

**American Housing Survey**

**Components of Inventory Change and  
Rental Dynamics Analysis:  
Sacramento, 2004–2011**

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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 Sacramento metropolitan area changed between 2004 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 Sacramento and on their occupants in both 2004 and 2011.

In 2004 the Sacramento metropolitan area contained 727,500 housing units, including vacant units. By 2011 the number of housing units had increased to 883,700. Part of this increase was due to a redefinition of the metropolitan area that added Yolo County. We estimate that the 2011 count of housing units for the metropolitan area as defined in 2004 would be 804,600. This represents an overall increase of 10.6 percent, which translates to an average annual increase of 1.4 percent over the 7-year period.

Between 2004 and 2011, only 3,600 units left the housing stock. Of these, 1,000 are clearly permanent losses—the original unit is gone, and major construction would be required to replace it with a new unit. Another 1,300 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 1,300 units that left the housing stock either permanently or temporarily for “other” reasons, a category that encompasses a wide variety of situations. Demolitions and natural disasters accounted for 600 of the permanent losses, while mergers and conversions contributed another 200 permanent losses. Mobile home move-outs accounted for another 200 losses.

In the period between the 2004 and the 2011 AHS surveys, 97,500 units were added to the housing stock. Ninety-six percent of these additions were newly constructed units. Move-ins of mobile homes contributed 400 units. Also, 1,300 new units were formed from the conversion or merger of 2004 units. We classified 1,600 units as recovered because these units had been in the housing stock at some point but were classified in 2004 as nonresidential or uninhabitable. Finally, 1,100 units were added in other unclassified ways.

The Sacramento metropolitan area lost 0.5 percent of all 2004 housing units by 2011, and additions by new construction or other means represented 11.0 percent of the 2011 housing stock. The loss rate and the rate of addition varied across segments of the housing market.

- Vacant units had a higher-than-average loss rate.
- Units owned by households earning \$100,000 or more in 2004 experienced a lower-than-average loss rate.

- Overall, units in multifamily structures experienced a lower-than-average rate of addition, and this was particularly the case among units in small multifamily structures (2–9 units or 2 stories). Units in large multifamily buildings (3 or more floors) had a rate of addition that was substantially higher than the average.
- In general, small units (2–4 rooms or 1 or 2 bedrooms) had low rates of addition, while large units (8 or more rooms or 4 or more bedrooms) experienced a high rate.
- Units occupied in 2011 by households with householders identifying themselves as members of two or more races or householders 75 years or older had low rates of addition. Units with Asian householders had a high rate of addition.
- The rate of addition was low among units that were renter-occupied in 2011 and, among rental units, particularly low for those occupied by households earning between \$15,000 and \$29,999 and those with low monthly housing costs (less than \$1,250). The rate of addition was higher than normal among high-cost rentals (\$1,250 per month or more).
- The rate of addition among units that were owner-occupied in 2011 was higher than that of all occupied units but not statistically different. Among owner-occupied units, those occupied by lower income owners (less than \$15,000) and those with lower monthly housing costs (\$350 to \$599) had lower rates of addition, while those occupied by high-income owners (\$100,000 or more) and those with high monthly housing cost (\$1,250 or more) had higher-than-average rates of addition.

The 2004 rental stock in Sacramento was not affordable. Of the 240,900 rental units in 2004, only 64,100 were extremely low rent or very low rent units. In addition, 41,800 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 44.0 percent of the 2004 rental stock. The three highest rent categories comprised almost 8 percent of the rental stock. Moves to a less affordable category (sometimes called gentrification) exceeded moves to a more affordable category (sometimes called filtration)—27.0 percent of all 2004 units compared to 18.8 percent. By 2011, 11.2 percent of the rental units in 2004 were no longer in the rental stock. The largest proportion of these losses was due to changes in tenure.

The rental stock in Sacramento was even less affordable in 2011 than in 2004. Of the 374,100 rental units in 2011, 86,600 were extremely low rent or very low rent units. In addition, 43,100 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 34.7 percent of the 2011 rental stock. The three highest rent categories comprised 17.7 percent of the rental stock. Moves from a more affordable category (sometimes called gentrification) exceeded moves from a less affordable category (sometimes called filtration)—20.7 percent of all 2011 units compared to 15.1 percent. Of the rental units in 2011, 29.4 percent were not rental in 2004. The largest proportion of these gains was due to changes in tenure.

# Components of Inventory Change and Rental Dynamics Analysis: Sacramento, 2004–2011

## 1. Introduction

This report describes how the housing stock in the Sacramento metropolitan area changed between 2004 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 Sacramento and on their occupants in both 2004 and 2011.<sup>1</sup>

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.<sup>2</sup>

CINCH reports present both forward-looking analysis (what happened to the 2004 units by 2011) and backward-looking analysis (where the 2011 units came from in terms of 2004).<sup>3</sup> 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 Sacramento.
- Section 3 explains the changes in the housing stock between 2004 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 2004 and 2011.

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<sup>1</sup> 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.

<sup>2</sup> 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>.

<sup>3</sup> 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 Sacramento metropolitan area between 2004 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 2004–2011 period began during 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: Sacramento**

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 2004 the Sacramento metropolitan area contained 727,500 housing units, including vacant units. By 2011 the number of housing units had increased to 883,700. Part of this increase was due to a redefinition of the metropolitan area that added Yolo County. Using the American Community Survey (2011, 5-year data) at the county level, we estimate that the 2011 count of housing units for the metropolitan area as defined in 2004 would be 804,600. This represents an overall increase of 10.6 percent, which translates to an average annual increase of 1.4 percent over the 7-year period.

The change in the geographical definition of Sacramento affects the interpretation of the information presented in this report. Our analysis applies only to that portion of the metropolitan area that was common to the Sacramento metropolitan area as defined in both 2004 and 2011, but the application to the common area is not precise, as explained in Appendix A.

### **Sample size**

Both CINCH and rental dynamics require that, if a sample unit is in both the 2004 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 2,492 sample units that were common to the 2004 and 2011 AHS Sacramento surveys and satisfied all the analytical requirements.<sup>4</sup> Between 2004 and 2011, 19 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 2,511 sample units. Between 2004 and 2011, 323 sample units meeting the analytical requirements were added to the AHS to represent additions to the stock throughout the metropolitan area as defined in 2011; thus, the backward-looking analysis is based on a maximum of 2,815 sample units. In the forward-looking analysis, the average weight of a sample unit is approximately 290 units; in the backward-looking analysis, the average weight of a sample unit is approximately 314 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 Sacramento, 7 years separate the 2011 sample from the 2004 sample. As a result, explaining the loss or addition of sample units is 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: 2004–2011***

### **Losses between 2004 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.

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<sup>4</sup> The 2004 AHS surveyed 4,728 units in the Sacramento metropolitan area; 3,367 of these units were in the 2011 AHS public use file (PUF). Of the 1,361 sample units no longer in the survey, 203 were legitimate temporary or permanent losses to the housing stock and were considered for the analysis. The remaining 1,158 cases are coded as “sample reduction for the current survey year” with no further explanation.



