The State of Rental Housing in Cook County

Current Conditions and Forecast

Produced by
DePaul University
The Real Estate Center

Funded by
MacArthur
The John D. and Catherine T. MacArthur Foundation

Prepared for
The Preservation Compact
A Rental Housing Strategy for Cook County

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Prepared for
The Preservation Compact
A civic partnership committed to the preservation
of affordable rental housing in Cook County

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As of 2005, there were approximately 2 million housing units in Cook County, and 835,000 of these were rentals. Of these, only 353,000 are considered "affordable"—renting for less than $750 per month.[1] Moreover, the stock of affordable rental units is projected to fall by an additional 38,000 units by 2020 while demand for such units will increase by 34,000. In this report, we document the state of rental housing in Cook County—the first time this information has been put together in one place. We also present a forecast of both the supply of and demand for affordable rental housing that is likely to exist in the year 2020. Here are some of our key findings.

- If recent trends continue, 38,000 affordable rental units will disappear by the year 2020. This forecast includes the projected new construction of 40,000 units by regional housing agencies so the actual loss of affordable units would be 78,000. In other words, for each new affordable unit built, two existing affordable units would be lost.

- Over the same time period, the demand for affordable rental units is projected to increase by 34,000, rising along with the county's general population.

- Residents of Cook County are much more likely to rent than are other Americans; 38.5% of Cook County households rent, as compared with 33% for the rest of the nation. Renters also are typically much younger than owners. Among Cook County households headed by someone younger than age 25, a total of 85% rent.

- In Cook County, renters earn less than half the income of owners, with approximately half earning less than $30,000 per year. Almost 370,000 rental households pay more than 30% of their income for housing, which is often used as the cutoff for "rent-burdened."

- Rental households in Cook County are much more likely to be occupied by minorities; 36% were occupied by Blacks and an additional 20% were occupied by Hispanics. The comparable percentages for the U.S. were 19% and 17%, respectively.

- Rental units in Cook County tend to have more units per structure than rentals in the rest of the nation. This is especially true for structures with two-to-four units, which account for more than a third of all rental units in Cook County but only 20% in the rest of the U.S.

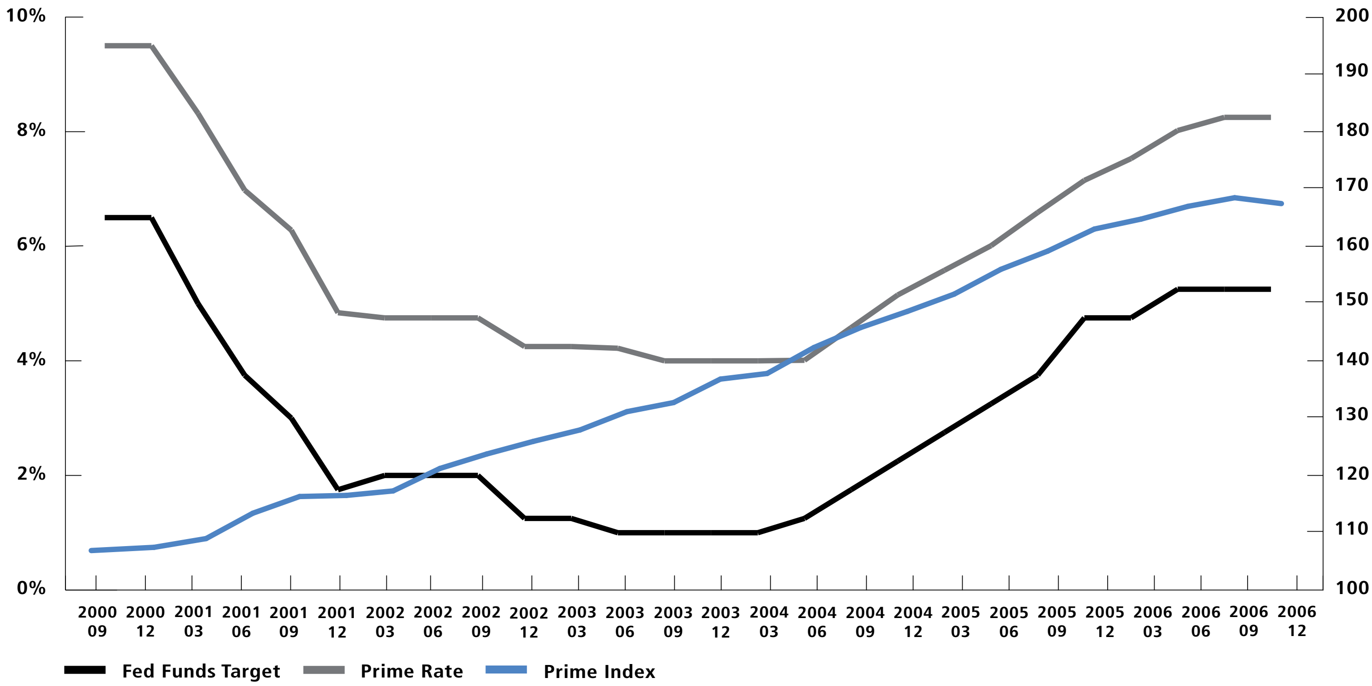
- Rental units in Cook County are much older than rental units in the rest of the country, and therefore are at higher risk of demolition or conversion. Approximately 60% of Cook County rental units were built before 1960, as compared with only 34% for the rest of the country.

Current Conditions

From 2000 to 2005, three broad factors led to sweeping changes in the market for rental housing in Cook County. First, a large number of renters became homeowners as mortgage-interest rates hit historical lows. Second, the supply of rental units declined precipitously as owners of multifamily structures converted their units to condominium status in order to cash in on the hot housing market. Third, the supply of affordable rental housing was further squeezed as the distribution of gross rents shifted upward in response to rising housing prices.

Figure 1

Selected U.S. Interest Rates and Chicago-MSA Housing Prices, 2002–2006



Key Findings

In January of 2001, the Federal Reserve Board began an unprecedented string of 13 consecutive interest rate cuts that pushed the targeted Federal Funds Rate down from 6.50% to an historical low of 1.00% on June 25, 2003 (Figure 1). Rates on adjustable-rate mortgages (ARMs) tied to the Prime Rate and other indices followed the overnight rate downward, making monthly mortgage payments and, therefore, home ownership, more affordable for millions of Americans. As more renters became owners, they helped to bid up the price of housing. In the metropolitan Chicago area, housing prices rose by 55% from December 2000 to December 2005.[2]

As renters became homeowners, the housing market in Cook County saw drastic changes. According to the Cook County Assessor's Office, there were about 20,000 converted condominium units from 2000–2005. From 2000 to 2003, the number of rental households dropped by 8.7% from 832,000 to 759,000 while the number of owner-occupied units rose by 2.9% to 1.18 million (Figure 2). Over the same period, the percentage of rental households in Cook County dropped from 42.1% to 39.2% Nationwide, the number of owner-occupied households rose by 3.7% while the number of rental households rose by only 0.9%, pushing the percentage of rental units down from 33.8% to 33.2%.

In June of 2004, the Federal Reserve Board reversed course and began a string of 17 consecutive interest rate increases of 25 basis points before pausing in August of 2006 at 5.25%. Rising rates cooled what many thought was an overheated housing market, but did not reverse the changes that had occurred in the Cook County and national housing markets. By 2005, the number of rental households in Cook County had fallen by an additional 12,000 to 747,000 and the percentage of rentals had dropped to 38.5%, down from 42.1% in 2000, but still considerably higher than the 33.1% for the U.S. as a whole (Figure 3).

The rental vacancy rate for Cook County had risen from 5.3% in 2000 to 8.0% in 2003 and 9.6% in 2005 (Figure 4). The rental vacancy rate for the nation as a whole also had risen during this period (from 6.8 to 8.0) but not by nearly as much as in Cook County.

