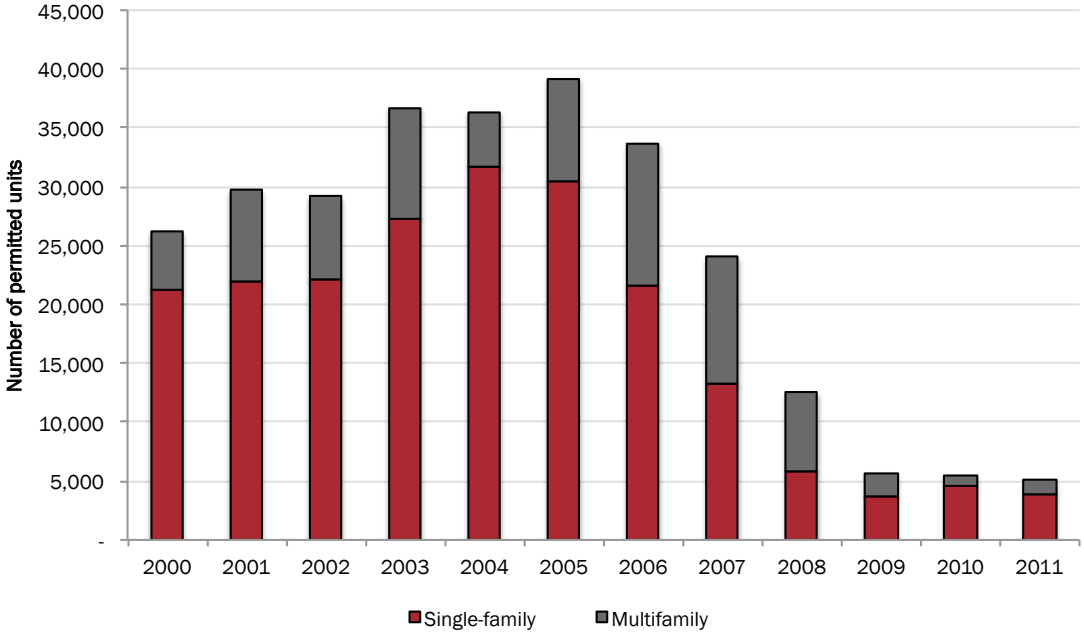
- Vacancy rates are cyclical and generally fluctuate between 4% and 8% in urban areas with a healthy housing market. Vacancy rates in multifamily housing are generally higher than in single-family housing in a healthy housing market. Clark County's vacancy rates appear to be high relative to vacancy rates during the last decade, consistent with vacancy rates in Nevada and the U.S.
- The decline in homeownership rates is consistent with problems in the regional housing market, with increased in foreclosure activity and housing prices declines.
- The majority of housing in Clark County is single-family detached housing. The majority of housing developed over the 2000 to 2011 period was also single-family detached housing.
- The decline in homeownership rates and increased share of renters living in single-family detached housing is consistent with other evidence (including anecdotal evidence from interviews) that single-family detached housing was overbuilt during the recent housing market bubble.

5.2 Development trends

Figure 5 shows residential building permits issued between 2000 and 2011 in Clark County. Over the 11-year period, more than 284,000 residential building permits were issued, averaging 25,800 permits issued annually. The number of permits issued peaked between 2003 to 2005, with more than 35,000 permits issued each of these years. Between 2009 and 2010, about 5,000 permits were issued each year, substantially below the average number of permits issued annually over the past 11 years. Nearly three-quarters of permits issued were for single-family units, with about one-quarter issued for multifamily units.

About half of the permits for all housing were issued in Las Vegas, North Las Vegas, and Henderson. More than half of the permits for multifamily housing were issued in Las Vegas.

Figure 5. Residential building permits issued, 2000 to 2011, Clark County

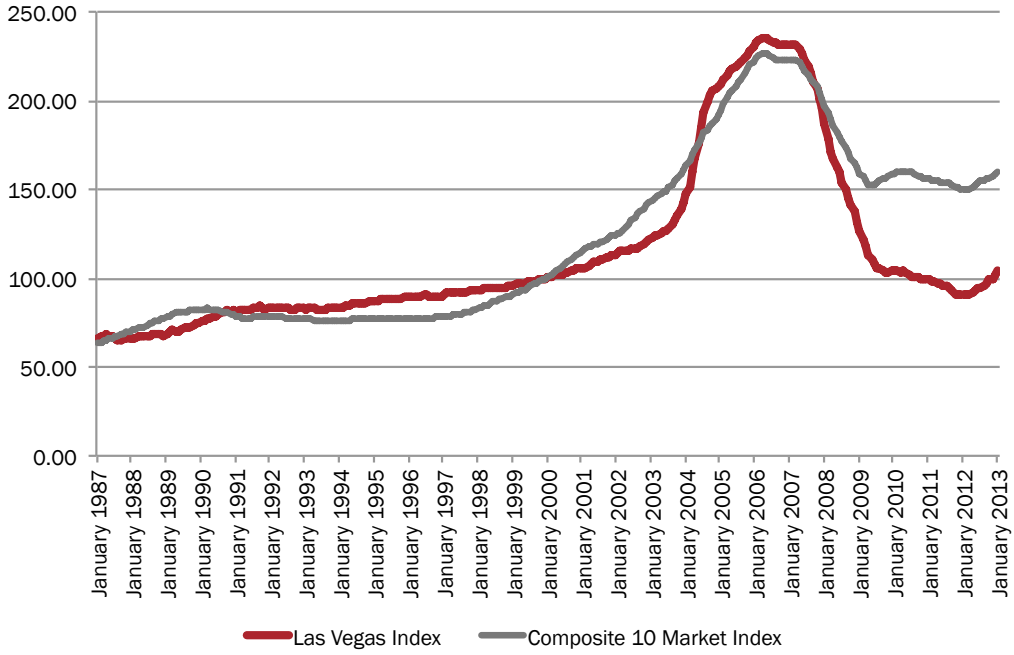


Source: U.S. Census

5.3 Housing costs and foreclosure activity

Figure 6 shows housing prices from the Case Shiller Home Price Index for the Las Vegas region. The Case-Shiller home price index shows that Clark County's housing prices increased gradually between 1987 and 2003. Between 2003 and late 2006, housing prices more than doubled. This change in price is consistent with other large urban housing markets in the U.S.

Figure 6. Case-Shiller Home Price Index, Las Vegas, 1987 to 2013



Source: Case-Shiller

Table 6 shows median sales price for single-family detached housing sold in Clark County selected months in 2003, 2007, and 2013. Between 2003 and 2007, the median sales prices nearly doubled from $187,250 to $300,000. By 2013, median sales prices decreased to $150,000, below the 2003 median sales price.

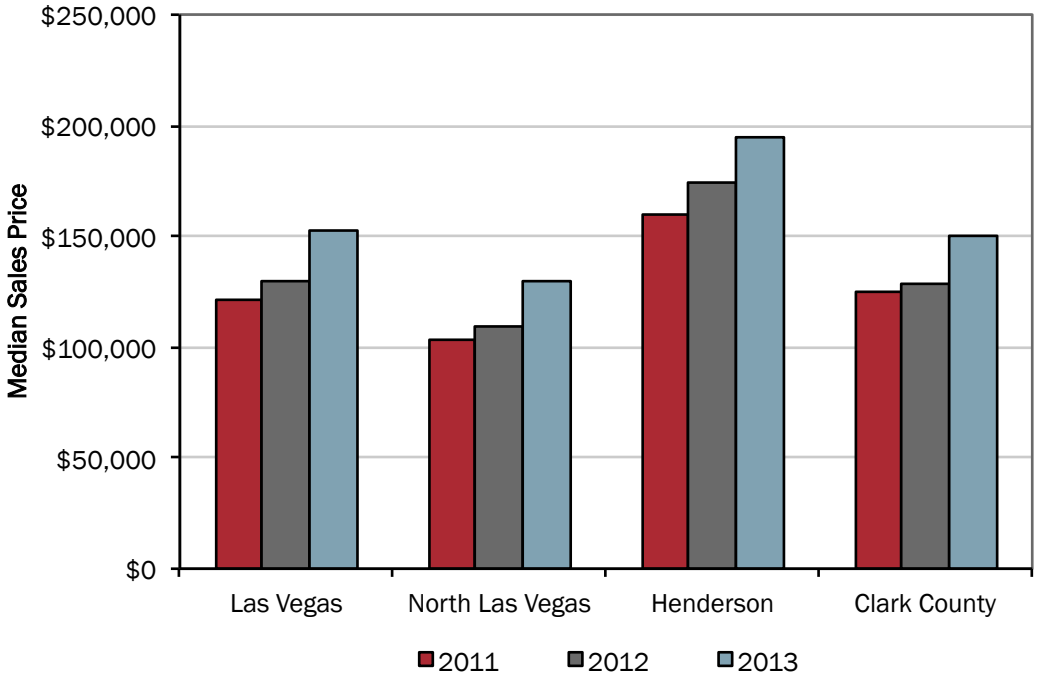
Table 6. Median sales price, single-family detached housing, Clark County, April 2003, April 2007, and February 2013

Year	Median Sales Price
2003	$187,250
2007	$300,000
2013	$150,000
Change 2001 to 2011	
Dollar	-$37,250
Percent Change	-20%
Change 2007 to 2011	
Dollar	-$150,000
Percent Change	-50%

Source: National Association of Realtors, Greater Las Vegas Association of Realtors

Figure 7 shows that median sales prices for single-family detached housing in Clark County, Las Vegas, North Las Vegas, and Henderson increased over the 2011 to 2013 period. Median sales prices were consistently highest in Henderson (at nearly $200,000 in 2013) and lowest in North Las Vegas (at about $130,000 in 2013).

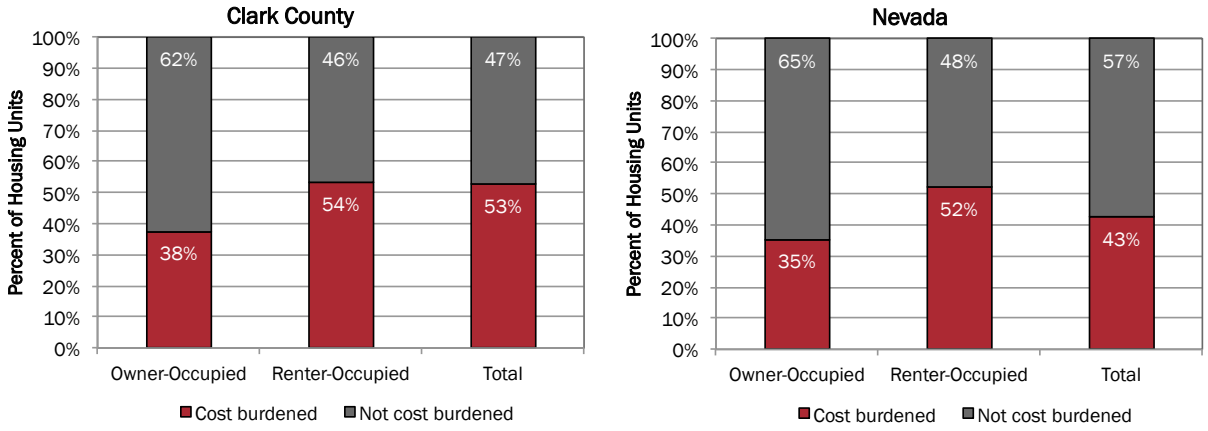
Figure 7. Median sales price, single-family detached housing, Las Vegas, North Las Vegas, and Henderson, selected months in 2011, 2012, and 2013



Source: National Association of Realtors, Greater Las Vegas Association of Realtors

Figure 8 shows cost burden for Nevada and Clark County. Cost burden is a measure of housing affordability, based the HUD standard that says that housing is affordable if it costs no more than 30% of a household's gross income. About 53% of all households in Clark County are cost-burdened (i.e., pay more than 30% of their gross income for housing costs), with 54% of renter-households and 38% of owner-households being cost-burdened. In comparison, 43% of all households in Nevada are cost burdened, with 52% of renter-households and 35% of owner-households being cost-burdened.

Figure 8. Housing Costs as a percent of monthly household income by tenure in 2011, Nevada and Clark County



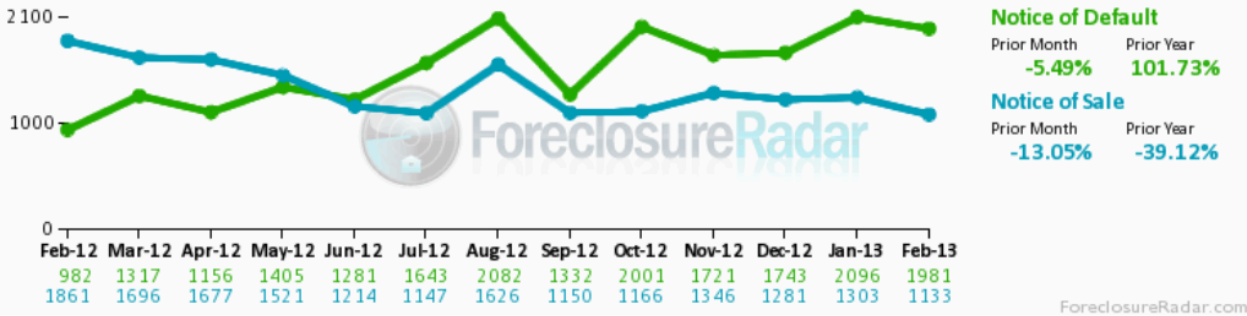
Source: American Community Survey 2011 B25091 and B25070.

Figure 9 and Figure 10 show information about foreclosure filings in Clark County. Notice of foreclosure sales were down 39% year over year from February 2012. However, notices of default were up 102% during the same period. Notices of default are the leading indicator for notice of sales, so it is likely that this number will increase in 2013.

Preforeclosures increased 11% in from January to February 2013. This is indicative of the trend of increasing notice of sales. There were 0.8 foreclosure cancellations for every sale (3rd party or back to the bank). Since February 2012 the ratio has dropped by 13% to 0.67 cancellations per sale.

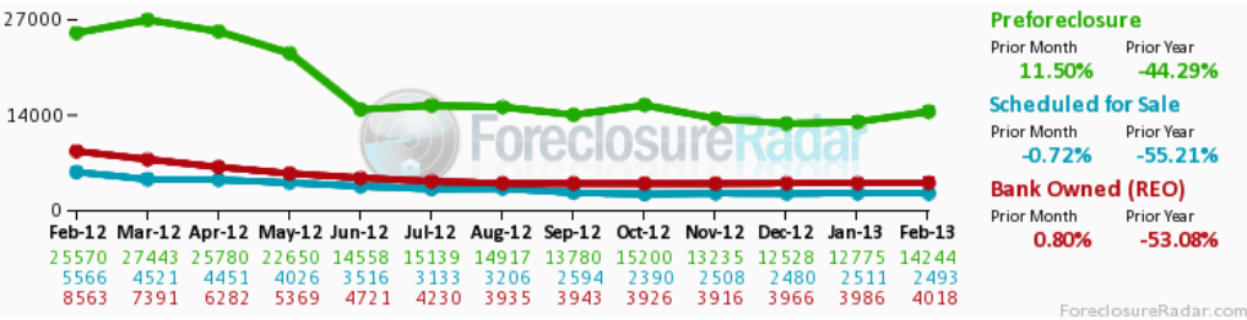
The combination of fewer cancellations and increasing preforeclosures will likely lead to an increase in the number of foreclosures in 2013. Bank owned properties (REO) decreased 50% in the past year. As the numbers of REO decrease, the market will stabilize as the supply of low priced inventory decreases.

Figure 9. Foreclosure filings in Clark County



Source: Foreclosureradar.com.

Figure 10. Foreclosure inventories in Clark County



Source: Foreclosureradar.com.

The key conclusions about housing costs and foreclosure activity are:

- Clark County's housing market had a larger-price bubble than the national housing market and it is taking longer for the Clark County housing market to recover from the dramatic increase and decrease in prices between 2003 and 2013.
- The rapid price changes put many households who purchased homes during the housing bubble (mostly between 2003 and 2007) in a position where they owe more on their mortgage than their home is worth. This contributed to the spike in foreclosure activity.
- In the short term, increased foreclosures have caused housing prices to drop and have increased the supply of houses listed for sale.
- The spike in foreclosures caused by the bursting of the housing bubble will likely not have a significant impact on the long-term demand for housing.
- The most significant impact the foreclosure crisis will have on future housing demand is through the decrease in the percentage and number of homeowners. Previous homeowners who are now renting will look to re-enter the housing market in the future as credit restrictions decrease and individual credit scores recover.
- Housing affordability, specifically for renters, is a problem despite recent decreases in rental rates. Approximately half of Clark County's renter households are cost-burdened; rents would have to drop significantly to be affordable for most renter households.

6. Housing forecast

The prior sections describe Clark County's housing market, present forecasts for change in population and employment, and discuss expected demographic changes. Tables 2-4 in Section 4 describe how the key factors affecting housing demand may affect Clark County's housing market over the next two decades. This section presents two forecasts of housing demand based on: (1) a continuation of historical trends, and (2) a change in housing demand based on expected changes in demographics.

