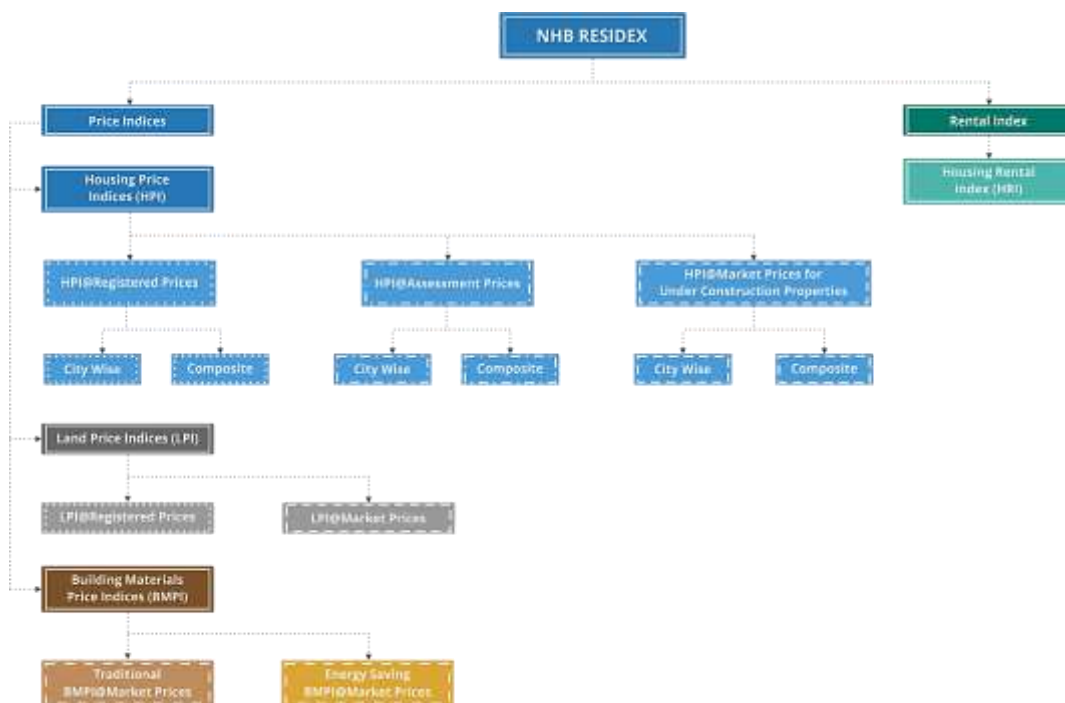




## Introduction to NHB RESIDEX

NHB RESIDEX, India's first official Housing Price Index (HPI), was launched in July, 2007, to track the movement in prices of residential properties in select cities on quarterly basis, taking 2007 as the base year. With a view to reflect the current macroeconomic scenario, NHB RESIDEX has been revamped to include cluster of indices with updated base year, revised methodology and automated processes.



The revamped NHB RESIDEX is also wider in its geographic coverage and captures two housing price indices viz. HPI@ Assessment Prices and HPI@ Market Prices for Under Construction Properties for 50 cities. HPI@ Assessment Prices is computed using lenders' valuation data received from Banks/Housing Finance Companies (HFCs), while HPI@ Market Prices for Under Construction Properties is based on primary market data for under construction properties collected from developers, builders and brokers. NHB also publishes Composite HPI@Assessment Prices and Composite HPI@Market Prices for Under Construction Properties based on 50 cities. The composite indices are derived by applying population weights to city level indices.

Indices	Data	Sources	Cities
HPI@Assessment Prices	Lenders' valuation data	Banks/HFCs	50
HPI@Market Prices for Under Construction Properties	Primary market data for Under Construction Projects	Primary Market Survey	50

The cities covered in phase 1 are spread across India in 21 States/Union Territories (UTs). Among the cities covered under the two HPIs, 18 cities are state capitals<sup>1</sup> and 33 are part of the smart city list released by Government of India. The housing price indices have been computed on a quarterly basis starting from the quarter April to June, 2013, and updated up to quarter January - March, 2018, taking FY 2012 -13 as the base year. From the previous quarter, i.e. April-June 2018, base year has been shifted to FY 2017-18. The housing prices are classified on the basis of carpet area size at city level (INR/sq. ft.) for units under three product category levels namely <=60 sq.mt, >60 & <=110 sq.mt, and >110 sq.mt. The indices are computed using Laspeyres Methodology, followed by calculation of a Four Quarter Weighted Moving Average with application of dynamic weights at product category level and static base year weights on the Weighted Moving Average product category level prices, across all the quarters starting from the base year.

<sup>1</sup> Out of 18 State/UT capitals, 15 are also smart cities



## Executive Summary

### HPI@Assessment Prices during the quarter October – December, 2019

HPI recorded an overall increase in 37 cities, decrease in 8 cities and no change in 5 cities on Y-o-Y basis and increase in 29 cities, decrease in 11 cities and no change in 10 cities on Q-o-Q basis.

Annual growth in HPI ranged from 18.0% in Hyderabad and 16.7% in Ahmedabad to (-) 7.6% in Chakan and (-) 6.1% in Delhi at the end of the quarter.