Figure 2

Cook County Household Tenure, 2000, 2003, 2005

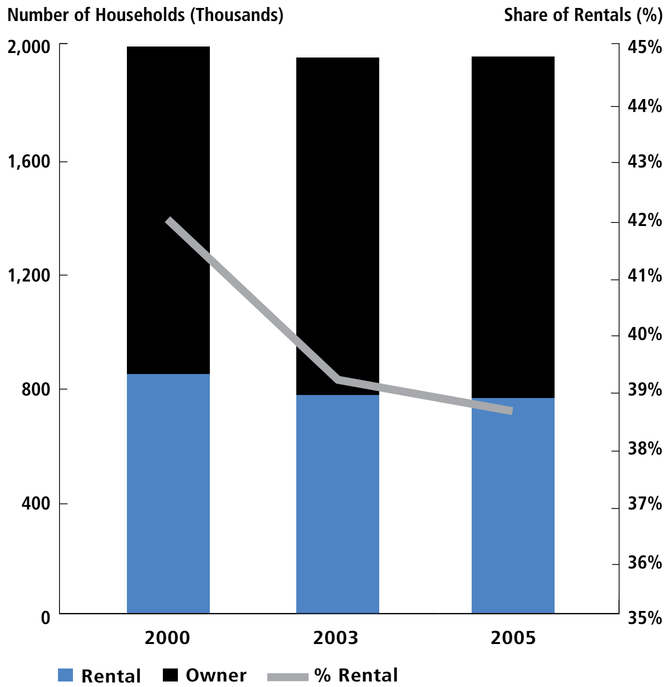
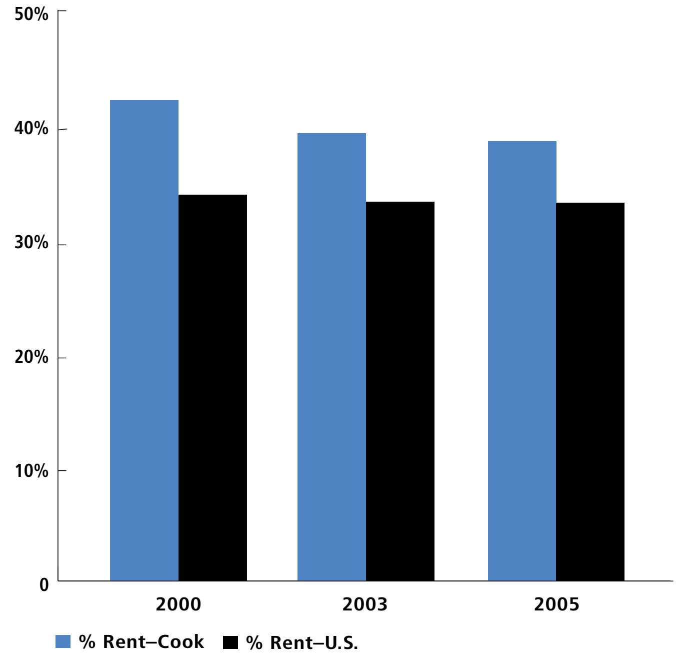


Figure 3

Percentage of Households Renting, Cook County vs. U.S.



In Cook County, the affordable rental market (units renting for less than 30% of 1.5 times the poverty level of income) saw more drastic changes. From 1990 to 2000, both the demand for and the supply of affordable units fell by almost equal amounts, leaving the excess of demand over supply roughly constant at 34,000 units. However, from 2000 to 2005, the supply of affordable rental units fell by more than 100,000 units to 353,000 (Figure 5). Over the same time period, the demand for affordable units declined by 21,000 to 467,000, resulting in an imbalance of 114,000 affordable rental units. Overall demand for rental units in any price range declined slightly with the declining number of households. (See the supply and demand methodologies at the end of this document for more details on how affordable supply and demand are calculated.)

The rising rental vacancy rate in Cook County appears contrary to the imbalance in demand and supply shown in Figure 5. However, there is some evidence that the quality of the rental housing stock, especially those which are vacant, might be significantly lower than that of occupied units.

As shown in Figure 6A, the number of exterior structural problems per unit is 0.46 for vacant rental units, 0.26 for occupied rental units and only 0.15 for owner-occupied units. Figure 6B illustrates the incidence of units without complete kitchens—25% for vacant rental units, 5% for occupied rentals and less than 1% for owner-occupied units.

By race and ethnicity, Cook County is much more diverse than the nation as a whole. Among renters, only 38% are white non-Hispanic versus 57% for the U.S. as a whole (Figure 7). Blacks and Hispanics make up 36% and 20% of Cook County renters, respectively, versus 19% and 17% of U.S. renters, respectively. Among owners in Cook County, 64% are white non-Hispanic versus 80% for the U.S. as a whole. Blacks and Hispanics make up 17% and 13% of Cook County owners, respectively, versus 8% and 8%, respectively, for the U.S. as a whole. From 2000 to 2005, the percentage of Cook County renters who were white non-Hispanic dropped from 42% to 38%, while the percentage of Hispanic increased from 18% to 20% and the percentage of renters who were Black increased from 33% to 36%.

Figure 4

Rental Vacancy Rates, Cook County vs. U.S.

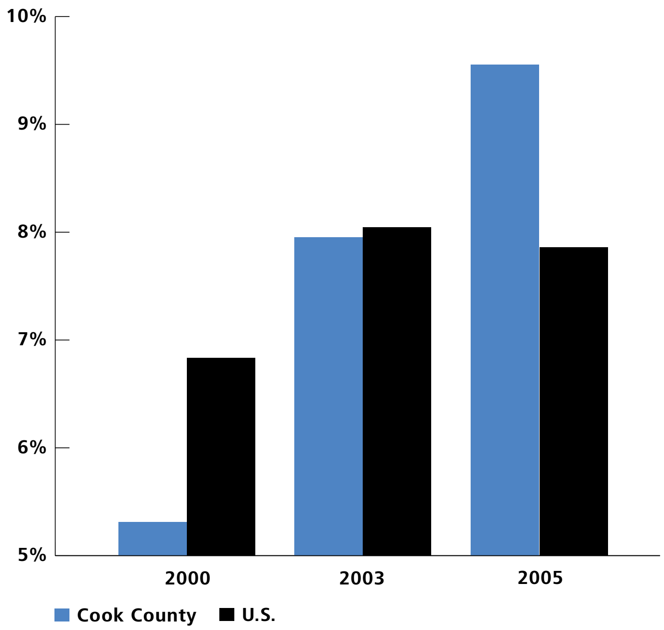


Figure 5

Cook County Affordable Rental Housing, 1990–2005

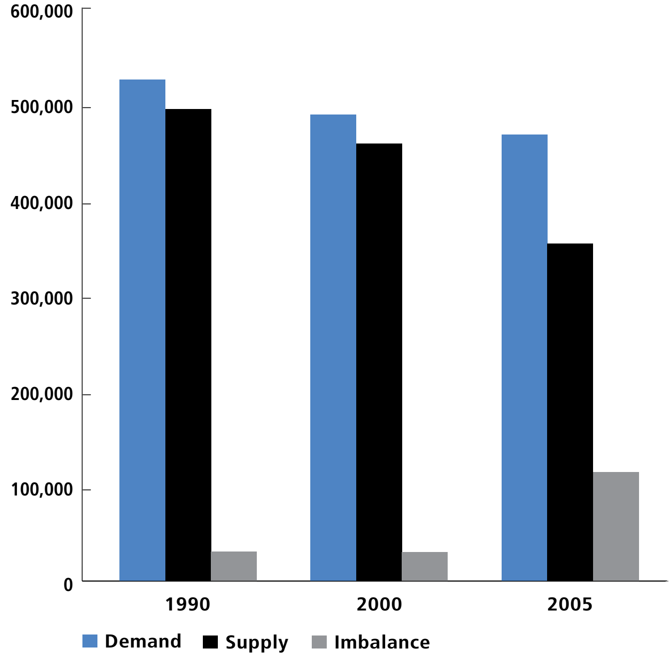


Figure 6A

External Structure Problems per Unit, Cook County 2003

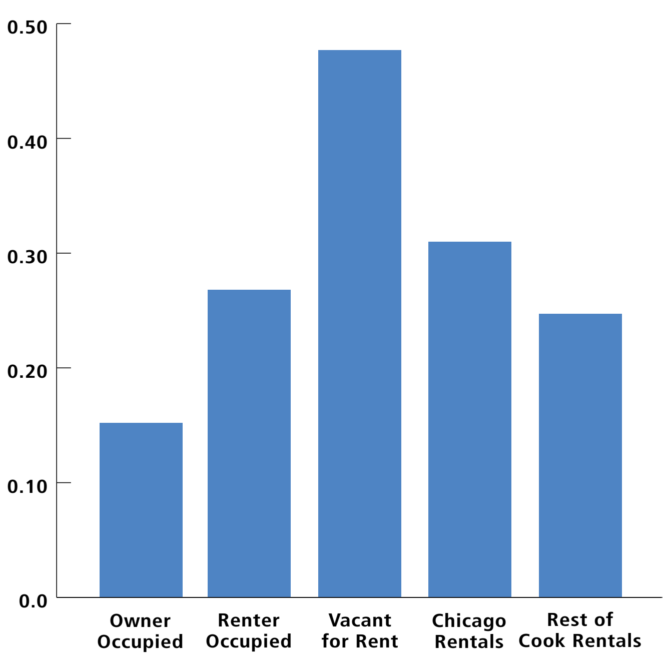
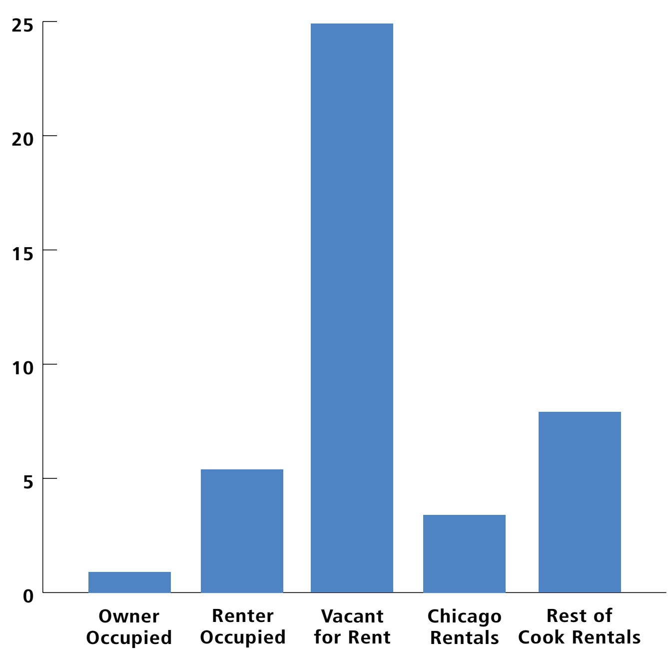


