

Appendix B: CINCH & Rental Dynamic 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; and
- 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.¹

- 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.²
- 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.
- 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 2004.³

¹ 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.

² 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.

³ These units had codes that identified them as “occupancy prohibited” or “interior exposed to the elements”.

- 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.

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.

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 end points 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.

	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	3,800	1,300	2,500	0	0	0	0	0	0	38
39	1	83,900	63,500	18,300	200	0	800	200	500	300	39
40	2	220,000	181,400	36,100	300	0	300	1,200	300	500	40
41	3	342,400	290,100	50,300	0	0	200	1,100	400	200	41
42	4 or more	205,700	163,900	40,200	0	0	200	900	400	0	42
43	Multiunit structures	233,900	230,500	0	300	0	900	800	800	600	43
	Stories in Structures										
44	1	11,500	11,200	0	0	0	300	0	0	0	44
45	2	73,800	73,200	0	300	0	0	0	0	300	45
46	3	67,200	65,800	0	0	0	300	500	600	0	46
47	4 to 6	50,100	49,300	0	0	0	300	300	300	0	47
48	7 or more	31,300	31,000	0	0	0	0	0	0	300	48

	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	9,100	2,600	6,300	0	0	0	200	0	0	16
17	Plumbing	3,900	0	3,700	0	0	0	200	0	0	17
18	Heating	2,700	0	2,700	0	0	0	0	0	0	18
19	Electric	1,600	900	700	0	0	0	0	0	0	19
20	Upkeep	900	0	900	0	0	0	0	0	0	20
21	Moderate Problems	21,800	2,300	19,300	0	0	300	0	0	0	21
22	Plumbing	500	0	500	0	0	0	0	0	0	22
23	Heating	500	0	500	0	0	0	0	0	0	23
24	Kitchen	11,900	1,800	9,800	0	0	300	0	0	0	24
25	Upkeep	12,000	500	11,500	0	0	0	0	0	0	25

Forward-Looking Table C: Occupant Characteristics, Cleveland

	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	769,300	686,100	77,900	500	0	1,100	1,700	900	1,100	1
	Age										
2	Under 65	577,200	443,800	129,400	500	0	500	1,500	700	800	2
3	65 to 74	89,500	23,900	65,400	0	0	0	200	0	0	3
4	75 or older	102,500	45,400	56,100	0	0	600	0	200	300	4
	Children										
5	Some	243,500	117,300	123,300	300	0	200	1,100	500	800	5
6	None	525,800	399,900	123,500	200	0	900	600	400	300	6
	Race/Origin										
7	White	640,400	545,300	92,800	500	0	800	600	0	300	7
8	Hispanic	22,800	8,600	14,300	0	0	0	0	0	0	8
9	Non-Hispanic	617,600	521,500	93,800	500	0	800	600	0	300	9
10	Black	104,000	74,200	26,700	0	0	300	1,100	900	800	10
11	Hispanic	700	0	700	0	0	0	0	0	0	11
12	Non-Hispanic	103,300	72,700	27,600	0	0	300	1,100	900	800	12
13	American Indian, Eskimo, Aleut	1,000	0	1,000	0	0	0	0	0	0	13
14	Asian	15,100	9,200	5,900	0	0	0	0	0	0	14
15	Pacific Islander	500	0	500	0	0	0	0	0	0	15
16	Two or more races	8,400	2,500	5,900	0	0	0	0	0	0	16
17	Total Hispanics	24,600	9,200	15,400	0	0	0	0	0	0	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 Source										
18	Wages and salaries	591,800	420,100	167,400	500	0	800	1,700	500	800	18
19	Dividend, interest, or rent	313,400	127,400	185,100	200	0	300	400	0	0	19
20	Welfare	20,300	700	18,400	0	0	0	600	300	300	20