### Composite HPI@Assessment Prices based on 50 cities

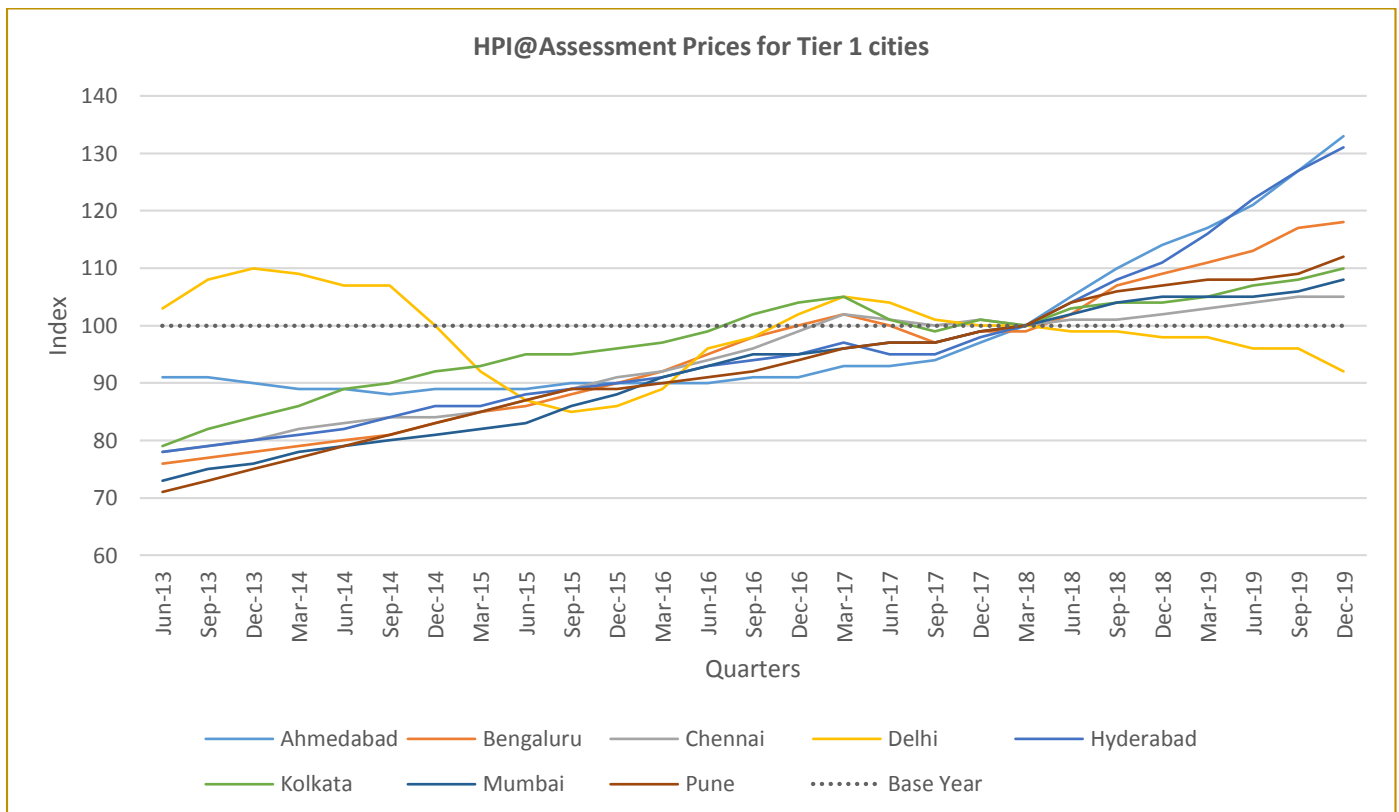
Composite HPI@Assessment Prices stood at 83 in June, 2013 and has moved up to 110 in the current quarter i.e. December, 2019. The index has moved up with a CAGR of 4.4% over the years.

The index increased by 4.8% on Y-o-Y basis.

### Tier-wise movement

Among the **8 Tier-1** cities, Hyderabad witnessed maximum increase 18.0% on Y-o-Y basis followed by Ahmedabad at 16.7%, Bengaluru at 8.3%, Kolkata at 5.8%, Pune at 4.7%, Chennai and Mumbai both at 2.9% while Delhi witnessed a fall in Index by (-) 6.1%. On Q-o-Q basis, Ahmedabad witnessed maximum rise (4.7%) followed by Hyderabad (3.1%), Pune (2.8%), Mumbai (1.9%), Kolkata (1.9%) and Bengaluru (0.9%). Chennai witnessed no change in the index while Delhi witnessed a fall in index y (-)4.2%.

Figure: HPI@Assessment Prices for Tier 1 cities (Base Year FY 2017-18 = 100)



Of the 29 Tier-2 cities, significant rise in indices was seen in Thiruvananthapuram (16.3%), Guwahati (15.2%) followed by Vadodara (14.4%), Ludhiana and Raipur (13.6%), Bhubaneswar (12.1%), Patna (11.5%) and Lucknow (10.7%), while fall in indices was seen in Faridabad (-2.9%) and Vasai Virar (-1.0%) on Y-o-Y basis. On the other hand, on Q-o-Q basis, Lucknow witnessed maximum increase in index by (5.6%) followed by Vadodara by (5.3%), Raipur by (4.5%) and Bhubaneswar and Guwahati, both



by (4.3%), while significant fall in index was witnessed in Ghaziabad (-2.8%), Noida (-2.5%) and Vasai Virar by (-1.9%). Dehradun, Chandigarh, Jaipur, Nashik, and Vijayawada witnessed no change in index.

Figure: HPI@Assessment Prices for Tier 2 cities classified as per geographic location (Base Year FY2017-18 = 100)

