



## Multifamily Production Indices - Q3 2017 (Seasonally Adjusted)

### PRODUCTION OF NEW APARTMENTS 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
<b>Multifamily Production Index</b>	<b>52</b>	<b>61</b>	<b>54</b>	<b>50</b>	<b>53</b>	<b>58</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>52</b>	<b>53</b>	<b>50</b>	<b>53</b>	<b>55</b>	<b>48</b>	<b>56</b>	<b>46</b>
<b>MPI Components:</b>																			
Low Rent Starts	55	60	50	47	48	52	51	52	54	54	55	50	54	52	54	54	48	53	54
Market Rent Starts	61	67	64	60	59	68	64	62	59	60	64	59	58	53	57	58	55	60	43
For Sale Starts	42	58	50	46	54	56	50	50	50	53	50	49	48	45	49	52	43	57	40

### EXPECTED PRODUCTION: 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
Low Rent Starts	57	60	56	53	47	51	57	55	54	54	57	53	53	48	54	49	52	56	50
Market Rent Starts	62	67	65	58	57	60	57	58	56	63	59	58	52	44	60	52	56	55	45
For Sale Starts	51	60	58	50	58	55	53	51	56	56	56	51	50	44	57	54	46	57	47

MPI components are based on questions asking if production is stronger, about the same, or weaker in the current vs. prior quarter.

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

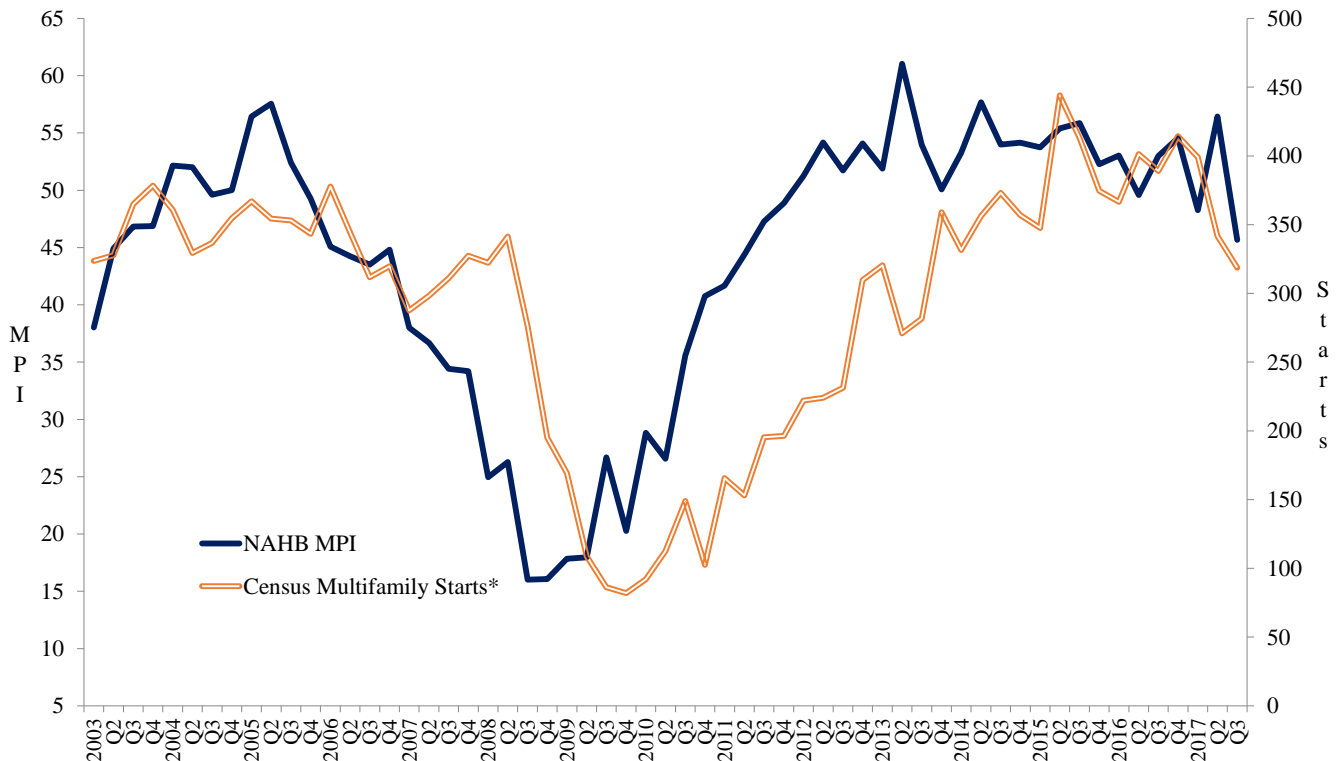
Numbers in the table are diffusion-type indices - calculated from the percentage responses using the formula  $(\text{Stronger} - \text{Weaker} + 100) / 2$ .

The overall Multifamily Production Index is a weighted average of the 3 components:  $.3533 \times \text{Low Rent} + .2806 \times \text{Market Rent} + .3661 \times \text{For Sale}$ .

The weights are derived from a statistical analysis of the historical relationship between the components and the Census series on multifamily

Source: Multifamily Market Survey, NAHB Economics and Housing Policy Group.

**NAHB Multifamily Production Index (MPI) and Multifamily Starts (in thousands)**



\*Multifamily Starts: U.S. Census Bureau, New Residential Construction (<http://www.census.gov/construction/nrc/index.html>).

The quarterly Multifamily Starts is the average of the three months of seasonally adjusted multifamily housing starts from that quarter.