

**Joint Center for Housing Studies
Harvard University**

**Addendum to W07-7: The Impact of JCHS 2009 Household Growth
Estimates on Long-Term Demand Projections for 2010-2020**

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Addendum to W07-7: The Impact of JCHS 2009 Household Growth Estimates on Long-Term Demand Projections for 2010-2020

By Daniel McCue

The Joint Center for Housing Studies' working paper *Projecting the Underlying Demand for New Housing Units: Inferences from the Past, Assumptions about the Future* (JCHS Working Paper W07-7) presents a detailed methodology for estimating the long term demand for new housing unit production. The paper culminates with an estimation of the long term demand for housing units for 2005-2015 using the 2006 JCHS household growth projections. With the release of the 2009 JCHS household growth projections in July 2009, we present here a new set of demand estimates for the 2010-2020 period.

The methodology presented in working paper W07-7 is not a forecast. Instead, it is an estimate of underlying demand for new housing units over the next several years if long-term trends hold. Making such a projection requires making many assumptions. A major assumption is that markets enter and exit the projection period in a state of balance between supply and demand. Since markets are rarely in balance and were most likely highly oversupplied in 2005, for practical purposes W07-7 presents additional sensitivities to show the effect of various estimates of oversupply entering the projection period on the demand levels for 2005-2015. This addendum simply presents the baseline projection and does not show the impact of any assumed market imbalance entering 2010.

Updated estimates for new housing unit demand for the 2010-2020 period based on the 2009 JCHS household growth projections are shown in Figure 1 alongside the previous estimates for 2005-2015 from working paper W07-7. Note that the 2009 household growth projections have high and low projections for household growth, which enable this update to have high and low projections for new housing unit demand. As detailed in Joint Center for Housing Studies' Working Paper W09-5, the major difference between the Joint Center's high and low household growth projections is the level of immigration built in. The high projection uses future immigration levels as projected by the US Census Bureau, while the low projection assumes the Census immigration projections are too aggressive and holds future immigration levels at half the level of Census projections. Under projected average baseline household growth of 1.25 and 1.48 million per year, demand for new housing units - which includes all housing unit

completions as well as placements of mobile homes - is projected to average from 1.72 million to 1.97 million per year from 2010 through 2019.

Figures 2 through 5 show the detail behind the updates to each component of new housing unit demand. As in the 2006 projections, the new projections incorporate the most conservative estimates for each category of vacant unit demand detailed in W07-7. Only two slight adjustments to the methodology from W07-7 were needed for the update. First, unlike the 2006 projections, the 2009 JCHS household growth projections are not split by tenure and give no estimates for future rental and owner households needed to derive the estimates of vacant for-rent and vacant for-sale units. Therefore, Figures 2 and 3 use an estimated tenure mix that applies a simple constant homeownership rate to the projected total number of households in 2010 and 2020. We use 67.8 percent, which is the Housing Vacancy Survey homeownership rate from 2001 – a period noted in W07-7 as being when the US owner market was more or less in balance. This results in growth of 4.4 to 4.8 million renters and 8.5 to 10.1 million owner households. More involved estimations would project tenure controlling for age and race. However, because slight changes to the homeownership rate have very small impacts on the total estimated new housing unit demand relative to other components in this methodology, the simple approach is taken here.

Figure 5 presents the new estimates for demand needed to replace net removals from the housing stock. As a conservative measure, this paper applies the ten-year stock loss rate derived in W07-7 to the most recent estimate of total housing units available from the Housing Vacancy Survey. The result is a total projected net stock loss of 3.25 million units from 2010-2020.

Figure 1: Estimates of Future Demand for New Housing Units

Projection Period	JCHS Household Growth Projection		
	2006	2009 Low	2009 High
	2005-2015	2010-2020	2010-2020
Projected Household Growth (000s)	14,632	12,549	14,837
Projected Total Vacant Unit Demand (000s)	1,506	1,441	1,627
<i>Projected Demand: Vacant For Rent (000s)</i>	145	323	382
<i>Projected Demand: Vacant For Sale (000s)</i>	192	128	151
<i>Projected Demand: Second Homes (000s)</i>	1,168	990	1,093
Projected Total Estimated Net Removals	3,300	3,250	3,250
<i>(Total Units * .025% / Year)</i>	3,100	3,250	3,250
<i>Katrina Removals</i>	200		
Projected Total Demand for New Units	19,438	17,240	19,713
<i>Annual</i>	1,944	1,724	1,971

Sources: JCHS Working Paper W09-5; JCHS Working Paper W07-7.