Table 1 reports that between 2004 and 2011, only 3,600 units left the housing stock.<sup>5</sup> Of these, 1,000 are clearly permanent losses—the original unit is gone, and major construction would be required to replace it with a new unit. Another 1,300 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 1,300 units that left the housing stock either permanently or temporarily for “other” reasons, a category that encompasses a wide variety of situations.

**Table 1: Disposition of 2004 Sacramento Housing Units in 2011<sup>6</sup>**

Present in 2004	727,500
2004 units present in 2011	723,900
<b>Units no longer in the stock</b>	<b>3,600</b>
2004 units lost due to conversion/merger	200
2004 house or mobile home moved out	200
2004 units lost through demolition or disaster	600
<b>Permanent losses</b>	<b>1,000</b>
2004 units changed to nonresidential use	900
2004 units badly damaged or condemned	400
<b>Temporary losses</b>	<b>1,300</b>
<b>2004 units lost in other ways</b>	<b>1,300</b>

Demolitions and natural disasters accounted for 600 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. Mobile home move-outs accounted for another 200 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 2004. For each subgroup, these tables detail how many of the 2004 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 2004–2011 period.

<sup>5</sup> With the caveats noted in Appendix A, this analysis applies to the area common to both the 2004 and 2011 definitions of the metropolitan area.

<sup>6</sup> Numbers may not add consistently due to rounding. Counts were rounded to the nearest hundred.

## Additions between 2004 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 2004 and 2011.<sup>7</sup>

**Table 2: Sources for 2011 Sacramento Housing Stock<sup>8</sup>**

2011 housing stock	883,700
2011 units present in 2004	786,200
<b>Total additions to stock</b>	<b>97,500</b>
Units added by new construction	93,100
House or mobile home moved in	400
Units added by conversion/merger	1,300
<b>New or reconstructed units</b>	<b>94,800</b>
Units added from nonresidential use	1,100
Units added from temporary losses	500
<b>Recovered units</b>	<b>1,600</b>
<b>Units added in other ways</b>	<b>1,100</b>

In the period between the 2004 and the 2011 AHS surveys, 97,500 units were added to the housing stock. Ninety-six percent of these additions were newly constructed units. Move-ins of mobile homes contributed 400 units. Also, 1,300 new units were formed from the conversion or merger of 2004 units.

We classified 1,600 units as recovered because these units had been in the housing stock at some point but were classified in 2004 as nonresidential or uninhabitable. Finally, 1,100 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 2004–2011 period.

### **4. Components With Atypical Losses or Additions**

The Sacramento metropolitan area lost 0.5 percent of all 2004 housing units by 2011, and additions by new construction or other means represented 11.0 percent of the 2011 housing stock. The loss rate and the rate of addition varied across segments of the housing market.

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<sup>7</sup> With the caveats noted in Appendix A, this analysis applies to the area common to both the 2004 and 2011 definitions of the metropolitan area. Inconsistencies between Tables 1 and 2 result from a combination of (1) changes in metropolitan boundaries, (2) changes in control housing counts between censuses, and (3) different weights.

<sup>8</sup> Numbers may not add consistently due to rounding. Counts were rounded to the nearest hundred.

We examined all of the components of the 2004 Sacramento housing stock contained in the four forward-looking tables in Appendix B to identify subgroups with unusual loss rates. Forward-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 Sacramento, 2004–2011<sup>9</sup>**

Characteristics	Present in 2004	Total lost	Percent lost
<i>Housing stock</i>	727,500	3,600	0.5%
<i>Occupancy status</i>			
Occupied	669,500	2,300	0.3%
Vacant	53,300	1,200	2.3%*
<i>Tenure</i>			
Owner-occupied	450,600	1,000	0.2%
Renter-occupied	218,900	1,200	0.5%
<i>Owner household income</i>			
\$100,000 or more	130,600	200	0.2%***

\*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.

Only two segments of the 2004 Sacramento housing market met the criteria for Table 3.<sup>10</sup>

- Vacant units had a higher-than-average loss rate.
- Units owned by households earning \$100,000 or more in 2004 experienced a lower-than-average loss rate.

The 97,500 additions reported in Table 2 represent 11.0 percent of the 2011 housing stock. The rate of addition varied by the characteristics of the housing. Additions represented 10.6 percent of occupied units.

We examined all of the components of the 2004 Sacramento housing stock contained in the four backward-looking tables in Appendix B to identify subgroups with unusual addition rates. Backward-Looking Table A reports information on all units in the stock; Table 4 lists subgroups

<sup>9</sup> 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.

<sup>10</sup> This is mainly the result of our ability to track only 19 sample units that were lost to the stock.

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 Sacramento, 2004–2011<sup>11</sup>**

Characteristics	Present in 2011	Total additions	Percent additions
<i>Housing stock</i>	883,700	97,500	11.0%
<i>Occupancy status</i>			
Occupied	783,700	83,000	10.6%
Vacant	78,700	11,800	15.0%*
<i>Units in structure</i>			
2 to 4	59,500	3,400	5.7%***
5 to 9	60,100	4,300	7.2%*
<i>Rooms</i>			
2	6,500	200	3.4%*
3	79,300	3,600	4.5%***
4	148,000	9,600	6.5%***
8	83,300	16,200	19.4%***
9	39,600	10,500	26.4%***
10 or more	19,600	5,500	27.9%***
<i>Bedrooms</i>			
1	99,900	4,400	4.5%***
2	224,900	19,800	8.8%*
4 or more	214,200	39,100	18.3%***
<i>Multifamily units</i>	222,200	18,800	8.5%**
<i>Stories in structure</i>			
2	162,600	7,700	4.7%***
3	20,900	5,400	25.6%**
4 to 6	7,400	3,000	41.0%***
<i>Age of householder</i>			
75 or older	80,100	2,800	3.5%***
<i>Race and ethnicity</i>			
Asian alone	75,900	14,200	18.7%***
Two or more races	22,900	1,000	4.5%**
<i>Tenure</i>			
Owner-occupied	442,700	54,000	12.2%
Renter-occupied	341,000	29,000	8.5%*

<sup>11</sup> 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>Renter monthly housing costs</i>			
Less than \$350	17,700	800	4.3%**
\$600 to \$799	60,900	2,100	3.5%***
\$800 to \$1,249	130,200	8,700	6.7%***
\$1,250 or more	99,900	15,200	15.2%**
<i>Renter household income</i>			
\$15,000 to \$29,999	85,400	5,200	6.1%***
<i>Owner monthly housing costs</i>			
\$350 to \$599	54,200	1,500	2.7%***
\$1,250 or more	270,200	43,100	15.9%***
<i>Owner household income</i>			
Less than \$15,000	30,300	1,700	5.7%**
\$100,000 or more	142,200	23,900	16.8%***

\*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 an interesting story about changes in the Sacramento metropolitan area.