6.1 Continuation of historical trends

The analysis of historical and current housing market condition leads to a baseline forecast of new housing units likely to be built in Clark County during the 2012 to 2035 period. Table 7 shows an estimate of that housing in Clark County based on recent data. The forecast is based on the following assumptions:

- Population will increase by 866,000 people from 2012 to 2035. This forecast of population is consistent with the University of Las Vegas' Center for Business and Economic Research forecast of population, *Population Forecasts: Long-Term Projections for Clark County, Nevada, 2012-2050.*
- The average household size will remain at 2.71 persons per household.
- Vacancy rates for all housing types will decrease to 9.0%, consistent with more typical vacancy rates in Clark County.

Based on these assumptions, Clark County will have 344,392 new dwelling units over the 2012 to 2035 period.[11] This forecast shows that the County will have fewer dwellings permitted per year, nearly 15,000, compared with the average of nearly 26,000 new dwellings permitted annually between 2000 and 2011. This change is consistent with the population forecasts' assumption that future growth will be substantially slower than recent historical growth.

Table 7. Forecast for growth in housing, Clark County, 2012 to 2035

Variable	Estimate of Housing Units (2012-2035)
Change in persons	866,000
minus Change in persons in group quarters	9,760
equals Persons in households	856,240
Average household size	2.71
New occupied DU	315,956
times Aggregate vacancy rate	9.0%
equals Vacant dwelling units	28,436
Total new dwelling units (2012-2035)	**344,392**
Average DU per year	**14,974**

Source: ECONorthwest, 2013

[11] The forecast of new units does not account for dwellings that will be demolished. This analysis does not factor those units in; it assumes they will be replaced at the same site.

Table 8 shows the distribution of these dwelling units by structure type for the 2012 to 2035 period. The distribution is based on the existing distribution of housing by type in Clark County (see Figure A-21). Table 8 shows that Clark County would need:

- **Single-family detached (including manufactured and mobile homes):** 220,411 new dwelling units
- **Single-family attached and 2-4 (including townhouses/row houses, duplexes, and tri- and quad-plexes):** 44,771 new dwelling units
- **Multi-family with 5+ units**: 79,210 new dwelling units

Table 8. Forecast for growth in housing by type of structure, Clark County, 2012 to 2035

Dwelling Units by Structure Type	Estimate of Housing Units (2012-2035)
Total new dwelling units 2012-2035)	344,392
Dwelling units by structure type	
Single-Family Detached	
Percent single-family	64%
equals Total new single-family DU	220,411
Single-family Attached and 2-4 Units	
Percent single-family attached and 2-4 units	13%
equals Total single-family attached and 2-4 Units	44,771
Multifamily with 5+ Units	
Percent multifamily with 5+ Units	23%
equals Total multifamily with 5+ Units	79,210
Total new dwelling units	344,392

Source: ECONorthwest, 2013

Table 9 allocates new units by structure type and tenure, assuming:

- The same distribution of housing by type in Table 8.
- Continuation of the Clark County's current tenure, with 54% of housing owner-occupied and 46% renter occupied.
- Continuation of the distribution of structures by tenure (e.g., 75% of single-family detached housing was owner-occupied and 25% was renter-occupied in 2011).

Table 9 shows that Clark County will need:

- **Owner-occupied:** 185,265 units. The majority of this housing will be single-family detached (164,814 units).
- **Renter-occupied:** 159,127 units. Rental units will be divided among multi-family with five or more units, single-family detached, and single-family attached and 2-4 units per structure.

Table 9. Forecast for growth in housing by type of structure and tenure, Clark County, 2012 to 2035

Structure Type	Owner-Occupied		Renter-Occupied		Total	
	New DU by Type	Percent by Type	New DU by Type	Percent by Type	New DU by Type	Percent of Total DU
Single-Family Detached	164,814	75%	55,597	25%	220,411	64%
Single-family Attached and 2-4 Units	14,256	32%	30,515	68%	44,771	13%
Multifamily with 5+ Units	6,195	8%	73,015	92%	79,210	23%
Total dwelling units	185,265		159,127		344,392	
Total Tenure		54%		46%		

Source: ECONorthwest, 2013

Table 10 shows a rough estimate of future housing demand by income range. This estimate is based on the current distribution of households among income segments and the median family income in Clark County in 2012. Table 10 shows that about one-third of households will be low or very-low income and about one-third will have nearly- or above-average income.

Table 10. Forecast for growth in housing by income range, Clark County, 2012 to 2035

Market Segment by Income	Income range	Number of Households	Percent of Households	Financially Attainable Products		
				Owner-occupied	Renter-occupied	
High (120% or more of MFI)	$85,680 or more	84,044	23%	All housing types; higher prices	All housing types; higher prices	↑
Upper Middle (80%-120% of MFI)	$57,120 to $85,680	40,907	11%	All housing types; lower values	All housing types; lower values	Primarily New Housing
Lower Middle (50%-80% of MFI	$35,700 to $57,120	109,360	30%	Manufactured on lots; single-family attached; duplexes	Single-family attached; detached; manufactured on lots; apartments	Primarily Used Housing
Low (30%-50% or less of MFI)	$21,420 to $35,700	73,167	20%	Manufactured in parks	Apartments; manufactured in parks; duplexes	↓
Very Low (Less than 30% of MFI)	Less than $21,420	55,870	15%	None	Apartments; new and used government assisted housing	

Source: ECONorthwest, 2013.

6.2 Two variations to the forecast of housing demand

Shifts in household age, household composition, and income can cause the housing market in Clark County to change from the trends it evidenced over the last decade and more. This section assesses how potential changes in these factors might change demand for housing by type of housing and tenure in Clark County relative to the historical demand described above.

The future is inherently uncertain, so any single forecast of long-run social phenomena (like housing production) is unlikely to prove correct over time. The variations in this section hold population growth, household size, and vacancy assumptions constant from Table 7. The variations assume that Clark County will add 344,392 new dwelling units over the 2012 to 2035 period. The forecasts that follows adjusts the baseline forecast shown in Table 8 based on an assessment of expected variation in some of the key factors that affect housing demand.[12]

Table 11 and Table 12 present two alternative forecasts for growth:

Shift A: Smaller Change assumes

- A decrease in the amount of single-family detached housing produced though 2035 (from 64% to 60%)
- An increase in the amount of single-family attached and 2-4 unit (from 13% to 15%) and multi-family with 5+ units (23% to 25%)
- A decrease in homeownership from 54% to 52%
- No change tenure by structure type (e.g., 75% of single-family housing is still assumed to be owner-occupied)

Shift B: Larger Change assumes

- A decrease in the amount of single-family detached housing produced though 2035 (from 64% to 55%)
- An increase in the amount of single-family attached and 2-4 unit (from 13% to 16%) and multi-family with 5+ units (23% to 29%)
- A decrease in homeownership from 54% to 50%
- An increase in homeownership rates for single-family attached and 2-4 unit (from 32% to 35%) and multi-family with 5+ units (8% to 12%)

Table 11. Two alternative forecasts for growth in housing by type of structure, Clark County, 2012 to 2035

Dwelling Units by Structure Type	Shift A: Smaller Change	Shift B: Larger Change
Total new dwelling units 2012-2035)	344,392	344,392
Dwelling units by structure type		
Single-Family Detached		
Percent single-family	60%	55.0%
equals Total new single-family DU	206,635	189,416
Single-family Attached and 2-4 Units		
Percent single-family attached and 2-4 units	15%	16.0%
equals Total single-family attached and 2-4 Units	51,659	55,103
Multifamily with 5+ Units		
Percent multifamily with 5+ Units	25%	29.0%
equals Total multifamily with 5+ Units	86,098	99,874
Total new dwelling units	**344,392**	**344,393**

Source: ECONorthwest, 2013

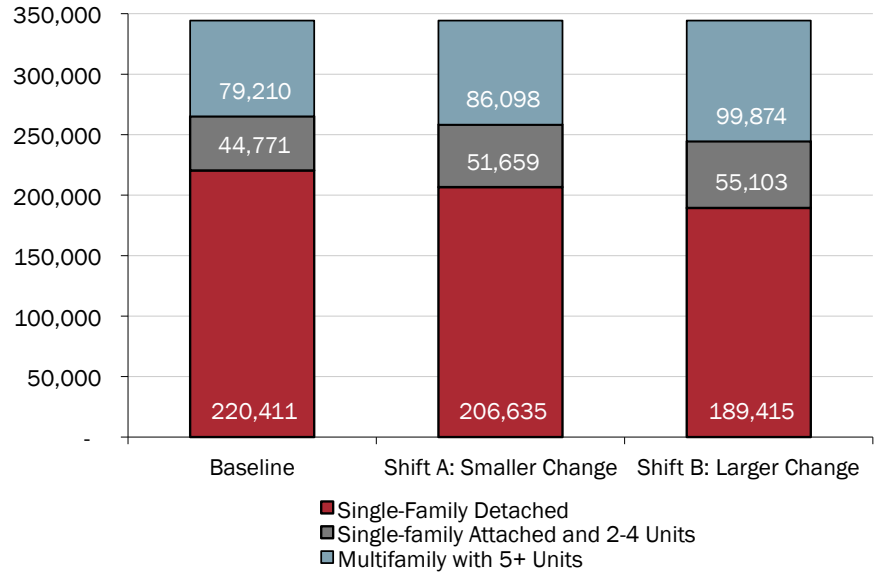
[12] We have not attempted to account for the possibility of another boom / bust cycle in our projections, but have just UNLV's projections as the basis for our analysis, as it is the most-used population forecast in the region.

Table 12. Two alternative forecasts for growth in housing by type of structure and tenure, Clark County, 2012 to 2035

Structure Type	Owner-Occupied		Renter-Occupied		Total	
	New DU by Type	Percent by Type	New DU by Type	Percent by Type	New DU by Type	Percent of Total DU
Shift A: Smaller Change						
Single-Family Detached	154,513	75%	52,122	25%	206,635	60%
Single-family Attached and 2-4 Units	16,450	32%	35,209	68%	51,659	15%
Multifamily with 5+ Units	6,733	8%	79,365	92%	86,098	25%
Total dwelling units	177,696		166,696		344,392	
Total Tenure		52%		48%		
Shift B: Larger Change						
Single-Family Detached	141,637	75%	47,779	25%	189,416	55%
Single-family Attached and 2-4 Units	19,286	35%	35,817	65%	55,103	16%
Multifamily with 5+ Units	11,985	12%	87,889	88%	99,874	29%
Total dwelling units	172,908		171,485		344,393	
Total Tenure		50%		50%		

Source: ECONorthwest

Figure 11. Two alternative forecasts for growth in housing by type of structure and tenure, Clark County, 2012 to 2035



Source: ECONorthwest, 2013

The factors that may affect housing demand, resulting in a housing demand similar to Shift A or Shift B, include the following:

- **Continuation of the foreclosure crisis** will affect demand over the next two to five years. While foreclosure rates have decreased recently, the data indicate that foreclosure rates may increase in Clark County over the next months or years. A continuation of the high rates of foreclosures may affect housing demand in the following ways:
  - A continuation and delay of resolution of the backlog of houses in foreclosure may continue to depress housing prices. It is unclear if housing prices have reached a bottom, as some of the data suggest, or may decrease as a result of additional foreclosures.

- As long as foreclosures continue at a historically high rate, some households will continue to rent, either by choice or by necessity.
- As homeowners become more confident in the housing market, foreclosures become less common, and financing becomes more available, some renter households will choose to purchase a home. Homeownership will be more affordable as a result of low prices. This trend appears underway in Clark County, but it is unclear if it will continue.
- If foreclosures continue or increase, the homeownership rate could decrease further. It appears that the homeownership rate is stable and has increased recently.

These factors will affect Clark County's housing market for the next few years but will fade as the housing market continues to recover and as households become willing and able to purchase housing. The forecasts in

- Table 11 and Table 12 assume that these issues have been factored into the population forecast and will not substantially affect Clark County's housing market in the long-term.

- **Growth in retirees.** Clark County's population is aging and the share of retirees is expected to increase from 12% of the population in 2012 to 20% of the population in 2035. Growth in retirees will be from two groups: (1) people who currently live in Clark County who age into retirement and (2) people who move to Clark County after retirement. These groups may have different housing needs.
  - People living in Clark County before (and after) retirement will make a variety of housing choices, as described in Tables 2 through 4 The majority may choose to age in place (i.e., continue to live in their current home), until they move into assisted living or a nursing home because of ill health. Some retirees in Clark County will choose to downsize into a smaller dwelling or move into an adult retirement community. The majority of people in this group will likely continue to be homeowners for as long as they are able.
  - People moving to Clark County after retirement will also make a variety of housing choices. Their housing choices may be similar to other retirees. Some may choose to purchase a single-family home or condominium or move into an adult retirement community. Housing in either of these cases is likely to be relatively small, both in terms of lot size and size of units. Some people in this group may choose to rent housing, such a small single-family unit, a townhouse, or an apartment.
  - Overall, growth in retirees is likely to decrease demand for single-family detached units and decrease homeownership rates, especially as retirees begin to sell their existing dwellings and seek different housing types.
- **Growth in Echo Boomers.** Echo Boomers will enter adulthood and their prime earning years during the next two decades. As they form households, they will

initially need affordable rental housing. As income increases, some Echo Boomers will choose to become homeowners, if they are able to afford to do so.

The Echo Boomers are likely to increase demand for rental housing, such as townhouses or apartments. In the later years of the planning period, some Echo Boomers may choose to purchase housing, such as small single-family detached housing, townhouses, or condominiums.

- **Growth in Hispanic population.** Clark County's Hispanic population is expected to grow twice the rate of total population growth between 2012 and 2035 in Clark County. By 2035, Hispanics will account for 33% of the County's population. Growth in Hispanic population will be from two groups: (1) first generation immigrants and (2) second and third (and older) generation immigrants. These groups may have different housing needs.
    - First generation immigrants generally have lower income and larger households than second and third generation or the County's average population. First generation immigrants are more likely to be renters and are more likely to need larger, more affordable housing (given larger household sizes and lower income).
    - Second generation and later immigrants have household characteristics that are more similar to the national average, with higher household income and smaller household sizes. Even so, second generation and later Hispanic immigrant households have lower income and higher household sizes than the national average. These households are also more likely to be renters than the national average, although homeownership rates approach 50% for second-generation Hispanic immigrants.[13]
    - Overall, the Hispanic population is likely to increase demand for more affordable housing for families, such as townhouses, affordable single-family detached units, or apartments. Growth in the Hispanic population may decrease homeownership rates slightly but not substantially.

The overall effect of these three groups is an increased demand for a wider variety of housing types, such as small single-family detached units, townhouses, duplexes, or apartments. Growth in these groups is likely to decrease homeownership rates, but not substantially.

Other factors that may affect housing demand over the next two decades are:

- The projected increase in real personal income may support demand for homeownership, especially of single-family detached units.
- Housing preferences and transportation costs will affect the location of housing demand (e.g., in an urban area or in a rural area). There are a number of reasons to expect that

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

more new development will occur in urban areas, rather than in exurbs or rural areas. Two of the groups forecast to grow the most, retirees and Echo Boomers, generally prefer to live in areas where urban services (e.g., shopping) are easily accessible. In addition, gasoline prices are forecast to remain at existing levels or to increase through 2040. Increases in transportation costs make living beyond urban areas less affordable, especially for households that work in the urban areas.

The forecasts in

Table 11 and Table 12 present two alternatives for future housing demand in Clark County. The smaller change in Shift A is more likely if:

1. The foreclosure crisis resolves sooner.
2. Housing prices decrease less.
3. Personal incomes continue to grow.
4. People who grow older in or move to Clark County generally prefer and can afford to own and live in single-family detached housing.

The larger change in Shift B is more likely if:

1. The foreclosure crisis takes longer to resolve.
2. Personal income stagnates or decreases in real dollars.
3. Housing preferences change so that renting attached housing is preferable.
4. Owning a single-family house is not financially attainable.

7. Conclusions

Despite the current economic crisis and distortion in the current Clark County housing market, the region is projected to continue to grow over the coming decades. That population will require the construction of additional housing units to accommodate it. The projections of housing units in this report illustrate a range of likely outcomes for mixes of housing types and tenures, given what is currently known and assumed about the demographic makeup of the new population. The way in which this growth is accommodated will affect the quality of life for new and current Clark County residents into the future, and should be considered in the larger planning and economic development efforts.

Appendix A.
Housing market conditions in Clark County

Except where noted, data in this section is based on U.S. Census data. Appendix A presents the data in charts and tables.

Demographic changes

Clark County's recent population growth outpaced the U.S. and Nevada

- Between 1990 and 2011, the average annual growth rate of the population for Clark County was 4.8%. The growth rate was larger than the 1.1% increase for the U.S. and 4.0% in Nevada.

Table A-13. Population change, U.S., Nevada, Clark County, and select cities, 1990 to 2011

Area	1990	2000	2010	2011	Change 1990 to 2011 Number	Percent	AAGR
U.S.	248,709,873	281,421,906	308,754,538	311,587,816	62,877,943	24%	1.1%
Nevada	1,201,833	1,998,257	2,700,551	2,720,028	1,498,718	125%	4.0%
Clark County	741,459	1,375,765	1,951,269	1,969,975	1,209,810	163%	4.8%
Las Vegas	258,295	478,434	583,756	589,317	325,461	126%	4.0%
North Las Vegas	47,707	115,488	216,961	219,020	169,254	355%	7.5%
Henderson	64,942	175,381	257,729	260,068	192,787	297%	6.8%
Boulder City	12,567	14,966	15,023	15,166	2,456	20%	0.9%
Mesquite	1,871	9,389	15,276	15,423	13,405	716%	10.6%

Source: U.S. Census 1990 "General Population Characteristics: Nevada," U.S. Census 2000 SF 1 DP-1, U.S. Census 2010 DP-1, U.S. Census Bureau State and County QuickFacts.

