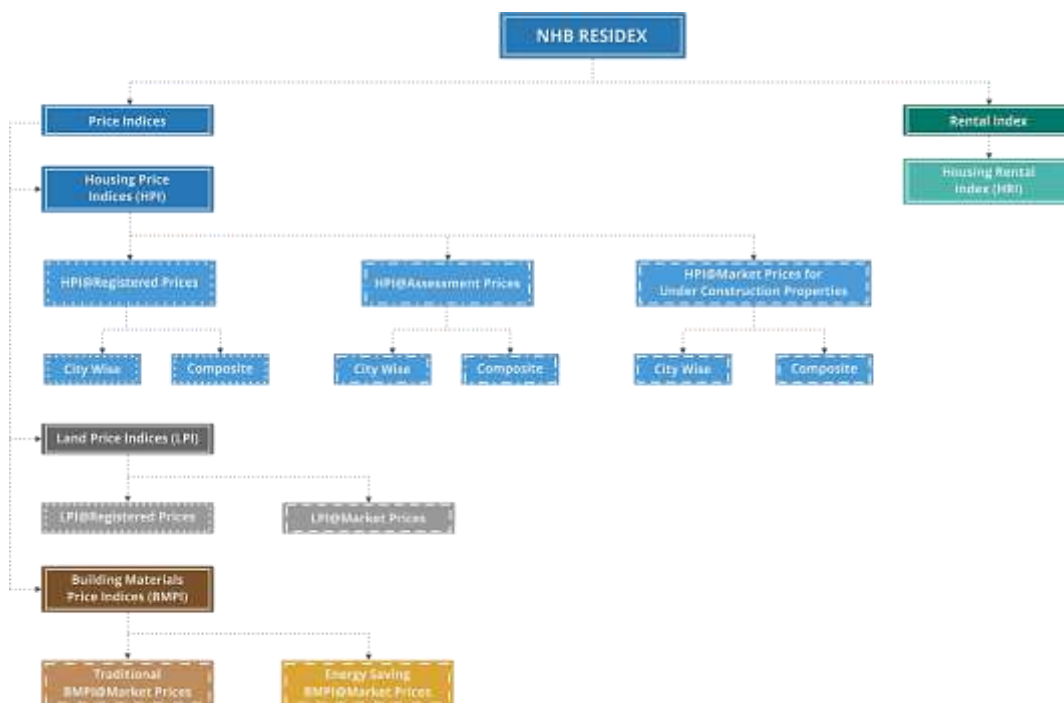




## Introduction to NHB RESIDEX

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 July-September 2019

HPI recorded an overall increase in 44 cities, decrease in 5 cities and no change in 2 cities on Y-o-Y basis and increase in 32 cities, decrease in 7 cities and no change in 11 cities on Q-o-Q basis.

Annual growth in HPI ranged from 17.6% in Hyderabad and 15.5% in Ahmedabad to (-) 4.8% in Chakan and (-3.0%) in Delhi at the end of the quarter, whereas, the quarterly growth in HPI ranged from 5.8% in Gandhinagar to (-2.0%) in Chakan.

