

American Housing Survey

**Components of Inventory Change and
Rental Dynamics Analysis:
Anaheim, 2002–2011**

Prepared For:

**U.S. Department of Housing & Urban Development
Office of Policy Development & Research**

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**Contract No. C-CHI-01030
Order No. CHI-T0002
Project No. 1053-002**

May 2015

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Executive Summary

Components of Inventory Change (CINCH) is a tool used by housing analysts to study how the housing inventory changes over time. One typically thinks of the housing stock as evolving through two mechanisms—the construction of new units and the demolition of old units. While new construction and losses through demolition and natural disasters are the primary means by which the housing stock changes, CINCH shows that there are other important engines of change.

This report describes how the housing stock in the Anaheim metropolitan area changed between 2002 and 2011, with particular emphasis on affordable rental housing. The study uses data from the American Housing Survey, which collected detailed information on housing units in Anaheim and on their occupants in both 2002 and 2011.

In 2002 the Anaheim metropolitan area contained 995,600 housing units, including vacant units. By 2011 the number of housing units had increased to 1,054,100. There were no changes to the definition of the metropolitan area between AHS surveys. This represents an overall increase of 5.9 percent, which translates to an average annual increase of 0.6 percent over the 9-year period.

Between 2002 and 2011, only 4,600 units left the housing stock. Of these, 1,200 are clearly permanent losses—the original unit is gone, and major construction would be required to replace it with a new unit. Another 2,800 are temporary losses—the original unit needs repairs or is being used for other purposes. These units may or may not return to the housing stock. Finally, there were 600 units that left the housing either permanently or temporarily for “other” reasons, a category that encompasses a wide variety of situations.

In the period between the 2002 and the 2011 AHS surveys, 63,500 units were added to the housing stock. Ninety-seven percent of these additions were newly constructed units. The 2011 AHS did not track move-ins of mobile homes in Anaheim. Also, 800 new units were formed from the conversion or merger of 2002 units. We classified 700 units as recovered because these units had been in the housing stock at some point but were classified in 2002 as nonresidential. Finally, 600 units were added in other unclassified ways.

The Anaheim metropolitan area lost 0.5 percent of all 2002 housing units by 2011; additions to the stock between 2002 and 2012 represented 6.0 percent of the 2011 housing stock. Losses and additions varied across portions of the Anaheim housing market defined by the characteristics of the unit or its occupants. We observed the following patterns that were both atypical of the overall housing stock and statistically significant:

- Among units that were vacant in 2002, the loss rate was much higher.
- Smaller units (1 room or no bedrooms) experienced high loss rates, whereas larger units (4 or more bedrooms) had a lower rate.
- Size and type of structure mattered. Single-family attached units and units in large multifamily buildings (50 or more units or 3 or more stories) had high rates of addition,

while units in 2- to 4-unit structures or in multifamily structures with 1 or 2 stories had low rates of addition.

- Unit size also mattered, but the threshold was high. Units with 6 or 7 rooms or with 3 bedrooms had below-average rates of addition, whereas units with 8 or 10 or more rooms had higher-than-average rates.
- New additions to the stock were overrepresented among units in 2011 with moderate physical problems, apparently because of upkeep issues. Units lacking complete kitchens were also overrepresented.
- New additions were underrepresented among units with severe physical problems in 2011 or that lacked all plumbing facilities. However, the sample sizes were small.
- As separate groups, units in 2011 with older householders (65 or older) or White or Hispanic householders had low rates of addition, whereas those with Asian householders had a higher-than-average rate. Additions were lower than average among households on public assistance.
- The rate of addition among units that were renter-occupied in 2011 was higher than that of all occupied units but not statistically different. Among renter-occupied units, those with moderate monthly housing costs (\$800–\$1,249) had lower rates of addition, while those with high monthly housing costs (\$1,250 or more) and those occupied by high-income renters (\$100,000 or more) had higher-than-average rates of addition.
- The rate of addition among units that were owner-occupied in 2011 was slightly lower than that of all occupied units but not statistically different. However, among owner-occupied units, addition rates clearly varied by monthly housing costs and household income in 2011. Those units with low housing costs (\$350–\$1,249) or occupied by lower income owners (\$30,000–\$99,999) had lower rates of addition, while those with high housing costs (\$1,250 or more) and those occupied by high-income owners (\$100,000 or more) had higher-than-average rates of addition.

The 2002 rental stock in Anaheim was not affordable. Of the 366,100 rental units in 2002, 90,400 were extremely low rent or very low rent units. In addition, 58,700 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 40.7 percent of the 2002 rental stock. The three highest rent categories comprised 17.7 percent of the rental stock. Moves to a less affordable category (sometimes called gentrification) exceeded moves to a more affordable category (sometimes called filtration)—53.6 percent of all 2002 units compared to 12.0 percent. By 2011, 10.2 percent of the 366,100 rental units in 2002 were no longer in the rental stock. The largest proportion of these losses was due to changes in tenure.

The rental stock in Anaheim was even less affordable in 2011 than in 2002. Of the 443,300 rental units in 2011, 47,500 were extremely low rent or very low rent units. In addition, 40,500 units were non-market; that is, they were either assisted or offered for no cash rent. These three

categories accounted for only 19.9 percent of the 2011 rental stock. The three highest rent categories comprised 33.3 percent of the rental stock. Moves from a more affordable category in 2002 (sometimes called gentrification) exceeded moves from a less affordable category (sometimes called filtration)—45.1 percent of all 2011 units compared to 10.4 percent. Of the 443,300 rental units in 2011, 23.7 percent were not rental in 2002. The largest proportion of these gains was due to changes in tenure.

Components of Inventory Change and Rental Dynamics Analysis: Anaheim, 2002–2011

1. Introduction

This report describes how the housing stock in the Anaheim metropolitan area changed between 2002 and 2011, with particular emphasis on affordable rental housing. The study uses data from the American Housing Survey (AHS), which collected detailed information on housing units in Anaheim and on their occupants in both 2002 and 2011.¹

As part of its Components of Inventory Change (CINCH) program, the U.S. Department of Housing and Urban Development (HUD) has funded, for a number of years, similar studies of metropolitan areas to document changes in the American housing stock. These studies have traditionally included an assessment of changes in the rental housing market called rental dynamics. This paper is one of 29 metropolitan CINCH studies based on the information provided by the 2011 AHS.²

CINCH reports present both forward-looking analysis (what happened to the 2002 units by 2011) and backward-looking analysis (where the 2011 units came from in terms of 2002).³ This paper repeats the analysis contained in the most recent CINCH and rental dynamics studies, but its organization differs from that of previous reports.

- Section 2 discusses data and related issues that affect the CINCH and rental dynamics analysis for Anaheim.
- Section 3 explains the changes in the housing stock between 2002 and 2011 in terms of losses to the housing stock through demolitions or the other ways units can leave the housing stock and additions through new construction and other means.
- Section 4 looks at components of the housing stock that experienced losses or additions markedly different from the overall patterns of losses and additions.
- Section 5 breaks the rental housing stock into eight affordability categories and tracks what happened to units in each of those categories between 2002 and 2011.

¹ Since 1973, the U.S. Department of Housing and Urban Development (HUD) and the Census Bureau have conducted an extensive survey of the American housing stock called the American Housing Survey (AHS). The AHS has two components: a national survey that, since 1985, has collected data every 2 years on the entire U.S. housing stock and a metropolitan component that, since 1985, has collected data at various times on the housing stock of 45 metropolitan areas. Both the national and metropolitan components use the same sample of housing units in successive surveys, making it possible to observe changes in units over time. The initial samples have been augmented in later years to account for units added by new construction or other means.

² HUD also funds CINCH studies of survey-to-survey changes in the national stock. At the national level, the Rental Dynamics studies are published separately. For a complete list of all CINCH studies, see <http://www.huduser.org/portal/datasets/cinch.html>.

³ The forward-looking analysis was previously presented to HUD in December 2013. The data needed to produce the backward-looking analysis did not become available until after the allowed period of performance of the contract under which the previous report was completed.

- Section 6 summarizes the changes to the housing stock of the Anaheim metropolitan area between 2002 and 2011.

The paper concludes with two appendices that contain analyses and data found in the body of previous CINCH reports.

- Appendix A explains the CINCH and rental dynamics methodologies.
- Appendix B contains the detailed CINCH and rental dynamics tables found in previous reports.

National economic conditions shaped in important ways the changes observed in this report. The 2002–2011 period encompassed a vigorous expansion (November 2001 to December 2007), included the recent harsh recession (December 2007 to June 2009), and ended with a period of lackluster recovery.

2. Special Issues: Anaheim

Metropolitan areas are composed of counties or townships that are interrelated economically. The Office of Management and Budget periodically adjusts the composition of metropolitan areas as the economic relationships among counties change. In some cases, the AHS retains the metropolitan boundaries in effect when the original metropolitan sample was drawn; in other cases, the AHS will adjust the original sample to correspond to the new definition of the metropolitan area. A change in sample boundaries will affect the interpretation of CINCH analysis and its precision. The absolute sample size available to study changes between surveys determines how reliably the observed changes are measured.

Geography

In 2002 the Anaheim metropolitan area contained 995,600 housing units, including vacant units. By 2011 the number of housing units had increased to 1,054,100. This represents an overall increase of 5.9 percent, which translates to an average annual increase of 0.6 percent over the 9-year period. There were no changes to the definition of the metropolitan area between AHS surveys.

Sample size

Both CINCH and rental dynamics require that, if a sample unit is in both the 2002 and 2011 housing stock, it must be interviewed in both surveys to be included in the analysis. Other analytical requirements also limit effective sample size.

There are 2,961 sample units that were common to the 2002 and 2011 AHS Anaheim surveys and satisfied all the analytical requirements.⁴ Between 2002 and 2011, 22 sample units in the common area meeting the analytical requirements were lost to the stock; thus, the forward-looking analysis is based on a maximum of 2,983 sample units. Between 2002 and 2011, 198 sample units meeting the analytical requirements were added to the AHS survey to represent additions to the stock; thus, the backward-looking analysis is based on a maximum of 3,159 sample units. In the forward-looking analysis, the average weight of a sample unit is approximately 334 units; in the backward-looking analysis, the average weight of a sample unit is approximately 334 units.