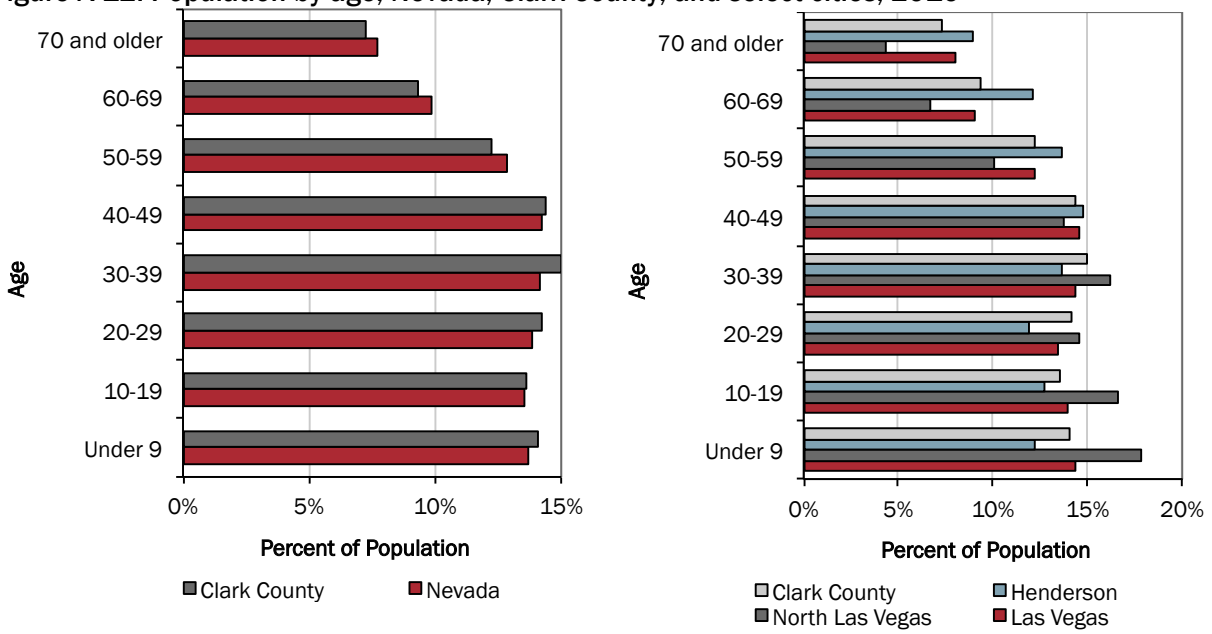
Note: AAGR is average annual growth rate.

Table A-14. Median age, Nevada, Clark County, and select cities, 2000 and 2010

Year	Nevada	Clark County	Las Vegas	North Las Vegas	Henderson
2000	35.0	34.4	34.5	28.8	35.9
2010	36.3	35.5	35.9	30.6	39.6
Change 2000 to 2010 Years	1.3	1.1	1.4	1.8	3.7

Source: U.S. Census 2000 SF1 DP-1, U.S. Census 2010 SF1 DP-1.

Figure A-12. Population by age, Nevada, Clark County, and select cities, 2010



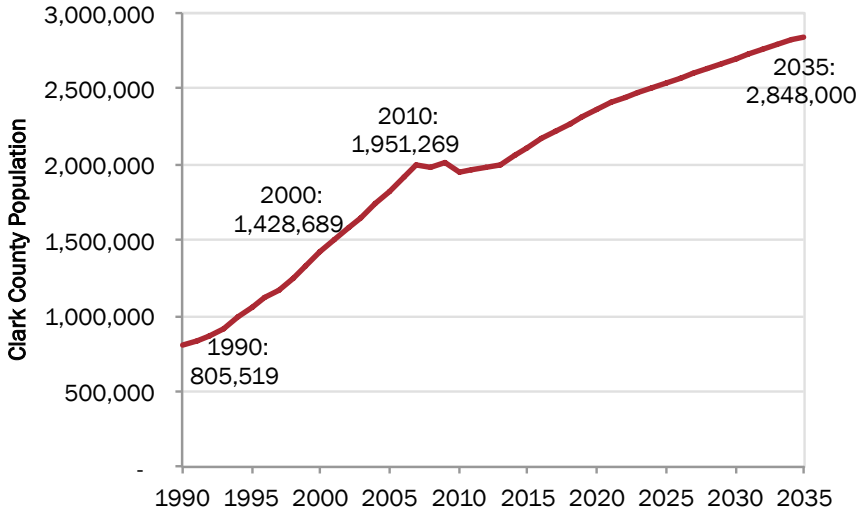
Source: U.S. 2010 SF1 P12.

Forecast for population growth

- From 2012 to 2035, the population of Clark County is forecast to increase from 1,982,000 to 2,848,000.[14] The population forecast shows Clark County growing at less than half of the rate that the County grew between 1990 and 2011, with an average annual growth rate of 1.59% over 2012 to 2035.
- The population forecast shows that approximately the same number of residents will be added to Clark County in the next 20 years as in the previous 20-year period. The growth rate between 2012 and 2035, however, is expected to be 1.6% per year, compared to 4.8% annually between 1990 and 2011.

[14] All information about population forecasts for Clark County in this report is based on the *Population Forecasts: Long-Term Projections for Clark County, Nevada, 2012-2050* from University of Nevada Las Vegas' Center for Business and Economic Research.

Figure A-13. Population forecast for Clark County, 1990 to 2035



Source: UNLV Center for Business and Economic Research, Population Forecasts: Long-Term Projections for Clark County, Nevada, 2012-2050.

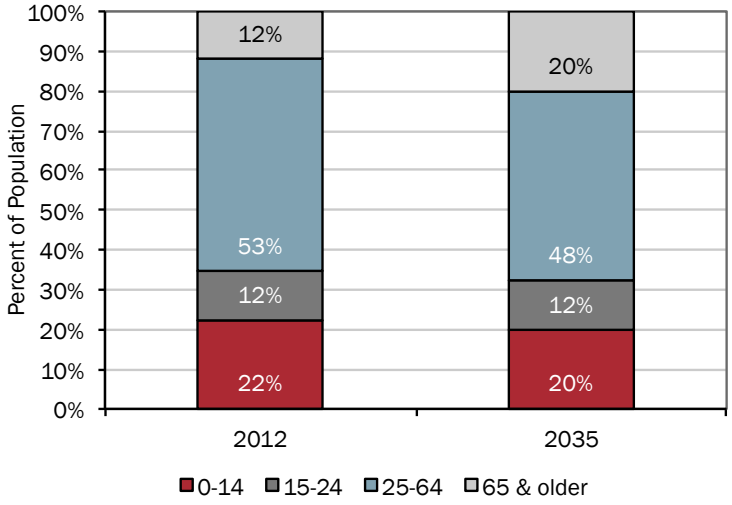
Migration is forecast to account for majority of the population growth in Clark County through 2030

- From 2012 through 2030, Clark County's population is expected to increase by 34% to 2.7 million people. Migration is forecast to account for 446,000 additional residents, which is 65% of the expected growth.
- Economic migrants (those who migrate to the area to seek employment) are forecast to account for 16% of new residents, although there is expected to be a net negative migration for economic reasons beginning in 2022.
- The majority of in-migrants through 2030 are forecast to be international (60%), with retirees currently living in the U.S. will make up 24% of the total.

Clark County's median age and percentage of the population aged 65 and over is increasing

- The median population age in Clark County increased only slightly from 34.4 years in 2000 to 35.5 in 2010.
- For the period between 2012 and 2035, the population segment aged 65 and over is forecast to grow more than any other group. In 2012, residents aged 65 and older made up 12% of the total population; this number is expected to increase to 20% in 2035.
- The population group between 25 and 64 years is forecast to grow by 280,000, which represents a smaller growth rate than other age categories. As a result, the share of population in this age category is forecast to decrease from 53% to 48% of the population from 2012 to 2035.

Figure A-14. Population forecast by age, Clark County, 2012 and 2035



Source: UNLV Center for Business and Economic Research, Population Forecasts: Long-Term Projections for Clark County, Nevada, 2012-2050.

The Hispanic population is forecast to be largest ethnic group in Clark County by 2035

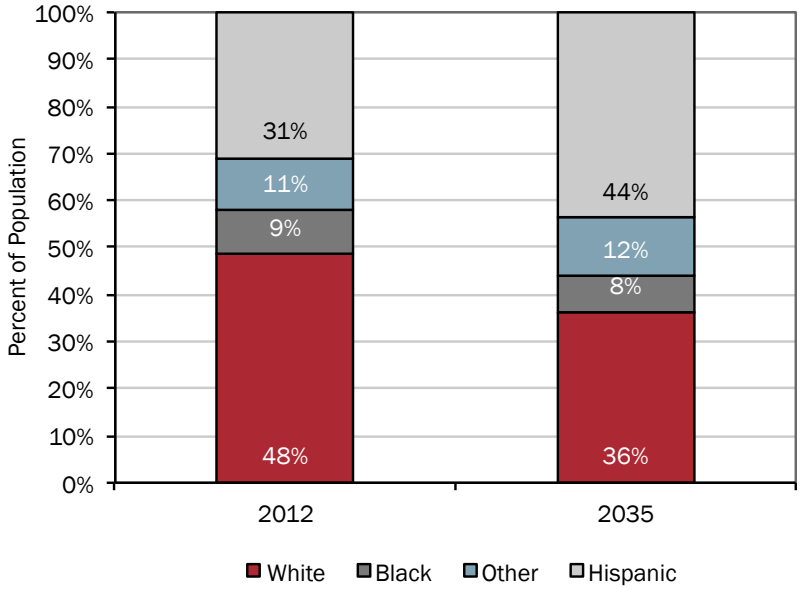
- Between 2000 and 2010, the number of Hispanics increased 88%, which is equivalent to an average annual growth rate of 6.53%.
- Moderate growth is expected for the black and white populations of Clark County from 2012 to 2035. The white population is expected to have an average annual growth rate of 0.23% compared to 0.7% for the black population.
- In 2035, the population in Clark County is expected to be 44% Hispanic, 36% white, 8% black, and 12% other.

Table A-15. Population by ethnicity in 2000 and 2010, Nevada, Clark County, and select cities

	Nevada	Clark County	Las Vegas	North Las Vegas	Henderson
2000					
Total Population	1,998,257	1,375,765	478,434	115,488	175,381
Hispanic or Latino	393,970	302,143	112,962	43,435	18,785
Percent Hispanic or Latino	19.7%	22.0%	23.6%	37.6%	10.7%
2010					
Total Population	2,700,551	1,951,269	583,765	216,961	257,729
Hispanic or Latino	716,501	568,644	183,859	84,134	38,377
Percent Hispanic or Latino	26.5%	29.1%	31.5%	38.8%	14.9%
Change 2000-2010					
Hispanic or Latino	322,531	266,501	70,897	40,699	19,592
Percent Hispanic or Latino	82%	88%	63%	94%	104%

Source: U.S. Census 2000 DP-1, U.S. Census 2010 DP-1.

Figure A-15. Population forecast by ethnicity, Clark County, 2012 and 2035



Source: UNLV Center for Business and Economic Research, Population Forecasts: Long-Term Projections for Clark County, Nevada, 2012-2050.

Conclusions about demographic changes

- Clark County's population is expected to continue growing but at a slower rate than the last two decades. This suggests that demand for housing will continue but at a slower rate.
- The majority of growth is expected to result from in-migration, specifically international migrants and retirees.
- Clark County's population is expected to be older, with more retirees, and a larger share will be Hispanic. These demographic changes suggest changes in demand for housing over the next two decades, as described in Table 1.

Employment

Jobs in Clark County are forecast to increase faster than population through 2035

- From 2012 to 2035, the number of jobs is forecast to increase by 46%, which represents a 2.0% average annual growth rate. This is greater then the forecast 1.59% average annual growth rate for the population in the same time period.
- With a 112% increase, the Health Care and Social Assistance sector is forecast to experience the largest growth rate, followed by the construction sector, which is expected to double the number of jobs through 2035.
- The farming sector is expected to lose 26% of the total workers through 2035, which is the highest loss among all sectors. Since the farm sector is the smallest sector in the Clark County economy, the nominal number of jobs lost is expected to be only 60,000.

- All segments of the Clark County workforce are expected to add jobs, except for the federal government, manufacturing, utilities and farm sectors, which are predicted to have fewer jobs in 2035 than are currently employed in the sector.

Table A-16. Employment forecast by sector, Clark County, 2012 and 2035

			Change 2012 to 2035		
Sector	2012	2035	Number	Percent	AAGR
	hundred thousands				
Health Care and Social Assistance	79.06	167.66	88.60	112%	4.9%
Construction	54.16	108.19	54.04	100%	4.3%
Professional and Technical Services	53.98	91.38	37.41	69%	3.0%
Other Services, Except Govt	47.77	78.96	31.19	65%	2.8%
Educational Services	10.37	16.39	6.02	58%	2.5%
State and Local - Government	82.32	128.40	46.08	56%	2.4%
Admin and Waste Services	77.60	115.62	38.02	49%	2.1%
Arts, Entertainment, and Recreation	32.63	48.46	15.83	49%	2.1%
Forestry, Fishing, Other	0.30	0.43	0.13	45%	2.0%
Real Estate and Rental and Leasing	61.88	88.04	26.16	42%	1.8%
Government - All Sectors	107.55	151.17	43.62	41%	1.8%
Accomodation and Food Services	256.81	347.43	90.61	35%	1.5%
Transportation and Warehousing	39.48	53.28	13.81	35%	1.5%
Finance and Insurance	71.75	95.06	23.31	32%	1.4%
Retail Trade	111.39	142.31	30.92	28%	1.2%
Mining	2.22	2.64	0.42	19%	0.8%
Wholesale Trade	23.63	26.47	2.84	12%	0.5%
Information	12.83	14.33	1.51	12%	0.5%
Management of Companies and Enterprises	16.23	17.42	1.20	7%	0.3%
Manufactoring	24.73	23.57	(1.16)	-5%	-0.2%
Federal Civilian - Government	12.00	10.94	(1.06)	-9%	-0.4%
Federal Military - Government	13.22	11.84	(1.39)	-10%	-0.5%
Utilities	3.09	2.53	(0.56)	-18%	-0.8%
Total	**1,194.98**	**1,742.51**	**547.53**	**46%**	**1.99%**

Source: Population Forecast: Long-term Projections for Clark County, Nevada 2012-2050

Conclusions about employment changes

- Some of the people who move to Clark County will do so for employment. The region will create more jobs than population increases through 2035.
- The employment forecast shows growth in higher-wage sectors (e.g., Health Care or Construction) but also growth in lower-wage sectors (e.g., Retail Trade or Arts and Entertainment). This suggests that the County will continue to have demand for both higher-cost housing and lower-cost housing.

Income

Real personal income is forecast to double in Clark County through 2035

- Real personal income, accounting for inflation, is expected to increase by 108% in Clark County from 2012 to 2035. This represents an annual average growth rate of 3.24%.
- Real per capita income is expected to increase by 45% through 2035, which represents an annual average growth rate of 1.62%.

The age group between 45 and 64 had the highest median income level in 2011

- In Clark County for 2011, the median income level for people in the 45-64 age bracket was $53,307, the median dropped to $50,580 for the 25-44 age group and even further to $39,555 for people over the age of 65.

The median income for white workers was roughly 40% higher than black and Hispanic workers for Clark County in 2011

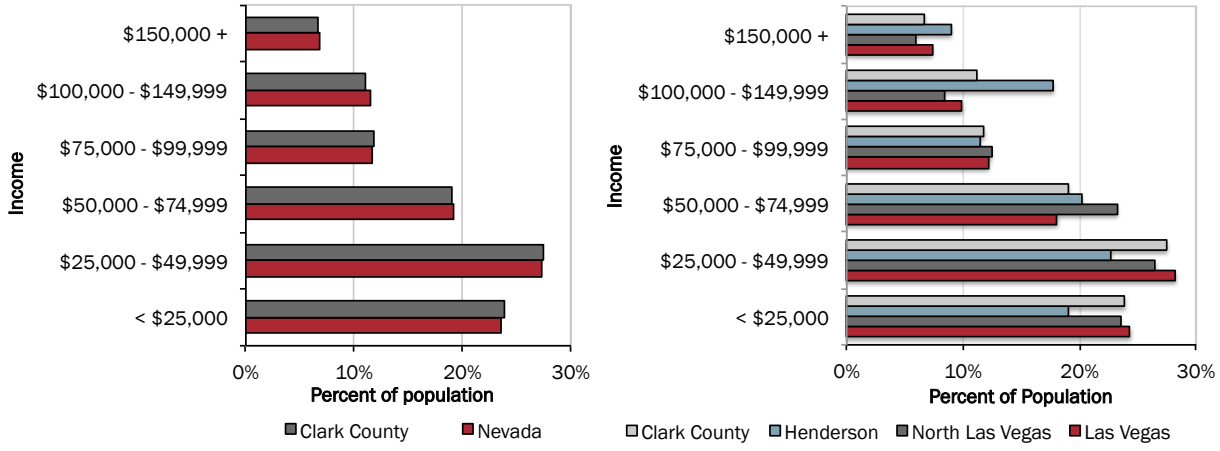
- In Clark County for 2011, the median income for a white employee was $53,768 compared to $39,096 for Hispanics and $37,107 for blacks.