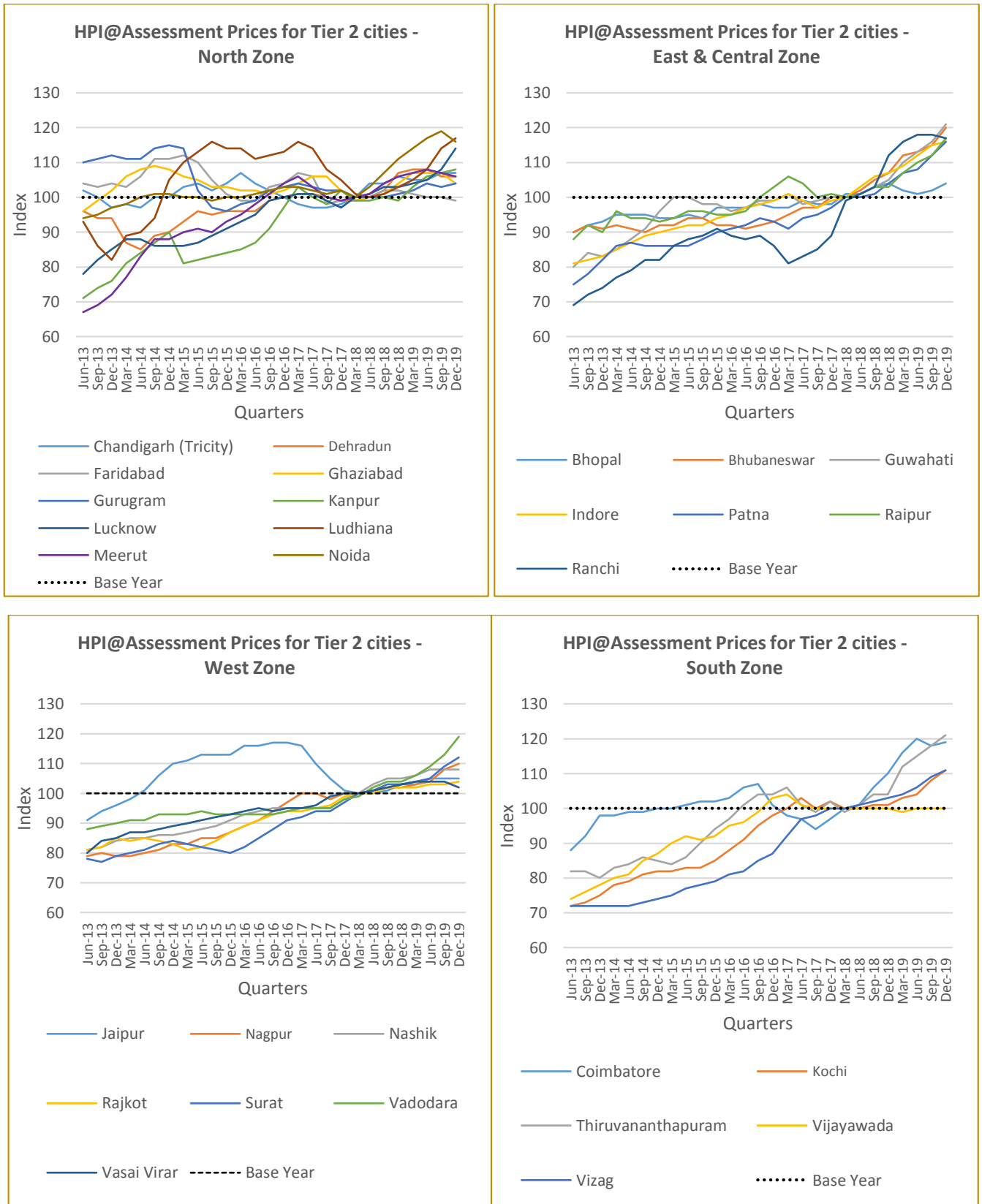
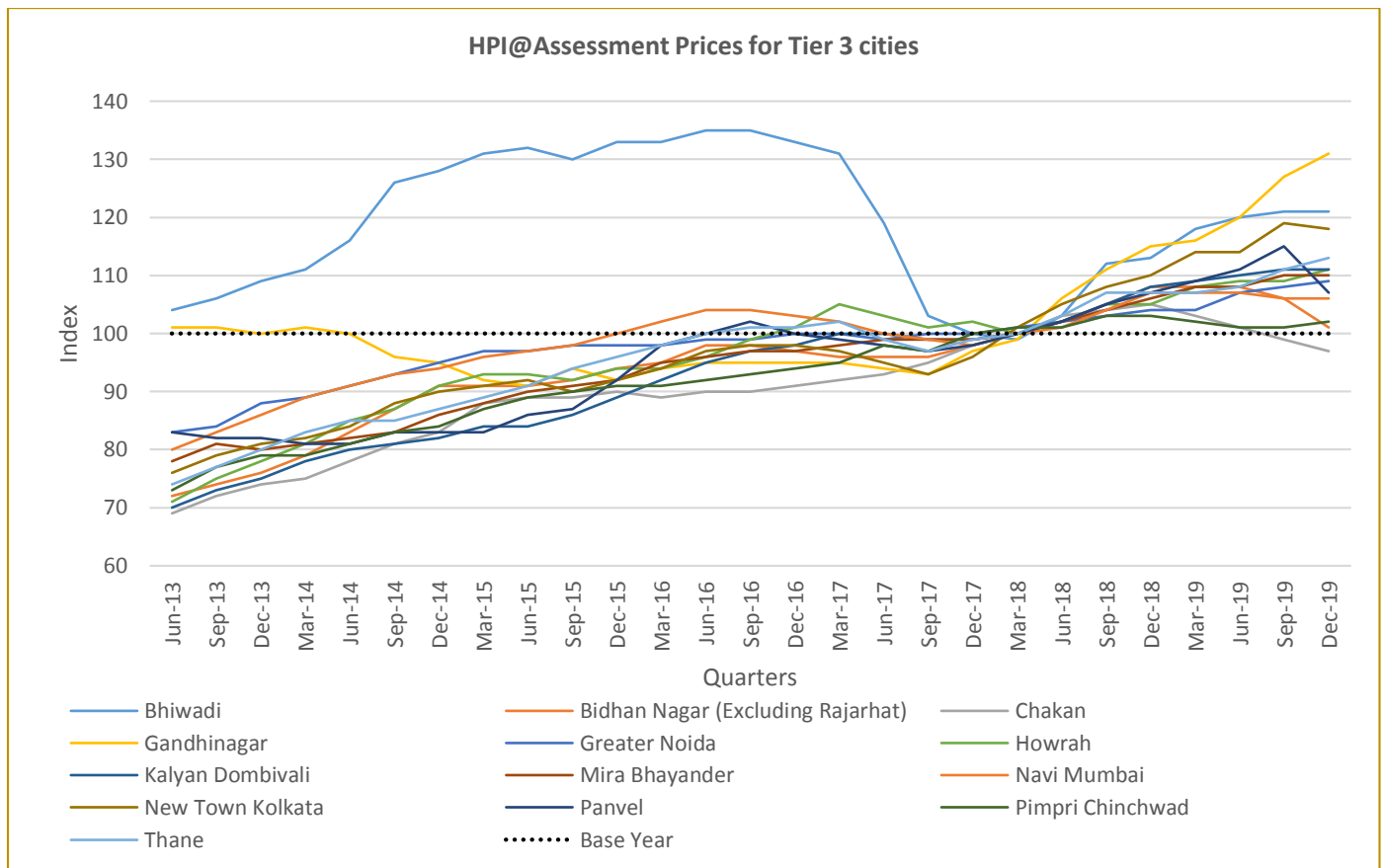