- Overall, units in multifamily structures experienced a lower-than-average rate of addition, and this was particularly the case among units in small multifamily structures (2–9 units or 2 stories). Units in large multifamily buildings (3 or more floors) had a rate of addition that was substantially higher than the average.
- In general, small units (2–4 rooms or 1 or 2 bedrooms) had low rates of addition, while large units (8 or more rooms or 4 or more bedrooms) experienced a high rate.
- Units occupied in 2011 by households with householders identifying themselves as members of two or more races or householders 75 or older had low rates of addition. Units with Asian householders had a high rate of addition.
- The rate of addition was low among units that were renter-occupied in 2011 and, among rental units, particularly low for those occupied by households earning between \$15,000 and \$29,999 and those with low monthly housing costs (less than \$1,250). The rate of addition was higher than normal among high-cost rentals (\$1,250 per month or more).
- The rate of addition among units that were owner-occupied in 2011 was higher than that of all occupied units but not statistically different. Among owner-occupied units, those occupied by lower income owners (less than \$15,000) and those with lower monthly housing costs (\$350 to \$599) had lower rates of addition, while those occupied by high-income owners (\$100,000 or more) and those with high monthly housing cost (\$1,250 or more) had higher-than-average rates of addition.

## **5. Rental Market Dynamics: 2004–2011**

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.<sup>12</sup> 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 2004 rental units by how affordable they were in 2004. 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.

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<sup>12</sup> Gross rent is equal to rent plus utilities.

**Table 5: Summary of Forward-Looking Rental Dynamics for Sacramento**

Affordability categories	2004 rental units	To more affordable categories in 2011	In same affordability category in both years	To less affordable categories in 2011	2004 rental units non-rental in 2011
Non-market	41,800	NA	32.6%	55.4%	12.0%
Extremely low rent	8,000	7.1%	7.2%	72.9%	12.7%
Very low rent	56,100	11.3%	49.4%	26.4%	12.9%
Low rent	57,800	26.6%	42.6%	24.1%	6.6%
Moderate rent	58,400	25.8%	54.5%	10.5%	9.2%
High rent	10,700	28.5%	42.9%	5.3%	23.3%
Very high rent	3,900	49.0%	7.4%	14.2%	29.5%
Extremely high rent	4,200	59.3%	20.0%	NA	20.7%
Total	240,900	18.6%	43.2%	27.0%	11.2%

The 2004 rental stock in Sacramento was not affordable. Of the 240,900 rental units in 2004, only 64,100 were extremely low rent or very low rent units. In addition, 41,800 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 44.0 percent of the 2004 rental stock. The three highest rent categories comprised almost 8 percent of the rental stock. Moves to a less affordable category (sometimes called gentrification) exceeded moves to a more affordable category (sometimes called filtration)—27.0 percent of all 2004 units compared to 18.8 percent.

By 2011, 11.2 percent of the 240,900 rental units in 2004 were no longer in the rental stock (27,000 units). The largest proportion of these losses was due to changes in tenure, with 19,700 rental units becoming owner-occupied or vacant for sale in 2011. Another 5,600 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.

Table 6 summarizes where the 2011 rental units came from, with respect to 2004, 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 Sacramento was even less affordable in 2011 than in 2004. Of the 374,100 rental units in 2011, 86,600 were extremely low rent or very low rent units. In addition, 43,100 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 34.7 percent of the 2011 rental stock. The three highest rent categories comprised 17.7 percent of the rental stock. Moves from a more affordable category (sometimes called gentrification) exceeded moves from a less affordable category (sometimes called filtration)—20.7 percent of all 2011 units compared to 15.1 percent.

**Table 6: Summary of Backward-Looking Rental Dynamics for Sacramento**

Affordability categories	2011 rental units	From more affordable categories in 2004	In same affordability category in both years	From less affordable categories in 2004	2011 rental units non-rental in 2004
Non-market	43,100	NA	37.9%	28.0%	34.1%
Extremely low rent	12,400	13.9%	5.4%	36.2%	44.6%
Very low rent	74,200	11.5%	47.1%	27.6%	13.9%
Low rent	73,600	25.7%	43.2%	17.7%	13.5%
Moderate rent	104,600	30.4%	37.5%	4.0%	28.1%
High rent	48,200	26.2%	11.8%	4.3%	57.7%
Very high rent	11,100	14.9%	3.0%	3.0%	79.1%
Extremely high rent	6,800	34.5%	15.6%	NA	49.9%
Total	374,100	20.7%	34.8%	15.1%	29.4%

Of the 374,100 rental units in 2011, 29.4 percent were not rental in 2004 (109,900 units). The largest proportion of these gains was due to changes in tenure, with 68,900 rental units having been owner-occupied or vacant for sale in 2004. Another 7,200 units had been seasonal units, units occupied by persons with usual residence elsewhere, or units used for migratory workers. Finally, 33,800 rental units had not been in the housing stock in 2004. Of these, 32,200 were added by new construction and 1,600 by other means. Backward-Looking Rental Dynamics Table 2 shows how the movement into the rental stock varied across the affordability categories.

## **6. Summary of Housing Market Changes: Sacramento Metropolitan Area, 2004–2011**

In 2004 the Sacramento metropolitan area contained 727,500 housing units, including vacant units. By 2011 the number of housing units had increased to 883,700. Part of this increase was due to a redefinition of the metropolitan area that added Yolo County. We estimate that the 2011 count of housing units for the metropolitan area as defined in 2004 would be 804,600. This represents an overall increase of 10.6 percent, which translates to an average annual increase of 1.4 percent over the 7-year period.

The change in the geographical definition of Sacramento affects the interpretation of the information presented in this report. Our analysis applies only to that portion of the metropolitan area that was common to the Sacramento metropolitan area as defined in both 2004 and 2011.

Between 2004 and 2011, only 3,600 units left the housing stock. Of these, 1,000 are clearly permanent losses—the original unit is gone, and major construction would be required to replace it with a new unit. Another 1,300 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 1,300 units that left the housing stock either permanently or temporarily for “other” reasons, a category that encompasses a wide variety of situations. Demolitions and natural disasters accounted for 600 of the permanent losses, while mergers and conversions contributed another 200 permanent losses. Mobile home move-outs accounted for another 200 losses.



In the period between the 2004 and the 2011 AHS surveys, 97,500 units were added to the housing stock. Ninety-six percent of these additions were newly constructed units. Move-ins of mobile homes contributed 400 units. Also, 1,300 new units were formed from the conversion or merger of 2004 units. We classified 1,600 units as recovered because these units had been in the housing stock at some point but were classified in 2004 as nonresidential or uninhabitable. Finally, 1,100 units were added in other unclassified ways.

The Sacramento metropolitan area lost 0.5 percent of all 2004 housing units by 2011, and additions by new construction or other means represented 11.0 percent of the 2011 housing stock. The loss rate and the rate of addition varied across segments of the housing market.