Data reliability

All CINCH analysis relies on two AHS variables: NOINT (why there was no interview), which, among other things, explains why a unit is temporarily or permanently out of the stock, and REUAD (why unit added), which explains why a sample unit entered the sample. Both variables require some detective work on the part of Census Bureau staff, and the longer the period between surveys, the more difficult the detective work. At the national level, the AHS data are collected every 2 years, so it is relatively easy to determine why a unit has been removed from or added to the sample. In the case of Anaheim, 9 years separate the 2011 sample from the 2002 sample. As a result, explaining the loss or addition of sample units is very challenging. This report is part of a series that compares the housing stock in 2011 to the housing stock of 7 metropolitan areas in 1998, 12 metropolitan areas in 2002, 8 metropolitan areas in 2004, and 2 metropolitan areas in 2009. We compared the pattern of changes across the 29 areas studied in these reports to the changes recorded between 2009 and 2011 at the national level. With respect to losses, the patterns are reasonably similar except for the role played by the movement of mobile homes. Mobile home move-outs are much more important in explaining losses at the national level. At both the national and metropolitan levels, the “other” category accounts for one-fifth to one-quarter of the losses. With respect to additions, new construction accounts for 72 percent of all additions at the national level but 94 percent at the metropolitan level. We suspect that data issues downplay the importance of “means other than new construction” at the metropolitan level.

3. Changes to the Housing Stock: 2002–2011

Losses between 2002 and 2011

One typically thinks of the housing stock evolving through two mechanisms: the construction of new units and the demolition of old units. While new construction and losses through demolition and natural disasters are the primary means by which the housing stock changes, CINCH shows that there are other important engines of change.

⁴ The 2002 AHS surveyed 4,911 units in the Anaheim metropolitan area; 3,717 of these units were in the 2011 AHS public use file (PUF). Of the 1,194 sample units no longer in the survey, 296 were legitimate temporary or permanent losses to the housing stock and were considered for the analysis. The remaining 898 cases are coded as “sample reduction for the current survey year” with no further explanation.

Table 1 reports that, between 2002 and 2011, only 4,600 units left the housing stock. Of these, 1,200 are clearly permanent losses—the original unit is gone, and major construction would be required to replace it with a new unit. Another 2,800 are temporary losses—the original unit needs repairs or is being used for other purposes. These units may or may not return to the housing stock. Finally, there were 600 units that left the housing either permanently or temporarily for “other” reasons, a category that encompasses a wide variety of situations.

Table 1: Disposition of 2002 Anaheim Housing Units in 2011⁵

Present in 2002	995,700
2002 units present in 2011	991,100
Units no longer in the stock	4,600
2002 units lost due to conversion/merger	200
2002 house or mobile home moved out	300
2002 units lost through demolition or disaster	700
Permanent losses	1,200
2002 units changed to nonresidential use	1,500
2002 units badly damaged or condemned	1,300
Temporary losses	2,800
2002 units lost in other ways	600

Demolitions and natural disasters accounted for 700 of the permanent losses, while mergers and conversions contributed another 200 permanent losses. “Conversion” is the terminology used in the AHS for the splitting of a unit into two or more units. The movement of a mobile home or house is considered a permanent loss because a housing unit is the combination of land and capital. While movement preserves the capital, it dissolves the union of capital and land that formed the original unit; therefore, the movement of a mobile home is considered a permanent loss. The 2011 AHS survey in Anaheim did track mobile home move-outs, which contributed an additional 300 units to permanent losses.

Sometimes houses are used for business purposes. Such commercial use or the use of a house for a group home is considered a change to a nonresidential use. Badly damaged units may be repaired, left in an unusable state, or demolished.

Appendix B contains four forward-looking tables that break the overall stock into more than 100 subgroups, such as single-family detached houses or units occupied by Black householders in 2002. For each subgroup, these tables detail how many of the 2002 units in that subgroup are in the same subgroup in 2011, have moved into another subgroup, or have left the stock and how they left the stock. Section 4 looks across the Appendix B forward-looking tables and focuses on those subgroups that lost an unusually high or an unusually low number of units over the 2002–2011 period.

⁵ Numbers may not add consistently due to rounding. Counts were rounded to the nearest hundred.

Additions between 2002 and 2011

Table 2, together with the backward-looking Appendix B tables, provides a great deal of information on additions to the housing stock between 2002 and 2011.⁶

Table 2: Sources for 2011 Anaheim Housing Stock⁷

2011 housing stock	1,054,100
2011 units present in 2002	990,600
Total additions to stock	63,500
Units added by new construction	61,500
House or mobile home moved in	0
Units added by conversion/merger	800
New or reconstructed units	62,300
Units added from nonresidential use	700
Units added from temporary losses	0
Recovered units	700
Units added in other ways	600

In the period between the 2002 and the 2011 AHS surveys, 63,500 units were added to the housing stock. Ninety-seven percent of these additions were newly constructed units. The 2011 AHS did not track move-ins of mobile homes in Anaheim. Also, 800 new units were formed from the conversion or merger of 2002 units.

We classified 700 units as recovered because these units had been in the housing stock at some point but were classified in 2002 as nonresidential. Finally, 600 units were added in other unclassified ways.

Appendix B contains four backward-looking tables that break the overall stock into more than 100 subgroups. For each subgroup, these tables detail how many of the 2011 units in that subgroup were in the same subgroup in 2011, have moved from another subgroup, or are new additions to the stock. Section 4 looks across the Appendix B backward-looking tables and focuses on those subgroups that gained an unusually high or an unusually low number of units over the 2002–2011 period.

4. Components With Atypical Losses or Additions

The Anaheim metropolitan area lost 0.5 percent of all 2002 housing units by 2011, but the loss rate varied across sectors of the stock. For example, the occupied housing stock lost 0.2 percent of its units between 2002 and 2011.

We examined all of the components of the 2002 Anaheim housing stock contained in the four forward-looking tables in Appendix B to identify subgroups with unusual loss rates. Forward-

⁶ Inconsistencies between Tables 1 and 2 result from a combination of (1) changes in control housing counts between censuses and (2) different weights.

⁷ Numbers may not add consistently due to rounding. Counts were rounded to the nearest hundred.

Looking Table A reports information on all units in the stock; Table 3 lists subgroups from Table A with loss rates statistically different than the loss rate of the overall stock. Forward-Looking Tables B, C, and D describe important characteristics of occupied units and their residents; Table 3 lists subgroups from those tables with loss rates statistically different than the loss rate of occupied units. We also employed judgment in selecting among components with statistically different loss rates. In general, we looked for subgroups with loss rates less than half or more than double the benchmark rate, but we listed other subgroups if their inclusion illustrated interesting patterns within loss rates. Finally, Table 3 includes the loss rates for four key segments of the housing market—occupied units, vacant units, owner-occupied units, and renter-occupied units—even if their loss rates are not statistically different.

Table 3: Sectors Experiencing Atypical Loss Rates in Anaheim, 2002–2011⁸

Characteristics	Present in 2002	Total lost	Percent lost
<i>Housing stock</i>	995,700	4,600	0.5%
<i>Occupancy status</i>			
Occupied	937,600	2,100	0.2%
Vacant	51,900	2,300	4.5%***
<i>Rooms</i>			
1	1,700	900	51.2%***
<i>Bedrooms</i>			
None	10,100	1,400	13.8%**
4 or more	236,100	300	0.1%*
<i>Tenure</i>			
Owner-occupied	597,400	1,200	0.2%
Renter-occupied	340,200	900	0.3%

*Statistically different from either all units or all occupied units, as appropriate, at the 10-percent level.

**Statistically different from either all units or all occupied units, as appropriate, at the 5-percent level.

*** Statistically different from either all units or all occupied units, as appropriate, at the 1-percent level.

Table 3 shows that the loss rates of only four segments were statistically different from their benchmarks.

- Among units that were vacant in 2002, the loss rate was much higher.
- Smaller units (1 room or no bedrooms) experienced high loss rates, whereas larger units (4 or more bedrooms) had a lower rate.

The 63,500 additions reported in Table 2 represented 6.0 percent of the 2011 housing stock. The rate of addition varied by the characteristics of the housing. Additions represented 5.9 percent of occupied units.

We examined all of the components of the 2002 Anaheim housing stock contained in the four backward-looking tables in Appendix B to identify subgroups with unusual addition rates.

⁸ Two conditions were necessary for a housing sector to appear in Table 3, one mathematical and one judgmental: (1) the difference between the sector's loss rate and the benchmark rate had to have been statistically significant at the 10-percent level, and (2) the difference had to be interesting. Counts are rounded to the nearest hundred.

Backward-Looking Table A reports information on all units in the stock; Table 4 lists subgroups from Table A with addition rates statistically different than the addition rate of the overall stock. Backward-Looking Tables B, C, and D describe important characteristics of occupied units and their residents; Table 4 lists subgroups from those tables with addition rates statistically different than the addition rate of occupied units. We also employed judgment in selecting among components with statistically different addition rates. In general, we looked for subgroups with addition rates less than half or more than double the benchmark rate, but we listed other subgroups if their inclusion illustrated interesting patterns within addition rates. Finally, Table 4 includes the addition rates for four key segments of the housing market—occupied units, vacant units, owner-occupied units, and renter-occupied units—even if their addition rates are not statistically different.