Table A-17. Median income for households and families in 2011, Nevada, Clark County, and select cities

Population	Nevada	Clark County	Las Vegas	North Las Vegas	Henderson
Households	$48,927	$48,215	$46,995	$50,006	$60,453
Families	$56,544	$55,766	$54,664	$51,525	$70,400

Source: American Community Survey 2011 S1903.

Figure A-16. Household income in 2011, Nevada, Clark County, and select cities



Source: American Community Survey 2011 B19001.

Table A-18. Forecast of income and expenditures, 2005 dollars, Clark County, 2012 and 2035

Income and Expenditures	2012	2035	Change 2012 to 2035 Number	Percent	AAGR
Personal Income (Billions USD)	$77.76	$288.10	$210.33	270%	5.86%
Taxes	*$6.45*	*$28.53*	*$22.08*	*342%*	6.68%
Disposable Personal Income	*$71.31*	*$259.57*	*$188.26*	*264%*	5.78%
Real Personal Income (Billions USD)	$66.36	$138.06	$71.70	108%	3.24%
with housing price	*$69.08*	*$142.00*	*$72.91*	*106%*	3.18%
PCE Price Index	$117.19	$208.68	$91.49	78%	2.54%
with housing price	*$112.57*	*$202.89*	*$90.32*	*80%*	2.59%
Real Disposable Personal Income (Billions USD)	$60.85	$124.39	$63.54	104%	3.16%
with housing price	*$63.35*	*$127.94*	*$64.59*	*102%*	3.10%

Source: Population Forecast: Long-term Projections for Clark County, Nevada 2012-2050; Calculations by ECONorthwest

Table A-19. Forecast of change in per capita income, 2005 dollars, Clark County, 2012 and 2035

Per Capita Income	2012	2035	Change 2012 to 2035 Number	Percent	AAGR
Real Personal Income (Billions USD)	$66.36	$138.06	$71.70	108%	3.24%
Population	1,982,000	2,848,000	866,000	44%	1.59%
Real Income Per Capita (USD)	$33,479	$48,474	$14,995	45%	1.62%

Source: Population Forecast: Long-term Projections for Clark County, Nevada 2012-2050; Per Capita calculation by ECONorthwest

Conclusions about changes in income

- Growth in personal income will result in increases in disposable income and more money available for housing expenditures. During the 1990s and early 2000s, housing costs outpaced income growth. By 2011, income growth and change in housing cost over the last decade had evened out, with income keeping pace with housing cost.
- It is unclear whether housing prices will grow at a similar rate as personal income over the next two decades or whether, similar to the pattern that created the housing bubble, housing prices will outpace change in personal income.
- Younger and Hispanic households generally have lower incomes than older, white households. These households may struggle to afford ownership costs, unless their incomes increase to closer to the County averages.

Household characteristics

Household size was similar for owner occupants and renters in Clark County

- The average household size was 2.7 for both the County and the state in 2010. Owner-occupied households had 2.7 people on average, while renters had 2.5.
- In 2010, households in the County were almost evenly distributed between families with children (35%), families with no children (31%) and non-family households (34%).

Table A-20. Average household size of occupied housing units by tenure in 2010, Clark County and select cities

	Clark County	Las Vegas	North Las Vegas	Henderson
Average household size	2.7	2.7	3.2	2.5
Owner-occupied units	2.7	2.7	3.2	2.6
Renter-occupied units	2.5	2.7	3.4	2.5

Source: U.S. Census 2010 SF1 H12.

North Las Vegas had a higher concentration of families with children than Clark County and state averages

- Average household size in North Las Vegas in 2010 was higher than the County average, at 3.2 persons per household for owner-occupied units, and 3.4 for renter-occupied units
- North Las Vegas had a similar percentage of families with no children (28%) compared to Clark County, but a higher percentage of families with children (48%) and fewer non-family households (23%).

Table A-21. Household composition in 2010, Clark County and select cities

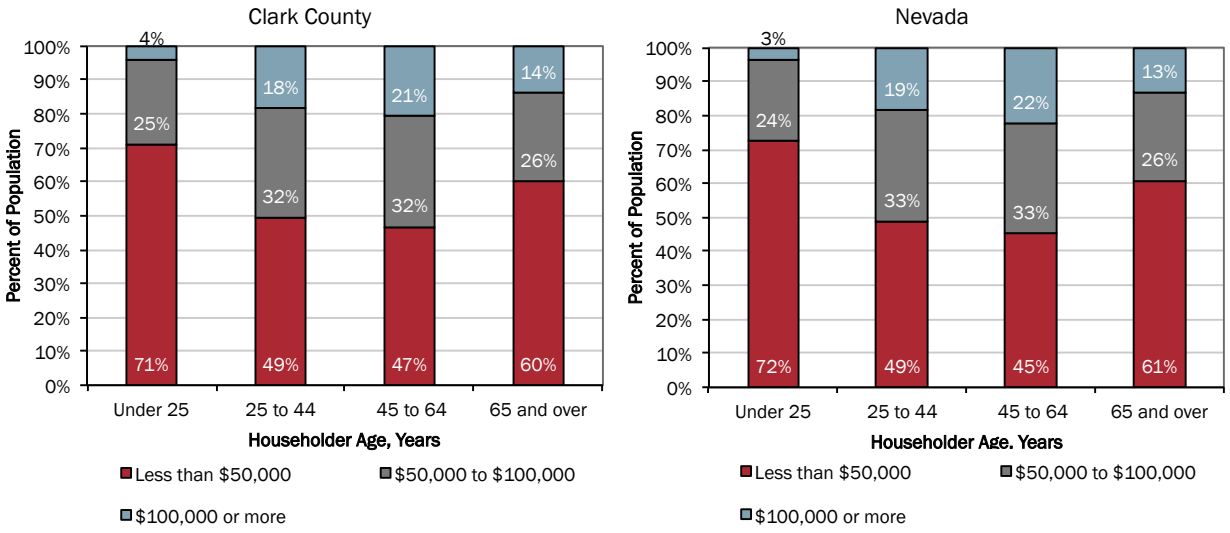
	Clark County		Las Vegas		North Las Vegas		Henderson	
Household Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Households with children	249,397	35%	75,313	36%	32,111	48%	31,505	31%
Married-couple family	153,650	21%	45,700	22%	20,238	30%	20,995	21%
Female householder, no husband present	64,188	9%	19,945	9%	8,210	12%	6,931	7%
Male householder, no wife present	31,559	4%	9,668	5%	3,663	6%	3,579	4%
Family households without children	221,802	31%	64,359	30%	18,924	28%	37,084	37%
Married-couple family	168,067	23%	48,238	23%	14,095	21%	30,486	30%
Female householder, no husband present	33,306	5%	10,233	5%	3,085	5%	4,274	4%
Male householder, no wife present	20,429	3%	5,888	3%	1,744	3%	2,324	2%
Nonfamily households	244,166	34%	72,017	34%	15,464	23%	32,725	32%
Total Households	715,365	100%	211,689	100%	66,499	100%	101,314	100%

Source: U.S. Census 2010 SF1 P20.

From 2000 to 2011, households with two or more people had the largest decrease in home ownership

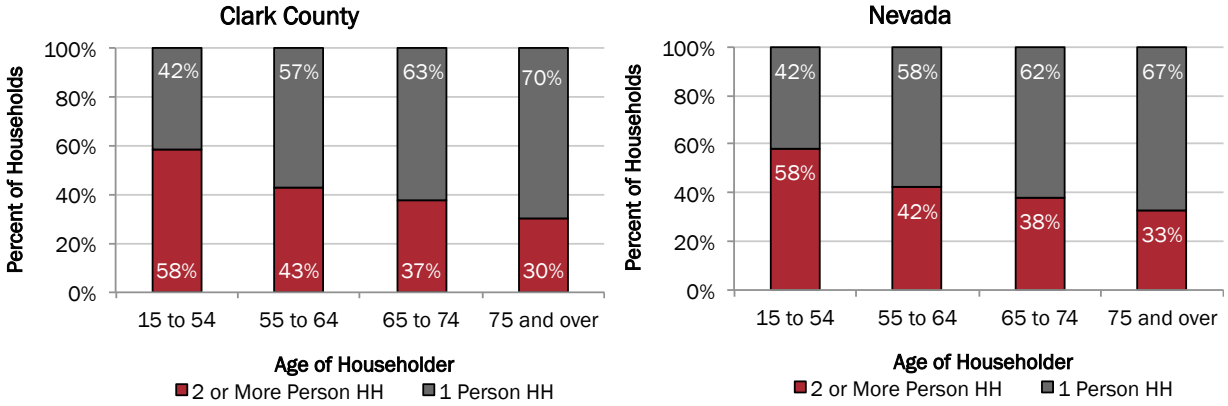
- From 2000 to 2011, homeownership for one-person households increased by 1%, but homeownership for two or more person households decreased by 7%.
- People between the ages of 15 and 54 were responsible for the entire decrease in homeownership among two or more person households, dropping by 7% in Clark County. People over age 55 had no change in homeownership.

Figure A-17. Income by age of householder in 2011, Clark County and Nevada



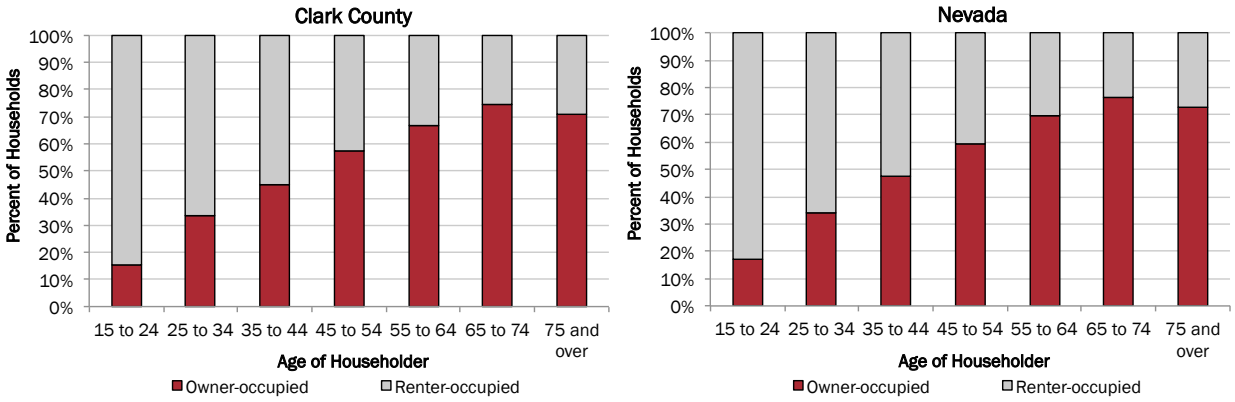
Source: American Community Survey 2011 B19037.

Figure 18. Household size by age in 2011, Nevada, Clark County, and select cities



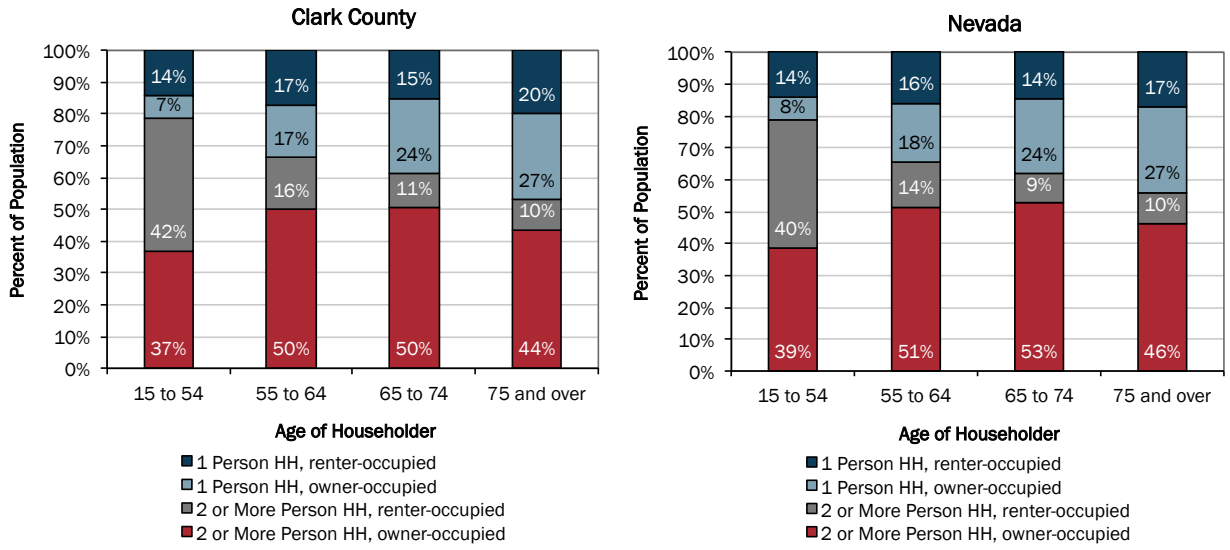
Source: American Community Survey 2011 B25116.

Figure A-19. Households by tenure and age of householder in 2011, Clark County and Nevada



Source: American Community Survey 2011 B25007

Figure A-20. Tenure by household size and age of householder in 2011, Clark County and Nevada



Source: American Community Survey 2011 B25116.

Housing characteristics

Recent housing vacancy rates were higher than usual in Clark County

- Overall vacancy rates in 2010 were about 15%, compared with 11% in 2005 and 8.5% in 2000.
- Vacancy rates in the U.S. in 2010 were 11.4% and 14.3% for Nevada. In comparison, vacancy rates in 2000 were 9% for the U.S. and 9.2% for Nevada.

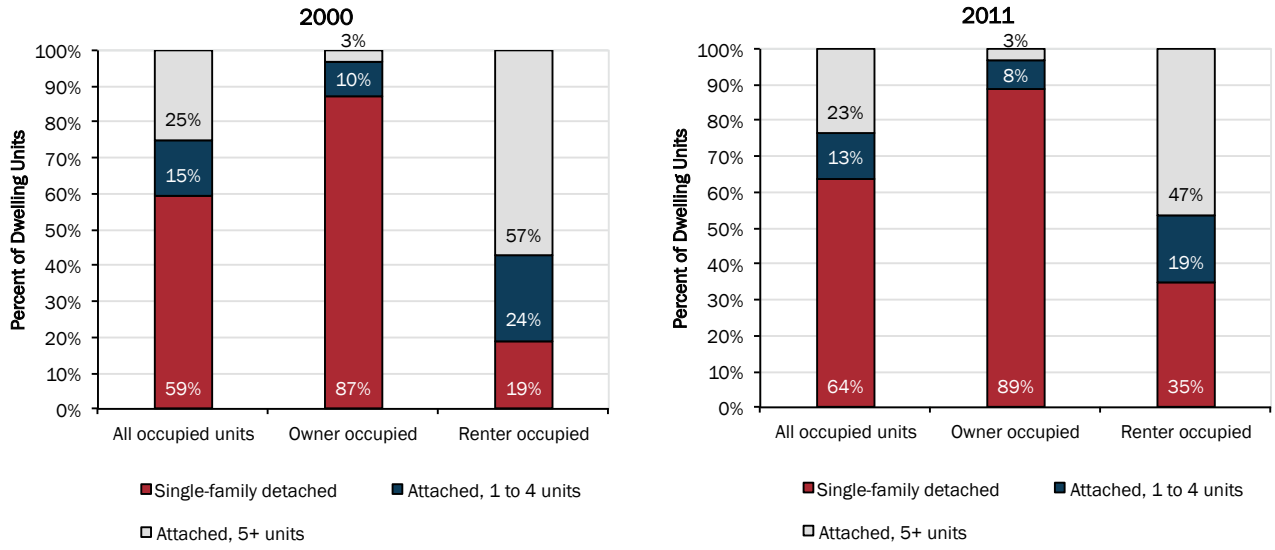
Multi-family homes had the highest vacancy rate outside of the City of Las Vegas

- In 2011, Clark County had a larger percentage (14.9%) of vacant housing units compared to the Las Vegas average of 13.1%.
- In 2011, 13% of multi-family homes and 10.5% of single-family homes in Clark County were vacant.