Figure: HPI@Assessment Prices for Tier 3 cities classified as per geographic location (Base Year FY 2017-18 = 100)



On Y-o-Y basis, 8 out of 13 Tier-3 cities showed growth with Gandhinagar (13.9%) in the lead followed by New Town Kolkata (7.3%) and Bhiwadi (7.1%) showed significant increase in indices. Chakan (-7.6%) and Navi Mumbai (-5.6%) witnessed drop in indices on Y-o-Y basis. On Q-o-Q basis Gandhinagar (3.1%) recorded the maximum increase while four Tier 3 cities recorded a fall in indices with Panvel (7.0%) and Navi Mumbai (-4.7%) registering the maximum fall in indices.

### HPI@Market Prices for Under Construction Properties during the Oct - Dec, 2019

HPI recorded an overall, increase in 30 cities, decrease in 18 cities and no change in 2 cities on Y-o-Y and increase in 24 cities, decrease in 13 cities and no change in 13 cities on Q-o-Q basis.

Annual growth in HPI ranged from 15.4% in Patna to (-) 7.9% in Noida at the end of the quarter Oct-Dec,2019.

### Composite HPI@Market Prices for Under Construction Properties based on 50 cities

Composite HPI@ Market Prices for Under Construction Properties stood at 85 in June, 2013 and has steadily moved up to 104 in the current quarter i.e. December, 2019. The index has moved up with a CAGR of 3.2% over the years.

On YoY basis, the index has witnessed a stagnancy.

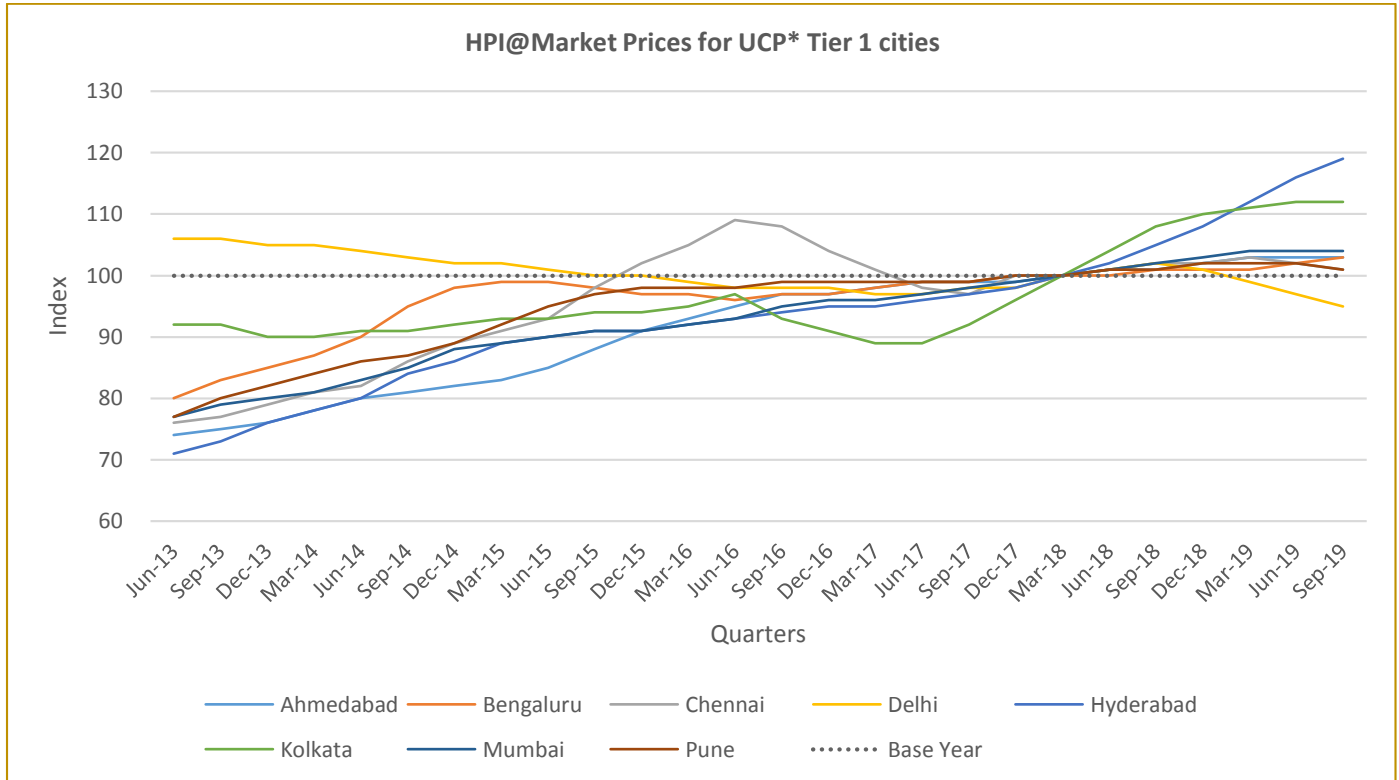
#### Tier-wise movement

Annually, out of 8 Tier-1 cities, the cities that showed growth with Hyderabad (13.0%) leading, followed by Bengaluru (3.0%), Ahmedabad (1.0%) and Kolkata (0.9%). Delhi, Pune, Mumbai and Chennai witnessed a fall in Index by (-) 5.9 %, (-) 2.9% and (-) 1.0%, respectively.