Figure 6B

Percentage of Units Lacking a Complete Kitchen, Cook County 2003



As shown in Figure 8, the distribution of household income in Cook County closely mirrors that of the nation. Renters typically earn less than owners and this relationship is readily apparent in the chart. Among rental households in the county, 51% earn less than $30,000 per year and 12% earn more than $75,000 per year. Among owner households in the county, 19% earn less than $30,000 per year and 42% earn more than $75,000 per year. On average, Cook County owners earned more than twice as much as renters. In 2005, the median income of owners was almost $65,000 while that of renters was less than $30,000.

As shown in Figure 9, renters in Cook County tend to be much younger than owners; 37% of all renters are between the ages of 15 and 34 while only 13% of owners fall within that age group. Among households headed by someone younger than 25, a total of 85% rent. At the other end of the age distribution, 43% of owners are age 55 or older while only 25% of renters are in this age group. The age distributions of Cook County owners and renters closely mirror those of the nation as a whole.

As shown in Figure 10, the rental housing stock in Cook County is significantly older than that of the U.S.; 60% was built before 1960 as compared with only 32% for the rest of the nation. In Cook County, only 7% of rental units have been built since 1990 while the comparable figure for the U.S. is 19%.

Cook County has much larger stocks of two-flats, six-flats and large high-rise buildings than does the rest of the nation. This is illustrated in Figure 11, which shows the number of units in the structure where the household is located. Rental households in building sizes of two-to-four units and five-to-nine units make up 34% and 19%, respectively, of the rental stock in Cook County. For the U.S., households in structures of these two sizes account for only 20% and 13% of the rental stock, respectively. Single family detached homes constitute 25% of rental units in the nation, but only 8% in Cook County. At the extreme end of the size spectrum, households in structures with 50 or more units make up 17% of the Cook County rental stock but only 11% of the U.S. rental stock, reflecting the large number of high-rise buildings in the city of Chicago.

As of 1995, there were approximately 62,000 units of federally assisted rental housing in Cook County (Figure 12). Of these, 39,000 were regulated by HUD and the remaining 23,000 were part of the Low-Income Housing

Figure 7

Race and Ethinicity, Cook County vs. U.S.

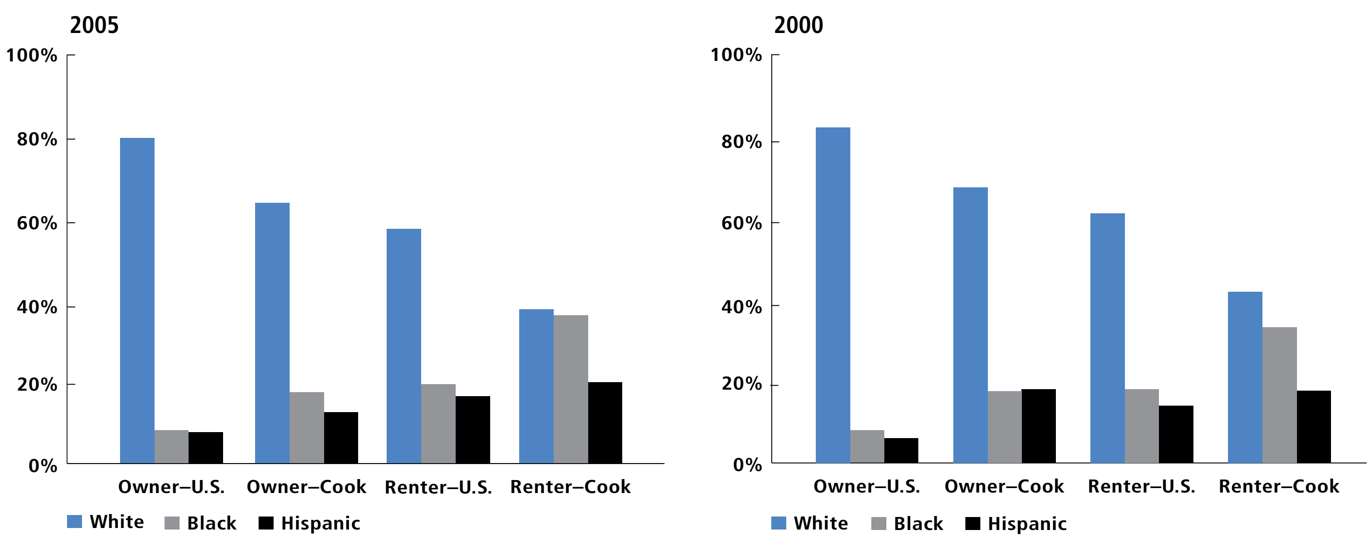
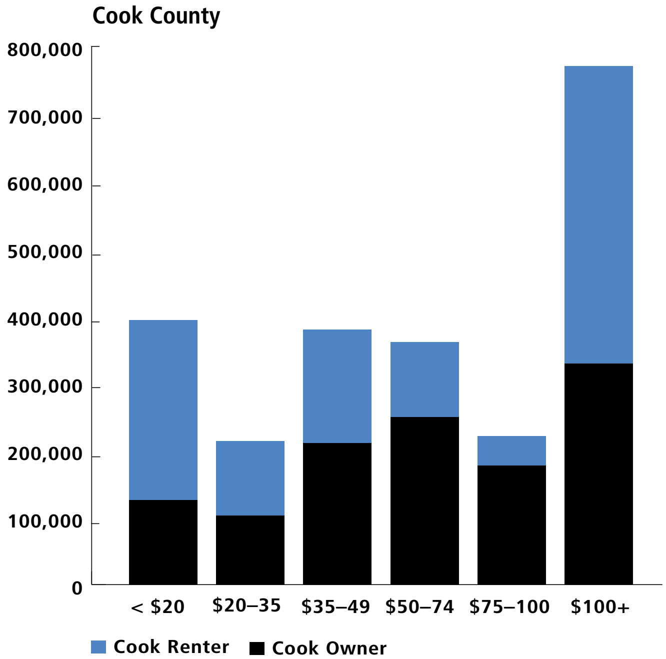


Figure 8

Household Income by Tenure, Cook County vs. U.S. 2005



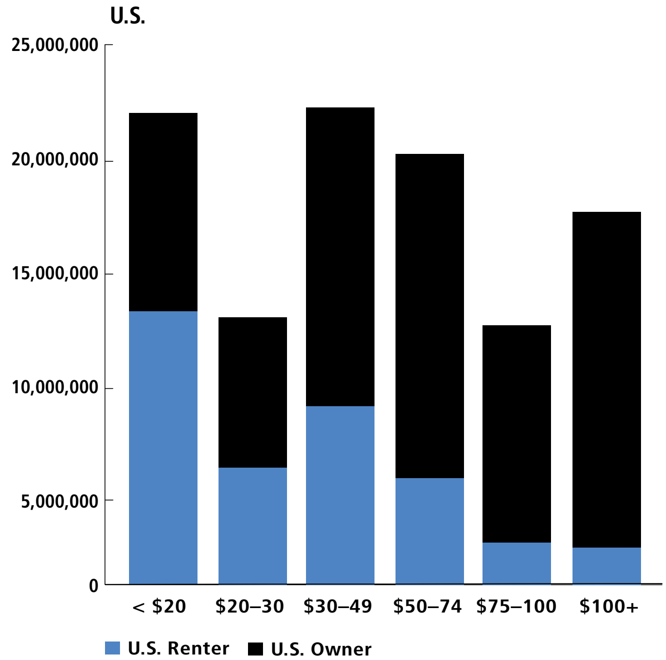


Figure 9

Age of Household by Tenure, Cook County 2005

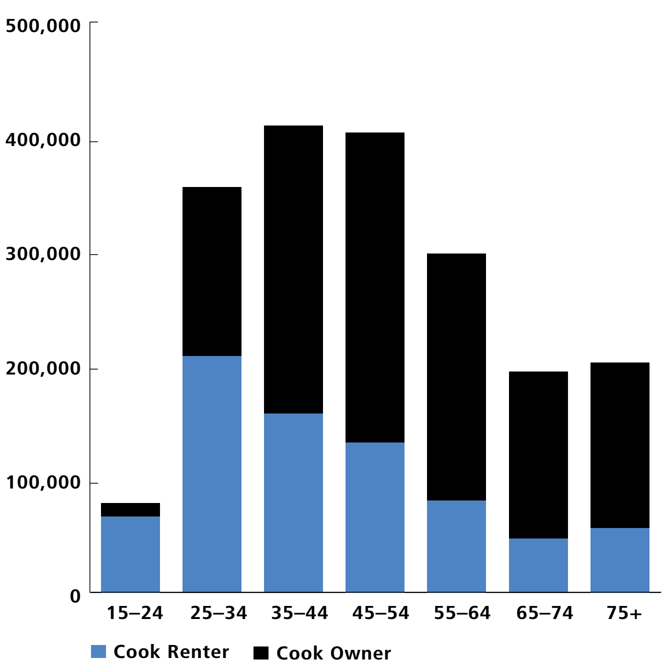


Figure 10

Rental Units by Year Built, Cook County vs. U.S.