Homeownership rates declined through 2011

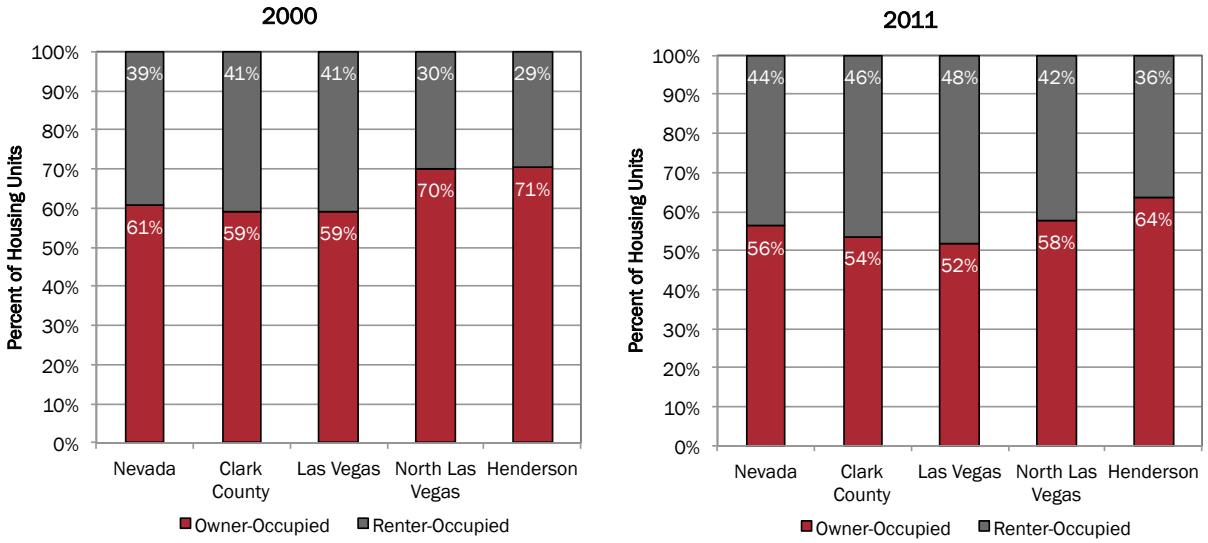
- Homeownership rates in Clark County declined from 59% in 2000 to 54% in 2011. This change is consistent with the statewide decline in homeownership from 61% to 56% in 2011. This change is also consistent with the national trend in declining homeownership rates.
- Homeownership rates declined in Las Vegas (59% in 2000 to 52% in 2011), North Las Vegas (70% in 2000 to 58% in 2011), and Henderson (71% in 2000 to 64% in 2011).

Figure A-21. Housing type by tenure, occupied housing units, 2000 and 2011, Clark County



Source: American Community Survey 2011 B25032.

Figure A-22. Tenure, Nevada, Clark County, and selected cities, 2000 and 2011



Source: Decennial Census 2000 H004; American Community Survey 2011 B25003

Table A-22. Vacancy rates, 2010, Clark County and select cities

	Clark County	Las Vegas	North Las Vegas	Henderson
Total housing units	840,343	243,701	76,073	113,586
Total occupied	715,365	211,689	66,499	101,314
Total vacant	124,978	32,012	9,574	12,272
Vacancy rate	14.9%	13.1%	12.6%	10.8%

Source: U.S. Census 2010 SF1 H3.

Table A-23. Vacancy rates by type of housing, 2000 to 2011, Clark County

Year	Single Family	Mobile Home	Multi-family
2000	2.0%	6.4%	6.5%
2001	2.6%	7.3%	6.2%
2002	2.6%	7.3%	6.2%
2003	2.6%	8.0%	7.2%
2004	3.6%	4.5%	5.6%
2005	2.8%	6.6%	6.4%
2006	3.8%	5.5%	6.9%
2007	4.3%	3.1%	6.9%
2008	6.4%	8.4%	6.8%
2009	5.2%	7.1%	11.4%
2010	5.8%	8.0%	11.5%
2011	10.5%	11.6%	13.1%

Source: U.S. Census 2010 SF1 H3.

In 2011, the majority of the owner-occupied housing stock in Clark County was two or three bedroom homes

- 61% of the housing stock in 2011 was single-family detached homes in Clark County. 85% of owner occupied homes were single family, 64% of this group were made up of two or three bedroom structures.

North Las Vegas had a greater drop in homeownership rates than Clark County from 2000 to 2011

- Homeownership rates decreased in North Las Vegas from 70% in 2000 to 58% in 2011. In comparison, homeownership rates decreased in Clark County from 59% in 2000 to 52% in 2011.
- Homeownership rates for one-person households in North Las Vegas increased by 2% from 2000-2011. This increase was offset by the 15% reduction in owner occupied households with two or more people.

North Las Vegas had higher percentage of single-family detached rental units than Clark County in 2011

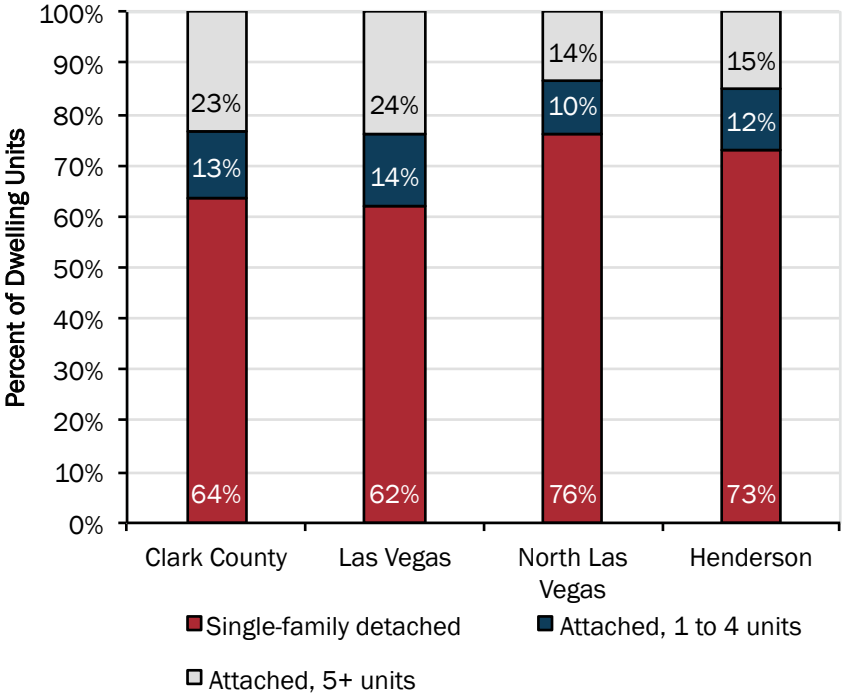
- Single-family detached renter occupied units were the largest share of the rental market in North Las Vegas (50%), compared to 33% in Clark County for 2011.
- The majority (56%) of renter occupied units in North Las Vegas were built after 2000; the largest category of unit breakdown was two or three bedrooms, representing 64% of the total.

Single-family detached housing accounts for the majority of housing in Clark County

- In 2011, 64% of housing was single-family detached (including manufactured and mobile homes), with 13% of housing in attached structures with four or fewer units and 23% in attached structures with five or more units.

- The share of single-family detached housing increased from 59% to 64% between 2000 and 2011. The share of attached housing decreased by 4% over the same period.
- 89% of ownership units were single-family detached in 2011, up from 87% in 2000.
- In 2011, about two-thirds of renters lived in attached housing and one-third in single-family detached housing.
- Since 2000, rental of single-family housing increased, from 19% to 35% of rental units in 2011.

Figure A-23. Housing type, occupied housing units, 2011, Clark County and select cities



Source: American Community Survey 2011 B25032.

Table A-24. Tenure by units in structure, year built, bedrooms, and total rooms, 2011, Clark County and select cities

	Clark County			Las Vegas			North Las Vegas			Henderson		
	All occupied units	Owner occupied	Renter occupied	All occupied units	Owner occupied	Renter occupied	All occupied units	Owner occupied	Renter occupied	All occupied units	Owner occupied	Renter occupied
Units in Structure												
Single-family detached	61%	85%	33%	61%	88%	32%	75%	93%	50%	72%	91%	38%
Single-family attached and 2-4 units	13%	8%	19%	14%	7%	21%	10%	4%	18%	12%	6%	22%
Structure with 5+ units	23%	3%	47%	24%	3%	46%	14%	1%	31%	15%	2%	39%
Mobile and manufactured	3%	4%	2%	1%	2%	1%	1%	2%	1%	1%	1%	1%
Year Built												
2000 or later	35%	37%	32%	25%	24%	26%	56%	57%	56%	37%	40%	33%
1990 to 1999	29%	32%	27%	35%	38%	31%	25%	29%	19%	40%	40%	41%
1989 or earlier	36%	31%	42%	41%	38%	43%	19%	14%	25%	22%	20%	26%
Bedrooms												
No bedroom	2%	0%	4%	3%	0%	5%	1%	0%	2%	0%	0%	0%
1 bedroorm	10%	1%	21%	11%	1%	22%	7%	0%	15%	7%	1%	18%
2 or 3 bedrooms	64%	64%	64%	65%	66%	64%	60%	57%	64%	66%	66%	68%
4 or more bedrooms	23%	34%	11%	21%	33%	9%	32%	42%	19%	27%	34%	14%
Total Rooms												
1 room	2%	0%	3%	3%	0%	5%	1%	0%	2%	0%	0%	0%
2 or 3 rooms	13%	3%	25%	14%	2%	26%	8%	1%	18%	8%	1%	20%
4 or 5 rooms	41%	35%	48%	39%	32%	47%	41%	37%	46%	40%	35%	49%
6 or more rooms	44%	62%	23%	44%	65%	22%	50%	61%	34%	52%	64%	31%

Source: American Community Survey 2011 B25032, B25036, B25042, and B25020.

The number of residential building permits issued decreased rapidly after 2005

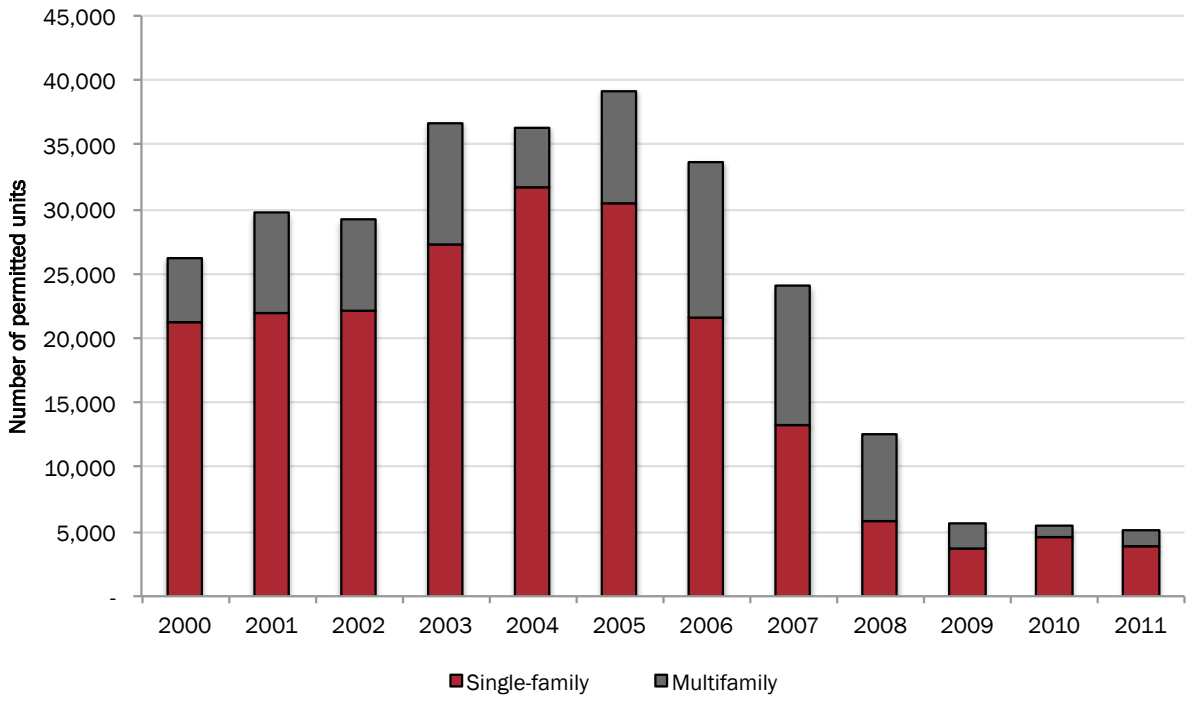
- Between 2000 and 2011, more than 284,000 residential building permits were issued, averaging 25,800 permits issued annually.
- The number of permits issued peaked from 2003 to 2005, with more than 35,000 permits issued in each of these years.
- Between 2009 and 2010, about 5,000 permits were issued each year, substantially lower than the average number of permits issued annually over the past 11 years.
- Nearly three-quarters of permits issued were for single-family units, with about one-quarter issued for multi-family units.
- About half of the permits for all housing were issued in Las Vegas, North Las Vegas, and Henderson.
- More than half of the permits for multi-family housing were issued in Las Vegas.

Table A-25. Residential building permits issued, 2000 to 2011, Clark County and selected cities

	Clark County		Las Vegas		North Las Vegas		Henderson	
Year	SF	MF	SF	MF	SF	MF	SF	MF
2000	21,282	4,942	4,750	1,134	2,505	519	5,507	379
2001	21,871	7,836	4,295	880	2,665	365	4,109	1,430
2002	22,148	7,008	4,454	1,110	2,735	555	3,980	684
2003	27,354	9,378	6,861	2,322	4,599	497	4,267	602
2004	31,741	4,654	6,200	1,720	6,105	813	4,595	106
2005	30,479	8,758	4,271	2,287	7,007	1,057	4,923	236
2006	21,590	12,138	2,998	2,204	4,262	1,469	4,249	716
2007	13,310	10,779	2,356	547	2,365	391	2,224	377
2008	5,840	6,697	1,085	1,613	834	1,614	1,063	415
2009	3,777	1,911	744	381	498	-	491	786
2010	4,623	851	926	362	648	20	700	68
2011	3,817	1,330	814	114	510	136	752	368
Total	**207,832**	**76,282**	**39,754**	**14,674**	**34,733**	**7,436**	**36,860**	**6,167**
% Total	**73%**	**27%**	**73%**	**27%**	**82%**	**18%**	**86%**	**14%**
Average	**17,319**	**6,357**	**3,313**	**1,223**	**2,894**	**620**	**3,072**	**514**

Source: U.S. Census

Figure A-24. Residential building permits issued, 2000 to 2011, Clark County



Source: U.S. Census

Conclusions about housing characteristics

- Vacancy rates generally cycle between 4% to 8% in urban areas in a healthy housing market. Vacancy rates in multi-family housing are generally higher than in single-family housing in a healthy housing market. Clark County's vacancy rates appear to

be high relative to vacancy rates during the last decade, consistent with vacancy rates in Nevada and the U.S.

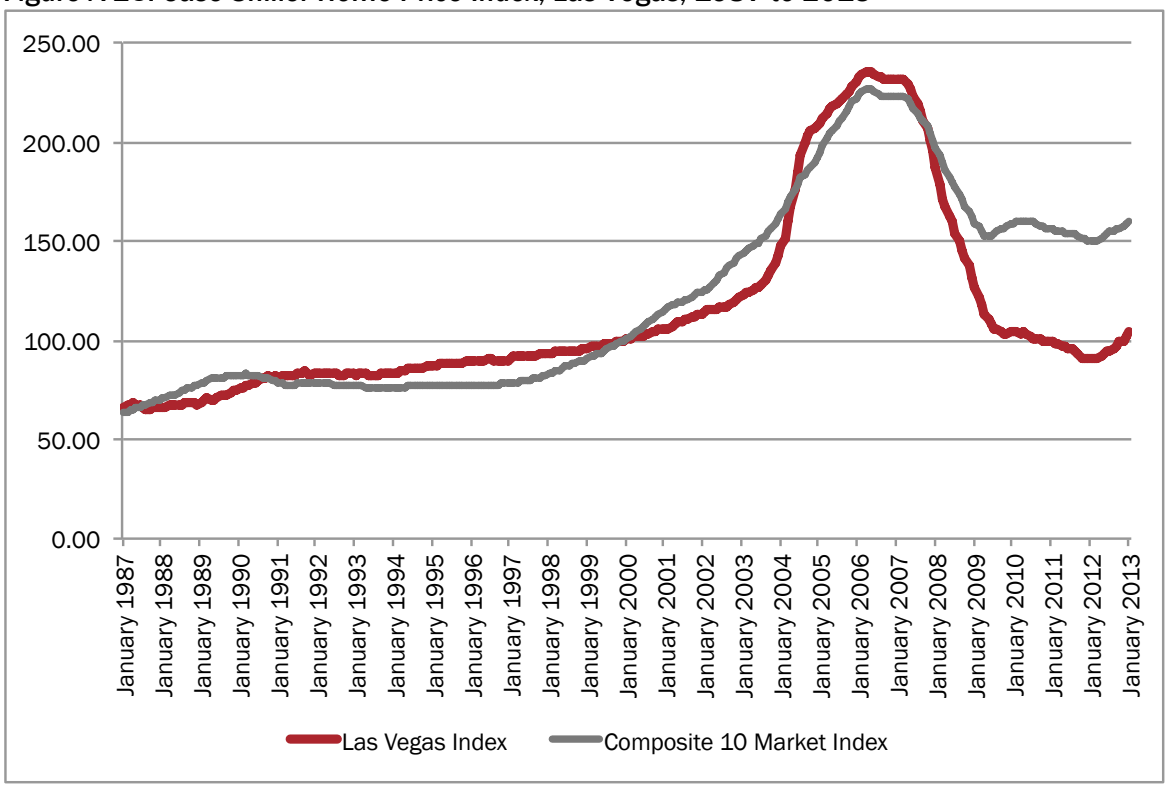
- The decline in homeownership rates is related to an increase in foreclosure activity and declines in housing prices (discussed later in this section).
- The majority of housing in Clark County is single-family detached housing. The majority of housing developed over the 2000 to 2011 period was also single-family detached housing.
- The decline in homeownership rates and increased share of renters living in single-family detached housing is consistent with other evidence (including anecdotal evidence from interviews) that single-family detached housing was overbuilt during the recent housing market bubble.