Table 4: Sectors Experiencing Atypical Rates of Addition in Anaheim, 2002–2011⁹

Characteristics	Present in 2011	Total additions	Percent additions
<i>All housing units</i>	1,054,100	63,500	6.0%
<i>Occupancy status</i>			
Occupied	983,300	58,200	5.9%
Vacant	63,000	5,300	8.4%
<i>Units in structure</i>			
1, attached	126,200	12,100	9.6% ***
2 to 4	109,400	2,000	1.9% ***
50 or more	48,000	8,600	17.9% ***
<i>Rooms</i>			
6	190,100	6,200	3.2% ***
7	158,400	5,500	3.5% ***
8	107,300	10,000	9.3% *
10 or more	18,300	4,700	25.9% ***
<i>Bedrooms</i>			
3	311,300	14,400	4.6% *
<i>Stories in structure (multifamily)</i>			
1	68,800	1,800	2.6% ***
2	221,800	3,900	1.8% ***
3	41,200	9,200	22.4% ***
4 to 6	21,000	6,600	31.4% ***
<i>Lacking complete kitchen facilities</i>	60,800	7,600	12.5% ***
<i>Lacking some plumbing</i>	18,300	400	1.9% **
<i>Severe problems</i>	25,300	400	1.4% ***
<i>Plumbing</i>	18,300	400	1.9% **
<i>Moderate problems</i>	65,300	7,900	12.1% ***
<i>Upkeep</i>	60,800	7,600	12.5% ***
<i>Age of householder</i>			
65 to 74	111,400	2,700	2.4% ***
75 or older	97,300	3,100	3.1% **

⁹ Two conditions were necessary for a housing sector to appear in Table 4, one mathematical and one judgmental: (1) the difference between the sector’s addition rate and the benchmark rate had to have been statistically significant at the 10-percent level, and (2) the difference had to be interesting. Counts are rounded to the nearest hundred.

Characteristics	Present in 2011	Total additions	Percent additions
<i>Race and ethnicity</i>			
White alone	769,100	34,700	4.5%**
White Hispanic	220,900	8,000	3.6%***
Black alone	15,700	2,700	17.4%**
Black Non-Hispanic	14,100	2,700	19.4%**
Asian alone	167,300	17,700	10.6%***
Hispanic or Latino (any race)	238,600	9,000	3.8%***
<i>Tenure</i>			
Owner-occupied	568,300	32,600	5.7%
Renter-occupied	415,000	25,700	6.2%
<i>Renter monthly housing costs</i>			
\$800 to \$1,249	101,300	1,800	1.7%***
\$1,250 or more	260,000	20,400	7.9%*
<i>Renter household income</i>			
\$100,000 or more	62,100	7,800	12.5%***
<i>Owner monthly housing costs</i>			
\$350 to \$599	63,400	700	1.1%***
\$800 to \$1,249	58,500	600	1.1%***
\$1,250 or more	385,500	31,200	8.1%**
<i>Owner household income</i>			
Less than \$15,000	33,700	700	2.0%***
\$30,000 to \$49,999	72,600	1,600	2.2%***
\$50,000 to \$99,999	153,600	5,600	3.6%**
\$100,000 or more	242,500	24,700	10.2%***

*Statistically different from either all units or all occupied units, as appropriate, at the 10-percent level.

**Statistically different from either all units or all occupied units, as appropriate, at the 5-percent level.

*** Statistically different from either all units or all occupied units, as appropriate, at the 1-percent level.

The results reported in Table 4 tell a full and interesting story about changes in the Anaheim metropolitan area.

- Size and type of structure mattered. Single-family attached units and units in large multifamily buildings (50 or more units or 3 or more stories) had high rates of addition, while units in 2- to 4-unit structures or in multifamily structures with 1 or 2 stories had low rates of addition.
- Unit size also mattered, but the threshold was high. Units with 6 or 7 rooms or with 3 bedrooms had below-average rates of addition, whereas units with 8 or 10 or more rooms had higher-than-average rates.
- New additions to the stock were overrepresented among units in 2011 with moderate physical problems, apparently because of upkeep issues. Units lacking complete kitchens were also overrepresented.
- New additions were underrepresented among units with severe physical problems in 2011 or that lacked all plumbing facilities. However, the sample sizes were small.

- As separate groups, units in 2011 with older householders (65 or older) or White or Hispanic householders had low rates of addition, whereas those with Asian householders had a higher-than-average rate. Additions were lower than average among households on public assistance.
- The rate of addition among units that were renter-occupied in 2011 was higher than that of all occupied units but not statistically different. Among renter-occupied units, those with moderate monthly housing costs (\$800–\$1,249) had lower rates of addition, while those with high monthly housing costs (\$1,250 or more) and those occupied by high-income renters (\$100,000 or more) had higher-than-average rates of addition.
- The rate of addition among units that were owner-occupied in 2011 was slightly lower than that of all occupied units but not statistically different. However, among owner-occupied units, addition rates clearly varied by monthly housing costs and household income in 2011. Those units with low housing costs (\$350–\$1,249) or occupied by lower income owners (\$30,000–\$99,999) had lower rates of addition, while those with high housing costs (\$1,250 or more) and those occupied by high-income owners (\$100,000 or more) had higher-than-average rates of addition.

5. Rental Market Dynamics: 2002–2011

Rental market dynamics focuses on the supply of rental housing and how that supply changes over time. Rental dynamics analysis has many of the features of CINCH analysis. A key step in rental dynamics analysis is to separate the rental stock into classes or strata based on how affordable the units are. This paper uses eight categories:

- Non-market: Either no cash rent or a subsidized rent.
- Extremely low rent: Affordable to renters with incomes less than or equal to 30 percent of local area median income.
- Very low rent: Affordable to renters with incomes greater than 30 percent but less than or equal to 50 percent of local area median income.
- Low rent: Affordable to renters with incomes greater than 50 percent but less than or equal to 60 percent of local area median income.
- Moderate rent: Affordable to renters with incomes greater than 60 percent but less than or equal to 80 percent of local area median income.
- High rent: Affordable to renters with incomes greater than 80 percent but less than or equal to 100 percent of local area median income.
- Very high rent: Affordable to renters with incomes greater than 100 percent but less than or equal to 120 percent of local area median income.

- Extremely high rent: Affordable to renters with incomes greater than 120 percent of local area median income.

For each category, “affordable” is defined as a gross-rent-to-income ratio of 30 percent or less for the higher of the incomes that define the boundaries for that category.¹⁰ The categories are defined relative to area median income; therefore, the boundaries of the categories will change as area median income changes.

Table 5 summarizes what happened to the 2002 rental units by how affordable they were in 2002. It is based on Forward-Looking Rental Dynamics Table 1 in Appendix B, which traces in more detail where these units wound up in 2011.

Table 5: Summary of Forward-Looking Rental Dynamics for Anaheim

Affordability categories	2002 rental units	To more affordable categories in 2011	In same affordability category in both years	To less affordable categories in 2011	2002 rental units non-rental in 2011
Non-market	58,700	NA	18.2%	73.5%	8.4%
Extremely low rent	9,900	5.9%	11.4%	68.9%	13.8%
Very low rent	80,500	9.8%	14.3%	67.8%	8.2%
Low rent	86,000	13.6%	14.3%	62.3%	9.7%
Moderate rent	66,300	14.4%	49.6%	27.9%	8.1%
High rent	51,100	23.6%	27.9%	35.1%	13.4%
Very high rent	6,700	9.6%	42.2%	26.9%	21.4%
Extremely high rent	6,900	0.0%	0.0%	NA	0.0%
Total	366,100	12.0%	24.1%	53.6%	10.2%

The 2002 rental stock in Anaheim was not affordable. Of the 366,100 rental units in 2002, 90,400 were extremely low rent or very low rent units. In addition, 58,700 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 40.7 percent of the 2002 rental stock. The three highest rent categories comprised 17.7 percent of the rental stock. Moves to a less affordable category (sometimes called gentrification) exceeded moves to a more affordable category (sometimes called filtration)—53.6 percent of all 2002 units compared to 12.0 percent.

By 2011, 10.2 percent of the 366,100 rental units in 2002 were no longer in the rental stock (37,500 units). The largest proportion of these losses was due to changes in tenure, with 25,800 rental units becoming owner-occupied or vacant for sale in 2011. Another 10,100 units became seasonal units, units occupied by persons with usual residence elsewhere, or units used for migratory workers. Finally, 1,600 rental units were no longer in the housing stock in 2011. Some of these losses were permanent; that is, the units were demolished or destroyed. Some losses were potentially reversible, such as units being used for nonresidential purposes. Forward-Looking Rental Dynamics Table 2 shows how the movement out of the rental stock varied across the affordability categories.

¹⁰ Gross rent is equal to rent plus utilities.

Table 6 summarizes where the 2011 rental units came from, with respect to 2002, by how affordable they were in 2011. It is based on Backward-Looking Rental Dynamics Table 1 in Appendix B, which traces in more detail the origin of these units.

The rental stock in Anaheim was even less affordable in 2011 than in 2002. Of the 443,300 rental units in 2011, 47,500 were extremely low rent or very low rent units. In addition, 40,500 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for only 19.9 percent of the 2011 rental stock. The three highest rent categories comprised 33.3 percent of the rental stock. Moves from a more affordable category (sometimes called gentrification) exceeded moves from a less affordable category (sometimes called filtration)—45.1 percent of all 2011 units compared to 10.4 percent.

Table 6: Summary of Backward-Looking Rental Dynamics for Anaheim

Affordability categories	2011 rental units	From more affordable categories in 2002	In same affordability category in both years	From less affordable categories in 2002	2011 rental units non-rental in 2002
Non-market	40,500	NA	27.2%	47.2%	25.5%
Extremely low rent	17,600	11.8%	6.4%	50.9%	31.0%
Very low rent	29,900	21.0%	39.0%	16.6%	23.4%
Low rent	54,600	61.9%	24.3%	6.0%	7.8%
Moderate rent	152,800	63.1%	22.5%	5.1%	9.4%
High rent	60,800	46.1%	24.7%	1.6%	27.6%
Very high rent	58,300	44.4%	5.3%	1.8%	48.6%
Extremely high rent	28,700	25.6%	9.1%	NA	65.3%
Total	443,300	45.1%	20.8%	10.4%	23.7%

Of the 443,300 rental units in 2011, 23.7 percent were not rental in 2002 (105,200 units). The largest proportion of these gains was due to changes in tenure, with 72,800 rental units having been owner-occupied or vacant for sale in 2002. Another 4,700 units had been seasonal units, units occupied by persons with usual residence elsewhere, or units used for migratory workers. Finally, 27,700 rental units had not been in the housing stock in 2002. Of these 25,800 were added by new construction and 1,900 by other means. Backward-Looking Rental Dynamics Table 2 shows how the movement into the rental varied stock across the affordability categories.