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

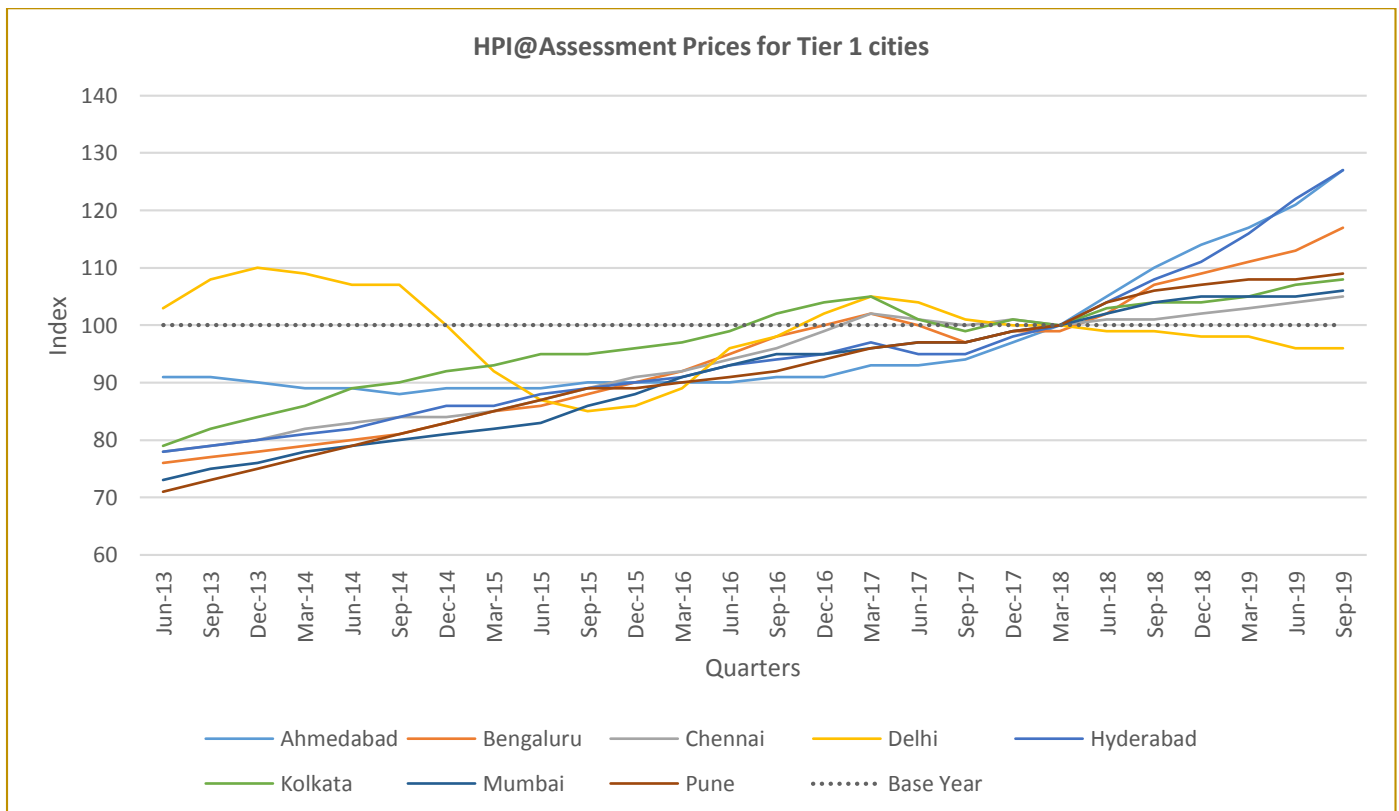
Composite HPI@Assessment Prices stood at 83 in June, 2013 and has moved up to 109 in the current quarter i.e. September, 2019. The index has moved up with a CAGR of 4.5% over the years.

The index increased by 5.8% on YoY basis.

### Tier-wise movement

Among the **8 Tier-1** cities, Hyderabad witnessed maximum increase 17.6% on Y-o-Y basis followed by Ahmedabad at 15.5%, Bengaluru at 9.3%, Chennai at 4.0%, Kolkata at 3.8%, Pune at 2.8% and Mumbai at 1.9%. Delhi witnessed a fall in Index by (-) 3.0%. On Q-o-Q basis, Ahmedabad witnessed maximum rise (5.0%) followed by Hyderabad (4.1%), Bengaluru (3.5%), Chennai & Mumbai (1.0%), Kolkata & Pune (0.9%). Delhi witnessed no change in the index.

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 Ranchi (14.6%), Thiruvananthapuram (13.5%) followed by Ludhiana (12.9%), Guwahati (12.6%), Coimbatore (11.3%), Noida (11.2%) and Patna (10.9%), while fall in indices was seen in Faridabad (-2.0%) and Bhopal (-1.0%) on Y-o-Y basis. On the other hand, on Q-o-Q basis, Ludhiana witnessed maximum increase in index by (5.6%) followed by Kochi, Nagpur & Surat, all by (3.8%), Patna & Vadodara by (3.7), while significant fall in index was witnessed in



Dehradun (-1.9%) and Coimbatore by (-1.7%). Faridabad, Ghaziabad, Jaipur, Nashik, Rajkot, Ranchi, Vasai Virar 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)