Housing costs

Housing prices in Clark County changed rapidly between 2003 and 2009

- The Case-Shiller home price index shows that Clark County's housing prices increased gradually between 1987 and 2003. Between 2003 and late 2006, housing prices more than doubled. This change in price is consistent with other large urban housing markets in the U.S.
- Starting in 2006, Clark County's housing prices decreased by more than half. Prices peaked in April 2006, then dropped to the price level of approximately 1996, when the market bottomed out in January 2012. The price decrease in Clark County was substantially larger than in other large urban housing markets in the U.S.
- Housing prices stabilized in 2010, then decreased in 2011 before bottoming out in early 2012. Prices have been consistently increasing (seasonally adjusted) starting in February 2012.

Figure A-25. Case-Shiller Home Price Index, Las Vegas, 1987 to 2013



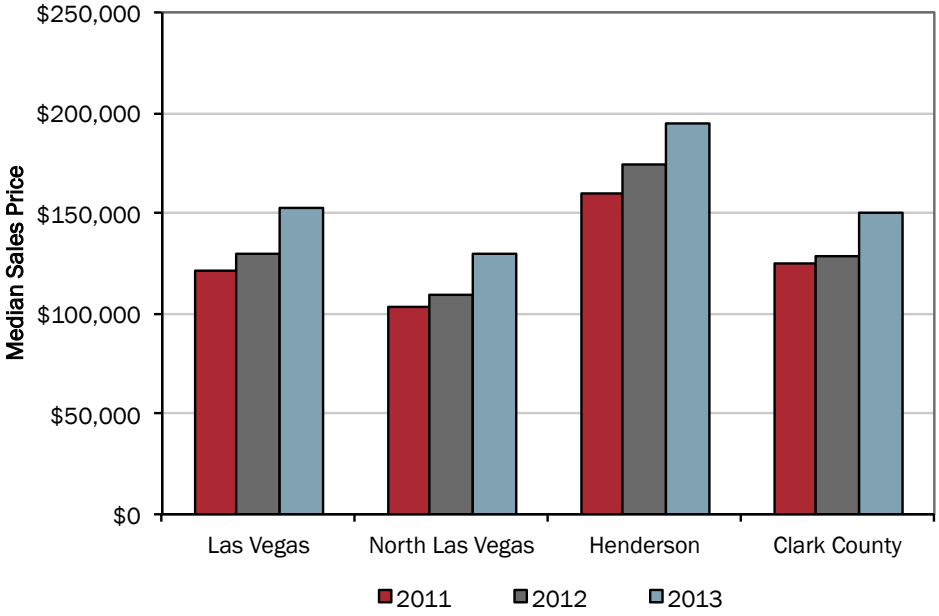
Source: Case-Shiller

Table A-26. Median sales price, single-family detached housing, Clark County, April 2003, April 2007, and February 2013

Year	Median Sales Price
2003	$187,250
2007	$300,000
2013	$150,000
Change 2001 to 2011	
Dollar	-$37,250
Percent Change	-20%
Change 2007 to 2011	
Dollar	-$150,000
Percent Change	-50%

Source: National Association of Realtors,
Greater Las Vegas Association of Realtors

Figure A-26. Median sales price, single-family detached housing, Las Vegas, North Las Vegas, and Henderson, selected months in 2011, 2012, and 2013

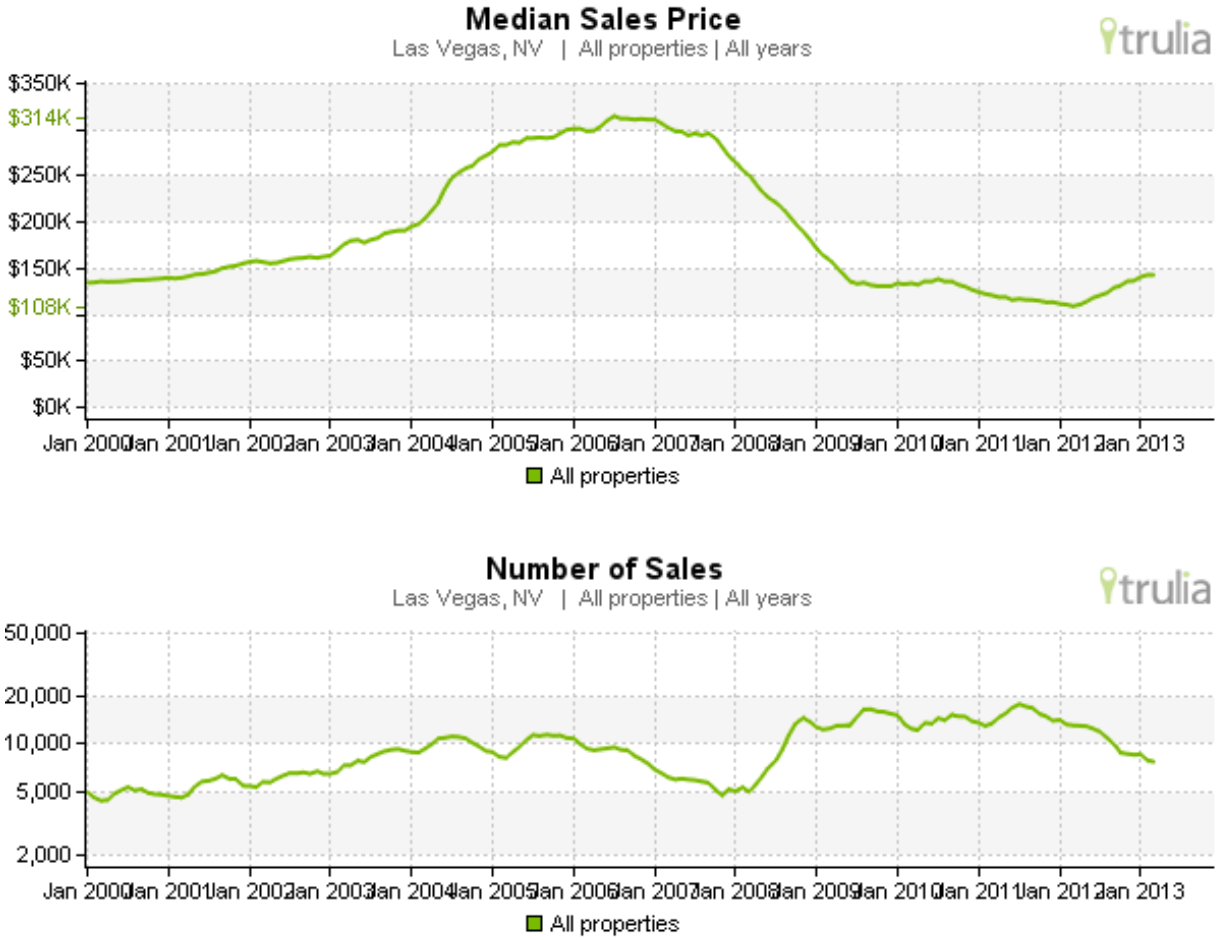


Source: National Association of Realtors, Greater Las Vegas Association of Realtors

Median sales prices peaked in 2007 and appear to be stabilizing in 2013

- In 2007, median sales prices for single-family detached housing peaked at about $300,000 in Clark County and by early 2013, had decreased to about $150,000, a 50% decrease.
- Median sales prices for all housing prices decreased to less than $150,000 in mid-2009 and appeared to stabilize at about $150,000 by early 2013.
- Median sales prices for single-family detached housing in Las Vegas, North Las Vegas, and Henderson followed the same pattern as the County, with the highest median prices in Henderson.

Figure A-27. Median Sales Price and Number of Sales, Las Vegas, January 2000 to January 2013



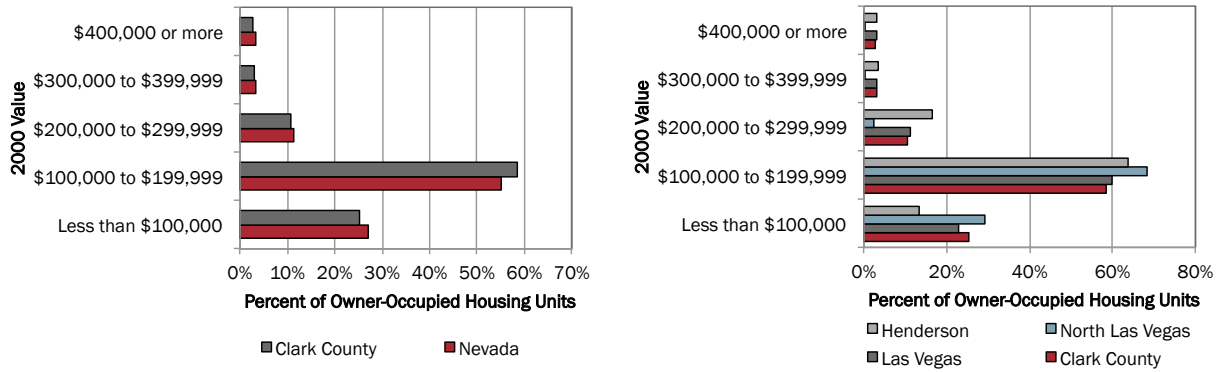
Source: Trulia.com

Table A-27. Median value of owner-occupied housing units, Nevada, Clark County, and select cities, 2001 and 2011

	2000	2011	Change 2000 to 2011 Amount	Change 2000 to 2011 Percent
Nevada	$142,000	$158,000	$16,000	11%
Clark County	$139,500	$153,800	$14,300	10%
Las Vegas	$137,300	$153,200	$15,900	12%
North Las Vegas	$156,000	$124,200	-$31,800	-20%
Henderson	$123,000	$192,900	$69,900	57%

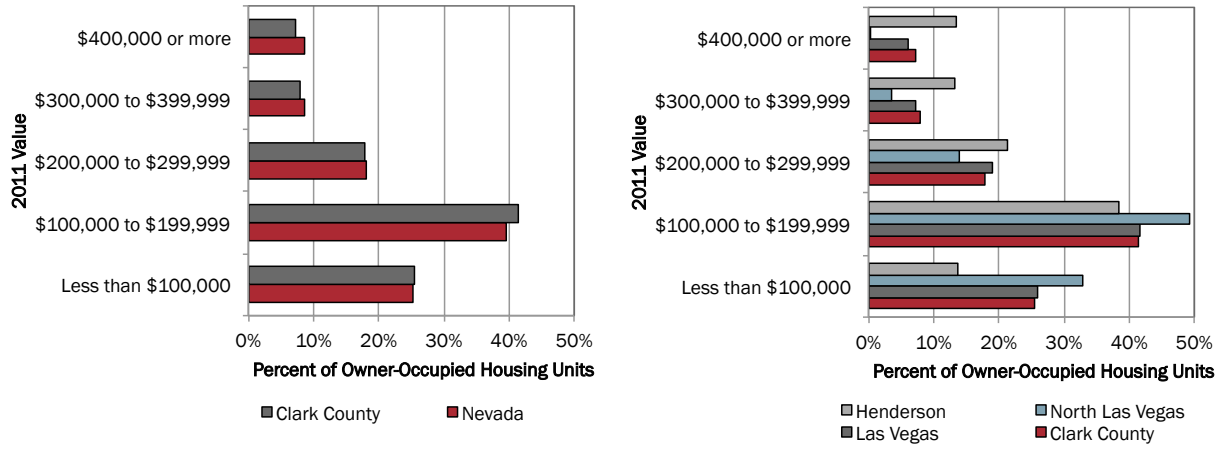
Source: American Community Survey 2011 B25075.

Figure A-28. Value of owner-occupied housing units, Nevada, Clark County, and select cities, 2000



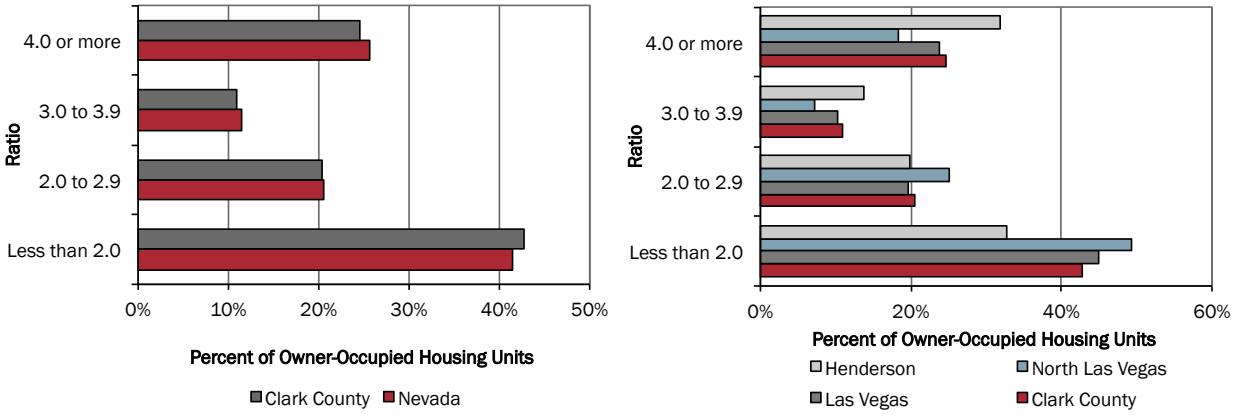
Source: U.S. Census 2000 SF3 H84.

Figure A-29. Value of owner-occupied housing units, Nevada, Clark County, and select cities, 2011



Source: American Community Survey 2011 B25075.

Figure A-30. Ratio of value to household income for owner-occupied housing units, Nevada, Clark County, and select cities, 2011



Source: American Community Survey 2011 B25100.

Median contract rent has decreased in Clark County since 2008

- Median contract rent in Clark County increased 27% from 2000 to 2011, from $648 to $818. The peak in contract rent was in 2008, with a median contract rent for Clark County of $899.
- For the same period in North Las Vegas, rents increased 55%.
- In 2000, median nominal rent was lower in North Las Vegas ($556) compared to Clark County ($648). By 2011, rent was higher in North Las Vegas ($864) than the median rent in Clark County ($818).

Table A-28. Median contract rent, Nevada, Clark County, and select cities, 2000 through 2011

Year	Nevada	Clark County	Las Vegas	North Las Vegas	Henderson
2000	$630	$648	$632	$556	$779
2005	$747	$772	$765	$769	$876
2006	$786	$822	$784	$825	$952
2007	$842	$874	$821	$935	$1,012
2008	$866	$899	$861	$933	$1,071
2009	$849	$883	$858	$959	$1,034
2010	$811	$842	$819	$867	$916
2011	$800	$818	$803	$864	$943
Change 2000 to 2011					
Amount	$170	$170	$171	$308	$164
Percent	27%	26%	27%	55%	21%

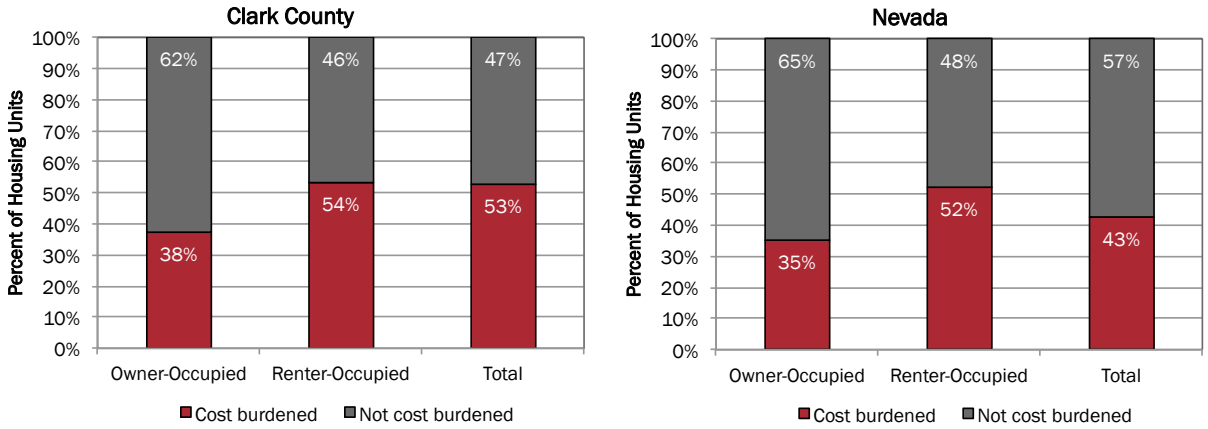
Source: U.S. Census 2000 SF3 H56 and American Community Survey 2011 B25058.

Renter households are the most likely to be cost-burdened

- About 53% of all Clark County households are cost-burdened (i.e., pay more than 30% of their gross income for housing costs). 54% of renter-households and 38% of owner-households are cost-burdened.
- In comparison, 43% of all households in Nevada are cost burdened, with 52% of renter-households and 35% of owner-households being cost-burdened.

Figure A-30 shows cost burden for Nevada and Clark County. Cost burden is a measure of housing affordability, based the HUD standard that says that housing is affordable if it costs no more than 30% of a household's gross income.

Figure A-31. Housing Costs as a percent of monthly household income by tenure in 2011, Nevada and Clark County



Source: American Community Survey 2011 B25091 and B25070.

Table A-29. Median household income, owner-occupied housing value, and gross rent in 1999 and 2011, Clark County and Nevada

	Clark County				Nevada			
Indicator	1999	2007	2011	Change 1999-2011	1999	2007	2011	Change 1999-2011
Median HH Income	$44,616	$55,996	$48,215	8%	$44,581	$55,062	$48,927	10%
Median Owner Value	$139,500	$315,300	$153,800	10%	$142,000	$311,300	$158,000	11%
Median Gross Rent	$716	$1,017	$957	34%	$699	$980	$936	34%
Ratio of Housing Value to Income								
Median HH Income	3.1	5.6	3.2		3.2	5.7	3.2	

Source: U.S. Census 2000 SF3 P53, H76, and H63; American Community Survey 2007 P53, H76, and H63; American Community Survey 2011 P53, H76, and H63.