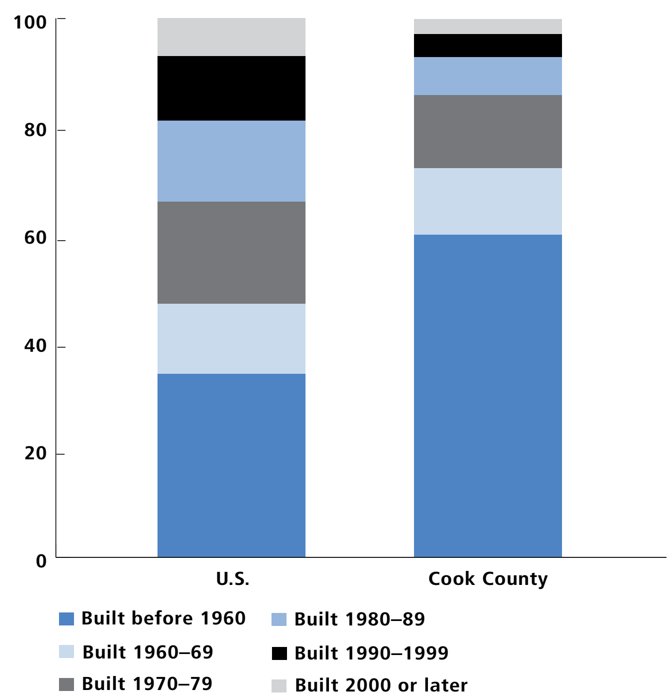
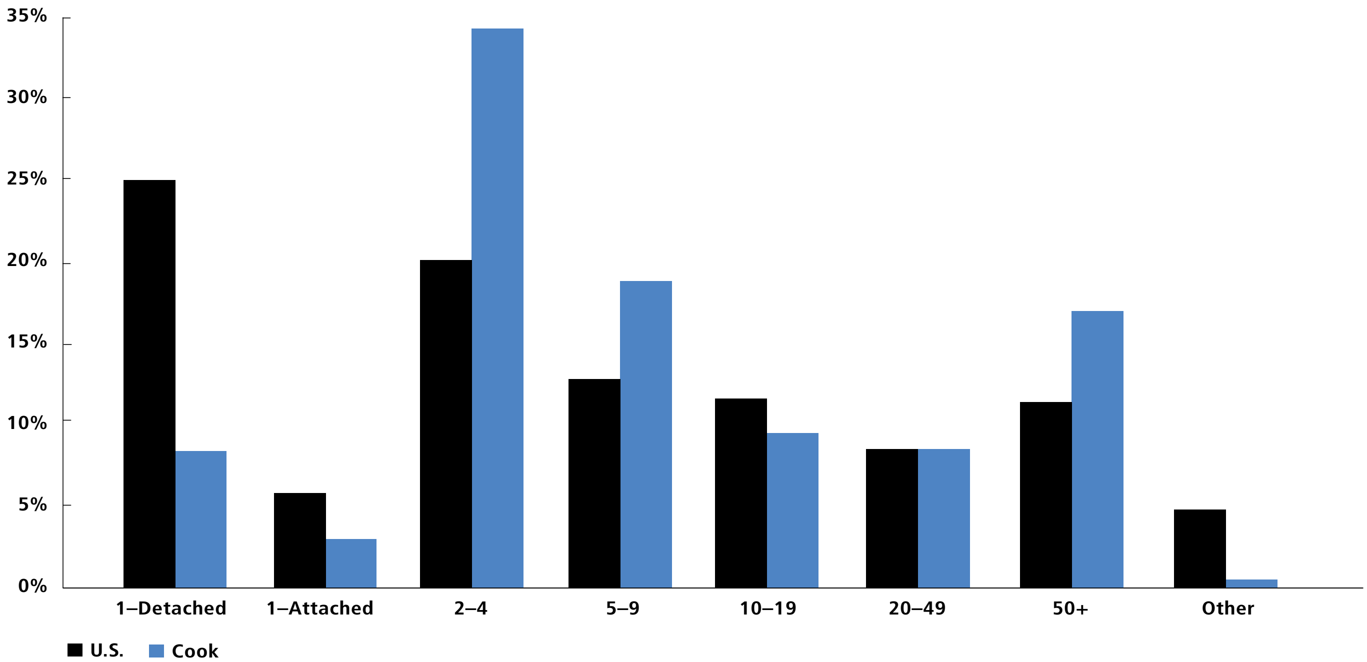


Figure 11

Renter-Occupied Housing By Units in Structure, Cook County vs. U.S. 2005



Tax Credit (LIHTC) program. More than three-fourths of the HUD regulated units and one-third of the LIHTC units are on contracts that expire by the year 2011, and/or allow the owner to opt out by that date.

From 1990 to 2005, the percentage of the population in Cook County born outside of the U.S. rose from 14% to 22%; comparable figures for the nation as a whole are 8% and 14% (Figure 13A).

The rise in immigration has important ramifications for the rental housing market. As shown in Figure 13B, the tenure decision (that is, the decision to own or rent) of foreign-born householders appears to be a function of how long they have been in the U.S. More than 90% of immigrants arriving during the previous five years rent. This falls to 52% for immigrants arriving during the previous 10–15 years and to 28% for immigrants arriving 25 or more years ago. Among immigrants who have been in the U.S. for at least 20 years, the rate of homeownership exceeds that of native born citizens.

The distribution of the rental housing stock by the number of persons in the household is more dispersed in Cook County than in the nation. One-person households make

Figure 12

At-Risk Federally Assisted Housing Stock in 1995

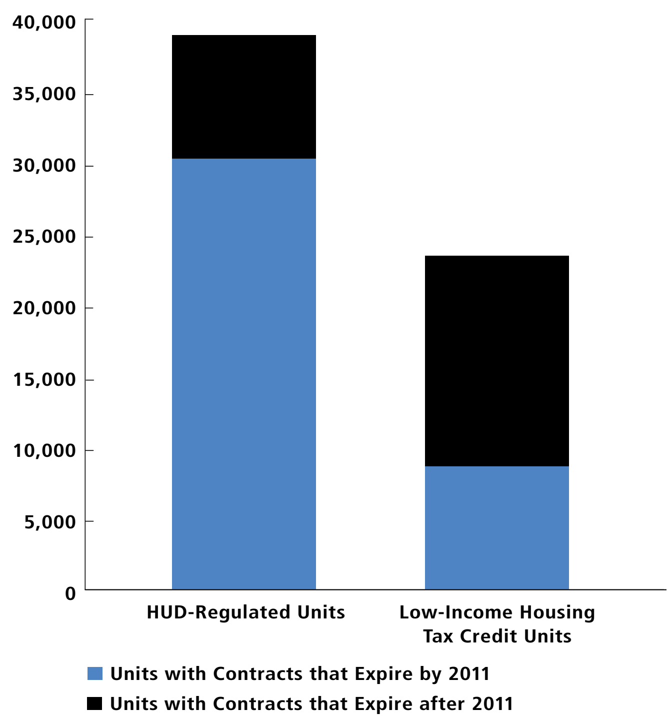


Figure 13A

Foreign Born Persons as a Percentage of the Population, Cook County vs. U.S.