6. Summary of Housing Market Changes: Anaheim Metropolitan Area, 2002–2011

In 2002 the Anaheim metropolitan area contained 995,600 housing units, including vacant units. By 2011 the number of housing units had increased to 1,054,100. There were no changes to the definition of the metropolitan area between AHS surveys. This represents an overall increase of 5.9 percent, which translates to an average annual increase of 0.6 percent over the 9-year period.

Between 2002 and 2011, only 4,600 units left the housing stock. Of these, 1,200 are clearly permanent losses—the original unit is gone, and major construction would be required to replace it with a new unit. Another 2,800 are temporary losses—the original unit needs repairs or is being used for other purposes. These units may or may not return to the housing stock. Finally,

there were 600 units that left the housing either permanently or temporarily for “other” reasons, a category that encompasses a wide variety of situations.

In the period between the 2002 and the 2011 AHS surveys, 63,500 units were added to the housing stock. Ninety-seven percent of these additions were newly constructed units. The 2011 AHS did not track move-ins of mobile homes in Anaheim. Also, 800 new units were formed from the conversion or merger of 2002 units. We classified 700 units as recovered because these units had been in the housing stock at some point but were classified in 2002 as nonresidential. Finally, 600 units were added in other unclassified ways.

The Anaheim metropolitan area lost 0.5 percent of all 2002 housing units by 2011; additions to the stock between 2002 and 2012 represented 6.0 percent of the 2011 housing stock. Losses and additions varied across portions of the Anaheim housing market defined by the characteristics of the unit or its occupants. We observed the following patterns that were both atypical of the overall housing stock and statistically significant:

- Among units that were vacant in 2002, the loss rate was much higher.
- Smaller units (1 room or no bedrooms) experienced high loss rates, whereas larger units (4 or more bedrooms) had a lower rate.
- Size and type of structure mattered. Single-family attached units and units in large multifamily buildings (50 or more units or 3 or more stories) had high rates of addition, while units in 2- to 4-unit structures or in multifamily structures with 1 or 2 stories had low rates of addition.
- Unit size also mattered, but the threshold was high. Units with 6 or 7 rooms or with 3 bedrooms had below-average rates of addition, whereas units with 8 or 10 or more rooms had higher-than-average rates.
- New additions to the stock were overrepresented among units in 2011 with moderate physical problems, apparently because of upkeep issues. Units lacking complete kitchens were also overrepresented.
- New additions were underrepresented among units with severe physical problems in 2011 or that lacked all plumbing facilities. However, the sample sizes were small.
- As separate groups, units in 2011 with older householders (65 or older) or White or Hispanic householders had low rates of addition, whereas those with Asian householders had a higher-than-average rate. Additions were lower than average among households on public assistance.
- The rate of addition among units that were renter-occupied in 2011 was higher than that of all occupied units but not statistically different. Among renter-occupied units, those with moderate monthly housing costs (\$800–\$1,249) had lower rates of addition, while

those with high monthly housing costs (\$1,250 or more) and those occupied by high-income renters (\$100,000 or more) had higher-than-average rates of addition.

- The rate of addition among units that were owner-occupied in 2011 was slightly lower than that of all occupied units but not statistically different. However, among owner-occupied units, addition rates clearly varied by monthly housing costs and household income in 2011. Those units with low housing costs (\$350–\$1,249) or occupied by lower income owners (\$30,000–\$99,999) had lower rates of addition, while those with high housing costs (\$1,250 or more) and those occupied by high-income owners (\$100,000 or more) had higher-than-average rates of addition.

The 2002 rental stock in Anaheim was not affordable. Of the 366,100 rental units in 2002, 90,400 were extremely low rent or very low rent units. In addition, 58,700 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 40.7 percent of the 2002 rental stock. The three highest rent categories comprised 17.7 percent of the rental stock. Moves to a less affordable category (sometimes called gentrification) exceeded moves to a more affordable category (sometimes called filtration)—53.6 percent of all 2002 units compared to 12.0 percent. By 2011, 10.2 percent of the 366,100 rental units in 2002 were no longer in the rental stock (37,500 units). The largest proportion of these losses was due to changes in tenure, with 25,800 rental units becoming owner-occupied or vacant for sale in 2011.

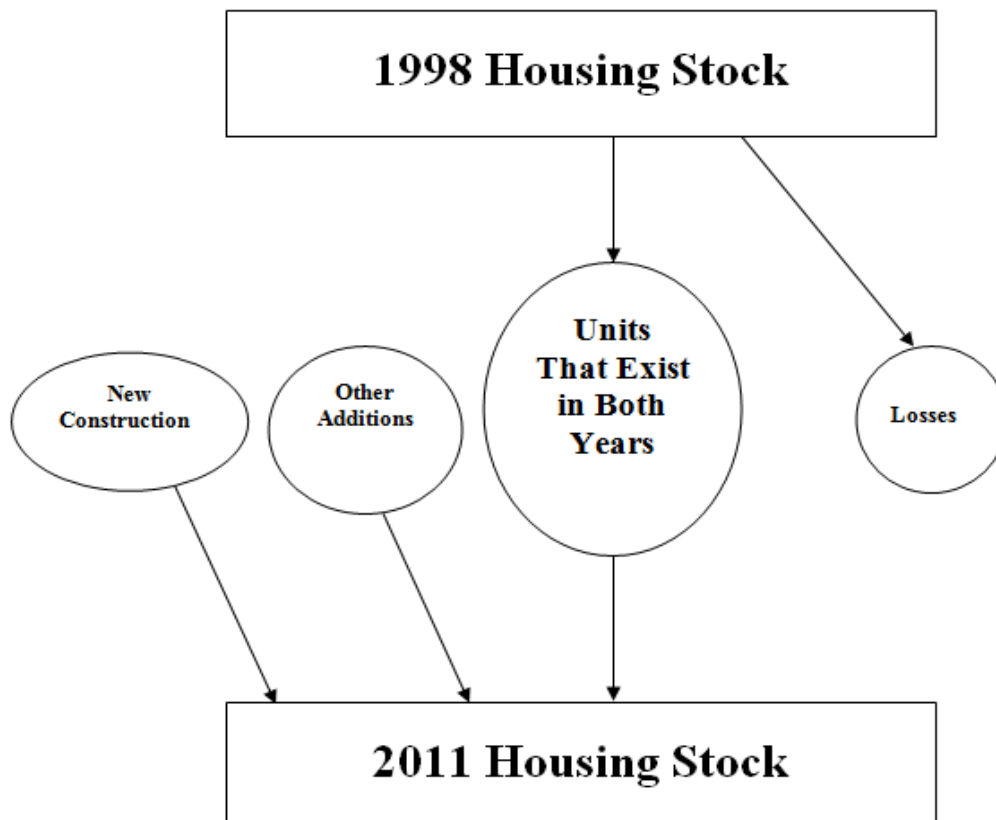
The rental stock in Anaheim was even less affordable in 2011 than in 2002. Of the 443,300 rental units in 2011, 47,500 were extremely low rent or very low rent units. In addition, 40,500 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for only 19.9 percent of the 2011 rental stock. The three highest rent categories comprised 33.3 percent of the rental stock. Moves from a more affordable category in 2002 (sometimes called gentrification) exceeded moves from a less affordable category (sometimes called filtration)—45.1 percent of all 2011 units compared to 10.4 percent. Of the 443,300 rental units in 2011, 23.7 percent were not rental in 2002. The largest proportion of these gains was due to changes in tenure, with 72,800 rental units having been owner-occupied or vacant for sale in 2002.

Appendix A: CINCH and Rental Dynamics Methodology

Overview

Components of Inventory Change (CINCH) is a tool used by housing analysts to study how the housing inventory changes over time. Figure 1 illustrates how the inventory evolves.

Figure A-1: How the Housing Inventory Changes



In the context of Figure A-1, the U.S. Census Bureau provides estimates for both rectangles (the 2002 and 2011 housing stocks) and one oval (units added through new construction between 2002 and 2011). No one estimates the other three ovals: the number of units that belong to both the 2002 and 2011 housing stock, units lost to the housing stock between 2002 and 2011, and other additions to the housing stock between 2002 and 2011.

While losses and other additions are small relative to the overall stock, they encompass important features of how housing markets evolve. Housing units are “clumps” of physical capital associated with specific plots of land, and the housing inventory is the aggregation of these capital-land combinations. New construction creates new clumps, and—like all capital—some “clumps” depreciate and disappear. However, housing units undergo other interesting changes. Losses can be either permanent or temporary. Units destroyed by natural disasters or intentionally demolished are permanent losses. Temporary losses include units that are used for

nonresidential purposes and units that are uninhabitable because of structural defects that can be repaired. Additions can result from restoring units that were uninhabitable or converting nonresidential structures into residential structures.

In addition to determining the size of each oval, housing analysts find information about the characteristics of the units in the different ovals useful. Interesting characteristics include structure type, age of the unit, size of the unit, location by region, location by metropolitan status, tenure, household size and composition, resident income, and resident race and ethnicity.

CINCH analysis has three goals:¹¹

- To provide an estimate for all six components of Figure A-1.
- To disaggregate losses and other additions into relevant component parts.
- To characterize the units that survive from one period to the next and the units that are added or lost between periods.

The AHS has four features that make CINCH analysis possible:

- Each unit has weights that can be used to estimate its share of the overall stock.
- The AHS tracks new construction and the various types of losses and other additions.
- The AHS has detailed information about the characteristics of each unit and its occupants.
- The AHS tracks the same unit from one period to the next so that changes in status and characteristics can be observed directly.