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

	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	769,300	686,100	77,900	500	0	1,100	1,700	900	1,100	1
	Tenure										
2	Owner occupied	545,500	473,800	70,500	0	0	0	800	400	0	2
3	Homeownership rate	70.9%									3
4	Renter occupied	223,800	161,900	57,800	500	0	1,100	900	500	1,100	4
	Renter Monthly Housing Costs										
5	No cash rent	14,900	2,200	12,700	0	0	0	0	0	0	5
6	Less than \$350	20,600	6,700	13,400	0	0	0	200	300	0	6
7	\$350 to \$599	58,900	18,100	39,200	500	0	500	200	0	300	7
8	\$600 to \$799	76,700	30,000	45,900	0	0	300	200	0	300	8
9	\$800 to \$1,249	43,100	17,800	24,600	0	0	0	0	200	500	9
10	\$1,250 or more	9,600	1,800	7,200	0	0	300	200	0	0	10
	Renter Household Income										
11	Less than \$15,000	63,200	20,900	41,200	0	0	300	200	300	300	11
12	\$15,000 to \$29,999	62,900	13,700	46,900	300	0	600	700	200	500	12
13	\$30,000 to \$49,999	59,400	13,100	45,900	0	0	200	0	0	200	13
14	\$50,000 to \$99,999	28,300	6,800	21,500	0	0	0	0	0	0	14
15	\$100,000 or more	9,900	1,400	8,300	200	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	65,900	10,900	54,700	0	0	0	400	0	0	16
17	\$350 to \$599	120,200	49,500	70,700	0	0	0	0	0	0	17
18	\$600 to \$799	65,500	9,400	55,900	0	0	0	200	0	0	18
19	\$800 to \$1,249	131,200	43,700	87,100	0	0	0	200	200	0	19
20	\$1,250 or more	162,700	107,500	55,000	0	0	0	0	200	0	20
	Owner Household Income										
21	\$0 to \$14,999	58,000	9,600	47,600	0	0	0	400	400	0	21
22	\$15,000 to \$29,999	77,500	17,900	59,400	0	0	0	200	0	0	22
23	\$30,000 to \$49,999	96,900	24,200	72,400	0	0	0	200	0	0	23
24	\$50,000 to \$99,999	183,100	75,700	107,500	0	0	0	0	0	0	24
25	\$100,000 or more	130,000	56,600	73,500	0	0	0	0	0	0	25

	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 Structure Built										
13	2010–2014	6,300	0	0	0	0	0	6,300	0	0	13
14	2005–2009	44,400	0	0	0	0	0	44,400	0	0	14
15	2000–2004	41,700	30,400	0	0	0	0	11,300	0	0	15
16	1995–1999	36,800	36,800	0	0	0	0	0	0	0	16
17	1990–1994	41,300	41,300	0	0	0	0	0	0	0	17
18	1985–1989	49,200	49,200	0	0	0	0	0	0	0	18
19	1980–1984	27,700	27,700	0	0	0	0	0	0	0	19
20	1975–1979	53,000	53,000	0	0	0	0	0	0	0	20
21	1970–1974	77,000	76,700	0	0	0	0	0	0	400	21
22	1960–1969	143,200	143,200	0	0	0	0	0	0	0	22
23	1950–1959	165,800	165,300	0	0	0	400	0	0	0	23
24	1940–1949	77,700	76,500	0	0	0	0	700	0	500	24
25	1930–1939	56,900	56,400	0	0	0	500	0	0	0	25
26	1920–1929	72,300	71,200	0	0	0	400	700	0	0	26
27	1919 or earlier	65,300	64,000	0	0	0	1,300	0	0	0	27