- Vacant units had a higher-than-average loss rate.
- Units owned by households earning \$100,000 or more in 2004 experienced a lower-than-average loss rate.
- Overall, units in multifamily structures experienced a lower-than-average rate of addition, and this was particularly the case among units in small multifamily structures (2–9 units or 2 stories). Units in large multifamily buildings (3 or more floors) had a rate of addition that was substantially higher than the average.
- In general, small units (2–4 rooms or 1 or 2 bedrooms) had low rates of addition, while large units (8 or more rooms or 4 or more bedrooms) experienced a high rate.
- Units occupied in 2011 by households with householders identifying themselves as members of two or more races or householders 75 years or older had low rates of addition. Units with Asian householders had a high rate of addition.
- The rate of addition was low among units that were renter-occupied in 2011 and, among rental units, particularly low for those occupied by households earning between \$15,000 and \$29,999 and those with low monthly housing costs (less than \$1,250). The rate of addition was higher than normal among high-cost rentals (\$1,250 per month or more).
- The rate of addition among units that were owner-occupied in 2011 was higher than that of all occupied units but not statistically different. Among owner-occupied units, those occupied by lower income owners (less than \$15,000) and those with lower monthly housing costs (\$350 to \$599) had lower rates of addition, while those occupied by high-income owners (\$100,000 or more) and those with high monthly housing cost (\$1,250 or more) had higher-than-average rates of addition.

The 2004 rental stock in Sacramento was not affordable. Of the 240,900 rental units in 2004, only 64,100 were extremely low rent or very low rent units. In addition, 41,800 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 44.0 percent of the 2004 rental stock. The three highest rent categories comprised almost 8 percent of the rental stock. Moves to a less affordable category (sometimes called gentrification) exceeded moves to a more affordable category (sometimes called filtration)—27.0

percent of all 2004 units compared to 18.8 percent. By 2011, 11.2 percent of the 240,900 rental units in 2004 were no longer in the rental stock (27,000 units). The largest proportion of these losses was due to changes in tenure, with 19,700 rental units becoming owner-occupied or vacant for sale in 2011.

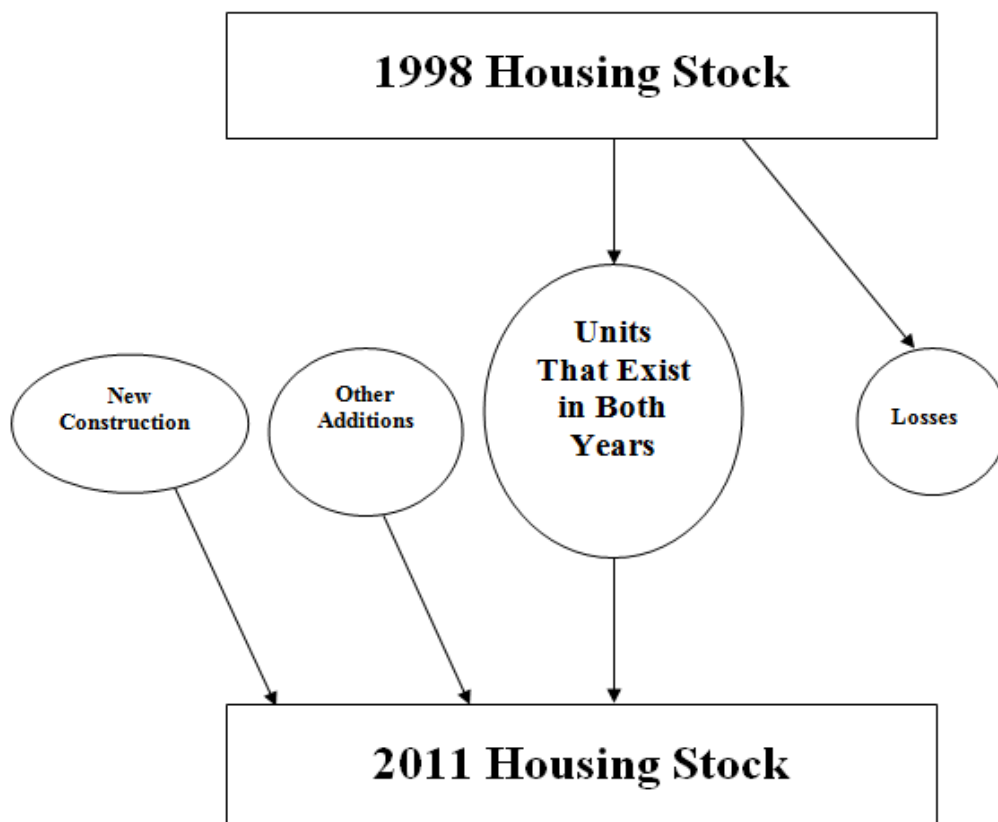
The rental stock in Sacramento was even less affordable in 2011 than in 2004. Of the 374,100 rental units in 2011, 86,600 were extremely low rent or very low rent units. In addition, 43,100 units were non-market; that is, they were either assisted or offered for no cash rent. These three categories accounted for 34.7 percent of the 2011 rental stock. The three highest rent categories comprised 17.7 percent of the rental stock. Moves from a more affordable category (sometimes called gentrification) exceeded moves from a less affordable category (sometimes called filtration)—20.7 percent of all 2011 units compared to 15.1 percent. Of the 374,100 rental units in 2011, 29.4 percent were not rental in 2004 (109,900 units). The largest proportion of these gains was due to changes in tenure, with 68,900 rental units having been owner-occupied or vacant for sale in 2004.

## 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 2004 and 2011 housing stocks) and one oval (units added through new construction between 2004 and 2011). No one estimates the other three ovals: the number of units that belong to both the 2004 and 2011 housing stock, units lost to the housing stock between 2004 and 2011, and other additions to the housing stock between 2004 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:<sup>13</sup>

- 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.

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<sup>13</sup> 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, 2004, 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 2004 and 2011. In some cases, there may be no status, (e.g., not yet constructed in 2004) 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 2004 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.<sup>14</sup> For example, the exact accounting might show that 2,500 sample units that were rental in 2004 became owner-occupied or vacant for sale in 2011. To estimate the number of units in the national housing stock that were rental in 2004 and became owner-occupied in 2011, one would need to apply weights. However, using 2004 weights would produce a different estimate than using 2011 weights. There is no conceptual reason to favor the answer using 2004 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 (2004) 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 (2004). 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.

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<sup>14</sup> 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 2004 and 2011, and the application to the common area is not precise for the following reasons:

- For forward-looking analysis (2004 to 2011), we observe only those sample units in the geography common to both 2004 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 2004 geography. Since the common area is smaller than the 2004 geography, the counts are overestimates for the common area.
- For the backward-looking analysis (2011 from 2004), we observe (a) sample units that were in the common area in 2004 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 2004 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 2004 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 2004 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 2004.

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 2004 housing stock by 2011. There are three possible dispositions of 2004 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 2004. There are three possible sources of 2011 units:

- Units that existed in 2004 with the same characteristics (or serving the same market).

- Units that existed in 2004 but with different characteristics (or serving a different market).
- Units that are additions to the housing stock between 2004 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 (2004 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 2004 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.<sup>15</sup>

- 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.<sup>16</sup>
- 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 2004 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 2004.
- Column H is the CINCH estimate of the number of units from column B that were newly constructed between 2004 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

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<sup>15</sup> 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.

<sup>16</sup> 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 2004.<sup>17</sup>
- 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 2004 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 2004 housing stock relate to the 2011 housing stock. Column A estimates the number of units in each affordability category in 2004. Columns B through L explain where the 2004 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 2004 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.