Housing analysts and policymakers are particularly interested in what happens to affordable rental housing units. Rental dynamics is a form of CINCH analysis that classifies the rental housing stock by affordability level and tracks the evolution of the rental housing stock by affordability class.

¹¹ Previous CINCH analyses have distinguished between the “status” of a unit with respect to the housing stock (e.g., existing as a nonresidential structure) and the “characteristics” of the unit or its occupants (e.g., rental vs. owner-occupied, or race of householder). This report uses this same distinction. Also adopting previous CINCH terminology, Appendix A will refer to the more recent AHS survey year, 2011, as the current year and the previous AHS survey year, 2002, as the base year.

Why the analysis needs to be separated into two components

It would be possible to list for every AHS sample unit its status and characteristics in both 2002 and 2011. In some cases, there may be no status, (e.g., not yet constructed in 2002) or no characteristics (e.g., no race of householder for vacant units), but with this understanding such a listing would still be possible. From the listing, one could construct an exact accounting of the movement of units among the various statuses and characteristics between 2002 and 2011.

The exact accounting would apply only to AHS sample observations, roughly a 1-in-500 picture of the housing stock at the metropolitan level. To obtain estimates of the magnitude of actual changes in the housing stock, one needs to apply weights to the sampled units. When weights are applied, the accounting will no longer be exact because units have different weights in different years.¹² For example, the exact accounting might show that 2,500 sample units that were rental in 2002 became owner-occupied or vacant for sale in 2011. To estimate the number of units in the national housing stock that were rental in 2002 and became owner-occupied in 2011, one would need to apply weights. However, using 2002 weights would produce a different estimate than using 2011 weights. There is no conceptual reason to favor the answer using 2002 weights over the answer using 2011 weights. The choice of weights depends upon how the intended analysis will be used.

For this reason, previous CINCH analyses have distinguished between:

1. *Forward-looking analysis*; that is, starting with the base-year stock (2002) and determining the status and characteristics of *those* units in the current year (2011). The goal is to explain what happened to the units comprising the housing stock in the base year. Forward-looking analysis takes the housing stock as given in the base year and looks at the destination of these units in the current year.
2. *Backward-looking analysis*; that is, starting from the current year (2011) stock and determining the status and characteristics of *those* units in the base year (2002). The goal here is to explain where the units comprising the current year housing stock came from. Backward-looking analysis takes the current-year housing stock as given and looks at the source of these units, either in the base year or in new construction or other additions.

¹² The Census Bureau assigns both a pure weight (the inverse of the probability of selection) and a final weight to each AHS observation. The final weights are designed to sum up to independent estimates of the total housing stock. The pure weights will vary over observations within a given AHS survey because of stratification in drawing the sample. Generally, pure weights do not vary across survey years. The final weights will differ over observations within a given AHS because the Census Bureau makes adjustments for various factors affecting the sample. The final weights of a given observation will also vary between AHS surveys because of changes in the housing stock.

Why changes in geography boundaries affect CINCH analysis

The analysis in this report applies only to that portion of the metropolitan area that was common to the metropolitan area as defined in both 2002 and 2011, and the application to the common area is not precise for the following reasons:

- For forward-looking analysis (2002 to 2011), we observe only those sample units in the geography common to both 2002 and 2011. Thus the observed changes correctly apply only to the common area. However, the forward-looking weights are based by necessity on the entire 2002 geography. Since the common area is smaller than the 2002 geography, the counts are overestimates for the common area.
- For the backward-looking analysis (2011 from 2002), we observe (a) sample units that were in the common area in 2002 and are still in the stock in 2011, (b) sample units representing additions to the stock throughout the metropolitan area as newly defined, and (c) sample units that represent housing existing in 2002 in the added portion of the metropolitan area. We can eliminate (c) and try to focus the analysis on the common area, but there are two problems. The backward-looking weights are based by necessity on the entire 2011 geography. Since the common area is smaller than the 2011 geography, the counts are overestimates for the common area. Moreover, we cannot determine which newly added sample units in (b) represent the common area and which represent the added portion of the metropolitan area. Therefore, additions are overestimated with respect to the common area.

Appendix B: CINCH and Rental Dynamics Tables

Contents

This appendix contains 12 detailed CINCH and rental dynamics tables that have been featured in previous reports. There are:

- Four forward-looking CINCH tables that track changes to the 2002 housing stock in 2011 by various characteristics of the units or their occupants.
- Four backward-looking CINCH tables that track where the 2011 housing stock originated by various characteristics of the units or their occupants.
- Two forward-looking rental dynamics tables (one with counts and one with percentages) that track by affordability category what happened to the 2002 rental stock by 2011.
- Two backward-looking rental dynamics tables (one with counts and one with percentages) that track by affordability category where the 2011 rental stock came from with respect to 2002.

Appendix B begins with an explanation of how to read the tables.

How to read CINCH tables

Rows and columns serve different purposes in CINCH tables. The rows identify classes of units to be analyzed. The columns trace those units either forward or backward. All counts are rounded to the nearest hundred.

The forward-looking tables report what happened to the 2002 housing stock by 2011. There are three possible dispositions of 2002 units:

- Units that continue to exist in 2011 with the same characteristics (or serving the same market).
- Units that continue to exist in 2011 but with different characteristics (or serving a different market).
- Units that were lost to the stock in 2011.

The backward-looking tables report where the 2011 housing stock came from in reference to 2002. There are three possible sources of 2011 units:

- Units that existed in 2002 with the same characteristics (or serving the same market).

- Units that existed in 2002 but with different characteristics (or serving a different market).
- Units that are additions to the housing stock between 2002 and 2011.

Since the essence of the CINCH analysis is in the columns, we will explain the columns in detail.

Columns Common to Both Forward-Looking and Backward-Looking Tables

The first and last columns contain the row numbers, which are identical for the same tables in the forward-looking and backward-looking sets. Columns A through D set up the analysis and track units that exist in both periods.

- Column A specifies the characteristic that defines the subset of the stock that is being tracked forward or backward in a particular row, for example, occupied units or units built from 1990 through 1994.
- Column B gives the CINCH estimate of the number of units that satisfy two conditions: (a) being part of the housing stock in the relevant year (2002 for the forward-looking tables and 2011 for the backward-looking tables) and (b) satisfying the condition in column A.
- Column C is the CINCH estimate of the number of units from column B that (a) are also part of the housing stock in the other year and (b) continue to belong to the subset defined by column A.
- Column D is the CINCH estimate of the number of units from column B that (a) are also part of the housing stock in the other year but (b) no longer belong to the subset defined by column A. In some cases, the analysis will not allow a unit to change characteristics between the base year and the other year. Examples include type of structure, year built, and number of stories; these characteristics are considered impossible or unlikely to change.

Columns Unique to Forward-Looking Tables

In the forward-looking tables, columns E through J track what happened to units that were lost from 2002 to 2011.

- Column E is the CINCH estimate of the number of units from column B that are not in the 2011 housing stock because they were merged with other units or converted into multiple units.
- Column F is the CINCH estimate of the number of houses or manufactured homes from column B that were moved out during the period. In most cases, these units were relocated rather than destroyed. The AHS considers them “losses” because a housing unit is a combination of land and capital, and a move breaks that specific combination to

create a new combination at a different location. For this reason, manufactured houses that move from one lot to another are treated as both losses and additions.¹³

- Column G is the CINCH estimate of the number of units from column B that became nonresidential at the end of the period. For example, a real estate firm, a tax preparation office, a palm reader, or some other business might buy or rent a house to use for business rather than residential purposes.¹⁴
- Column H is the CINCH estimate of the number of units from column B that were demolished or were destroyed by fires or natural disasters by 2011.
- Column I is the CINCH estimate of the number of units from column B that in 2011 were condemned or were no longer usable for housing because of extensive damage.
- Column J is the CINCH estimate of the number of units from column B that were lost by 2011 for other reasons.

The columns form a closed system. Column B counts the number of units tracked; columns C through J account for all the possible outcomes. Therefore, column B minus the sum of columns C through J always equals zero, except for rounding.

Columns Unique to Backward-Looking Tables

In backward-looking tables, columns E through J track where units came from that are part of the housing stock in 2011 but were not part of the 2002 housing stock.

- Column E is the CINCH estimate of the number of units from column B that were created by the merger or conversion of other units.
- Column F estimates the number of houses or mobile homes from column B that were moved in during the period. For many of the metropolitan areas in the 2011 AHS survey, information on movements was not collected.
- Column G is the CINCH estimate of the number of units from column B that had been nonresidential in 2002.
- Column H is the CINCH estimate of the number of units from column B that were newly constructed between 2002 and 2011. Note: Generally, in Backward-Looking Table A, there will be units in column H with year-built data substantially earlier than the survey year. There are three explanations for this apparent inconsistency. (1) With the exception of manufactured houses, presence in column H is determined by information from the

¹³ The AHS does not track what happens to a house or mobile home that is moved off of a lot that is part of the AHS sample, and does not inquire about the previous history of a unit that is moved on to a lot that is part of the AHS sample.

¹⁴ If the owner or tenant both lives in a unit and conducts business out of the unit, the AHS considers the unit to be residential. Nonresidential, therefore, means strictly no residential use.

Census Bureau indicating that the unit entered the sample from a listing of new construction; the Census Bureau may be mistaken. (2) Year built is based on information from the respondent; the respondent may be mistaken. (3) An older unit may have undergone substitution renovation that required a new construction permit, but the respondent may have given the original construction date rather than the renovation date. The extent of major renovation occurring in many established neighborhoods throughout the country makes (3) a likely possibility.

- Column I is the CINCH estimate of the number of units from column B that were added by 2011 from units that were structurally unsound in 2002.¹⁵
- Column J is the CINCH estimate of the number of units from column B that were added by 2011 from units that had been temporarily lost to the stock in 2002 for reasons “not classified” or were newly added by “other” means.

In some metropolitan areas, the AHS surveys do not report data for all the rows in the tables in this appendix. The columns for those rows are left blank.