Backward-Looking Table B: Unit Quality, Cleveland

	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	860,400	735,633	63,212	0	0	1,810	58,865	0	880	1
2	With complete kitchen	845,318	718,942	65,311	0	0	1,810	58,375	0	880	2
3	Lacking complete kitchen facilities	15,082	1,746	12,847	0	0	0	490	0	0	3
	Plumbing Facilities										
4	With all plumbing facilities	849,812	722,988	65,760	0	0	1,810	58,375	0	880	4
5	Lacking some or all plumbing facilities	10,588	0	10,098	0	0	0	490	0	0	5
6	No hot piped water	997	0	507	0	0	0	490	0	0	6
7	No bathtub and no shower	490	0	0	0	0	0	490	0	0	7
8	No flush toilet	997	0	507	0	0	0	490	0	0	8
9	No exclusive use	9,590	0	9,590	0	0	0	0	0	0	9
	Primary Source of Water										
10	Public or private system	781,676	662,496	61,544	0	0	1,810	54,946	0	880	10
11	Well serving 1 to 5 units	75,643	67,955	3,769	0	0	0	3,919	0	0	11
12	Other	3,081	2,029	1,052	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 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
	Means of Sewage Disposal										
13	Public sewer	768,777	636,302	77,779	0	0	1,810	52,006	0	880	13
14	Septic tank or cesspool	91,623	77,364	7,400	0	0	0	6,858	0	0	14
15	Other										15
16	Severe physical problems	15,612	2,664	12,458	0	0	0	490	0	0	16
17	Plumbing	10,588	0	10,098	0	0	0	490	0	0	17
18	Heating	4,010	0	4,010	0	0	0	0	0	0	18
19	Electric	1,504	1,015	0	0	0	0	490	0	0	19
20	Upkeep										20
21	Moderate physical problems	21,898	2,253	19,645	0	0	0	0	0	0	21
22	Plumbing	1,465	0	1,465	0	0	0	0	0	0	22
23	Heating										23
24	Upkeep	15,082	1,746	12,847	0	0	0	490	0	0	24
25	Kitchen	8,852	507	8,345	0	0	0	0	0	0	25

Backward-Looking Table C: Occupant Characteristics, Cleveland

	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	860,400	735,633	63,212	0	0	1,810	58,865	0	880	1
	Age of Householder										
2	Less than 65 years old	631,090	476,874	103,207	0	0	1,374	49,135	0	501	2
3	65 to 74 years old	113,216	25,980	82,831	0	0	0	4,405	0	0	3
4	75 years old and over	116,094	46,508	63,445	0	0	436	5,325	0	380	4
	Households & Children										
5	Households with children	248,171	125,722	101,210	0	0	0	21,240	0	0	5
6	Households with no children	612,229	427,895	144,018	0	0	1,810	37,625	0	880	6

	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
	Race and Hispanic Origin										
7	White alone	697,115	585,843	57,457	0	0	1,374	52,062	0	380	7
8	Hispanic	20,927	9,029	9,082	0	0	0	2,816	0	0	8
9	Non-Hispanic	676,188	560,539	64,649	0	0	1,374	49,246	0	380	9
10	Black alone	132,785	79,562	47,026	0	0	436	5,261	0	501	10
11	Hispanic	4,725	0	4,725	0	0	0	0	0	0	11
12	Non-Hispanic	128,060	77,715	44,147	0	0	436	5,261	0	501	12
13	Am Indian or Alaska Native	1,712	0	1,186	0	0	0	526	0	0	13
14	Asian alone	18,296	9,915	7,366	0	0	0	1,016	0	0	14
15	Pacific Islander alone										15
16	Two or more races	10,492	1,776	8,716	0	0	0	0	0	0	16
17	Hispanic or Latino (any race)	28,039	9,787	15,437	0	0	0	2,816	0	0	17
	Income Sources of Families and Primary Individuals	601,969	452,759	100,610	0	0	551	47,549	0	501	
18	Wages and salaries	240,304	137,446	84,109	0	0	0	18,749	0	0	18
19	Dividends, interest, or rent	15,253	641	12,719	0	0	0	1,893	0	0	19
20	Public assistance or public welfare	860,400	735,633	63,212	0	0	1,810	58,865	0	880	20