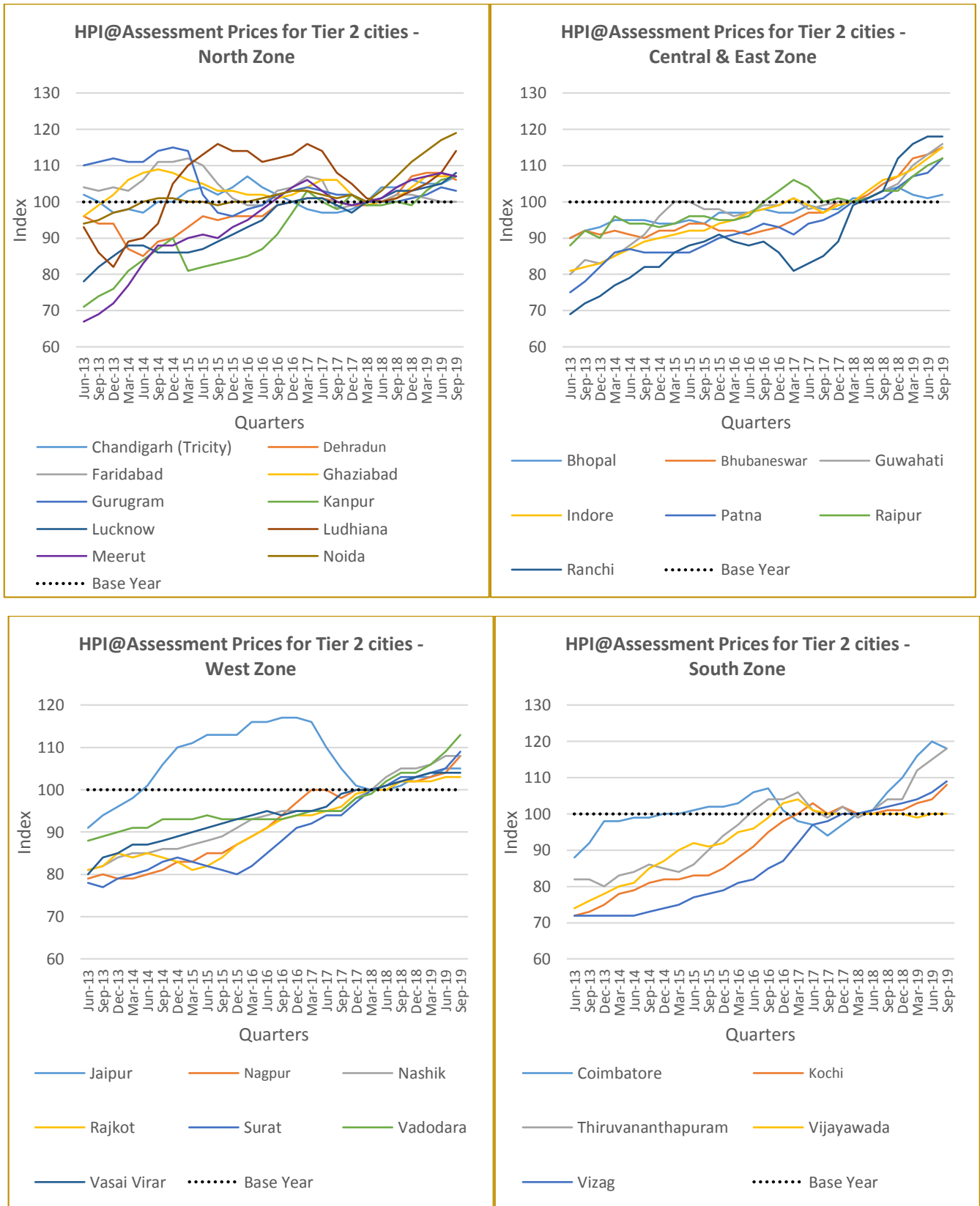
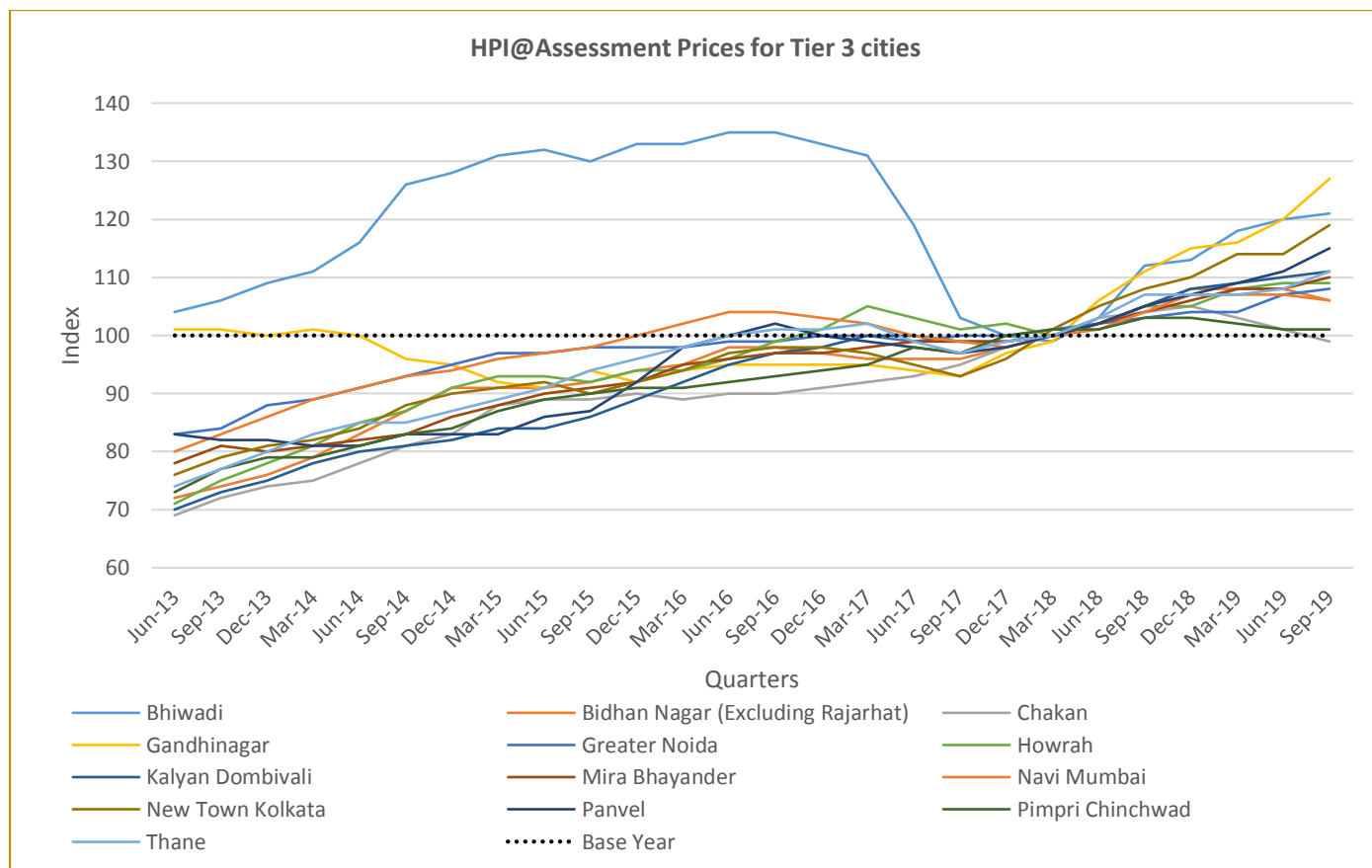