How to read rental dynamics tables

Forward-Looking Rental Dynamics Table 1 details by affordability category how the rental units in the 2002 housing stock relate to the 2011 housing stock. Column A estimates the number of units in each affordability category in 2002. Columns B through L explain where the 2002 rental units fit into the 2011 housing stock.

- If the units are still rental in 2011, they will be counted in columns B through I, depending upon how affordable they are in 2011.
- If the units have become owner-occupied or for vacant for sale, they will be counted in column J.
- Seasonal units, units that are not the primary residence of their occupants, units used for migratory workers, and units that are vacant but not for rent or sale are counted in column K.
- Column L counts 2002 units that are not in the 2011 housing stock; these can be either temporary or permanent losses to the stock.

The sum of columns B through L equals column A, except for rounding.

Forward-Looking Rental Dynamics Table 2 presents the same information as Table 1, but columns B through L are now percentages of column A. Columns B through L sum to 100 percent in each row.

¹⁵ These units had codes that identified them as “occupancy prohibited” or “interior exposed to the elements.”

Backward-Looking Rental Dynamics Table 1 details by affordability category where the rental units in the 2011 housing stock came from with respect to the 2002 housing stock. Column A estimates the number of units in each affordability category in 2011. Columns B through L explain where the 2011 rental units originated.

- If the units were rental in 2002, they will be counted in columns B through I, depending upon how affordable they are in 2002.
- If the units were owner-occupied or for vacant for sale, they will be counted in column J.
- Seasonal units, units that are not the primary residence of their occupants, units used for migratory workers, and units that are vacant but not for rent or sale in 2002 are counted in column K.
- Column L counts rental units that were newly constructed between 2002 and 2011.
- Column M counts rental units that were added to the housing stock after 2002 by other means.

The sum of columns B through M equals column A, except for rounding.

Backward-Looking Rental Dynamics Table 2 presents the same information as Table 1, but columns B through M are now percentages of column A. Columns B through M sum to 100 percent in each row.

These four Rental Dynamics Tables look only at the endpoints of the 9-year period; for example, a unit that is low rent in 2002 and moderate rent in 2011 might have been high rent, owned, or out of the stock at points in between the two surveys. These tables do not track the path of rental units between 2002 and 2011.

Forward-Looking Table A: Housing Characteristics, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
1	Housing stock	995,700	991,100	0	200	300	1,500	700	1,300	600	1
	Occupancy status										
2	Occupied	937,600	871,700	63,900	200	0	700	500	300	400	2
3	Vacant	51,900	11,200	38,300	0	300	700	200	1,000	200	3
4	Seasonal	6,200	700	5,300	0	0	200	0	0	0	4
	Units in structure										
5	1, detached	505,900	503,800	0	200	300	1,000	0	300	400	5
6	1, attached	240,000	239,500	0	0	0	200	200	0	200	6
7	2 to 4	81,300	80,200	0	0	0	0	0	1,000	0	7
8	5 to 9	39,200	39,200	0	0	0	0	0	0	0	8
9	10 to 19	40,800	40,600	0	0	0	200	0	0	0	9
10	20 to 49	33,400	32,800	0	0	0	200	400	0	0	10
11	50 or more	19,000	18,900	0	0	0	0	200	0	0	11
12	Manufactured/mobile home	36,100	36,100	0	0	0	0	0	0	0	12

Row	A	B	C	D	E	F	G	H	I	J	Row
	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/ merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	
	Year built										
15	2000–2004	25,700	25,300	0	0	0	200	0	0	200	15
16	1995–1999	43,600	43,400	0	0	300	0	0	0	0	16
17	1990–1994	52,800	52,800	0	0	0	0	0	0	0	17
18	1985–1989	93,800	93,800	0	0	0	0	0	0	0	18
19	1980–1984	60,700	60,700	0	0	0	0	0	0	0	19
20	1975–1979	125,400	124,700	0	0	0	700	0	0	0	20
21	1970–1974	173,900	173,900	0	0	0	0	0	0	0	21
22	1960–1969	266,900	265,100	0	0	0	500	400	700	400	22
23	1950–1959	107,800	107,000	0	200	0	0	400	300	0	23
24	1940–1949	24,800	24,300	0	0	0	200	0	300	0	24
25	1930–1939	14,300	14,300	0	0	0	0	0	0	0	25
26	1920–1929	3,400	3,400	0	0	0	0	0	0	0	26
27	1919 or earlier	2,600	2,600	0	0	0	0	0	0	0	27
	Rooms										
28	1	1,700	500	300	0	0	900	0	0	0	28
29	2	10,400	5,400	4,400	200	0	200	200	0	0	29
30	3	107,400	73,400	33,600	0	300	0	200	0	0	30
31	4	216,600	131,100	84,300	0	0	200	200	800	0	31
32	5	191,500	79,800	111,300	0	0	0	200	200	0	32
33	6	173,400	78,600	94,300	0	0	300	0	0	200	33
34	7	138,900	63,400	75,100	0	0	0	0	0	400	34
35	8	86,200	40,800	45,100	0	0	0	0	300	0	35
36	9	40,500	19,300	21,200	0	0	0	0	0	0	36
37	10 or more	29,300	6,800	22,500	0	0	0	0	0	0	37

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
	Bedrooms										
38	None	10,100	4,900	3,900	200	0	1,000	200	0	0	38
39	1	123,400	103,800	19,100	0	300	0	200	0	0	39
40	2	310,000	278,800	29,800	0	0	200	200	1,000	0	40
41	3	316,100	262,900	52,200	0	0	0	200	300	600	41
42	4 or more	236,100	215,600	20,200	0	0	300	0	0	0	42
43	Multiunit structures	213,700	211,800	0	0	0	400	500	1,000	0	43
	Stories in structure										
44	1	43,200	42,800	0	0	0	0	0	300	0	44
45	2	135,500	134,000	0	0	0	400	500	700	0	45
46	3	22,400	22,400	0	0	0	0	0	0	0	46
47	4 to 6	11,200	11,200	0	0	0	0	0	0	0	47
48	7 or more	1,400	1,400	0	0	0	0	0	0	0	48

Forward-Looking Table B: Unit Quality, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
1	Occupied units	937,600	871,700	63,900	200	0	700	500	300	400	1
2	With complete kitchen	924,000	817,500	104,600	200	0	500	500	300	400	2
3	Lacking complete kitchen facilities	13,600	2,700	10,700	0	0	200	0	0	0	3
4	With complete plumbing	932,300	851,300	78,900	200	0	700	500	300	400	4
5	Lack some plumbing	5,300	300	5,000	0	0	0	0	0	0	5
6	No hot piped water	600	0	600	0	0	0	0	0	0	6
7	No bathtub/shower										7
8	No flush toilet										8
9	No exclusive use	4,700	300	4,500	0	0	0	0	0	0	9
	Water										
10	Public/private water	937,000	870,500	64,400	200	0	700	500	300	400	10
11	Well serving 1 to 5 units	300	0	300	0	0	0	0	0	0	11
12	Other water source	300	0	300	0	0	0	0	0	0	12
	Sewer										
13	Public sewer	934,700	868,800	63,900	200	0	700	500	300	400	13
14	Septic tank/cesspool	2,900	1,300	1,600	0	0	0	0	0	0	14
15	Other										15

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
16	Severe problems	14,300	1,600	12,700	0	0	0	0	0	0	16
17	Plumbing	5,300	300	5,000	0	0	0	0	0	0	17
18	Heating	9,000	600	8,400	0	0	0	0	0	0	18
19	Electric										19
20	Upkeep										20
21	Moderate problems	19,700	3,200	16,300	0	0	200	0	0	0	21
22	Plumbing	1,600	0	1,600	0	0	0	0	0	0	22
23	Heating	1,000	300	700	0	0	0	0	0	0	23
24	Kitchen	13,600	2,700	10,700	0	0	200	0	0	0	24
25	Upkeep	5,700	0	5,700	0	0	0	0	0	0	25

Forward-Looking Table C: Occupant Characteristics, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
1	Occupied units	937,600	871,700	63,900	200	0	700	500	300	400	1
	Age of householder										
2	Under 65	760,500	619,500	139,300	200	0	700	500	300	0	2
3	65 to 74	94,400	10,200	84,200	0	0	0	0	0	0	3
4	75 or older	82,700	33,700	48,700	0	0	0	0	0	400	4
	Children in household										
5	Some	383,000	212,500	170,400	0	0	0	0	0	0	5
6	None	554,600	386,400	166,100	200	0	700	500	300	400	6
	Race and ethnicity										
7	White	700,200	580,500	117,800	200	0	500	500	300	400	7
8	Hispanic	106,800	76,100	30,700	0	0	0	0	0	0	8
9	Non-Hispanic	593,400	437,100	154,400	200	0	500	500	300	400	9
10	Black	12,600	3,300	9,300	0	0	0	0	0	0	10
11	Hispanic	900	0	900	0	0	0	0	0	0	11
12	Non-Hispanic	11,700	3,300	8,400	0	0	0	0	0	0	12
13	American Indian or Alaska Native alone	3,600	300	3,300	0	0	0	0	0	0	13
14	Asian or Pacific Islander	126,700	82,700	44,000	0	0	0	0	0	0	14
16	Other	94,600	900	93,500	0	0	200	0	0	0	16
17	Hispanic or Latino (any race)	190,900	139,100	51,600	0	0	200	0	0	0	17

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
	Income sources of families and primary individuals										
18	Wages and salaries	782,000	577,100	203,900	0	0	200	500	300	0	18
20	Dividends, interest, or rent	348,200	138,900	208,700	0	0	300	0	0	400	20
21	Public assistance or public welfare	28,900	800	28,100	0	0	0	0	0	0	21