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

	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	860,400	735,600	63,200	0	0	1,800	58,900	0	900	1
	Tenure										
2	Owner-occupied	591,700	507,300	32,700	0	0	800	50,500	0	400	2
3	Homeownership rate	68.8%									3
4	Renter-occupied	268,700	174,100	84,800	0	0	1,000	8,300	0	500	4
	Renter Monthly Housing Costs										
5	No cash rent										5
6	Less than \$350	23,200	7,600	14,500	0	0	500	700	0	0	6
7	\$350 to \$599	47,900	19,600	27,700	0	0	0	700	0	0	7
8	\$600 to \$799	84,200	32,700	50,300	0	0	0	700	0	500	8
9	\$800 to \$1,249	84,100	19,100	60,300	0	0	600	4,100	0	0	9
10	\$1,250 or more	15,700	2,100	12,100	0	0	0	1,600	0	0	10
		13,500	2,200	10,800	0	0	0	500	0	0	
	Renter Household Income										
11	Less than \$15,000	76,000	22,000	52,700	0	0	0	1,200	0	0	11
12	\$15,000 to \$29,999	68,200	14,200	51,100	0	0	500	1,900	0	500	12
13	\$30,000 to \$49,999	58,500	14,800	43,700	0	0	0	0	0	0	13
14	\$50,000 to \$99,999	54,700	7,300	43,200	0	0	600	3,700	0	0	14
15	\$100,000 or more	11,300	1,300	8,600	0	0	0	1,500	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	28,000	11,400	15,700	0	0	0	1,000	0	0	16
17	\$350 to \$599	122,100	52,900	64,100	0	0	400	4,700	0	0	17
18	\$600 to \$799	59,100	9,900	45,800	0	0	0	3,400	0	0	18
19	\$800 to \$1,249	149,700	46,400	90,100	0	0	0	12,800	0	400	19
20	\$1,250 or more	232,900	117,000	86,800	0	0	400	28,600	0	0	20
	Owner Household Income										
21	\$0 to \$14,999	42,900	10,200	30,300	0	0	400	2,000	0	0	21
22	\$15,000 to \$29,999	88,400	18,400	64,900	0	0	400	4,400	0	400	22
23	\$30,000 to \$49,999	113,200	25,300	80,300	0	0	0	7,600	0	0	23
24	\$50,000 to \$99,999	199,900	83,000	102,400	0	0	0	14,500	0	0	24
25	\$100,000 or more	147,400	62,000	63,300	0	0	0	22,100	0	0	25

Forward-Looking Rental Dynamics Table 1: Counts, 2004–2011, Cleveland (All Numbers in Thousands)

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	50,900	14,700	0	8,900	10,300	5,900	500	500	700	5,400	3,400	500
Extremely Low Rent	23,700	1,800	700	7,000	4,000	1,100	500	0	0	4,200	3,500	800
Very Low Rent	118,100	9,400	1,800	49,200	28,400	13,400	0	0	0	6,400	7,000	2,600
Low Rent	51,900	2,900	3,100	5,800	15,900	17,100	1,800	0	700	2,700	1,100	700
Moderate Rent	18,100	1,600	0	2,300	2,900	6,800	1,200	0	0	2,700	500	0
High Rent	4,300	0	0	0	700	700	1,000	0	0	1,700	0	200
Very High Rent	3,500	0	0	700	0	500	500	0	700	500	600	0
Extremely High Rent	2,900	0	0	700	600	0	0	0	1,300	0	0	300
Total	273,400	30,400	5,600	74,600	62,800	45,500	5,500	500	3,400	23,600	16,100	5,100