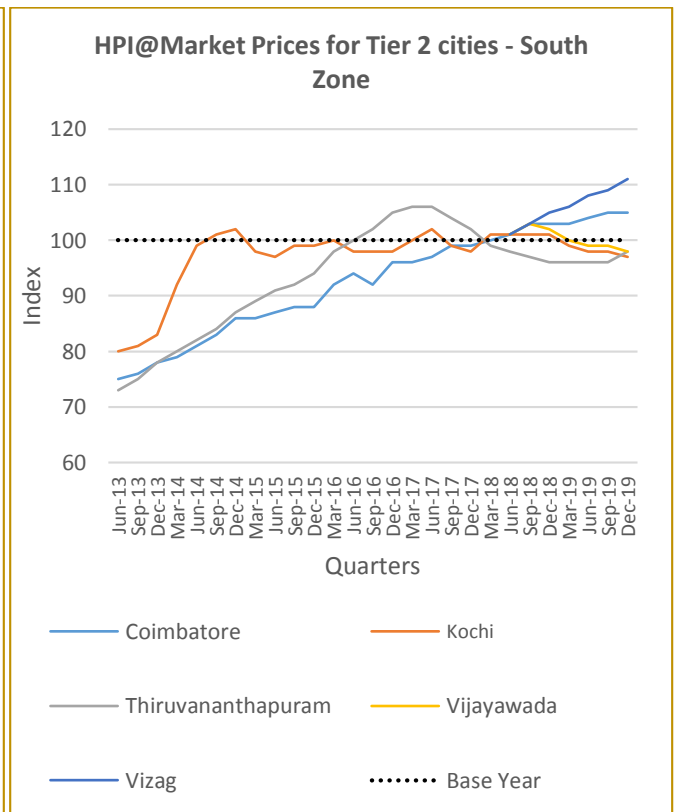
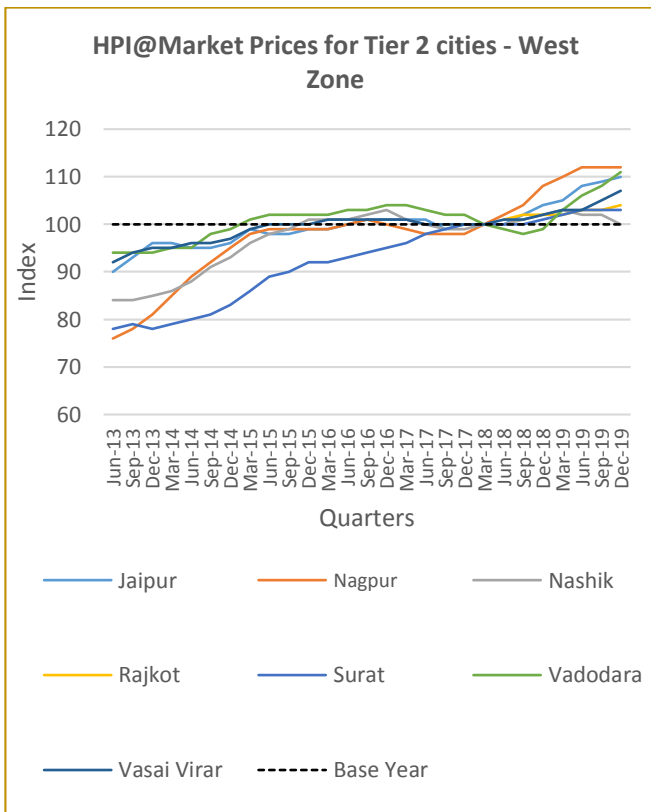
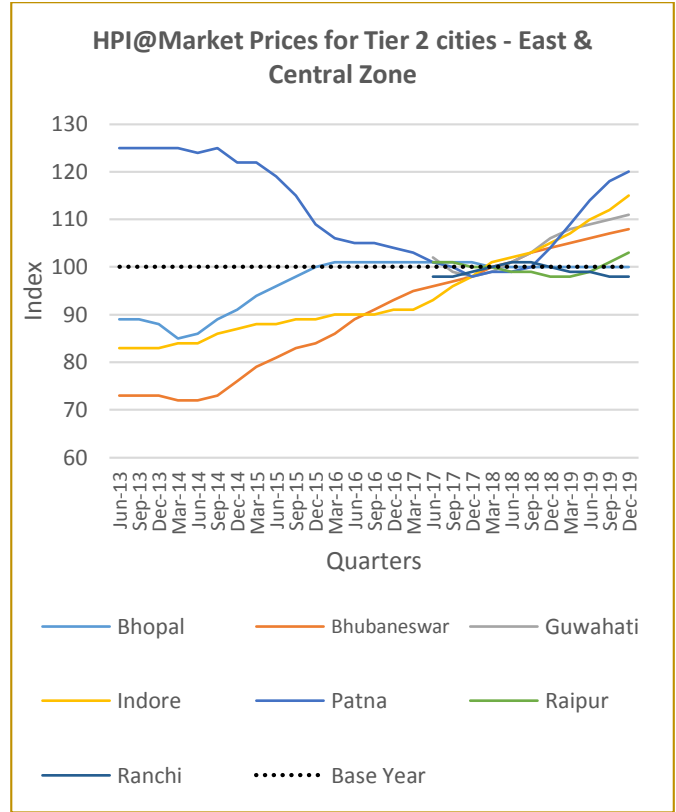
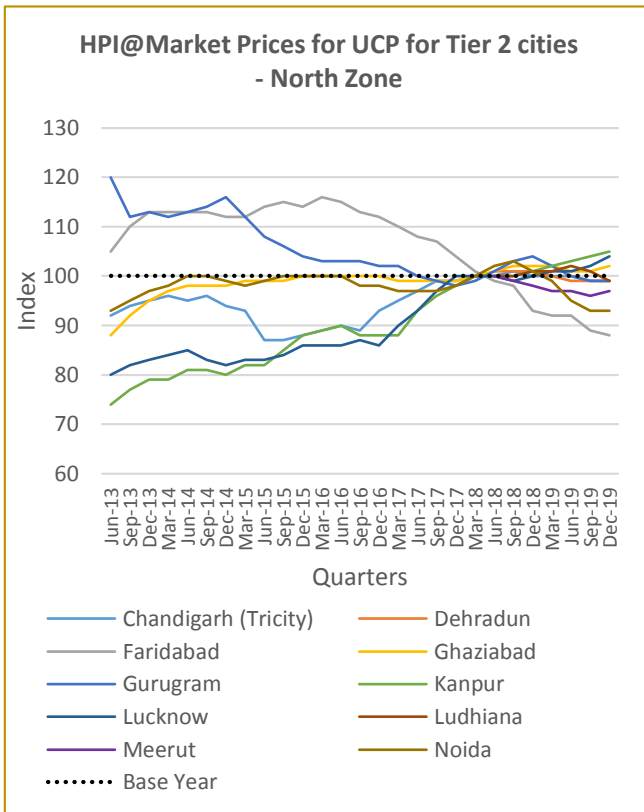
On quarterly basis, Hyderabad witnessed the maximum increase by (3.3%), followed by Bengaluru (1.0%). Delhi, Ahmedabad and Chennai witnessed no change in index while Pune witnessed the maximum fall of (-2.0%) followed by Mumbai (-1.9%) and Kolkata (0.9%).