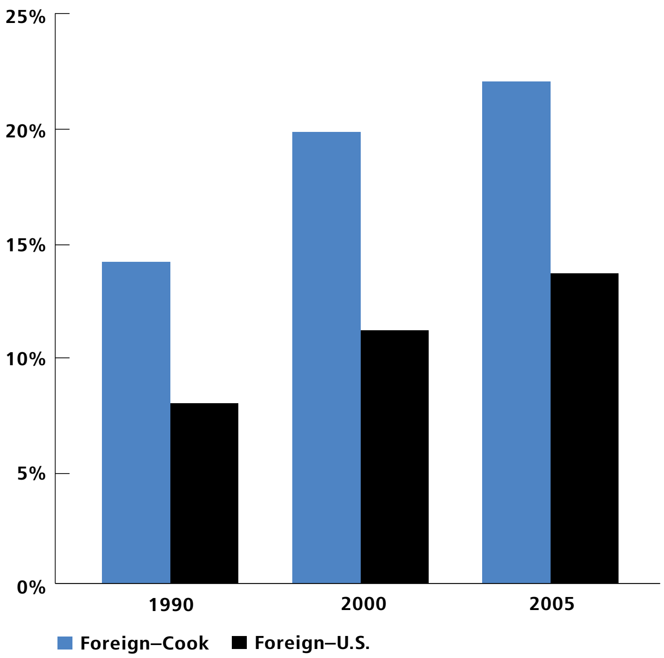


Figure 13B

Year Immigrated by Tenure, Cook County

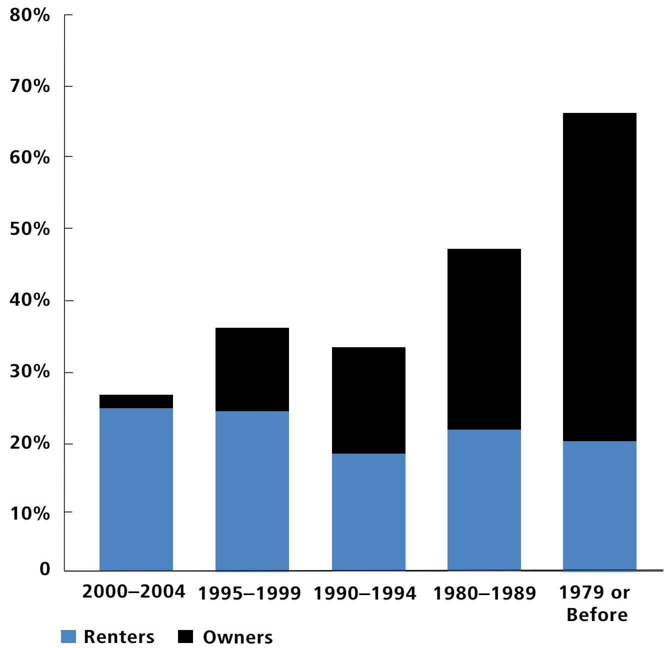
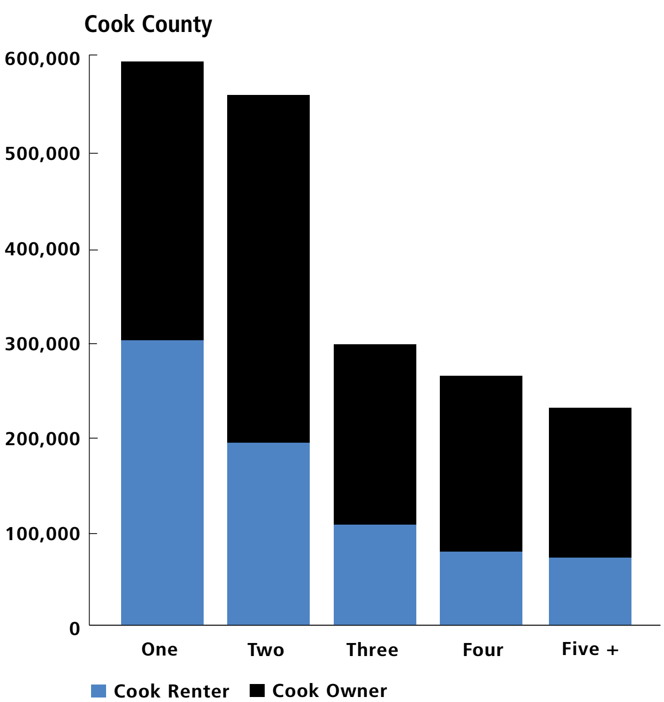