Table A-30 shows a rough estimate of housing affordability in Clark County by income level in 2012. This table is based on American Community Survey data about income, value of owner units, and cost of rent. This table uses HUD standards for housing affordability, which say that housing is affordable if it costs no more than 30% of a household's gross income. The table also uses HUD's estimates for fair market rents in Clark County.

Clark County has a deficit of housing affordable to lower-income households. More than one-fifth of Clark County's households are unable to afford the cost of renting a studio apartment ($691). About one-third of Clark County's households are unable to afford the cost of a one-bedroom unit ($864). These findings are consistent with the fact that more than half of Clark County's renters are cost-burdened.

Clark County has a surplus of housing affordable to households with income between $75,000 and $150,000. This suggests that some households are living in housing that costs less than they could afford, according to HUD standards.

Table A-30. Rough estimate of housing affordability, 2012, Clark County

Income Level	Number of HH	Percent	Affordable Monthly Housing Cost	Crude Estimate of Affordable Purchase Owner-Occupied Unit	Est. Number of Owner Units	Est. Number of Renter Units	Surplus (Deficit)	HUD Fair Market Rent (FMR) in 2008
Less than $10,000	42,600	7%	$0 to $250	$0 to $25,000	10,496	3,608	(28,496)	
$10,000 to $14,999	30,353	5%	$250 to $375	$25,000 to $37,000	5,434	3,015	(21,904)	
$15,000 to $24,999	68,211	11%	$375 to $625	$37,500 to $62,500	18,525	30,532	(19,154)	
								Studio: $691
$25,000 to $34,999	77,270	12%	$625 to $875	$62,500 to $87,500	33,075	80,612	36,417	1 bdrm: $864
$35,000 to $49,999	102,706	16%	$875 to $1,250	$87,500 to $125,000	62,226	103,332	62,852	2 bdrm: $1,064
								3 bdrm: $1,568
$50,000 to $74,999	132,808	21%	$1,250 to $1,875	$125,000 to $187,500	87,492	52,616	7,301	4 bdrm: $1,861
Las Vegas-Paradise MSA MFI: $71,400			$1,785	$178,500				
$75,000 to $99,999	80,565	13%	$1,875 to $2,450	$187,500 to $245,000	44,469	17,346	(18,750)	
$100,000 to $149,999	71,292	11%	$2,450 to $3,750	$245,000 to $375,000	48,226	3,637	(19,428)	
$150,000 or more	31,935	5%	More than $3,750	More than $375,000	31,884	1,212	1,162	
Total	637,740	100%			341,829	295,911	0	

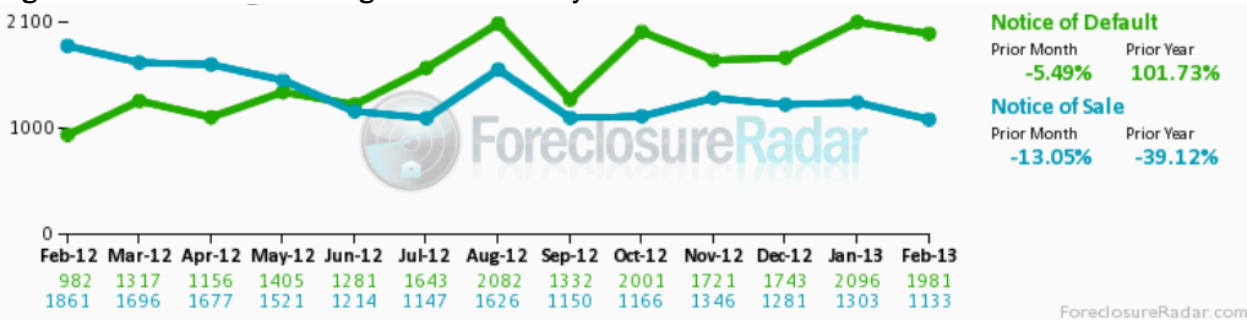
Source: American Community Survey 2011 B19001, B25075, and B25063

Foreclosure activity

Foreclosure activity has decreased over the last year; the trend, however, appears to be reversing based on the most recent data

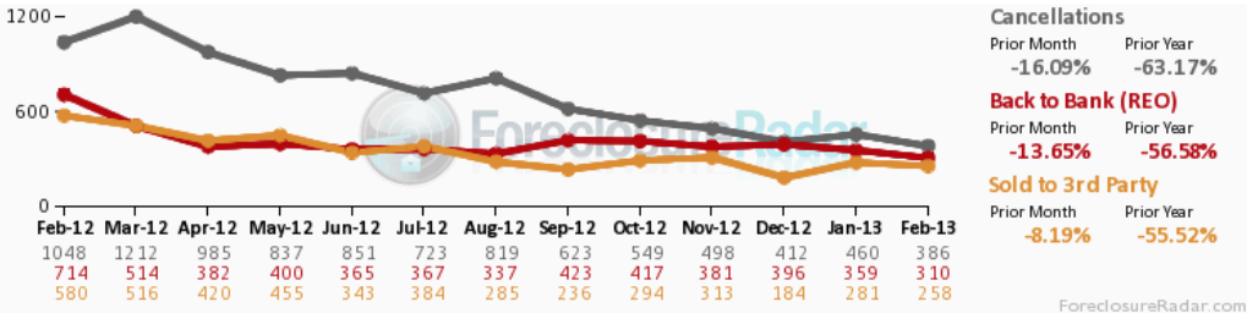
- Notice of foreclosure sales were down 39% year over year from February 2012. However, notices of default were up 102% during the same period. Notices of default are the leading indicator for notice of sales, so it is likely that this number will increase in 2013.
- Preforeclosures increased 11% in from January to February 2013. This is indicative of the trend of increasing notice of sales. There were 0.8 foreclosure cancellations for every sale (3rd party or back to the bank). Since February 2012 the ratio has dropped by 13% to 0.67 cancellations per sale.
- The combination of fewer cancellations and increasing preforeclosures will likely lead to an increase in the number of foreclosures in 2013.
- Bank owned properties (REO) decreased 50% in the past year. As the numbers of REO decrease, the market will stabilize as the supply of low priced inventory decreases.

Figure A-32. Foreclosure filings in Clark County



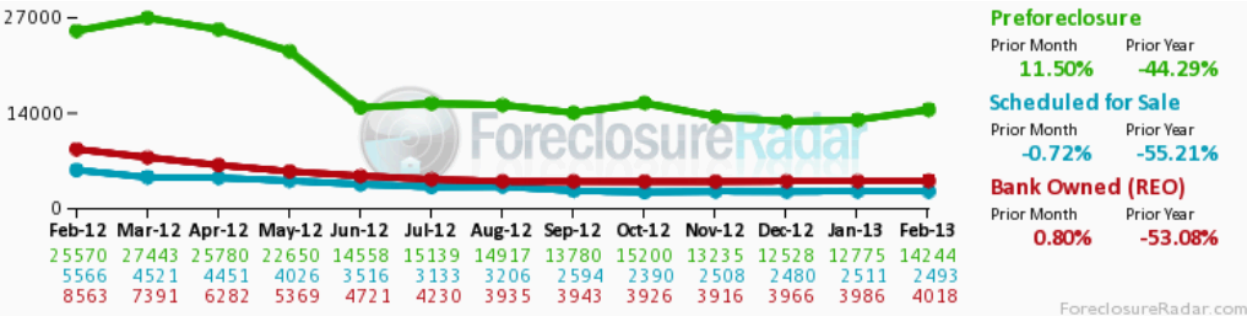
Source: Foreclosureradar.com.

Figure A-33. Foreclosure outcomes in Clark County



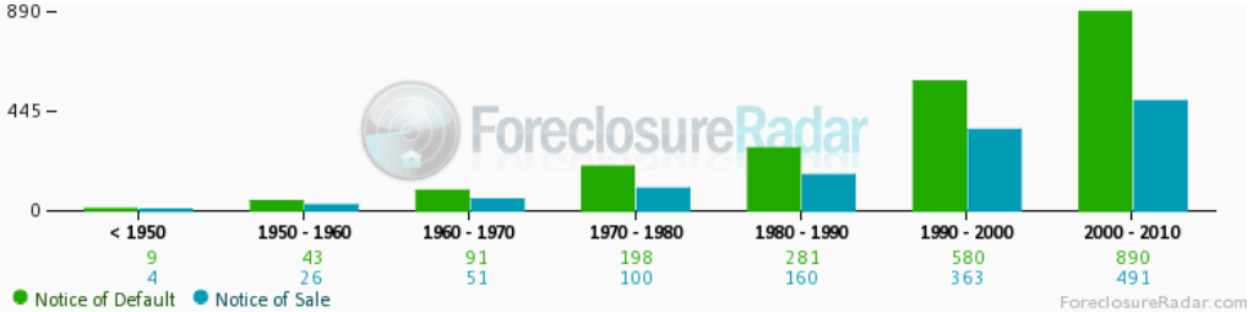
Source: Foreclosureradar.com.

Figure A-34. Foreclosure inventories in Clark County



Source: Foreclosureradar.com.

Figure A-35. Foreclosure filings by year built, Clark County



Source: Foreclosureradar.com.

Figure A-36. Foreclosure filings by estimated market value, Clark County

Source: Foreclosureradar.com.

Conclusions about housing costs and foreclosure activity

- Clark County's housing market had a larger-price bubble than the national housing market and it is taking longer for the Clark County housing market to recover from the dramatic increase and decrease in prices between 2003 and 2013.
- The rapid price changes put many households who purchased homes during the housing bubble (mostly between 2003 and 2007) in a position where they owe more on their mortgage than their home is worth. This contributed to the spike in foreclosure activity.
- In the short term, increased foreclosures have caused housing prices to drop and have increased the supply of houses listed for sale.
- The spike in foreclosures caused by the bursting of the housing bubble will likely not have a significant impact on the long-term demand for housing.
- The most significant impact the foreclosure crisis will have on future housing demand is through the decrease in the percentage and number of homeowners. Previous homeowners who are now renting will look to re-enter the housing market in the future as credit restrictions decrease and individual credit scores recover.
- Housing affordability, specifically for renters, is a problem despite recent decreases in rental rates. Approximately half of Clark County's renter households are cost-burdened; rents would have to drop significantly to be affordable for most renter households.

Appendix B.
Framework for forecasting housing demand[1]

Many factors affect housing markets and housing choice

Economists view housing as a bundle of services for which people are willing to pay some price: shelter certainly, but also proximity to other attractions (jobs, shopping, recreation), amenities (type and quality of fixtures and appliances, landscaping, views), prestige, and access to public services (quality of schools).

Because it is impossible to maximize all these services and simultaneously minimize costs, households must, and do, make tradeoffs. What they can get for their money is influenced by both economic forces and government policy. Different households will value what they can get differently. They will have different preferences, which in turn are a function of many factors like income, age of the head of the household, number of people and children in the household, number of workers and job locations, number of automobiles, and so on.

These points explain why forecasting what types of housing will be built is so complex and uncertain:

- The housing choices of individual households are influenced by dozens of factors.
- Those factors interact in complex ways.
- Individual households may weight (value) the factors in very different ways. Those preferences may be correlated with certain socioeconomic and demographic characteristics, but they are not dictated by them.
- What people say they want and what they can and will actually pay may be very different.
- Housing demand in a given region is the result of the individual decisions of thousands of households.

The complexity of a housing market is a reality, but it does not obviate the need for some type of forecast of future housing demand, and of the implications of that housing demand for land demand and consumption. Such forecasts are inherently uncertain. Their usefulness for public policy often derives more from the explanation of their underlying assumptions about the dynamics of markets and policies than from the specific estimates of future demand and need. This section attempts to provide such an explanation.

Housing as a bundle of goods

Starting broadly, residential choice means the choice of both a housing *location* and a housing *type*. Factors relating to location include travel times (to work, shopping, recreation, education), views, neighborhood characteristics, quality of public services (especially, for many families,

schools), and tax rates. Housing type comprises many attributes, the most important of which are structure type (e.g., single-family, multi-family) and size, lot size, quality and age, price, and tenure (own/rent). All of these attributes—what real estate economists refer to as the *bundle of goods* that one purchases when making a housing choice—affect residential choice.

Consider in more detail some of the location and structure characteristics that households evaluate:

- **Access to work.** For a large majority of U.S. households, at least one member of each household, and often two members, commutes to work daily. Fundamental to early and (to a significant extent) prevailing theories of urban economics and location theory is the tradeoff between travel time and land value (which for households means residential land value). There is no doubt other factors influence location decisions, or that the auto gives households considerable flexibility in choosing a location, but access to work remains an important determinant of household location.
- **Access to shopping, recreation, friends.** About 70% of all household travel in the U.S. is for non-work purposes. People travel from their homes to shopping, recreation, education, and other neighborhoods. Households value access to a variety of destinations.
- **Public services.** Households value a variety of public services, some of which vary by location. The quality and price of water, sewer, drainage, and power service typically vary little within a metropolitan area. The quality of other public services, especially schools and public safety (police and fire protection) can often vary substantially, and can have a large impact on a household's location decision.
- **Neighborhood characteristics.** Characteristics of residential neighborhoods—character of development, income, age, and size of households, environmental quality—vary substantially within a metropolitan area, and are important to households. Most households have had the experience of settling for a smaller, less-well maintained unit in order to get housing they can afford in a location they (and others) desire.
- **Land and improvements.** As with businesses, the desire for space varies by household, and households are willing to trade-off space for other attributes, such as accessibility and amenities. Some families, for example, are willing to pay more for space, and use less of it, in areas with especially good schools.

Six categories of factors that determine the type and amount of new housing

At ECONorthwest, we combined our knowledge of economic theories about housing demand with practical experience with local housing markets and policies to identify six categories of factors that affect the amount and type of housing built in a community and can be summarized into six categories (which we refer to as "the six P's"):

- **Population.** Even if none of the subsequent factors changed, housing demand will change, all else being equal, if population (i.e., the number of households) changes. Population grows either when people move to a region (in-migration) or through natural

increase (births minus deaths). The demographic characteristics (e.g., age) of new population affect housing demand.

- **Purchasing power.** Even without population growth, if an existing population were to suddenly get richer, it might spend more on housing—housing demand would increase. The amount that a household can spend on housing is predominantly dependent on household income and wealth, but the availability of mortgage financing also affects housing choice.
- **Preferences.** Households have preferences about: (1) types of housing (e.g., single-family detached or apartments), (2) housing amenities (e.g., fireplaces or multiple-car garages), (3) and locational amenities (e.g., distance from work, quality of schools, or access to shopping). Housing preferences are linked to demographic characteristics and purchasing power.
- **Prices (and costs) of housing.** Households have money to pay for housing, and preferences about the kind of housing they want to pay for. Prices tell them how much of what they want they can afford to get. If there are reasons to believe, for example, that the real price of residential land or housing construction will be rising, then one would expect housing developers and purchasers to begin to economize on lot size (land) or built space. Development costs describe the costs of building a house, including construction costs, land costs, and public services and infrastructure. Costs are strongly related to prices, but are not identical. For example, in a strong market with excess demand, a developer may be able to command a price that is in excess of development costs and a standard rate of return. In addition, certain advances in the technology of building housing or infrastructure my reduce costs.
- **Prices of housing compliments.** One important compliment for housing is transportation. For example, choices to purchase housing in suburban locations was influenced by the price of travel: if it had been very much higher, fewer households could have afforded to move to suburban locations. Telecommunications is a compliment for proximity and is a technology whose prices have dropped substantially in the last three decades.
- **Policy.** Governments affect the housing market through policies and actions that encourage or discourage development of certain types of housing in certain locations.

The relative importance of different factors

The literature is inconclusive on the relative weight of site and structure characteristics in housing location choice in the U.S. Based on a household survey, Wachs, et. al. (1993) concluded "…commuting distance is likely to be a secondary consideration in choosing where to live; housing costs, quality of schools, and safety from crime were anticipated generally to play a much larger role." Geographic scale plays a large role in the appropriateness of this statement. If one is looking at neighborhoods that represent an overall difference of five minutes in travel time, service and housing attributes will probably dominate residential locational choice. Within a larger metropolitan region travel time will play a much more substantial role.

Levine (1998) concluded commute time was a dominant determinant of residential location at the regional scale, and that provision of affordable housing near employment concentrations can influence residential location decisions for low-to-moderate income single-worker households. He noted, however, that the jobs-housing balance does not decrease travel times or increase travel speeds, but that relaxation of suburban regulation intended to lead to improved matches between home and workplace is seen as enhancing the range of households' choices about residence and transportation.

The relative importance of many of these factors to different households is different. Some like the excitement, diversity, and opportunities of an urban location; others like the quiet and security of a suburban cul-de-sac. Some may want a big yard; some want no maintenance responsibilities. Children and pets make a difference. Similar tradeoffs apply for own vs. rent; close-in vs. far out; amount of space and quality vs. price.