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

Affordability Categories	A Total in 2004 (Thousands)	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	50,900	28.9%	0.0%	17.6%	20.2%	11.6%	1.0%	1.0%	1.3%	10.7%	6.7%	1.0%
Extremely Low Rent	23,700	7.8%	2.9%	29.5%	16.9%	4.8%	2.2%	0.0%	0.0%	17.7%	14.9%	3.3%
Very Low Rent	118,100	8.0%	1.5%	41.6%	24.1%	11.3%	0.0%	0.0%	0.0%	5.4%	5.9%	2.2%
Low Rent	51,900	5.6%	5.9%	11.2%	30.7%	32.9%	3.6%	0.0%	1.3%	5.2%	2.2%	1.3%
Moderate Rent	18,100	8.9%	0.0%	12.9%	16.2%	37.5%	6.8%	0.0%	0.0%	14.9%	2.7%	0.0%
High Rent	4,300	0.0%	0.0%	0.0%	15.6%	15.8%	23.2%	0.0%	0.0%	40.1%	0.0%	5.1%
Very High Rent	3,500	0.0%	0.0%	19.1%	0.0%	14.6%	14.6%	0.0%	19.1%	14.6%	18.0%	0.0%
Extremely High Rent	2,900	0.0%	0.0%	22.9%	21.5%	0.0%	0.0%	0.0%	45.7%	0.0%	0.0%	9.8%
Total	273,400	11.2%	2.0%	27.3%	23.0%	16.6%	2.1%	0.2%	1.2%	8.7%	5.9%	1.9%

Backward-Looking Rental Dynamics Table 1: Counts, 2004–2011, Cleveland (All Numbers in Thousands)

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	43,400	16,300	2,100	10,500	3,200	1,800	0	0	0	7,500	1,300	700	0
Extremely Low Rent	8,100	0	600	1,900	3,100	0	0	0	0	1,500	400	0	500
Very Low Rent	92,100	9,000	6,500	51,200	6,100	2,500	0	800	800	7,700	6,000	700	900
Low Rent	74,500	10,700	3,800	29,000	17,000	3,000	800	0	800	8,300	1,200	0	0
Moderate Rent	66,100	6,400	1,200	14,700	18,800	7,500	800	500	0	13,300	2,400	0	600
High Rent	9,900	500	500	0	1,900	1,200	1,100	400	0	3,700	400	0	0
Very High Rent	3,400	500	0	0	0	0	0	0	0	2,200	600	0	0
Extremely High Rent	3,900	800	0	0	600	0	0	600	1,400	500	0	0	0
Total	301,300	44,100	14,700	107,300	50,800	16,000	2,600	2,400	2,900	44,800	12,400	1,400	1,900

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

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	43,400	37.5%	4.7%	24.2%	7.5%	4.2%	0.0%	0.0%	0.0%	17.3%	3.0%	1.6%	0.0%
Extremely Low Rent	8,100	0.0%	7.9%	23.6%	38.5%	0.0%	0.0%	0.0%	0.0%	18.8%	5.4%	0.0%	5.8%
Very Low Rent	92,100	9.7%	7.0%	55.6%	6.7%	2.7%	0.0%	0.8%	0.8%	8.4%	6.5%	0.7%	1.0%
Low Rent	74,500	14.4%	5.1%	38.9%	22.8%	4.1%	1.0%	0.0%	1.0%	11.1%	1.6%	0.0%	0.0%
Moderate Rent	66,100	9.7%	1.7%	22.3%	28.4%	11.3%	1.1%	0.8%	0.0%	20.1%	3.7%	0.0%	0.8%
High Rent	9,900	5.5%	5.5%	0.0%	19.4%	12.2%	11.0%	4.5%	0.0%	37.5%	4.5%	0.0%	0.0%
Very High Rent	3,400	15.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	65.4%	18.7%	0.0%	0.0%
Extremely High Rent	3,900	19.4%	0.0%	0.0%	15.7%	0.0%	0.0%	15.7%	35.2%	14.0%	0.0%	0.0%	0.0%
Total	301,300	14.6%	4.9%	35.6%	16.8%	5.3%	0.9%	0.8%	1.0%	14.9%	4.1%	0.5%	0.6%