Figure 14

Size of Household by Tenure, 2005



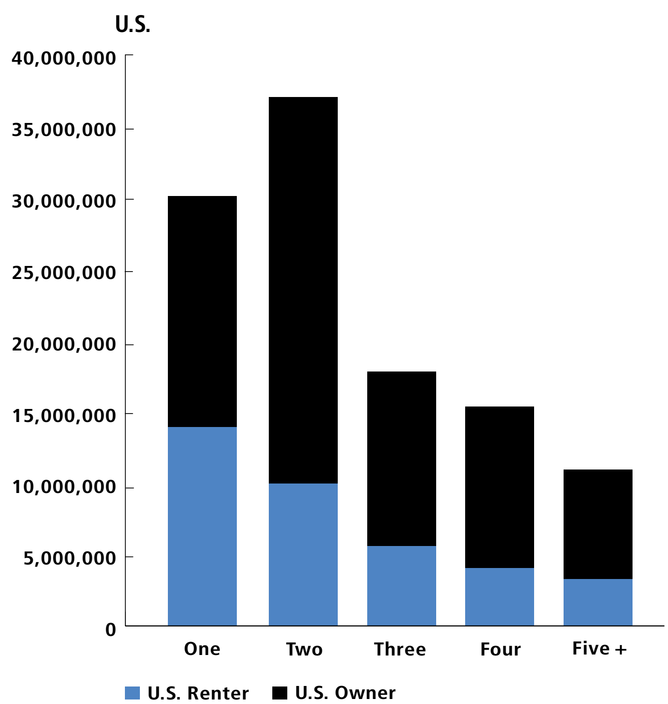


Figure 15

Number of Bedrooms in Unit by Tenure, 2005

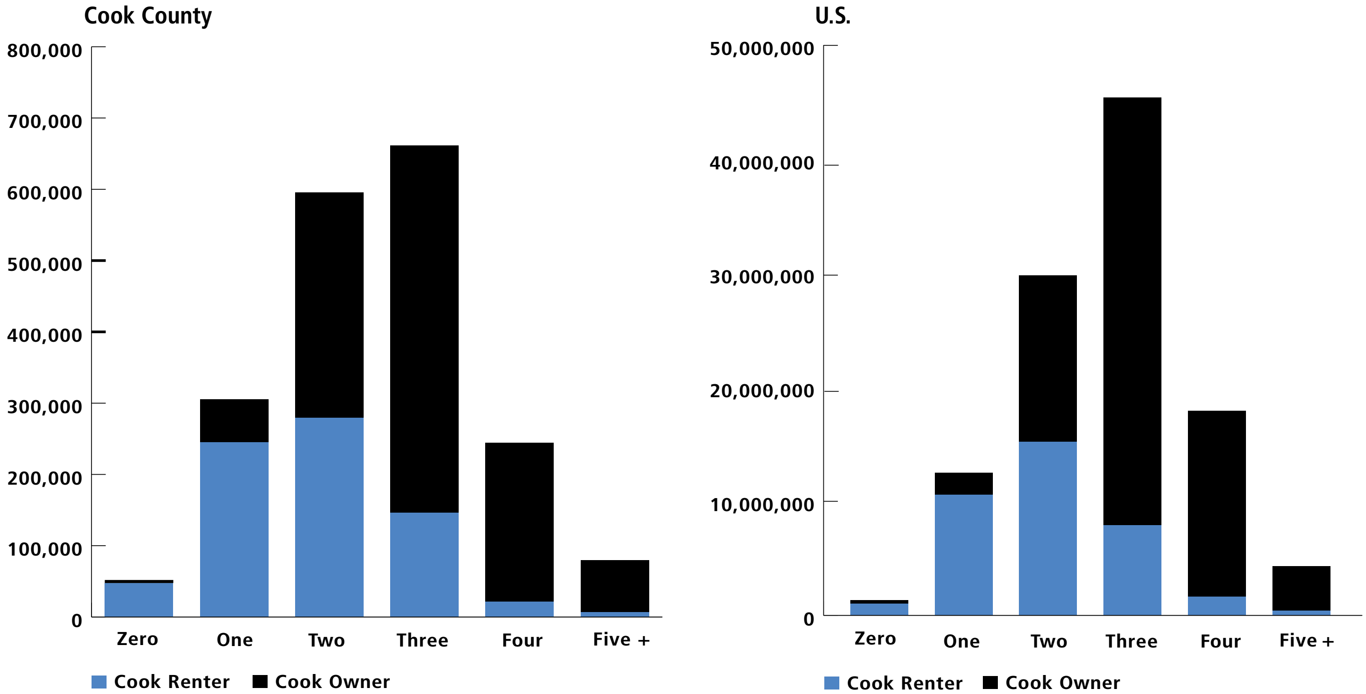


Figure 16

Means of Transportation by Tenure, 2005

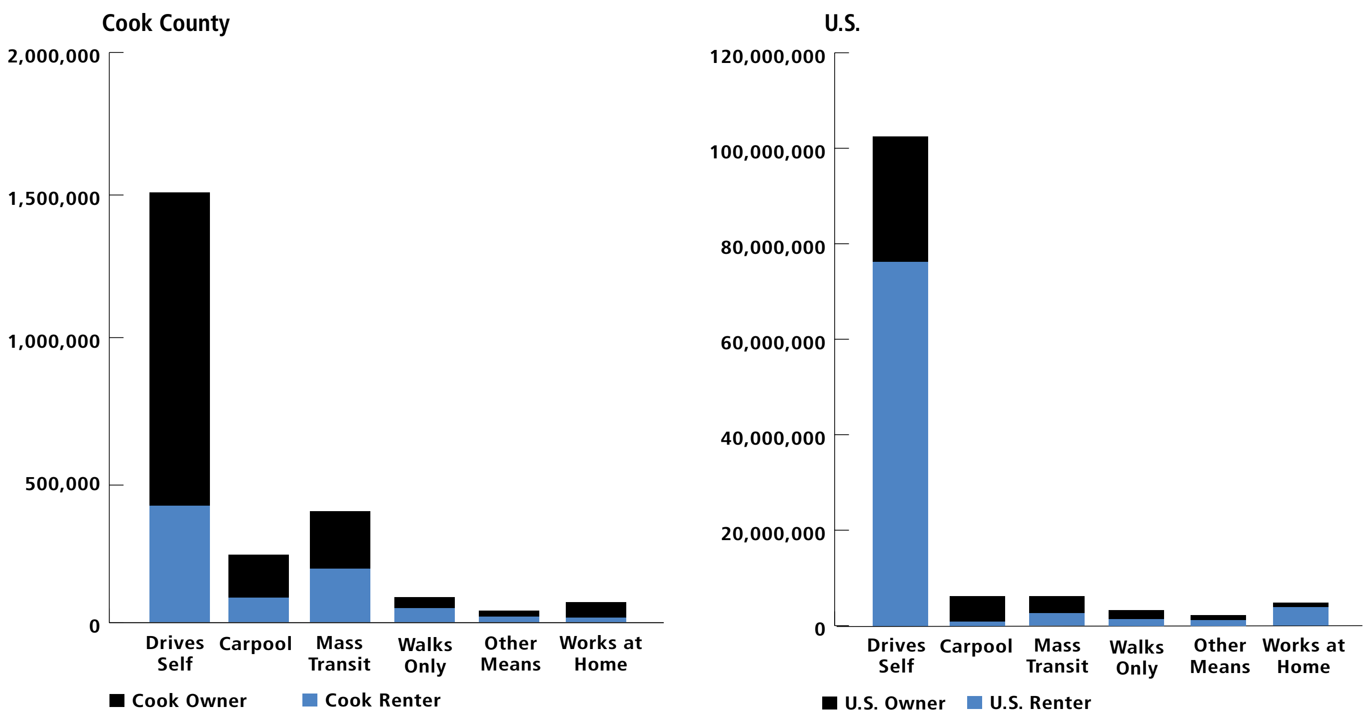
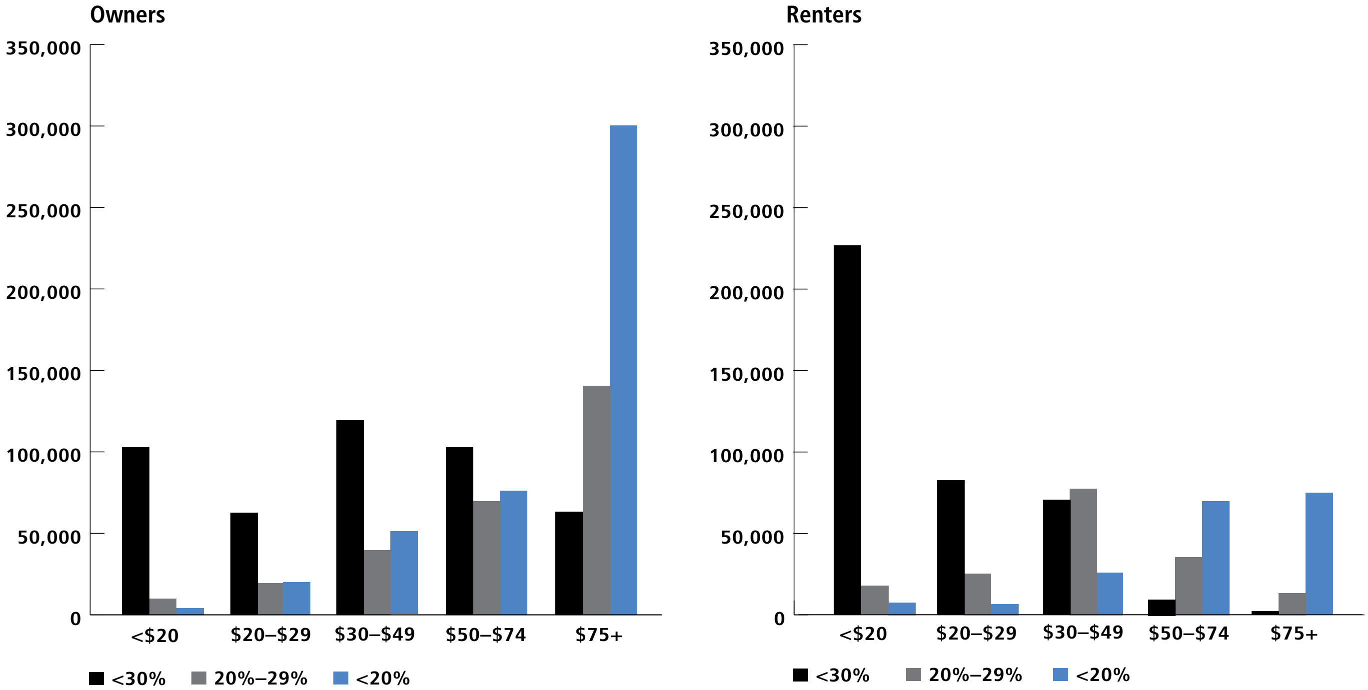


Figure 17

Percent of Income Spent on Housing By Tenure and Household Income, Cook County 2005



up 40%, and seven-plus-person households make up 2% of the occupied rental housing stock in Cook County; the comparable figures for the nation are 38% and 1% (Figure 14). In Cook County, more than half of one-person households rent (51%), while less than 30% of four- and five-member households rent.

Occupied housing units are smaller in Cook County than in the nation as a whole. Among rentals, studio and one-bedroom units account for 39% in Cook County but only 32% in the U.S. Among owner-occupied units, studio, one and two bedroom units account for 32% in Cook County but only 22% in the U.S. (Figure 15).

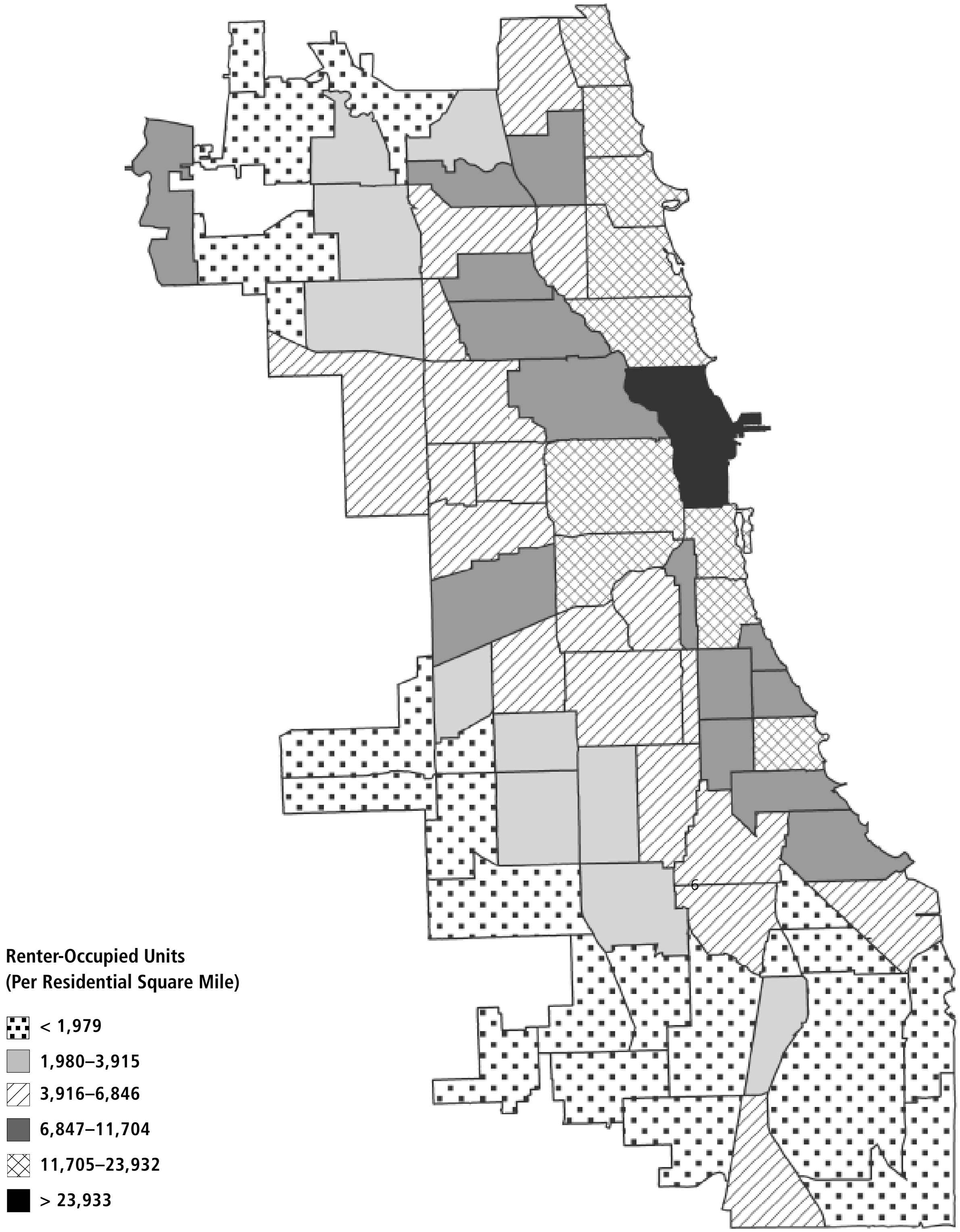
Households in Cook County are much more likely to use mass transit than households in the rest of the nation and renters are more likely to use mass transit than home-owners. In the county, only 54% of renters as compared to 70% of owners drive themselves to work; in the rest of the U.S., the comparable percentages are 67% and 81%. This, of course, reflects both the relative density of housing and the availability of mass transit in Cook County versus the rest of the U.S. (Figure 16).