Considerations in modeling future housing demand

Definitions: demand, absorption, need

The term "demand" gets used to mean two different but related things, which can create confusion analytically and in public discussion. In economic text books, "demand" is the ubiquitous downward-sloping demand curve: the estimated amount of some good or services that consumers will purchase at different prices. The greater the price, the less they purchase. But "demand" gets used commonly and in the press to mean not the demand curve, but the intersection of supply and demand curves at some quantity for a given price. In real estate, that use of the term demand would be equivalent to the term "absorption."[15]

Sometimes analysts introduce yet a third variation: "potential demand," which is a very squishy term. It is not the demand that one observes historically in the market place or that one expects to observe in the future. Rather, it is some bigger amount of demand—not predicted to occur necessarily—but apparently out there potential under some set of demand and supply conditions that are not specified.

In the context of housing markets, what one observes when looking at past and current housing conditions is *the intersection of the forces of housing supply and demand at prevailing prices*: in other words, absorption. As noted in the prior section, there are many factors that go into determining that intersection. Analysts will often divide these, as we do here, into factors that tend to have more influence on the demand side (e.g., growth in population, households, and income), and those that tend to have more influence on the supply side (e.g., the cost of materials, construction, and land).

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[15] Further definitions: absorption is similar but not identical to "new construction." New construction is probably the variable of primary interest. Over the longer run, absorption and new construction will be approximately equal. In the short run, units can get built but not sold (absorbed). Building permit data is directly about new construction and indirectly and approximately about absorption.

Thus, in this memorandum we use the term "demand" in two ways: (1) to refer to a category of factors that influence the amount of housing, by type, that has been or is likely to be absorbed in the Clark County market, and (2) the historical and forecasted amount of that absorption.

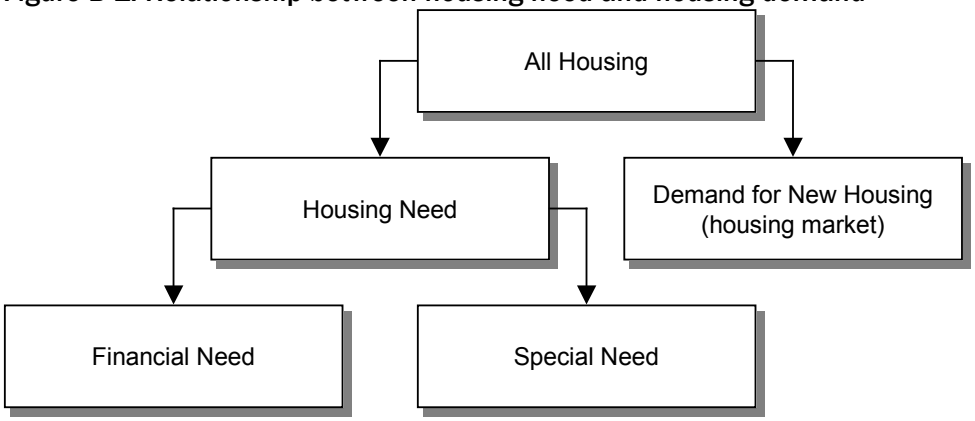
Consistent with the first use of the term, we discuss characteristics of households that create or are correlated with *preferences* for different types of housing, and *the ability to pay* for that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing; in other words, income or wealth).

The ability to pay is essential to the definition of housing demand. Housing market analysis often do not make a clear distinction between *demand* and *need*:

- *Housing need* can be defined broadly or narrowly. At its broadest, all households need shelter. For analysis, however, most studies use narrower definitions that distinguish between: (1) households that are financially able to purchase or rent housing at an "affordable" price, consistent with the requirements of their household characteristics, and (2) households that cannot find and afford such housing. Households in the second category have *need*: they are either unhoused, in housing of substandard condition, overcrowded, or paying more than their income and federal, state, or local standards say they can afford.
- *Housing market demand* is what households demonstrate they are willing to purchase in the market place. 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 by the market.

Figure B-1 distinguishes between housing needs that are unmet and those that are met via market transactions. Housing need is the total number of housing units required to shelter the population. In that sense, housing need is approximately the number of households: every household needs a dwelling place. Some housing need is met through market transactions without much government intervention because households have the income to *demand* (purchase) housing services (as owners or renters). That demand is shown in the box on the right. Other households, however, have needs unmet, usually because they lack the resources to purchase housing services (financial need), but also because of special needs (though, even here, the issue is still one of financial resources).

Figure B-1. Relationship between housing need and housing demand



Further confusing the discussion is that most households with needs (ones that do not have the financial resources to purchase or rent what society deems as minimally acceptable housing) are actually part of the effective demand overall: they are being housed somewhere. Most, however, are not part of the effective demand for *new* housing units (though a few are because they either receive income supplements or housing cost and price are reduced by other government programs).

Forecasting demand based on component factors

A simple way to forecast new housing units (i.e., units built or absorbed, one definition of demand) is to project historical trends into the future. That technique gets criticized as "driving by looking in the rear-view mirror," but for long-run forecasting it can be equally or more reliable than much more sophisticated forecasting techniques. Why?

For growing metropolitan areas (Clark County is in this class), it is typical to see long-run, average growth rates for population and employment in the range of 1.0% to 1.5%. Since housing stock is highly correlated with population, it is not surprising that new housing gets added annually at the rate of about 1% of total housing stock. In any given year, these numbers can vary in the aggregate and by type of housing. But over a 20-year forecasting period, the historical data typically show a long-run (secular) upward trend containing short-run (cyclical) peaks and troughs.

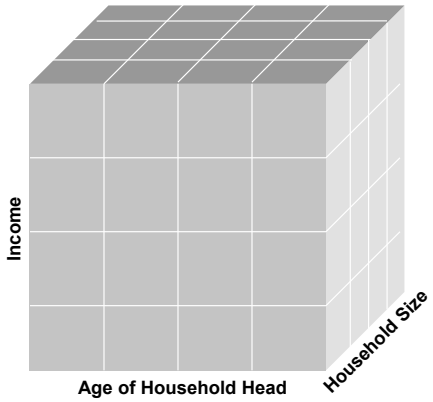
The other way to forecast new housing construction / absorption is as a function of the factors that cause it to occur (like the ones discussed in the prior section). If one could do the measurement fine enough, one might find that every household has a unique set of preferences for housing. But no regional housing analysis can expect to build from the preferences of individual households.[16] Thus, most housing market analyses that get to this level of detail try

[16] Not only could one not measure the preferences of all existing households; one could not know what specific households would be migrating to the region.

to describe *categories* of households on the assumption that households in each category will share characteristics that will make their preferences similar.

Three household characteristics are strongly correlated with choices about residential location and housing type: age of the household head, size of the household, and income. Even if these were the only three significant variables influencing housing preferences (they are not), and if they each only had four subcategories (e.g., age of head 18-30, 31-40, 41-55, 55+) they would lead to 64 different household types (4*4*4). This idea is illustrated in Figure B-2.

Figure B-2. Illustration of combinations of factors influencing housing choice



It is difficult, at best, to allocate households to each of the 64 different housing types. Simpler forecasting techniques allow a reasonable estimate of the total number of housing units that will be needed based on expected population increases and the basic relationships between the variables shown in Figure B-2.

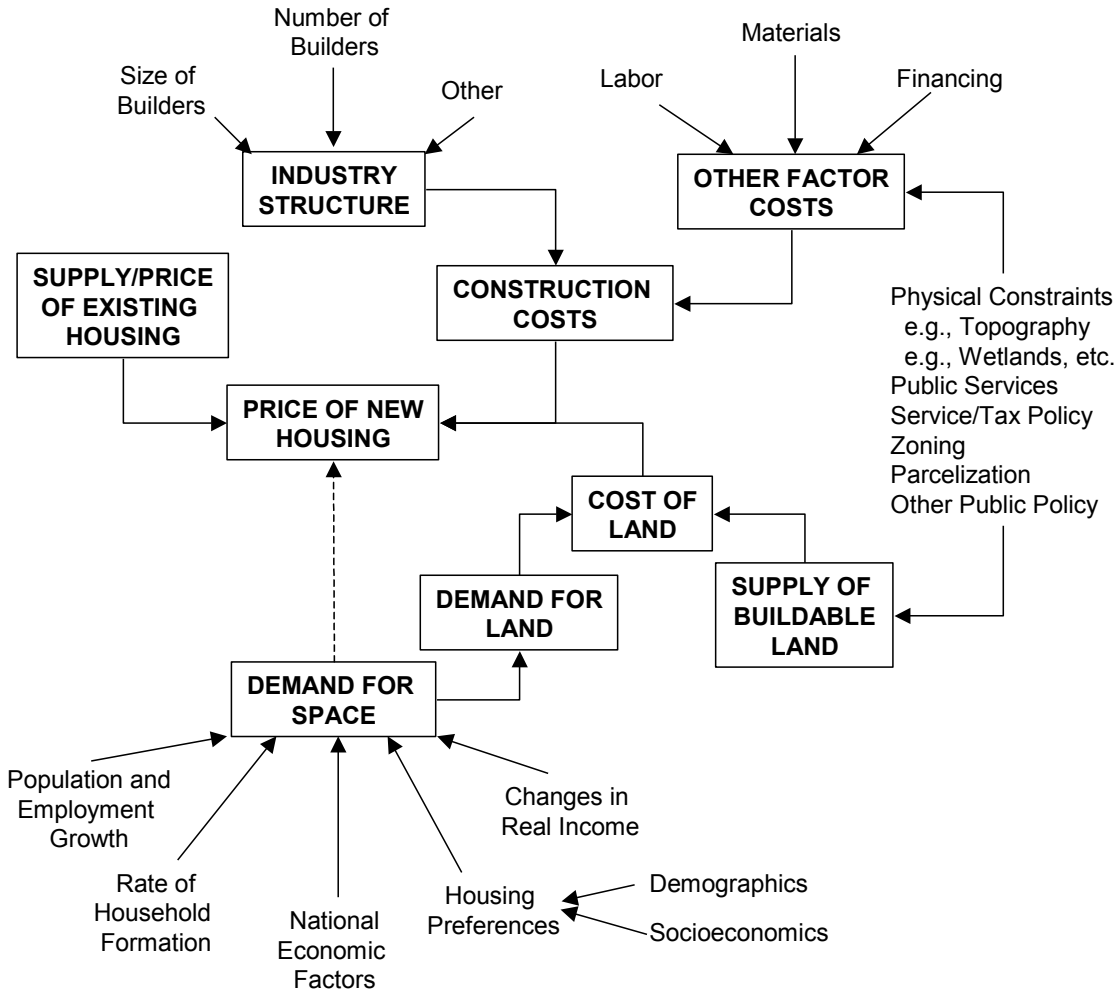
More rigorous specifications of factors that drive housing choice are also possible. Economists have developed what they refer to as *hedonic price models* of the housing market, which is jargon for models that try to estimate the contribution of each key component in a house's bundle of services to its market price. The housing demand variables in a hedonic price model are typically price of housing, price of other goods and services (because some of them are compliments for goods and services in the housing bundle: e.g., auto and transit travel is a compliment for residential locations next to trip destinations), the financial resources of consumers (income and wealth), preferences, and the number of households.[17] The model must also account for housing supply variables, such as the price of desirable housing characteristics.

Figure B-3 shows factors that influence housing cost. A more complete model would have to be disaggregated by type of housing product (e.g., single-family dwelling, multi-family), and type

[17] Complicating the picture further is that for a large percentage of households, housing is not only a consumption good, but also an investment. Thus, housing choice depends also on one's assessment of future capital gains in the housing market.

of household with effective demand for those products (e.g., by household size, age of household head, income).

Figure B-3. Factors affecting housing price



Source: ECONorthwest

The purpose of the discussion so far has been to give some background on the kinds of factors that influence housing choice, and in so doing, to convey why the number and interrelationships among those factors ensure that any generalization about housing choice will be wrong, at least in part. Given that caveat, we proceed to make some of those generalizations.

Figure B-4 illustrates a common pattern for how one's life cycle intersects with housing choice. Many other patterns exist, but the one shown is common. The point is that housing needs and preferences change for a person or a household over time, and, on average, they change in predictable ways.

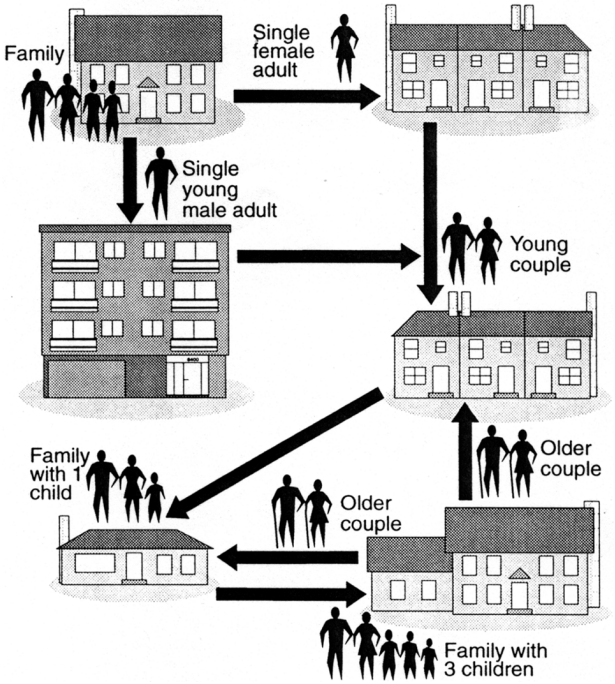
The main demographic and socioeconomic variables that may affect housing choice and preference for multi-family or compact single-family housing are: age of householder, household composition (e.g., married couple with children or single-person household), size of

household, ethnicity, race, household income, or accumulated wealth (e.g., real estate or stocks). The literature about housing markets identify the following household characteristics so those most strongly correlated with housing choice are: age of the householder, size of the household, and income. [18]

- **Age of householder** is the age of the person identified (in the Census) as the head of household. Householder age affects housing type and tenure. Households make different housing choices at different stages of life. Mobility is substantially higher for people aged 20 to 34. People in that age group will also have, on average, less income and fewer children than people in the next older age bracket. All of these factors mean that younger households are much more likely to be renters. Renters are more likely to be in multi-family housing. Figure B-5 shows this general pattern and also shows that it is not absolute: some young people own single-family houses and some old people rent. This trend holds true for Clark County.
- **Size of household** is the number of people living in the household. The size of the household is related to the age of the householders. Younger and older people are more likely to live in single-person households and people in their middle years are more likely to live in multiple person households (often with children). In Clark County, households older than 75 years are the most likely to be single-person households (about half of households older than 75 years). About 20% of households younger than 54 years are single-person households. Between age 55 and 74, about one-third of households are single-person households.
- **Income** is the household income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and to household tenure (e.g., rent or own). Figure B-6 shows how age and income relate to housing type and tenure in the U.S. (1990). It illustrates a substantial preference for single-family housing and ownership when incomes allow that choice, regardless of age. A review of census data that analyzes housing types by income in most cities will show that as income increases, households are more likely to choose single-family detached housing types. Consistent with the relationship between income and housing type, higher income households are also more likely to own than rent. This trend appears to hold true for Clark County.

[18] See the end of this appendix for citations to some of the literature supporting these generalizations.

Figure B-4. The intersection of life cycles and housing careers

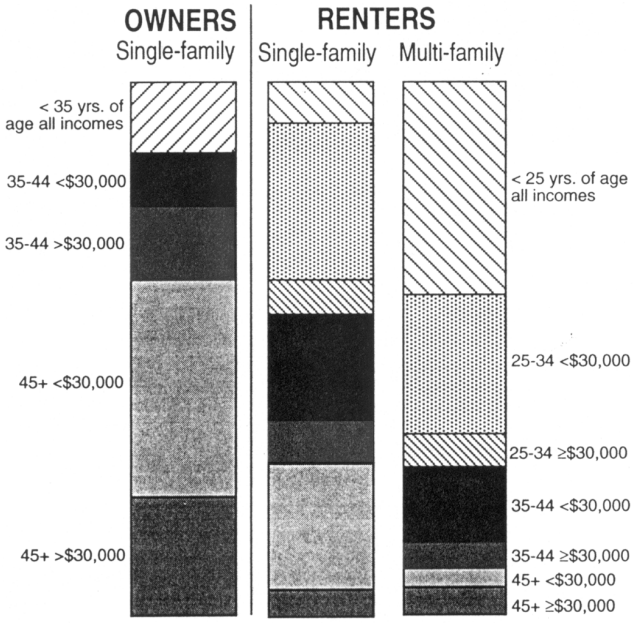


Source: Reprinted from Clark, Willam A.V. and Frans M. Dieleman. 1996. Households and Housing. New Brunswick, NJ: Center for Urban Policy Research.

Figure B-5. Tenure and household type by age of household head

multi-family

Figure B-6: Composition of owner and renter tenures for U.S. households, 1990



Source: Reprinted from Clark, Willam A.V. and Frans M. Dieleman. 1996. *Households and Housing*. New Brunswick, NJ: Center for Urban Policy Research.

In summary, the data illustrate what more detailed research has shown and what most people understand intuitively:

- Household life cycles and housing choice interact in ways that are predictable in the aggregate.
- Age of the household head is correlated with household size and income.
- Household size and age of household head affect housing preferences.
- Income affects the ability of a household to afford a preferred housing type.

Thus, simply looking at the long wave of demographic trends can provide good information for estimating future housing demand. The connection between socioeconomic and demographic factors, on the one hand, and housing choice, on the other, is often described informally by giving names to households with certain combinations of characteristics: the "traditional family," the "never-marrieds," the "dinks" (dual-income, no kids), the "empty nesters."