Figure: HPI@Market Prices for Under Construction Properties for Tier-1 cities (Base Year FY 2017-18 = 100)



Of the 29 Tier-2 cities being covered, maximum increase in indices was seen in Patna (15.4%) followed by Vadodara (12.1%), Indore (9.5%) and Jaipur (5.8%), while maximum decrease in indices was seen in Noida (-7.9%), Faridabad (-5.4%), Gurugram (-4.8%), Kochi (-4.0%), Vijayawada (-3.9%), Ranchi, Ludhiana, Dehradun and Nashik (-2.0%), Chandigarh (Tri-city) and Meerut (-1.0%) on Y-o-Y basis. On Q-o-Q basis, maximum increase in indices was seen in Vadodara (2.8%) followed by Indore (2.7%), Thiruvananthapuram (2.1%), Raipur and Lucknow (2.0%), Vasai Virar (1.9%). Maximum decline was witnessed in Ludhiana and Nashik (-2.0%), Faridabad (-1.1%) Whereas, no change was seen in cities like, Bhopal, Chandigarh, Coimbatore, Dehradun, Gurugram, Nagpur, Noida, Ranchi and Surat.

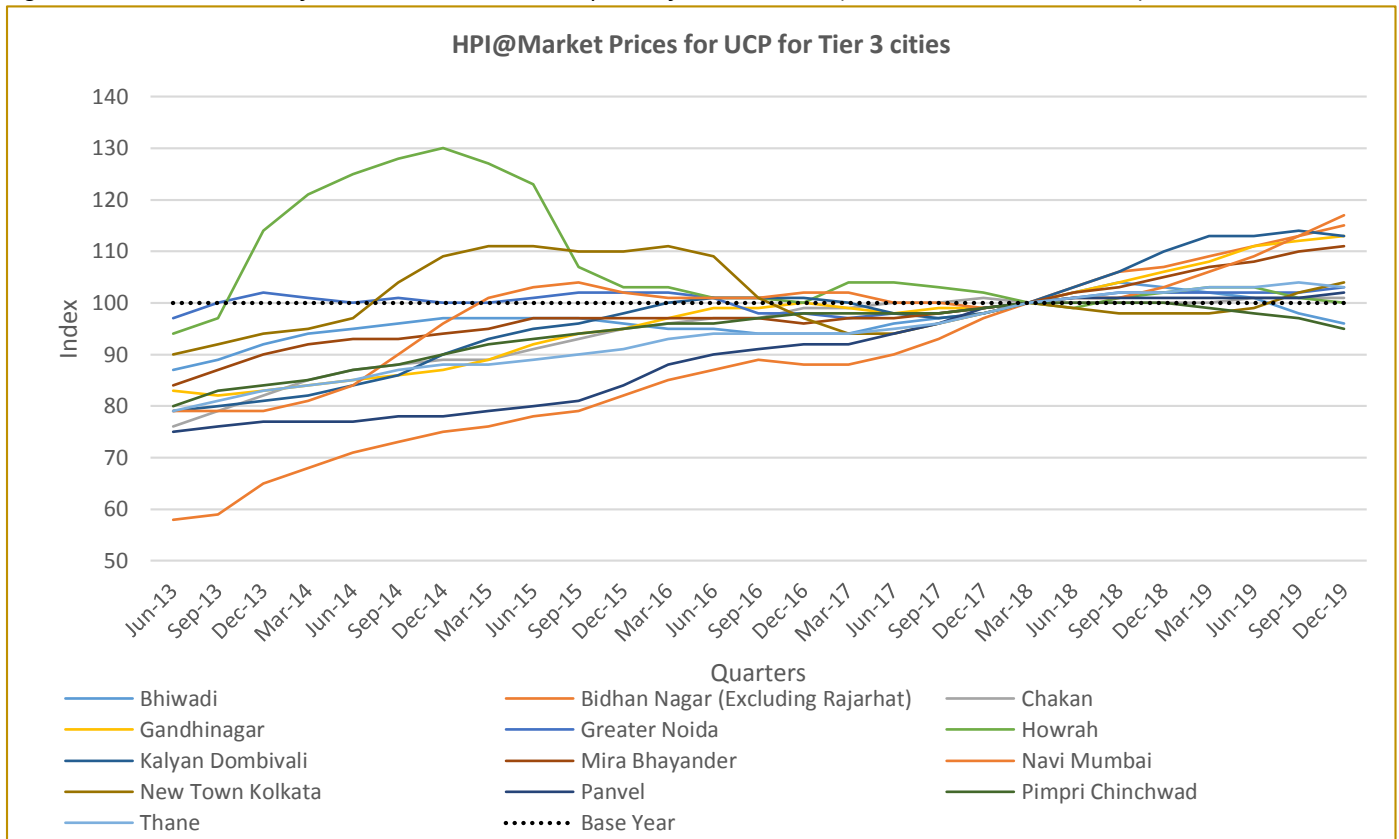
Figure: HPI@Market Prices for Under Construction Properties for Tier-2 cities (Base Year FY 2017-18 = 100)



Among the 13 Tier-3 cities, the variations ranged from 13.6% in Navi Mumbai, 7.5% in Bidhan Nagar, 6.6% in Gandhinagar and 6.1% in New Town Kolkata to (-) 6.8% in Bhiwadi on Y-o-Y basis. On Q-o-Q basis, maximum increase in indices was seen in Navi Mumbai (3.7%) followed by New town Kolkata (3.0%), Mira Bhayander at (1.9%). No changes were seen in cities like Chakan, Greater Noida and Panvel, while Bhiwadi and Howrah witnessed a fall by (-3%) and (-1.9%), respectively.