Among both owners and renters, most households with incomes below $30,000 are housing burdened, spending more than 30% of their income on housing. At higher levels of income, most households tend to be owners, and tend to spend less than 20% of their income on housing. Over half of all renters spend more than 30% of their income on housing, and the majority of these earn less than $20,000 a year. (Figure 17).

Figures 18 and 19 present maps of the City of Chicago and the rest of Cook County, respectively, that show the density of rental housing by neighborhood. As one might expect the lowest-density category in the City of Chicago is greater than the highest-density category in the rest of the county, as most rental housing is located within the city. Within the city itself, rental housing is most dense along the northeastern shore of Lake Michigan in the neighborhoods of Near North, Lakeview, Uptown, Edgewater and Rogers Park; it is least dense in the south-west and northwest city limits. Density in the rest of the county continues this pattern, with the highest density in the neighborhoods just outside of the city limits and the lowest densities following the county line.

Figure 18

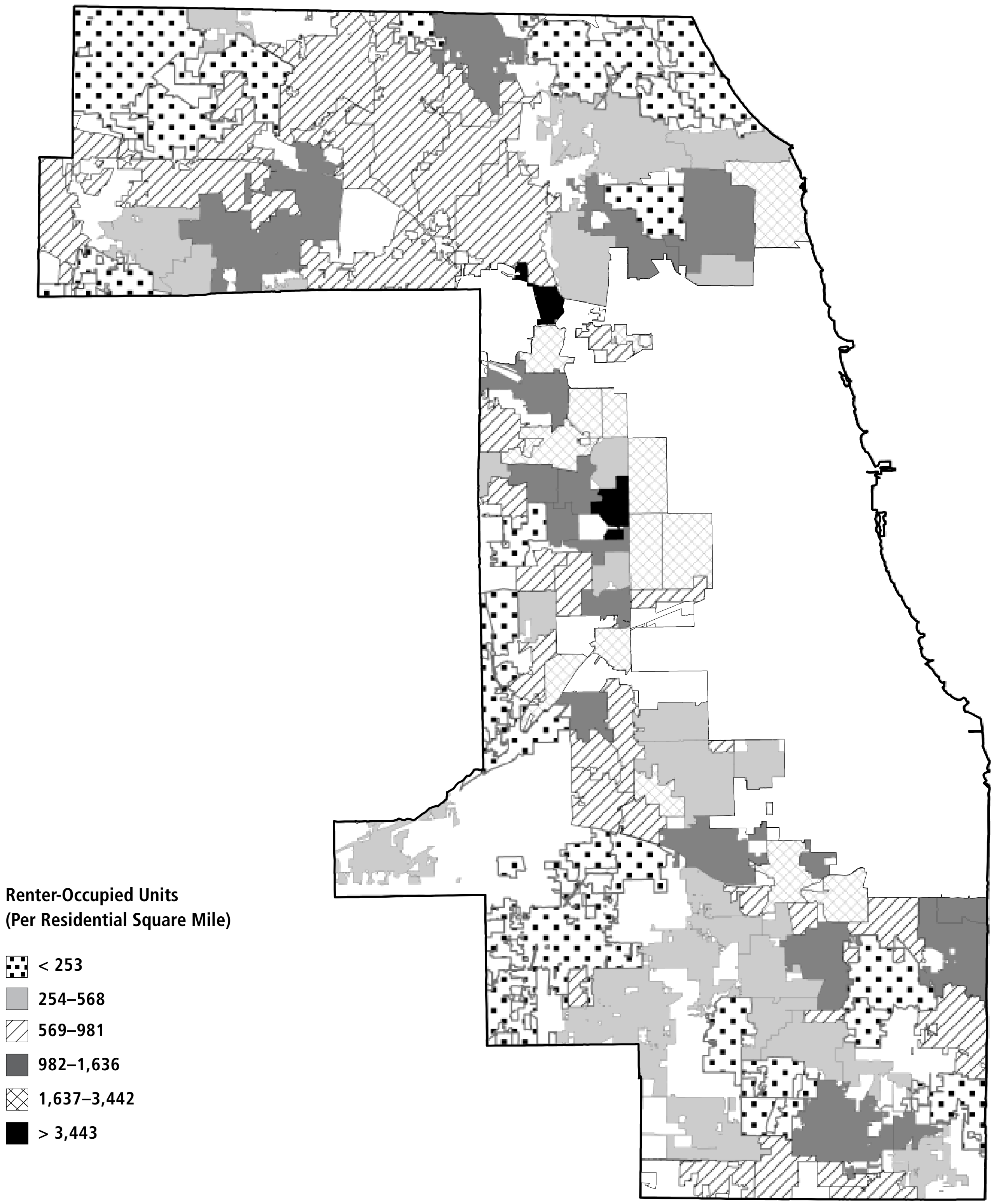
Density of Rental Units—City of Chicago



Data Source: U.S. Census 2000, NIPC 2001. Map by Metro Chicago Information Center.

Figure 19

Density of Rental Units—Cook County Excluding Chicago Proper



Data Source: U.S. Census 2000, NIPC 2001. Map by Metro Chicago Information Center.

Forecast

If recent trends in the Cook County housing market continue, the supply of affordable rental units will decline by 38,000 from 2005–2020 to a level of only 315,000. Over the same period of time, it is expected that demand for affordable rentals will rise by 34,000 to more than 500,000 units. The net result in 2020 will be more than 185,000 households seeking, but unable to find, affordable rental housing in Cook County.

Methodology for Estimating the Change in Supply of Affordable Rental Units

We use the distribution of gross rents for occupied rental units from the 1990 and 2000 Censuses as our primary source of data.[3] Each Census provides information on the number of households paying rent in a series of "buckets" (See Figure 20). For each Census, we calculate the number of affordable rentals as the number of households reporting monthly gross rent less than or equal to 30% of monthly income of a household earning 150% of the poverty income for a family of four ($29,957 as of 2005).[4] We then calculate the change in this number from 1990 to 2000 and convert this to a percentage by dividing by the 1990 value. We convert this ten-year percentage change to a fifteen-year percentage change,[5] and use this percentage to estimate the change from 2005 to 2020 based upon the number of 2005 affordable rental units reported by the 2005 American Community Survey, which also was conducted by the U.S. Census.[6]

Figure 20

Cook County Gross Rent for Renter-Occupied Housing, 1990–2000

Gross Rent	1900	2000
Less than $100	18,548	10,504
$100 to $149	22,643	17,787
$150 to $199	18,143	15,012
$200 to $249	23,090	13,307
$250 to $299	35,167	13,685
$300 to $349	58,623	18,389
$350 to $399	82,712	24,336
$400 to $449	98,561	37,495
$450 to $499	95,044	51,199
$500 to $549	84,442	65,658
$550 to $599	66,756	68,284
$600 to $649	54,990	72,418
$650 to $699	39,465	65,836
$700 to $749	29,908	59,156
$750 to $999	67,233	49,467
$1,000 or more	25,896	228,839
Total With Cash Rent	**821,221**	**811,372**
No Cash Rent	13,633	18,923
Total	**834,854**	**830,295**

Source: Data from Census.