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<sup>17</sup> 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 2004 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 2004, they will be counted in columns B through I, depending upon how affordable they are in 2004.
- 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 2004 are counted in column K.
- Column L counts rental units that were newly constructed between 2004 and 2011.
- Column M counts rental units that were added to the housing stock after 2004 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 7-year period; for example, a unit that is low rent in 2004 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 2004 and 2011.

**Forward-Looking Table A: Housing Characteristics, Sacramento**

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	Row
1	Housing stock	727,500	723,900	0	200	200	900	600	400	1,300	1
	Occupancy status										
2	Occupied	669,500	612,100	55,200	0	200	200	600	400	800	2
3	Vacant	53,300	12,700	39,400	200	0	500	0	0	500	3
4	Seasonal	4,700	2,600	1,900	0	0	100	0	0	0	4
	Units in structure										
5	1, detached	496,900	494,200	0	0	200	500	400	400	1,200	5
6	1, attached	31,900	31,800	0	0	0	100	0	0	0	6
7	2 to 4	48,800	48,400	0	200	0	200	0	0	0	7
8	5 to 9	39,000	39,000	0	0	0	0	0	0	0	8
9	10 to 19	30,900	30,600	0	0	0	0	200	0	200	9
10	20 to 49	18,100	18,100	0	0	0	0	0	0	0	10
11	50 or more	25,500	25,500	0	0	0	0	0	0	0	11
12	Manufactured/mobile home	36,300	36,300	0	0	0	0	0	0	0	12

Row	A Characteristics	B Present in 2004	C 2004 units present in 2011	D Change in characteristics	E 2004 units lost due to conversion/ merger	F 2004 house or mobile home moved out	G 2004 units changed to nonresidential use	H 2004 units lost through demolition or disaster	I 2004 units badly damaged or condemned	J 2004 units lost in other ways	Row
	Year built										
15	2000–2004	84,800	84,400	0	0	200	0	0	0	200	15
16	1995–1999	50,300	50,300	0	0	0	0	0	0	0	16
17	1990–1994	60,400	60,400	0	0	0	0	0	0	0	17
18	1985–1989	90,300	90,300	0	0	0	0	0	0	0	18
19	1980–1984	53,400	53,000	0	200	0	0	0	200	0	19
20	1975–1979	80,800	80,600	0	0	0	0	200	0	0	20
21	1970–1974	74,400	74,000	0	0	0	0	0	0	400	21
22	1960–1969	93,000	92,400	0	0	0	200	200	0	200	22
23	1950–1959	73,200	72,600	0	0	0	0	200	0	400	23
24	1940–1949	33,200	32,900	0	0	0	100	0	200	0	24
25	1930–1939	14,900	14,600	0	0	0	200	0	0	0	25
26	1920–1929	11,500	11,400	0	0	0	200	0	0	0	26
27	1919 or earlier	7,500	7,100	0	0	0	200	0	0	200	27
	Rooms										
28	1	1,900	1,200	500	0	0	100	0	0	0	28
29	2	5,900	3,500	2,200	0	0	0	0	0	200	29
30	3	58,100	44,700	12,400	0	200	0	600	200	0	30
31	4	126,800	80,900	45,300	200	0	200	0	0	200	31
32	5	159,900	90,900	68,200	0	0	600	0	0	200	32
33	6	155,800	79,900	75,500	0	0	0	0	0	400	33
34	7	96,000	40,800	54,700	0	0	0	0	0	400	34
35	8	65,000	31,600	33,200	0	0	0	0	200	0	35
36	9	32,600	12,300	20,300	0	0	0	0	0	0	36
37	10 or more	25,700	6,500	19,200	0	0	0	0	0	0	37

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	Row
	Bedrooms										
38	None	4,500	3,100	1,000	0	0	100	0	0	200	38
39	1	77,500	68,500	7,900	0	200	0	600	200	0	39
40	2	186,000	162,600	22,500	200	0	600	0	0	200	40
41	3	290,900	259,100	31,100	0	0	200	0	0	600	41
42	4 or more	168,700	148,400	19,700	0	0	0	0	200	400	42
43	Multiunit structures	162,300	161,600	0	200	0	200	200	0	200	43
	Stories in structure										
44	1	23,800	23,800	0	0	0	0	0	0	0	44
45	2	121,500	120,900	0	200	0	200	200	0	0	45
46	3	13,500	13,300	0	0	0	0	0	0	200	46
47	4 to 6	2,200	2,200	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, Sacramento**

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	Row
1	Occupied units	669,500	612,100	55,200	0	200	200	600	400	800	1
2	With complete kitchen	652,800	593,700	57,500	0	0	0	400	400	800	2
3	Lacking complete kitchen facilities	16,700	1,100	15,000	0	200	200	200	0	0	3
4	With complete plumbing	666,300	604,600	59,500	0	200	200	600	400	800	4
5	Lack some plumbing	3,200	0	3,200	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	600	0	600	0	0	0	0	0	0	7
8	No flush toilet	600	0	600	0	0	0	0	0	0	8
9	No exclusive use	2,600	0	2,600	0	0	0	0	0	0	9
	Water										
10	Public/private water	623,800	567,900	53,800	0	200	200	600	200	800	10
11	Well serving 1 to 5 units	43,300	40,400	2,900	0	0	0	0	0	0	11
12	Other water source	2,400	300	1,900	0	0	0	0	200	0	12
	Sewer										
13	Public sewer	594,600	541,300	51,300	0	200	200	600	200	800	13
14	Septic tank/cesspool	74,600	60,900	13,500	0	0	0	0	200	0	14
15	Other	300	0	300	0	0	0	0	0	0	15

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	Row
16	Severe problems	6,900	0	6,900	0	0	0	0	0	0	16
17	Plumbing	3,200	0	3,200	0	0	0	0	0	0	17
18	Heating	4,300	0	4,300	0	0	0	0	0	0	18
19	Electric										19
20	Upkeep										20
21	Moderate problems	21,800	1,400	19,700	0	200	200	200	0	0	21
22	Plumbing	1,200	0	1,200	0	0	0	0	0	0	22
23	Heating	600	300	300	0	0	0	0	0	0	23
24	Kitchen	16,700	1,100	15,000	0	200	200	200	0	0	24
25	Upkeep	4,400	0	4,200	0	0	200	0	0	0	25



**Forward-Looking Table C: Occupant Characteristics, Sacramento**

Row	A	B	C	D	E	F	G	H	I	J	Row
	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	
1	Occupied units	669,500	612,100	55,200	0	200	200	600	400	800	1
	Age of householder										
2	Under 65	543,500	432,900	108,300	0	200	200	600	400	800	2
3	65 to 74	62,300	14,600	47,700	0	0	0	0	0	0	3
4	75 or older	63,700	36,100	27,600	0	0	0	0	0	0	4
	Children in household										
5	Some	250,700	120,700	128,700	0	0	0	400	200	600	5
6	None	418,800	307,500	110,300	0	200	200	200	200	200	6
	Race and ethnicity										
7	White alone	530,900	437,200	92,200	0	200	200	400	0	600	7
8	Hispanic	76,800	39,600	36,600	0	0	0	400	0	200	8
9	Non-Hispanic	454,100	360,600	92,700	0	200	200	0	0	400	9
10	Black alone	43,700	19,700	24,000	0	0	0	0	0	0	10
11	Hispanic	600	0	600	0	0	0	0	0	0	11
12	Non-Hispanic	43,100	19,400	23,700	0	0	0	0	0	0	12
13	American Indian or Alaska Native alone	8,200	2,000	6,200	0	0	0	0	0	0	13
14	Asian alone	56,600	34,500	21,600	0	0	0	200	0	200	14
15	Pacific Islander alone	9,300	3,100	6,000	0	0	0	0	200	0	15
16	Two or more races	20,800	7,600	13,000	0	0	0	0	200	0	16
17	Hispanic or Latino (any race)	90,100	50,000	39,500	0	0	0	400	0	200	17