Figure: HPI@Market Prices for Under Construction Properties for Tier-3 cities (Base Year FY2017-18 = 100)



## Geographic Trend

### Zone Wise movement under HPI@Assessment Prices during the quarter Oct - Dec, 2019

#### North Zone

(Bhiwadi, Chandigarh, Dehradun, Delhi, Faridabad, Ghaziabad, Greater Noida, Gurugram, Kanpur, Lucknow, Ludhiana, Meerut and Noida)

**On Quarterly basis**, the index has shown an overall increase in 5 cities, decline in 5 cities and no change in 3 cities. Rise in Housing Price Index was witnessed in Lucknow (5.6%) followed by Ludhiana (2.6%), Gurugram (1.0%), Kanpur and Greater Noida (0.9%). Fall in House Price Index was witnessed in Delhi (-4.2%), Ghaziabad (-2.8%), Noida (-2.5%), Faridabad (-1.9%) and Meerut (-0.9%). Index remained stable in Bhiwadi, Chandigarh (Tri-City) and Dehradun.

**On Annual basis**, the index has shown increase in 8 cities and decrease in 3 cities and no change in 2 cities. Rise in Housing Price Index was witnessed in Ludhiana (13.6%), Lucknow (10.7%), Kanpur (9.1%), Bhiwadi (7.1%), Greater Noida (4.8%), Noida (4.5%), Greater Noida (4.9%), Gurugram (3.0%) and Chandigarh (Tri-city) (0.9%). Delhi (-6.1%), Faridabad (-2.9%) and Dehradun (-0.9%) witnessed fall in index. Index remained stable in Ghaziabad and Meerut.

#### East & Central Zone

(Bidhan Nagar, Bhopal, Bhubaneswar, Guwahati, Howrah, Indore, Kolkata, New Town Kolkata, Patna, Raipur and Ranchi)

**On Quarterly basis**, the index has shown an overall increase in 8 cities and decline in 2 cities and no change in 1 city. Rise in House Price Index was witnessed in Raipur (4.5%), Bhubaneswar (4.3%), Guwahati (4.3%), Patna (3.6%), Bhopal (2.0%), Kolkata



(1.9%), Howrah (1.8%) and Indore (0.9%). Fall in House Price Index was witnessed in Ranchi and New Town Kolkata by (-0.8%). Index remained stable in Bidhan Nagar.

**On Annual basis**, the index has shown an overall increase in 9 cities, only 1 city witnessed a fall in index and no change in 1 city. The cities exhibiting increase in index are Guwahati (15.2%), Raipur (13.6%), Bhubaneswar (12.1%), Patna (11.5%), Indore (8.4%), New Town Kolkata (7.3%), Kolkata (5.8%), Howrah (5.7%), and Ranchi (4.5%). Bidhan Nagar witnessed a fall in Housing Price Index by (1.0%). Index remained stable in Bhopal.

## West Zone

(Ahmedabad, Chakan, Gandhinagar, Jaipur, Kalyan Dombivali, Mira Bhayander, Mumbai, Nagpur, Nashik, Navi Mumbai, Panvel, Pimpri Chinchwad, Pune, Rajkot, Surat, Thane, Vadodara and Vasai Virar)

**On Quarterly basis**, the index has shown an overall increase in 10 cities, no change in 4 and fall in 4 cities. Rise in Housing Price Index was witnessed in Vadodara (5.3%), Gandhinagar (4.6%), Ahmedabad (3.0%), Pune & Surat (2.8%), Mumbai & Nagpur (1.9%), Thane (1.8%), Pimpri Chinchwad & Rajkot (1.0%). Jaipur, Kalyan Dombivali, Mira Bhayander and Nashik witnessed no change in index. Panvel (-7.0%), Navi Mumbai (-4.7%), Chakan (-2.0%) and Vasai Virar (-1.9%) experienced a fall in index.

**On Annual basis**, the index has shown an overall increase in 13 cities, decrease in 4 cities and no change in 1 city. The cities exhibiting increase in index are Ahmedabad (16.7%), Vadodara (14.4%), Gandhinagar (13.9%), Surat (8.7%), Nagpur (7.8%), Thane (5.6%), Pune (4.7%), Mira Bhayander (3.8%), Mumbai & Nashik (2.9%), Kalyan Dombivali (2.8%), Rajkot (2.0%) and Jaipur (1.9%). On the other hand, cities that witnessed a fall in index are Chakan (-7.6%), Navi Mumbai (-5.6%), Pimpri Chinchwad and Vasai Virar (-1.0%). Panvel witnessed no change in index.

## South Zone

(Bengaluru, Chennai, Coimbatore, Hyderabad, Kochi, Thiruvananthapuram, Vijayawada and Vizag)

**On Quarterly basis**, the index has shown an overall increase in 6 cities, and no change in 2 cities. Rise in Housing Price Index was witnessed in Hyderabad (3.1%), Kochi (2.8%), Thiruvananthapuram (2.5%), Vizag (1.8%), Bengaluru (0.9%) and Coimbatore (0.8%). Chennai and Vijayawada witnessed no change in Housing Price Index.

