



Multifamily Vacancy Indices - Q4 2018
(Seasonally Adjusted)

RENTAL VACANCY IN CURRENT VS. PRIOR QUARTER

	2014				2015				2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Multifamily Vacancy Index	37	38	41	39	36	34	39	40	39	42	42	42	41	38	41	41	42	45	47	45
MVI Components:																				
Class A apartments	38	39	40	39	35	34	41	40	39	44	44	44	47	41	42	44	46	48	53	54
Class B apartments	35	36	41	37	36	33	36	38	38	40	40	39	37	37	40	39	39	43	46	40
Class C apartments	41	40	46	41	38	37	42	42	39	41	41	45	38	34	40	40	40	41	38	38

EXPECTED VACANCY: NEXT 6 MONTHS VS. CURRENT QUARTER

	2014				2015				2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Class A apartments	36	42	44	36	38	33	37	39	47	48	44	45	43	48	45	52	52	48	59	53
Class B apartments	41	38	41	38	38	36	35	40	36	46	41	39	38	40	41	41	41	42	48	46
Class C apartments	42	45	45	42	42	40	42	43	45	46	44	45	35	42	37	40	35	39	42	42

MVI components are based on questions asking if occupancy is higher, about the same, or lower in the current vs. prior quarter.

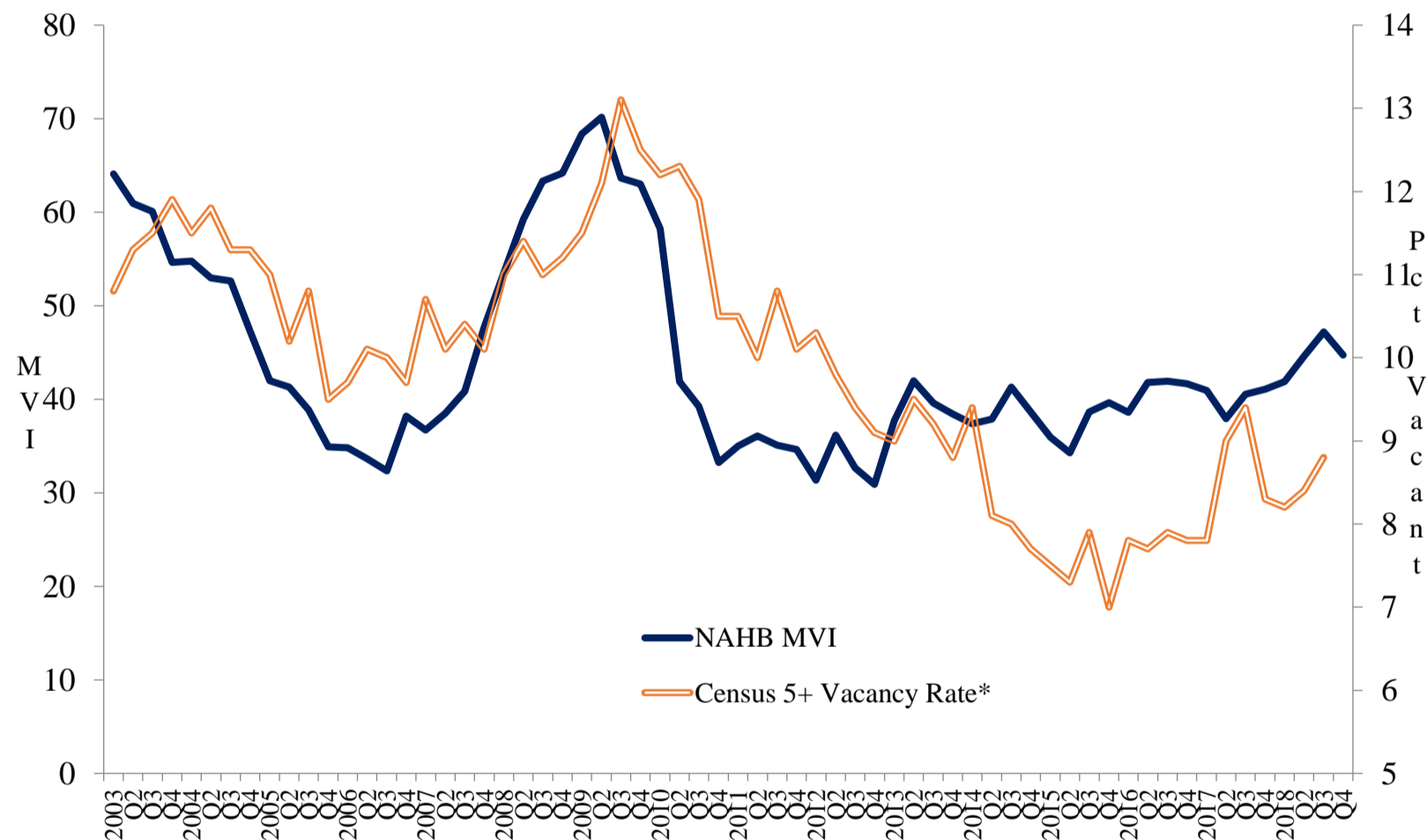
Expected vacancy indices are based on similar questions about occupancy during the next 6 months vs. the current quarter.

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.



*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.