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	Row
	Income sources of families and primary individuals										
18	Wages and salaries	525,000	359,000	164,200	0	200	200	400	200	800	18
20	Dividends, interest, or rent	264,800	111,000	153,600	0	0	0	0	200	0	20
21	Public assistance or public welfare	22,500	4,000	17,900	0	0	0	400	200	0	21

**Forward-Looking Table D: Income and Housing Cost, Sacramento**

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	Row
1	Occupied units	669,500	612,100	55,200	0	200	200	600	400	800	1
	Tenure										
2	Owner-occupied	450,600	367,400	82,200	0	200	0	0	400	400	2
3	Homeownership rate	67.3%									3
4	Renter-occupied	218,900	174,700	43,000	0	0	200	600	0	400	4
	Renter monthly housing costs										
5	No cash rent	7,200	2,300	4,700	0	0	0	200	0	0	5
6	Less than \$350	12,700	5,100	7,600	0	0	0	0	0	0	6
7	\$350 to \$599	21,500	4,700	16,600	0	0	0	0	0	200	7
8	\$600 to \$799	52,400	21,800	30,400	0	0	0	200	0	0	8
9	\$800 to \$1,249	89,800	47,100	42,100	0	0	200	200	0	200	9
10	\$1,250 or more	35,300	18,800	16,500	0	0	0	0	0	0	10
	Renter household income										
11	Less than \$15,000	40,000	15,100	24,300	0	0	0	400	0	200	11
12	\$15,000 to \$29,999	48,500	12,800	35,400	0	0	0	200	0	200	12
13	\$30,000 to \$49,999	60,200	12,600	47,600	0	0	0	0	0	0	13
14	\$50,000 to \$99,999	58,700	16,600	41,900	0	0	200	0	0	0	14
15	\$100,000 or more	11,500	2,000	9,500	0	0	0	0	0	0	15

	A	B	C	D	E	F	G	H	I	J	
Row	Characteristics	Present in 2004	2004 units present in 2011	Change in characteristics	2004 units lost due to conversion/merger	2004 house or mobile home moved out	2004 units changed to nonresidential use	2004 units lost through demolition or disaster	2004 units badly damaged or condemned	2004 units lost in other ways	Row
	Owner monthly housing costs										
16	Less than \$350	44,000	11,300	32,300	0	200	0	0	200	0	16
17	\$350 to \$599	72,700	23,300	49,400	0	0	0	0	0	0	17
18	\$600 to \$799	28,100	6,100	22,000	0	0	0	0	0	0	18
19	\$800 to \$1,249	80,000	20,600	59,200	0	0	0	0	200	0	19
20	\$1,250 or more	225,800	154,700	70,600	0	0	0	0	0	400	20
	Owner household income										
21	Less than \$15,000	26,600	3,500	22,900	0	0	0	0	200	0	21
22	\$15,000 to \$29,999	51,000	12,200	38,800	0	0	0	0	0	0	22
23	\$30,000 to \$49,999	85,800	15,900	69,400	0	0	0	0	200	200	23
24	\$50,000 to \$99,999	156,600	49,000	107,400	0	0	0	0	0	200	24
25	\$100,000 or more	130,600	58,700	71,700	0	200	0	0	0	0	25

**Backward-Looking Table A: Housing Characteristics, Sacramento**

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
1	Housing stock	883,700	786,200	0	1,300	400	1,100	93,100	500	1,100	1
	Occupancy status										
2	Occupied	783,700	652,600	48,100	1,300	400	200	80,300	500	300	2
3	Vacant	78,700	14,700	52,200	0	0	500	10,900	0	400	3
4	Seasonal	21,300	6,200	12,500	0	0	400	1,800	0	400	4
	Units in structure										
5	1, detached	590,200	519,300	0	500	0	800	68,700	0	800	5
6	1, attached	48,600	41,200	0	300	0	0	6,800	0	300	6
7	2 to 4	59,500	56,100	0	500	0	0	2,400	500	0	7
8	5 to 9	60,100	55,800	0	0	0	0	4,300	0	0	8
9	10 to 19	45,900	40,800	0	0	0	0	5,100	0	0	9
10	20 to 49	28,400	24,200	0	0	0	200	3,900	0	0	10
11	50 or more	28,400	26,600	0	0	0	0	1,900	0	0	11
12	Manufactured/mobile home	22,800	22,400	0	0	400	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 2004	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 2004 stock	2011 units added in other ways	Row
	Year built										
13	2010–2014	5,900	0	0	0	0	0	5,900	0	0	13
14	2005–2009	63,500	0	0	0	0	0	63,500	0	0	14
15	2000–2004	112,700	90,400	0	0	0	0	22,300	0	0	15
16	1995–1999	54,600	53,300	0	300	0	0	1,000	0	0	16
17	1990–1994	65,000	64,700	0	300	0	0	0	0	0	17
18	1985–1989	99,600	99,600	0	0	0	0	0	0	0	18
19	1980–1984	57,600	57,200	0	0	0	200	0	0	200	19
20	1975–1979	87,200	86,500	0	0	0	0	400	300	0	20
21	1970–1974	82,400	81,300	0	200	0	500	0	0	300	21
22	1960–1969	100,900	100,000	0	300	400	0	0	0	200	22
23	1950–1959	80,400	79,700	0	0	0	400	0	0	400	23
24	1940–1949	37,600	37,300	0	300	0	0	0	0	0	24
25	1930–1939	15,400	15,400	0	0	0	0	0	0	0	25
26	1920–1929	12,800	12,800	0	0	0	0	0	0	0	26
27	1919 or earlier	8,300	8,100	0	0	0	0	0	200	0	27