**On Annual basis**, the index has shown an overall increase in 7 cities and no change in 1 city. The cities exhibiting increase in index are Hyderabad (18.0%), Thiruvananthapuram (16.3%), Kochi (9.9%), Bengaluru (8.3%), Coimbatore (8.2%), Vizag (7.8%), and Chennai (2.9%). Vijayawada witnessed no change in index.

Overall, on comparing the quarterly performance of indices within the zones, it is visible that at the end of this quarter, growth of HPI@Assessment Prices has been significant in all zones with only 3 cities, two in North zone and one in West Zone witnessing a significant decline. Index remained stable in 8 cities and increased in 37 cities.

## Zone Wise movement under HPI@Market Prices for Under Construction Properties during the quarter Oct - Dec, 2019

### North Zone

(Bhiwadi, Chandigarh, Dehradun, Delhi, Faridabad, Ghaziabad, Greater Noida, Gurugram, Kanpur, Lucknow, Ludhiana, Meerut and Noida)

**On Quarterly basis**, the index has shown an overall increase in 5 cities, decline in 3 cities and no change in 5 cities. Rise in Housing Price Index was witnessed in Lucknow (2.0%) followed by Ghaziabad, Greater Noida, Meerut and Kanpur all by (1.0%). Chandigarh,





Dehradun, Gurugram, Delhi and Noida witnessed no change in index, and Index fell in Bhiwadi & Ludhiana (-2.0%), and Faridabad (-1.1%).

**On Annual basis**, the index has shown an overall increase in 3 cities, decrease in 9 cities and no change in 1 city. Rise in index was witnessed in Kanpur & Lucknow (4.0%), and Meerut (1.0%). Ghaziabad witnessed no change and index fell in Noida (-7.9%), Bhiwadi (-6.8%), Delhi (-5.9%), Faridabad (-5.4%), Gurugram (-4.8%), Dehradun & Ludhiana (-2.0%), Meerut and Chandigarh (Tri-city), both at (-1.0%).

## East & Central Zone

(Bidhan Nagar, Bhopal, Bhubaneswar, Guwahati, Howrah, Indore, Kolkata, New Town Kolkata, Patna, Raipur and Ranchi)

**On Quarterly basis**, the index has shown an overall increase in 7 cities, decrease in 2 cities and witnessed no change in 2 cities. Rise in Housing Price Index was witnessed in Indore (2.7%), Raipur & New Town Kolkata (2.0%), Bidhan Nagar (1.8%), Patna (1.7%), Bhubaneswar and Guwahati, both (1.8%), Bhubaneswar and Guwahati, both (0.9%). Bhopal and Kolkata saw no change in Housing Price Index. Index fell in Howrah (-1.9%) and Ranchi (-1.0%).

**On Annual basis**, the index has shown an overall increase in 8 cities, no change in 1 city and decrease in 2 cities. The 8 cities exhibiting increase in index are Patna (15.4%), Indore (9.5%), Bidhan Nagar (7.5%), New Town Kolkata (6.1%), Raipur (5.1%), Guwahati (4.1%), Bhubaneswar (3.8%) and Kolkata (0.9%). Index fell in Howrah and Ranchi (-2.0%). Index remained stable in Bhopal.

## West Zone

(Ahmedabad, Chakan, Gandhinagar, Jaipur, Kalyan Dombivali, Mira Bhayander, Mumbai, Nagpur, Nashik, Navi Mumbai, Panvel, Pimpri Chinchwad, Pune, Rajkot, Surat, Thane, Vadodara and Vasai Virar)

**On Quarterly basis**, the index has shown an overall increase in 8 cities, no change in 4 cities and fall in 6 cities. Rise in Housing Price Index was witnessed in Navi Mumbai (3.5%), Vadodara (2.8%), Vasai Virar (1.9%), Panvel & Rajkot, both at (1.0%) and Mira Bhayander, Gandhinagar and Jaipur, all (0.9%). Ahmedabad, Surat, Chakan, and Nagpur experienced a stable index. A decrease in Housing Price Index was evident in Pimpri Chinchwad (-2.1%), Nashik & Pune (-2.0%), Mumbai (-1.9%), Thane (-1.0%) and Kalyan Dombivali (-1.0%).

**On Annual basis**, the index has shown an overall increase in 14 cities, and decrease in 4 cities. The cities exhibiting increase in index are Navi Mumbai (13.6%), Vadodara (12.1%), Gandhinagar (6.6%), Jaipur (5.8%), Mira Bhayander (5.7%), Vasai Virar (4.9%), Nagpur (3.7%) and Kalyan Dombivali (2.7%), Rajkot & Surat, both at (2.0%), Ahmedabad, Chakan, Panvel & Thane, all (1.0%). On the other hand, cities that witnessed a fall in index are Pimpri Chinchwad (-5.0%), Pune (2.9%), Nashik (-2.0%) and Mumbai (-1.0%).

## South Zone

(Bengaluru, Chennai, Coimbatore, Hyderabad, Kochi, Thiruvananthapuram, Vijayawada and Vizag)

**On Quarterly basis**, the index has shown an overall increase in 4 cities, decrease in 2 cities and no change in 2 cities. Rise in Housing Price Index was witnessed in Hyderabad (2.5%), Thiruvananthapuram (2.1%), Vizag (1.8%), and Bengaluru (1.0%). Chennai and Coimbatore witnessed no change in index, while Chennai and Coimbatore, both at (-1.0%) witnessed a fall in Housing Price Index.

**On Annual basis**, the index has shown an overall increase in 5 cities and decrease in 3 cities. The cities exhibiting increase in index are Hyderabad (13.0%), Vizag (5.7%), Bengaluru (3.0%) and Thiruvananthapuram (2.1%), and Coimbatore (1.9%). Kochi (-4.0%), Vijayawada (-3.9%) and Chennai (-1.0%) witnessed a fall in indices.



Overall, on quarterly basis, 30 cities witnessed a rise in indices, followed by 18 cities witnessed a fall in indices and 2 cities in which the index remained stable. Highest decrease was seen in cities in north zones.