Figure 21

Estimation of Poverty Income Level 1990 and 2000

Using Annual CPI-U				
	100% Poverty Income (Fam 4)	**CPI-U Annual**	**CPI-U April**	**30% Monthly Income (Fam 4)***
1990	$13,359.00	130.7	128.9	$501.00
2000	$17,604.00	172.2	171.3	$660.00
2005	$19,971.00	195.3	194.6	$749.00
Using April CPI-U				
	100% Poverty Income (Fam 4)	**CPI-U Annual**	**CPI-U April**	**30% Monthly Income (Fam 4)***
1990	$13,175.02	130.70	128.9	$494.00
2000	$17,511.99	172.20	171.3	$657.00
Using Blended 1989 CPI-U				
	100% Poverty Income (Fam 4)	**Blended CPI-U 1989****		**30% Monthly Income (Fam 4)***
1989	$12,745.73	124.70		$478.00
1999	$17,092.85	167.20		$641.00

*Calculated as 100% x 1.5% to get 150%, then divided by 12 to get monthly, then multiplied by .3 to get 30%.

**Average of May and October CPI-U.

A key issue in these calculations is how to estimate the level of poverty income in 1990 and 2000. We use three different scenarios (Figure 21). First, we simply use the average annual value for the CPI of each Census year (Scenario One). However, the information collected by the Census is supposed to be reported as of April 1st of the Census year. This suggests that using the CPI as of April of the Census year would be the appropriate deflator for estimating the level of poverty income for the Census year (Scenario Two). However, the gross rents reported as of April 1st reflect leases signed during the previous 12 months, which would be rolling over with CPI adjustments during the Census year. In Chicago, leases typically rolled over during May or October. This suggests that the appropriate CPI adjustment for poverty income would be the average of the May and October CPIs from the prior year (Scenario Three). We calculate our 1990–2000 changes using each of these three scenarios and use them to generate forecasts for the change from 2005–2020 (Figure 22).

Figure 22

Forecast of Change in Supply of Affordable Rental Units, 2005–2020

	MEDIUM	HIGH	LOW
	Using April 1990 CPI	Using Annual 1990 CPI	Using Blended 1989 CPI
Affordable Rent	$494.00	$501.00	$478.00
Affordable Units	443,027	455,909	412,613
	Using April 2000 CPI	Using Annual 2000 CPI	Using Blended 1999 CPI
Affordable Rent	$657.00	$660.00	$614.00
Affordable Units	418,608	422,558	396,487
Change in Number of Affordable Units 1990–2000	(24,419)	(33,351)	(16,125)
10–Yr% Change	-5.51%	-7.32%	-3.91%
5–Yr% Change	-2.79%	-3.37%	-1.97%
15-Yr% Change	-8.15%	-10.77%	-5.80%
Number of Units 2005	352,794	352,794	352,794
Change in Number of Affordable Units 2005–2020	(28,762)	(37,995)	(20,478)

Figure 23

Forecast for Change in Demand for Affordable Rental Units from 2005 to 2020

	NIPC Growth Rate	Census Growth Rate
2020 Projections	2,059,534	2,045,493
2005 ACS	1,937,864	1,937,864
Occupied Housing Units Needed	121,670	107,629
Vacancy Rate	9.60%	9.60%
Total Housing Units Needed	134,591	119,059
Percent Rental	39.58%	39.58%
Rental Units Needed	53,271	47,123
Percent Demanding Affordable Rent	64.55	64.55
Affordable Units Needed	34,386	30,418

*Using projected Annual Growth Rate of 0.407% based on 2030 NIPC Projections and 2000 actual census count.

Using CPI Scenario One, we estimate the loss of affordable rental units at 28,762; using CPI Scenario Two, the estimated loss is 37,995; and using CPI Scenario Three, the estimated loss is 20,478.

Methodology for Estimating the Change in Demand for Affordable Rental Units

Our forecast for change in demand for affordable rental units relies primarily upon an estimate of the growth in the number of housing units. We estimate this growth rate from two different sources. First, we use projections from the Northeastern Illinois Planning Commission (NIPC).[7] For Cook County, NIPC projects the number of households expected in the year 2030 to be 2.230 million. We assume the implied 0.407% growth rate for Cook County will be constant on an annual basis (Figure 23). Second, we use the actual change in the number of housing units reported for Cook County by the 1990 and 2000 Censuses, also assuming that the implied 0.361% growth rate will be constant on an annual basis.

As a baseline, we take the 1.938 million number of Cook County households as of 2005 from the 2005 American Community Survey (ACS), and apply the two alternative implied annual growth rates compounded for fifteen years to come up with a forecast for the number of Cook County households in 2020. Using the NIPC growth rate, we get 2.060 million; using the Census growth rate, we get 2.045 million. Assuming that the vacancy rate remains constant, each additional household translates into demand for one additional housing unit. We also must account for the 9.60% natural vacancy rate in the housing market.[8] Consequently, we multiply our forecast by one plus the 9.60% vacancy rate reported by the 2005 ACS. We separate rental-housing demand from demand for owner-occupied housing by assuming that the proportion of rental units to owner-occupied units remains the same as reported by the 2005 ACS.

To complete our forecast, we need an estimate of the demand for affordable rental units as a percentage of available rental units. We define an "affordable" rental unit as one with gross rent less than or equal to 30% of monthly income of a household earning 150% of the poverty income for a family of four ($29,957 as of 2005).[9] We define the demand for affordable rental units as all occupied affordable rental units plus all units renting for more

Figure 24

Household Income by Gross Rent, Cook County 2005

	Household Income in the Past 12 Months (2005 Inflation-Adjusted Dollars)						
Gross Rent	**<$10K**	**$10K–19K**	**$20K–$30K**	**$30K–$50K**	**$50K–$74K**	**$75K–$99K**	**>$100K**
Less than $100	2,555	803	331	165	51	0	0
$100 to $199	16,348	4,002	501	451	159	177	0
$200 to $299	10,014	5,145	1,233	1,373	494	406	47
$300 to $399	5,550	8,047	2,363	2,023	354	484	1,122
$400 to $499	10,212	9,177	4,675	5,686	1,750	489	248
$500 to $599	11,526	18,531	9,967	12,207	5,479	1,314	531
$600 to $699	17,883	21,827	17,156	22,992	11,246	2,101	3,333
$700 to $799	16,147	18,000	10,511	14,694	8,854	2,319	1,465
$800 to $899	12,224	11,663	27,410	44,688	27,691	7,419	6,364
$900 to $999	9,345	9,472	11,231	20,831	16,049	4,485	3,097
$1,000 to $1,249	10,208	12,155	13,204	22,623	20,339	10,672	4,983
$1,250 to $1,499	4,049	4,561	5,793	9,374	8,907	6,610	5,619
$1,500 to $1,999	3,008	2,061	3,333	6,205	6,069	4,661	8,578
$2,000 or more	1,138	936	521	749	1,199	1,899	7,230
Total With Cash Rent	**130,207**	**126,380**	**108,229**	**164,061**	**108,641**	**43,036**	**42,616**
No Cash Rent	5,986	4,555	2,613	4,797	2,299	1,122	1,989
Total	**136,193**	**130,935**	**110,841**	**168,859**	**110,940**	**44,158**	**44,605**

Low Income Demand (364,816) High Income Demand (102,014) Total Demand for Affordable: 466,830 Percentage Demand for Affordable: 64.55%

Source: U.S. Census Bureau, 2005 American Community Survey Table B25122.

than 30% of the monthly income of a household earning 150% of the poverty income for a family of four but occupied by a family earning less than or equal to 150% of the poverty income for a family of four. We divide this number by the total number of rental units to come up with a 64.6% estimate of the demand for affordable rental units as a percentage of available rental units (Figure 24). Finally, we multiply this percentage by the 2020 forecast for the number of rental units to produce our 2020 forecast for the demand for affordable rental units. Using the NIPC growth rate, we get 34,386; using the Census growth rate, we get 30,418 (Figure 23).

Notes

1. Affordable housing is defined as housing costing less than 30% of the monthly income for a family of four earning 150% of the poverty level of income. In 2005, this translates to income of $29,957 and rent of $749 per month.
2. This is based upon the Case-Shiller housing index for the Chicago metropolitan statistical area.
3. These data come from the Summary Tape File 3 (STF 3), which is based upon the sample of households filling out the "long form" during the decennial census.
4. Poverty incomes are taken from Historical Poverty Tables published by the U.S. Census.
5. We first take the square root of one plus the ten-year percentage change, then take the cube of this number and subtract one to get the fifteen-year percentage change.
6. The American Community Survey is now conducted on an annual basis by the U.S. Census and will replace the "long form" used in previous decennial Censuses to collected detailed information from a sample of all households.
7. We obtain this information from NIPC's website: http://www.nipc.org/2030_forecast_endorsed_093003.htm. This forecast was most recently revised September 27, 2006.
8. The "natural vacancy rate" is the normal percentage of properties that are not leased or occupied. The natural vacancy rate we use here is a weighted average of the rental and owner occupied market segments.
9. Poverty incomes are taken from Historical Poverty Tables published by the U.S. Census.

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