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
	Rooms										
28	1	3,000	1,600	800	0	0	200	0	0	400	28
29	2	6,500	4,500	1,800	0	0	0	0	0	200	29
30	3	79,300	56,100	19,700	500	0	0	3,000	0	0	30
31	4	148,000	94,500	43,800	500	0	200	8,500	300	0	31
32	5	205,100	97,400	83,900	0	400	0	22,600	200	500	32
33	6	180,200	84,300	78,500	200	0	0	17,200	0	0	33
34	7	119,200	41,700	67,300	0	0	0	10,200	0	0	34
35	8	83,300	32,300	34,900	0	0	0	16,200	0	0	35
36	9	39,600	12,600	16,500	0	0	600	9,900	0	0	36
37	10 or more	19,600	6,600	7,500	0	0	0	5,500	0	0	37
	Bedrooms										
38	None	6,700	4,200	1,900	0	0	200	0	0	400	38
39	1	99,900	87,400	8,100	500	0	0	3,700	0	200	39
40	2	224,900	185,000	20,000	800	0	200	18,300	300	300	40
41	3	338,000	269,600	35,000	0	400	0	32,600	200	200	41
42	4 or more	214,200	153,900	21,200	0	0	600	38,500	0	0	42
43	Multiunit structures	222,200	203,400	0	500	0	200	17,500	500	0	43
	Stories in structure										
44	1	29,400	26,700	0	300	0	0	2,400	0	0	44
45	2	162,600	154,800	0	300	0	200	6,700	500	0	45
46	3	20,900	15,600	0	0	0	0	5,400	0	0	46
47	4 to 6	7,400	4,400	0	0	0	0	3,000	0	0	47
48	7 or more	1,900	1,900	0	0	0	0	0	0	0	48

**Backward-Looking Table B: Unit Quality, Sacramento**

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
1	Occupied units	783,700	652,600	48,100	1,300	400	200	80,300	500	300	1
2	With complete kitchen	773,600	630,000	61,900	1,300	400	200	79,300	300	300	2
3	Lacking complete kitchen facilities	10,100	1,500	7,300	0	0	0	1,000	200	0	3
4	With complete plumbing	778,000	644,700	50,300	1,300	400	200	80,300	500	300	4
5	Lack some plumbing	5,700	0	5,700	0	0	0	0	0	0	5
6	No hot piped water	0	0	0	0	0	0	0	0	0	6
7	No bathtub/shower	0	0	0	0	0	0	0	0	0	7
8	No flush toilet	300	0	300	0	0	0	0	0	0	8
9	No exclusive use	5,400	0	5,400	0	0	0	0	0	0	9
	Water										
10	Public/private water	740,200	611,100	49,600	800	400	200	77,700	500	0	10
11	Well serving 1 to 5 units	43,200	38,300	1,400	500	0	0	2,600	0	300	11
12	Other water source	300	300	0	0	0	0	0	0	0	12
	Sewer										
13	Public sewer	714,500	583,500	54,300	300	400	200	75,400	500	0	13
14	Septic tank/cesspool	68,900	59,200	3,400	1,100	0	0	4,900	0	300	14
15	Other	300	0	300	0	0	0	0	0	0	15



	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
16	Severe problems	12,100	0	12,100	0	0	0	0	0	0	16
17	Plumbing	5,700	0	5,700	0	0	0	0	0	0	17
18	Heating	6,200	0	6,200	0	0	0	0	0	0	18
19	Electric										19
20	Upkeep	300	0	300	0	0	0	0	0	0	20
21	Moderate problems	16,800	1,800	13,800	0	0	0	1,000	200	0	21
22	Plumbing	1,000	0	1,000	0	0	0	0	0	0	22
23	Heating	600	300	300	0	0	0	0	0	0	23
24	Kitchen	10,100	1,500	7,300	0	0	0	1,000	200	0	24
25	Upkeep	6,000	0	6,000	0	0	0	0	0	0	25

**Backward-Looking Table C: Occupant Characteristics, Sacramento**

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
1	Occupied units	783,700	652,600	48,100	1,300	400	200	80,300	500	300	1
	Age of householder										
2	Under 65	618,300	470,700	75,500	1,000	0	200	70,000	500	300	2
3	65 to 74	85,300	14,800	62,400	300	400	0	7,500	0	0	3
4	75 or older	80,100	36,100	41,200	0	0	0	2,800	0	0	4
	Children in household										
5	Some	270,500	129,300	99,800	300	0	0	40,800	300	0	5
6	None	513,200	323,600	148,000	1,100	400	200	39,500	200	300	6
	Race and ethnicity										
7	White alone	601,700	456,100	89,400	1,300	400	200	53,500	500	300	7
8	Hispanic	95,600	41,200	44,100	0	0	0	10,200	0	0	8
9	Non-Hispanic	506,200	372,000	88,200	1,300	400	200	43,300	500	300	9
10	Black alone	63,100	22,400	32,800	0	0	0	7,900	0	0	10
11	Hispanic	6,400	0	5,200	0	0	0	1,200	0	0	11
12	Non-Hispanic	56,700	22,000	28,000	0	0	0	6,700	0	0	12
13	American Indian or Alaska Native alone	8,300	2,200	4,900	0	0	0	1,300	0	0	13
14	Asian alone	75,900	35,900	25,800	0	0	0	14,200	0	0	14
15	Pacific Islander alone	11,800	3,300	6,100	0	0	0	2,400	0	0	15
16	Two or more races	22,900	7,600	14,200	0	0	0	1,000	0	0	16
17	Hispanic or Latino (any race)	116,900	52,700	50,800	0	0	0	13,300	0	0	17

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
	Income sources of families and primary individuals										
18	Wages and salaries	531,700	385,300	81,600	1,000	0	0	63,400	300	0	18
20	Dividends, interest, or rent	200,100	110,200	67,800	500	400	0	20,600	200	300	20
21	Public assistance or public welfare	27,400	4,600	20,800	0	0	0	1,900	0	0	21

**Backward-Looking Table D: Income and Housing Cost, Sacramento**

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
1	Occupied units	783,700	652,600	48,100	1,300	400	200	80,300	500	300	1
	Tenure										
2	Owner-occupied	442,700	359,600	29,100	500	400	200	52,700	200	0	2
3	Homeownership rate	56.5%									3
4	Renter-occupied	341,000	215,600	96,300	800	0	0	27,700	300	300	4
	Renter monthly housing costs										
5	No cash rent	10,800	2,100	7,700	0	0	0	700	0	300	5
6	Less than \$350	17,700	6,400	10,500	0	0	0	800	0	0	6
7	\$350 to \$599	21,500	5,500	14,600	0	0	0	1,300	0	0	7
8	\$600 to \$799	60,900	28,100	30,700	300	0	0	1,900	0	0	8
9	\$800 to \$1,249	130,200	58,700	62,900	500	0	0	7,900	300	0	9
10	\$1,250 or more	99,900	22,300	62,400	0	0	0	15,200	0	0	10
	Renter household income										
11	Less than \$15,000	80,900	18,300	55,200	0	0	0	7,100	0	300	11
12	\$15,000 to \$29,999	85,400	16,500	63,700	0	0	0	5,200	0	0	12
13	\$30,000 to \$49,999	74,100	15,300	52,800	800	0	0	4,800	300	0	13
14	\$50,000 to \$99,999	73,000	20,100	47,100	0	0	0	5,800	0	0	14
15	\$100,000 or more	27,600	2,600	20,300	0	0	0	4,700	0	0	15