Forward-Looking Table D: Income and Housing Cost, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
1	Occupied units	937,600	871,700	63,900	200	0	700	500	300	400	1
	Tenure										
2	Owner-occupied	597,400	497,000	99,300	0	0	500	0	300	400	2
3	Homeownership rate	63.70%									3
4	Renter-occupied	340,200	282,300	57,000	200	0	200	500	0	0	4
	Renter monthly housing costs										
5	No cash rent	5,500	1,400	3,700	200	0	0	200	0	0	5
6	Less than \$350	12,700	4,900	7,800	0	0	0	0	0	0	6
7	\$350 to \$599	15,100	700	14,300	0	0	0	200	0	0	7
8	\$600 to \$799	45,300	1,100	44,000	0	0	0	200	0	0	8
9	\$800 to \$1,249	164,200	45,600	118,400	0	0	200	0	0	0	9
10	\$1,250 or more	97,300	65,900	31,400	0	0	0	0	0	0	10
	Renter household income										
11	Less than \$15,000	43,700	13,700	29,500	200	0	0	400	0	0	11
12	\$15,000 to \$29,999	74,300	14,500	59,600	0	0	0	200	0	0	12
13	\$30,000 to \$49,999	90,200	18,300	71,800	0	0	200	0	0	0	13
14	\$50,000 to \$99,999	96,700	27,300	69,400	0	0	0	0	0	0	14
15	\$100,000 or more	35,200	7,300	27,900	0	0	0	0	0	0	15

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2002	2002 units present in 2011	Change in characteristics	2002 units lost due to conversion/merger	2002 house or mobile home moved out	2002 units changed to nonresidential use	2002 units lost through demolition or disaster	2002 units badly damaged or condemned	2002 units lost in other ways	Row
	Owner monthly housing costs	64,500	9,500	54,800	0	0	200	0	0	0	
16	Less than \$350	71,600	14,100	57,200	0	0	0	0	300	0	16
17	\$350 to \$599	41,200	5,500	35,700	0	0	0	0	0	0	17
18	\$600 to \$799	80,500	11,900	68,200	0	0	0	0	0	400	18
19	\$800 to \$1,249	339,600	235,900	103,500	0	0	300	0	0	0	19
20	\$1,250 or more										20
	Owner household income	36,700	6,500	29,700	0	0	500	0	0	0	
21	Less than \$15,000	68,400	13,600	54,500	0	0	0	0	300	0	21
22	\$15,000 to \$29,999	92,700	13,700	78,600	0	0	0	0	0	400	22
23	\$30,000 to \$49,999	200,700	60,600	140,100	0	0	0	0	0	0	23
24	\$50,000 to \$99,999	198,900	109,500	89,500	0	0	0	0	0	0	24
25	\$100,000 or more	937,600	871,700	63,900	200	0	700	500	300	400	25

Backward-Looking Table A: Housing Characteristics, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
1	Housing stock	1,054,100	990,600	0	800	0	700	61,500	0	600	1
	Occupancy status										
2	Occupied	983,300	880,000	45,100	600	0	500	56,600	0	600	2
3	Vacant	63,000	10,000	47,700	200	0	200	4,900	0	0	3
4	Seasonal	7,800	700	7,100	0	0	0	0	0	0	4
	Units in structure										
5	1, detached	541,700	511,800	0	200	0	200	29,400	0	0	5
6	1, attached	126,200	114,100	0	200	0	0	11,700	0	300	6
7	2 to 4	109,400	107,400	0	400	0	0	1,700	0	0	7
8	5 to 9	72,400	69,400	0	0	0	300	2,700	0	0	8
9	10 to 19	74,400	70,700	0	0	0	0	3,700	0	0	9
10	20 to 49	50,600	46,400	0	0	0	200	4,000	0	0	10
11	50 or more	48,000	39,400	0	0	0	0	8,300	0	300	11
12	Manufactured/mobile home	31,400	31,400	0	0	0	0	0	0	0	12

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
	Year built										
13	2010–2014	4,900	0	0	0	0	0	4,900	0	0	13
14	2005–2009	36,700	300	0	200	0	0	36,200	0	0	14
15	2000–2004	42,500	25,700	0	0	0	0	16,500	0	300	15
16	1995–1999	46,600	43,700	0	0	0	0	2,800	0	0	16
17	1990–1994	53,300	52,300	0	0	0	0	1,000	0	0	17
18	1985–1989	91,000	90,700	0	0	0	300	0	0	0	18
19	1980–1984	58,900	58,900	0	0	0	0	0	0	0	19
20	1975–1979	122,800	122,800	0	0	0	0	0	0	0	20
21	1970–1974	175,500	175,500	0	0	0	0	0	0	0	21
22	1960–1969	268,100	267,100	0	600	0	400	0	0	0	22
23	1950–1959	109,300	109,300	0	0	0	0	0	0	0	23
24	1940–1949	24,200	23,900	0	0	0	0	0	0	300	24
25	1930–1939	14,000	14,000	0	0	0	0	0	0	0	25
26	1920–1929	3,600	3,600	0	0	0	0	0	0	0	26
27	1919 or earlier	2,700	2,700	0	0	0	0	0	0	0	27

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
	Rooms										
28	1	3,200	600	1,800	0	0	200	300	0	300	28
29	2	9,400	5,700	2,700	400	0	0	400	0	300	29
30	3	102,100	75,900	17,700	0	0	0	8,500	0	0	30
31	4	218,000	131,500	74,600	400	0	300	11,200	0	0	31
32	5	198,700	78,000	110,100	0	0	200	10,400	0	0	32
33	6	190,100	77,200	106,800	0	0	0	6,200	0	0	33
34	7	158,400	63,500	89,400	0	0	0	5,500	0	0	34
35	8	107,300	41,600	55,800	0	0	0	10,000	0	0	35
36	9	48,700	19,800	24,500	0	0	0	4,300	0	0	36
37	10 or more	18,300	7,000	6,600	0	0	0	4,700	0	0	37
	Bedrooms										
38	None	10,500	5,200	4,200	0	0	200	700	0	300	38
39	1	132,700	107,300	15,100	400	0	0	9,700	0	300	39
40	2	320,300	275,100	29,100	400	0	300	15,500	0	0	40
41	3	311,300	258,900	38,000	0	0	200	14,200	0	0	41
42	4 or more	279,200	219,600	38,200	0	0	0	21,400	0	0	42
43	Multiunit structures	354,800	333,300	0	400	0	500	20,400	0	300	43
	Stories in structure										
44	1	68,800	67,100	0	400	0	0	1,400	0	0	44
45	2	221,800	217,900	0	0	0	500	3,400	0	0	45
46	3	41,200	31,900	0	0	0	0	8,900	0	300	46
47	4 to 6	21,000	14,400	0	0	0	0	6,600	0	0	47
48	7 or more	2,000	2,000	0	0	0	0	0	0	0	48

Backward-Looking Table B: Unit Quality, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/ merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
1	Occupied units	983,300	880,000	45,100	600	0	500	56,600	0	600	1
2	With complete kitchen	922,500	821,500	50,300	200	0	200	49,900	0	300	2
3	Lacking complete kitchen facilities	60,800	3,000	50,300	400	0	300	6,700	0	300	3
4	With complete plumbing	965,000	859,000	48,100	600	0	500	56,200	0	600	4
5	Lack some plumbing	18,300	300	17,600	0	0	0	400	0	0	5
6	No hot piped water	700	0	700	0	0	0	0	0	0	6
7	No bathtub/shower	2,600	0	2,200	0	0	0	400	0	0	7
8	No flush toilet	3,500	0	3,500	0	0	0	0	0	0	8
9	No exclusive use	14,200	300	13,900	0	0	0	0	0	0	9
	Water										
10	Public/private water	980,800	878,900	44,400	600	0	500	55,900	0	600	10
11	Well serving 1 to 5 units	800	0	800	0	0	0	0	0	0	11
12	Other water source	1,700	0	1,000	0	0	0	700	0	0	12
	Sewer										
13	Public sewer	981,400	877,000	46,500	600	0	500	56,200	0	600	13
14	Septic tank/cesspool	1,900	1,300	300	0	0	0	300	0	0	14
15	Other										15

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
16	Severe problems	25,300	1,700	23,200	0	0	0	400	0	0	16
17	Plumbing	18,300	300	17,600	0	0	0	400	0	0	17
18	Heating	7,100	600	6,500	0	0	0	0	0	0	18
19	Electric										19
20	Upkeep	600	0	600	0	0	0	0	0	0	20
21	Moderate problems	65,300	3,400	54,000	400	0	300	7,000	0	300	21
22	Plumbing	300	0	300	0	0	0	0	0	0	22
23	Heating	1,300	300	800	0	0	0	300	0	0	23
24	Kitchen	60,800	3,000	50,300	400	0	300	6,700	0	300	24
25	Upkeep	8,000	0	8,000	0	0	0	0	0	0	25

Backward-Looking Table C: Occupant Characteristics, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
1	Occupied units	983,300	880,000	45,100	600	0	500	56,600	0	600	1
	Age of householder										
2	Under 65	774,500	626,700	95,300	600	0	500	51,100	0	300	2
3	65 to 74	111,400	10,300	98,500	0	0	0	2,700	0	0	3
4	75 or older	97,300	34,100	60,200	0	0	0	2,800	0	300	4
	Children in household										
5	Some	387,500	216,000	143,200	600	0	0	27,800	0	0	5
6	None	595,800	388,800	177,100	0	0	500	28,800	0	600	6
	Race and ethnicity										
7	White	769,100	583,700	150,700	600	0	200	33,300	0	600	7
8	Hispanic	220,900	78,400	134,500	200	0	0	7,500	0	300	8
9	Non-Hispanic	548,200	437,800	83,700	400	0	200	25,900	0	300	9
10	Black	15,700	3,200	9,700	0	0	0	2,700	0	0	10
11	Hispanic	1,600	0	1,600	0	0	0	0	0	0	11
12	Non-Hispanic	14,100	3,200	8,100	0	0	0	2,700	0	0	12
13	American Indian or Alaska Native alone	9,900	300	9,000	0	0	0	600	0	0	13
14	Asian or Pacific Islander	177,200	85,300	73,100	0	0	300	18,500	0	0	14
16	Other	11,400	10,000	0	0	0	0	1,400	0	0	16
17	Hispanic or Latino (any race)	238,600	142,300	87,300	200	0	0	8,400	0	300	17