Figure 2: Estimates of Future Demand for New Vacant For-Rent Units, 2010-2020

Base Years for Vacancy Rate	Base period average ratio of vacant for-rent to renter occupied units	Projected renter household growth 2010-2020(000s)		Projected change in vacant for-rent demand 2010-2020(000s)	
		Low	High	Low	High
1991-4	8.0%	4,041	4,777	323	382
1998-00	8.9%	4,041	4,777	360	425
2005-6	11.0%	4,041	4,777	444	526
Lowest Demand Projection				323	382

Notes: "Low" and "High" refer to use of JCHS low-series or high-series household growth projections as a base for that estimate. Projected growth in renter occupied households calculated by applying a constant homeownership rate of 67.8 percent to the JCHS 2009 projected total households in 2010 and 2020. See text for more details.

Sources: US Census Bureau Housing Vacancy Survey; JCHS Working Paper W09-5; JCHS Working Paper W07-7.

Figure 3: Estimates of Future Demand for New Vacant For-Sale Units, 2010-2020

Base Years for Vacancy Rate	Base period average ratio of vacant for-sale to owner occupied units	Projected owner household growth 2010-2020(000s)		Projected change in vacant for sale demand 2010-2020(000s)	
		JCHS Low Series	JCHS High Series	Low	High
1992-5	1.5%	9,994	10,059	128	151
1998-2002	1.7%	9,994	10,059	145	171
2006	2.4%	9,994	10,059	204	241
Lowest Demand Projection				128	151

Notes: "Low" and "High" refer to use of JCHS low-series or high-series household growth projections as a base for that estimate. Projected growth in owner occupied households calculated by applying a constant homeownership rate of 67.8 percent to the JCHS 2009 projected total households in 2010 and 2020. See text for more details.

Sources: US Census Bureau Housing Vacancy Survey; JCHS Working Paper W09-5; JCHS Working Paper W07-7.

Figure 4: Estimates of Future Demand for New Seasonal and Other Second Homes, 2010-2020

Age of Householder	Base Ownership Rates		Demand Using Low and High JCHS Household Growth Projections							
	Second Homes Per HH (1993)	Second Homes Per HH (2003)	JCHS Projected Household Growth 2010-2020		Projected Growth in 2nd Home Demand (using 1993 rates)		Projected Growth in 2nd Home Demand (using 2003 rates)		Lowest of 1993 or 2003 Projections	
			Low	High	Low	High	Low	High	Low	High
Under 30	1.6%	2.1%	-6	764	0	12	0	16	0	12
30s	3.8%	3.5%	1,948	2,671	74	102	68	93	68	93
40s	7.0%	6.2%	-1,502	-1,134	-105	-79	-93	-70	-105	-79
50s	10.2%	10.4%	509	713	52	73	53	74	52	73
60s	8.7%	9.0%	5,958	6,122	518	533	536	551	518	533
70s+	8.1%	8.1%	5,642	5,700	457	462	457	462	457	462
Total Growth in Demand for Seasonal and Other Second Homes 2010-2020								990	1,093	

Notes: "Low" and "High" refer to use of JCHS low-series or high-series household growth projections as a base for that estimate. Data Sources: US Federal Reserve, Survey of Consumer Finances (SCF); US Census Bureau Housing Vacancy Survey; JCHS Working Paper W09-5; JCHS Working Paper W07-7.

Figure 5: Estimated Net Removals of Housing Stock, 2010-2020

Year	Total Housing Stock (Millions)	Projected 10 Year Stock Loss Rate	Estimated Net Removals in next 10 years (Thousands)
1995	113	0.025	2,825
2000	120	0.025	3,000
2005	124	0.025	3,100
2009	130	0.025	3,250
2010(e)	130	0.025	3,250

Note: 2010 Estimate uses 2009 HVS stock total

Sources: US Census Bureau Housing Vacancy Survey; JCHS Working Paper W07-7.

References

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