	A	B	C	D	E	F	G	H	I	J	
Row	2011 characteristics	Present in 2011	2011 units present in 2004	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 2004 stock	2011 units added in other ways	Row
	Owner monthly housing costs										
16	Less than \$350	23,300	10,800	11,000	0	0	0	1,400	0	0	16
17	\$350 to \$599	54,200	23,000	29,700	0	0	0	1,500	0	0	17
18	\$600 to \$799	38,100	5,600	28,900	0	400	0	3,100	0	0	18
19	\$800 to \$1,249	57,000	19,800	32,600	300	0	0	4,200	0	0	19
20	\$1,250 or more	270,200	154,700	72,400	200	0	200	42,400	200	0	20
	Owner household income										
21	Less than \$15,000	30,300	3,500	25,000	0	0	0	1,700	0	0	21
22	\$15,000 to \$29,999	54,700	10,400	39,800	0	400	0	3,900	200	0	22
23	\$30,000 to \$49,999	68,600	16,200	46,200	500	0	0	5,700	0	0	23
24	\$50,000 to \$99,999	146,900	49,100	80,200	0	0	0	17,600	0	0	24
25	\$100,000 or more	142,200	58,600	59,800	0	0	200	23,700	0	0	25

**Forward-Looking Rental Dynamics Table 1: Counts, 2004–2011, Sacramento**

Affordability categories	A Total in 2004	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	41,800	13,600	1,900	5,100	5,400	6,500	3,400	600	300	3,900	900	200
Extremely low rent	8,000	600	600	2,200	1,100	2,000	300	0	300	500	300	200
Very low rent	56,100	4,100	2,200	27,800	9,200	5,100	0	300	300	4,600	2,200	400
Low rent	57,800	2,500	600	12,300	24,700	12,800	1,200	0	0	2,300	1,100	400
Moderate rent	58,400	1,800	1,100	2,500	9,700	31,900	5,600	300	300	4,300	800	200
High rent	10,700	0	0	500	200	2,300	4,600	300	300	2,000	300	200
Very high rent	3,900	300	0	0	200	0	1,400	300	600	1,200	0	0
Extremely high rent	4,200	0	300	900	0	800	300	300	800	900	0	0
Total	240,900	22,900	6,700	51,300	50,500	61,400	16,800	2,100	2,900	19,700	5,600	1,600

**Forward-Looking Rental Dynamics Table 2: Row Percentages, 2004–2011, Sacramento**

Affordability categories	A Total in 2004	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	41,800	32.6%	4.5%	12.3%	12.9%	15.6%	8.1%	1.4%	0.7%	9.4%	2.1%	0.5%
Extremely low rent	8,000	7.1%	7.2%	27.1%	13.8%	25.1%	3.5%	0.0%	3.5%	6.5%	3.6%	2.6%
Very low rent	56,100	7.4%	3.9%	49.4%	16.3%	9.1%	0.0%	0.5%	0.5%	8.3%	3.9%	0.7%
Low rent	57,800	4.4%	1.0%	21.2%	42.6%	22.1%	2.0%	0.0%	0.0%	4.0%	1.9%	0.7%
Moderate rent	58,400	3.1%	1.9%	4.2%	16.5%	54.5%	9.5%	0.5%	0.5%	7.4%	1.4%	0.4%
High rent	10,700	0.0%	0.0%	4.8%	2.3%	21.4%	42.9%	2.7%	2.6%	19.0%	2.7%	1.6%
Very high rent	3,900	7.4%	0.0%	0.0%	6.2%	0.0%	35.4%	7.4%	14.2%	29.5%	0.0%	0.0%
Extremely high rent	4,200	0.0%	6.7%	20.2%	0.0%	18.9%	6.7%	6.9%	20.0%	20.7%	0.0%	0.0%
Total	240,900	9.5%	2.7%	21.2%	20.9%	25.4%	6.9%	0.8%	1.2%	8.2%	2.3%	0.7%

**Backward-Looking Rental Dynamics Table 1: Counts, 2004–2011, Sacramento**

Affordability categories	A Total in 2011	B Non- market in 2004	C Extremely low rent in 2004	D Very low rent in 2004	E Low rent in 2004	F Moderate rent in 2004	G High rent in 2004	H Very high rent in 2004	I Extremely high rent in 2004	J Owner- occupied in 2004	K Seasonal or related vacant in 2004	L New construction	M Added in other ways
Non-market	43,100	16,300	700	5,500	3,100	2,400	0	300	0	6,500	1,400	6,500	300
Extremely low rent	12,400	1,700	700	2,300	600	1,200	0	0	400	4,300	600	700	0
Very low rent	74,200	6,300	2,200	34,900	15,200	3,300	800	0	1,100	7,300	1,200	1,300	500
Low rent	73,600	6,600	1,400	11,000	31,800	12,400	300	300	0	7,000	600	1,800	500
Moderate rent	104,600	8,000	2,300	6,000	15,400	39,300	3,100	0	1,100	19,900	1,000	8,200	300
High rent	48,200	4,100	400	0	1,200	6,900	5,700	1,700	400	17,200	1,700	9,000	0
Very high rent	11,100	700	0	300	0	300	400	300	300	4,800	700	3,300	0
Extremely high rent	6,800	400	400	300	0	300	400	600	1,100	1,900	0	1,500	0
Total	374,100	44,100	8,100	60,200	67,500	66,000	10,600	3,300	4,400	68,900	7,200	32,200	1,600

**Backward-Looking Rental Dynamics Table 2: Row Percentages, 2004–2011, Sacramento**

Affordability categories	A Total in 2011	B Non- market in 2004	C Extremely low rent in 2004	D Very low rent in 2004	E Low rent in 2004	F Moderate rent in 2004	G High rent in 2004	H Very high rent in 2004	I Extremely high rent in 2004	J Owner- occupied in 2004	K Seasonal or related vacant in 2004	L New construction	M Added in other ways
Non-market	43,100	37.9%	1.7%	12.7%	7.3%	5.6%	0.0%	0.8%	0.0%	15.1%	3.2%	15.1%	0.7%
Extremely low rent	12,400	13.9%	5.4%	18.2%	5.1%	9.8%	0.0%	0.0%	3.1%	34.5%	4.8%	5.3%	0.0%
Very low rent	74,200	8.5%	3.0%	47.1%	20.5%	4.5%	1.0%	0.0%	1.5%	9.8%	1.7%	1.8%	0.7%
Low rent	73,600	8.9%	1.9%	14.9%	43.2%	16.8%	0.4%	0.5%	0.0%	9.5%	0.8%	2.4%	0.7%
Moderate rent	104,600	7.6%	2.2%	5.7%	14.8%	37.5%	2.9%	0.0%	1.1%	19.0%	1.0%	7.8%	0.3%
High rent	48,200	8.6%	0.8%	0.0%	2.6%	14.2%	11.8%	3.6%	0.8%	35.6%	3.5%	18.6%	0.0%
Very high rent	11,100	6.3%	0.0%	3.0%	0.0%	2.4%	3.3%	3.0%	3.0%	43.1%	6.0%	29.9%	0.0%
Extremely high rent	6,800	5.6%	5.6%	4.2%	0.0%	4.6%	5.6%	8.9%	15.6%	28.0%	0.0%	21.9%	0.0%
Total	374,100	11.8%	2.2%	16.1%	18.0%	17.7%	2.8%	0.9%	1.2%	18.4%	1.9%	8.6%	0.4%