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
	Income sources of families and primary individuals										
18	Wages and salaries	722,200	582,600	94,600	400	0	0	44,400	0	300	18
20	Dividends, interest, or rent	272,900	139,600	111,600	0	0	0	21,600	0	0	20
21	Public assistance or public welfare	16,100	900	14,300	200	0	0	700	0	0	21

Backward-Looking Table D: Income and Housing Cost, Anaheim

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/ merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
1	Occupied units	983,300	880,000	45,100	600	0	500	56,600	0	600	1
	Tenure										
2	Owner-occupied	568,300	495,100	40,700	0	0	0	32,600	0	0	2
3	Homeownership rate	57.8%									3
4	Renter-occupied	415,000	293,500	95,800	600	0	500	24,000	0	600	4
	Renter monthly housing costs										
5	No cash rent	9,400	1,400	7,400	0	0	300	300	0	0	5
6	Less than \$350	17,100	5,100	11,300	0	0	0	700	0	0	6
7	\$350 to \$599	16,000	700	13,800	600	0	0	900	0	0	7
8	\$600 to \$799	11,200	1,200	9,300	0	0	0	400	0	300	8
9	\$800 to \$1,249	101,300	48,100	51,400	0	0	0	1,800	0	0	9
10	\$1,250 or more	260,000	68,100	171,500	0	0	200	19,900	0	300	10
	Renter household income										
11	Less than \$15,000	58,600	14,300	40,900	400	0	300	2,700	0	0	11
12	\$15,000 to \$29,999	82,700	15,200	63,900	200	0	0	3,100	0	300	12
13	\$30,000 to \$49,999	83,000	19,300	60,100	0	0	200	3,400	0	0	13
14	\$50,000 to \$99,999	128,600	28,200	93,200	0	0	0	6,900	0	300	14
15	\$100,000 or more	62,100	7,600	46,700	0	0	0	7,800	0	0	15

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2002	Change in characteristics	2011 units added by conversion/merger	2011 house or mobile home moved in	2011 units added from nonresidential use	2011 units added by new construction	2011 units added from temporary losses in 2002 stock	2011 units added in other ways	Row
	Owner monthly housing costs										
16	Less than \$350	23,300	9,700	13,500	0	0	0	0	0	0	16
17	\$350 to \$599	63,400	14,300	48,400	0	0	0	700	0	0	17
18	\$600 to \$799	37,600	5,300	32,300	0	0	0	0	0	0	18
19	\$800 to \$1,249	58,500	10,900	47,000	0	0	0	600	0	0	19
20	\$1,250 or more	385,500	236,000	118,200	0	0	0	31,200	0	0	20
	Owner household income										
21	Less than \$15,000	33,700	6,400	26,600	0	0	0	700	0	0	21
22	\$15,000 to \$29,999	65,900	13,300	52,600	0	0	0	0	0	0	22
23	\$30,000 to \$49,999	72,600	13,500	57,400	0	0	0	1,600	0	0	23
24	\$50,000 to \$99,999	153,600	59,800	88,200	0	0	0	5,600	0	0	24
25	\$100,000 or more	242,500	110,100	107,800	0	0	0	24,700	0	0	25

Forward-Looking Rental Dynamics Table 1: Counts, 2002–2011, Anaheim

Affordability categories	A Total in 2002	B Non-market in 2011	C Extremely low rent in 2011	D Very low rent in 2011	E Low rent in 2011	F Moderate rent in 2011	G High rent in 2011	H Very high rent in 2011	I Extremely high rent in 2011	J Owner- occupied in 2011	K Seasonal or related vacant in 2011	L Lost to stock in 2011
Non-market	58,700	10,700	2,400	4,700	10,000	17,600	3,800	3,300	1,300	3,300	1,300	400
Extremely low rent	9,900	600	1,100	1,600	800	2,000	900	1,100	300	900	300	200
Very low rent	80,500	5,500	2,400	11,500	22,000	25,700	3,300	2,600	900	4,000	1,500	1,000
Low rent	86,000	7,200	2,500	2,000	12,300	48,200	3,200	1,600	600	6,800	1,600	0
Moderate rent	66,300	2,400	2,100	2,100	2,900	32,900	15,700	2,300	500	3,700	1,700	0
High rent	51,100	2,200	1,300	700	500	7,400	14,200	15,400	2,500	4,500	2,400	0
Very high rent	6,700	0	0	0	0	0	600	2,800	1,800	1,400	0	0
Extremely high rent	6,900	0	300	0	0	0	200	1,100	2,700	1,200	1,300	0
Total	366,100	28,600	12,100	22,600	48,500	133,800	41,900	30,200	10,600	25,800	10,100	1,600

Forward-Looking Rental Dynamics Table 2: Row Percentages, 2002–2011, Anaheim

Affordability categories	A Total in 2002	B Non-market in 2011	C Extremely low rent in 2011	D Very low rent in 2011	E Low rent in 2011	F Moderate rent in 2011	G High rent in 2011	H Very high rent in 2011	I Extremely high rent in 2011	J Owner- occupied in 2011	K Seasonal or related vacant in 2011	L Lost to stock in 2011
Non-market	58,700	18.2%	4.0%	8.0%	17.1%	30.0%	6.4%	5.6%	2.3%	5.6%	2.2%	0.6%
Extremely low rent	9,900	5.9%	11.4%	16.7%	8.1%	20.7%	9.4%	10.7%	3.3%	8.8%	3.4%	1.7%
Very low rent	80,500	6.8%	3.0%	14.3%	27.4%	32.0%	4.1%	3.2%	1.1%	5.0%	1.9%	1.3%
Low rent	86,000	8.4%	2.9%	2.3%	14.3%	56.1%	3.7%	1.9%	0.6%	7.9%	1.9%	0.0%
Moderate rent	66,300	3.7%	3.2%	3.2%	4.3%	49.6%	23.6%	3.4%	0.8%	5.6%	2.5%	0.0%
High rent	51,100	4.3%	2.6%	1.3%	0.9%	14.5%	27.9%	30.2%	5.0%	8.8%	4.6%	0.0%
Very high rent	6,700	0.0%	0.0%	0.0%	0.0%	0.0%	9.6%	42.2%	26.9%	21.4%	0.0%	0.0%
Extremely high rent	6,900	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	366,100	7.8%	3.3%	6.2%	13.3%	36.6%	11.5%	8.2%	2.9%	7.0%	2.7%	0.4%

Backward-Looking Rental Dynamics Table 1: Counts, 2002–2011, Anaheim

Affordability categories	A Total in 2011	B Non- market in 2002	C Extremely low rent in 2002	D Very low rent in 2002	E Low rent in 2002	F Moderate rent in 2002	G High rent in 2002	H Very high rent in 2002	I Extremely high rent in 2002	J Owner- occupied in 2002	K Seasonal or related vacant in 2002	L New construction	M Added in other ways
Non-market	40,500	11,000	600	5,800	7,700	2,700	2,400	0	0	7,700	300	2,000	300
Extremely low rent	17,600	2,100	1,100	2,400	2,500	2,300	1,400	0	300	3,700	0	1,000	800
Very low rent	29,900	4,600	1,700	11,600	2,000	2,300	700	0	0	6,100	300	400	300
Low rent	54,600	10,100	900	22,800	13,300	2,800	500	0	0	2,700	200	1,100	200
Moderate rent	152,800	17,200	2,200	26,500	50,500	34,300	7,700	0	0	11,800	1,100	1,400	0
High rent	60,800	4,000	900	3,400	3,300	16,400	15,000	700	300	10,900	1,200	4,700	0
Very high rent	58,300	3,200	1,100	2,500	1,800	2,300	15,000	3,100	1,000	17,400	700	10,200	0
Extremely high rent	28,700	1,200	300	700	400	500	2,400	1,800	2,600	12,400	1,000	5,100	300
Total	443,300	53,400	8,800	75,800	81,500	63,600	45,100	5,600	4,200	72,800	4,700	25,800	1,900

Backward-Looking Rental Dynamics Table 2: Row Percentages, 2002–2011, Anaheim

Affordability categories	A Total in 2011	B Non- market in 2002	C Extremely low rent in 2002	D Very low rent in 2002	E Low rent in 2002	F Moderate rent in 2002	G High rent in 2002	H Very high rent in 2002	I Extremely high rent in 2002	J Owner- occupied in 2002	K Seasonal or related vacant in 2002	L New construction	M Added in other ways
Non-market	40,500	27.2%	1.4%	14.3%	19.0%	6.6%	5.9%	0.0%	0.0%	19.1%	0.7%	5.0%	0.7%
Extremely low rent	17,600	11.8%	6.4%	13.6%	14.4%	13.1%	7.9%	0.0%	1.9%	21.0%	0.0%	5.6%	4.4%
Very low rent	29,900	15.4%	5.6%	39.0%	6.7%	7.6%	2.4%	0.0%	0.0%	20.3%	1.0%	1.2%	1.0%
Low rent	54,600	18.5%	1.6%	41.8%	24.3%	5.2%	0.8%	0.0%	0.0%	5.0%	0.4%	1.9%	0.4%
Moderate rent	152,800	11.3%	1.4%	17.4%	33.0%	22.5%	5.1%	0.0%	0.0%	7.7%	0.7%	0.9%	0.0%
High rent	60,800	6.6%	1.5%	5.6%	5.5%	26.9%	24.7%	1.2%	0.5%	18.0%	1.9%	7.7%	0.0%
Very high rent	58,300	5.5%	2.0%	4.2%	3.0%	3.9%	25.7%	5.3%	1.8%	29.8%	1.2%	17.6%	0.0%
Extremely high rent	28,700	4.1%	1.2%	2.5%	1.6%	1.8%	8.3%	6.2%	9.1%	43.2%	3.4%	17.7%	1.0%
Total	443,300	12.1%	2.0%	17.1%	18.4%	14.4%	10.2%	1.3%	1.0%	16.4%	1.1%	5.8%	0.4%