



Multifamily Vacancy Indices - Q3 2017 (Seasonally Adjusted)

RENTAL VACANCY IN CURRENT VS. PRIOR QUARTER

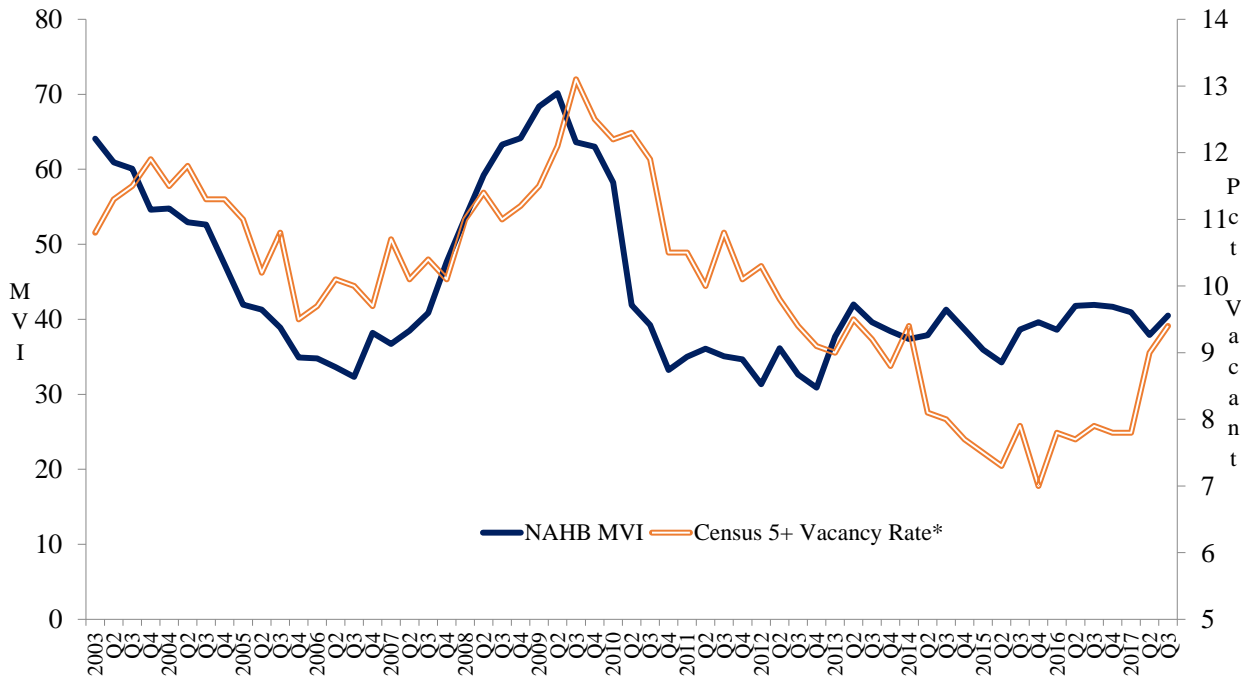
	2013				2014				2015				2016				2017		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Multifamily Vacancy Index	38	42	40	38	37	38	41	39	36	34	39	40	39	42	42	42	41	38	41
MVI Components:																			
Class A apartments	38	42	36	36	38	39	40	39	35	34	41	40	39	44	44	44	47	41	42
Class B apartments	37	41	42	39	35	36	41	37	36	33	36	38	38	40	40	39	37	37	40
Class C apartments	40	43	41	43	41	40	46	41	38	37	42	42	39	41	41	45	38	34	40

EXPECTED VACANCY: NEXT 6 MONTHS VS. CURRENT QUARTER

	2013				2014				2015				2016				2017		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Class A apartments	40	43	33	40	36	42	44	36	38	33	37	39	47	48	44	45	43	48	45
Class B apartments	37	41	34	43	41	38	41	38	38	36	35	40	36	46	41	39	38	40	41
Class C apartments	40	43	40	46	42	45	45	42	42	40	42	43	45	46	44	45	35	42	37

MVI components are based on questions asking if occupancy is higher, about the same, or lower in the current vs. prior quarter.
 Expected vacancy indices are based on similar questions about occupancy during the next 6 months vs. the current quarter.
 Individual vacancy indices are calculated from the percentage responses using the formula $(\text{Lower Occupancy} - \text{Higher Occupancy} + 100) / 2$.
 The overall Multifamily Vacancy Index is a weighted average of the three components: $.3632 \times \text{Class A} + .4630 \times \text{Class B} + .1738 \times \text{Class C}$.
 The weights are derived from a statistical analysis of the historical relationship between the components and Census rental vacancy rates.
 Source: Multifamily Market Survey, NAHB Economics and Housing Policy Group.

NAHB Multifamily Vacancy Index (MVI) and 5+ Rental Vacancy Rate



*Source: U.S. Census Bureau, Housing Vacancies and Homeownership (<http://www.census.gov/hhes/www/housing/hvs/hvs.html>)
 The rental vacancy rate is the number of vacant rental units divided by the number of vacant rental units plus the number of rental units occupied plus the number of rental units rented but not yet occupied.