Figure: HPI@Assessment Prices for Tier 3 cities classified as per geographic location (Base Year FY 2017-18 = 100)



On Y-o-Y basis, of the Tier 3 cities being covered, 11 out of 13 Tier-3 cities showed growth with Gandhinagar (14.4%) in the lead followed by New Town Kolkata (10.2%) and Bhiwadi (8.1%) showing significant increase in indices. Chakan (-4.8%) and Pimpri Chinchwad (-1.9%) witnessed drop in indices. On Q-o-Q basis Gandhinagar (5.8%) recorded the maximum increase followed by New Town Kolkata (4.4%) and Panvel (3.6%) while three Tier 3 cities recorded a fall in indices with Chakan (-2.0%), Bidhan Nagar (-1.9%) and Navi Mumbai (-0.9%) registering the fall in indices.

### HPI@Market Prices for Under Construction Properties during the July-September 2019

HPI recorded an overall, increase in 30 cities, decrease in 15 cities and no change in 5 cities on Y-o-Y and increase in 21 cities, decrease in 13 cities and no change in 16 cities on Q-o-Q basis.

Annual growth in HPI ranged from 18.0% in Patna to (-) 9.7% in Noida at the end of the quarter, whereas, the quarterly growth in HPI ranged from 2.6% in Hyderabad to (-) 2.1% in Delhi.

### 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 to 104 in the current quarter i.e. September, 2019. The index has moved up with a CAGR of 3.3% over the years.

On YoY basis, the index has witnessed a rise of 2.0%.

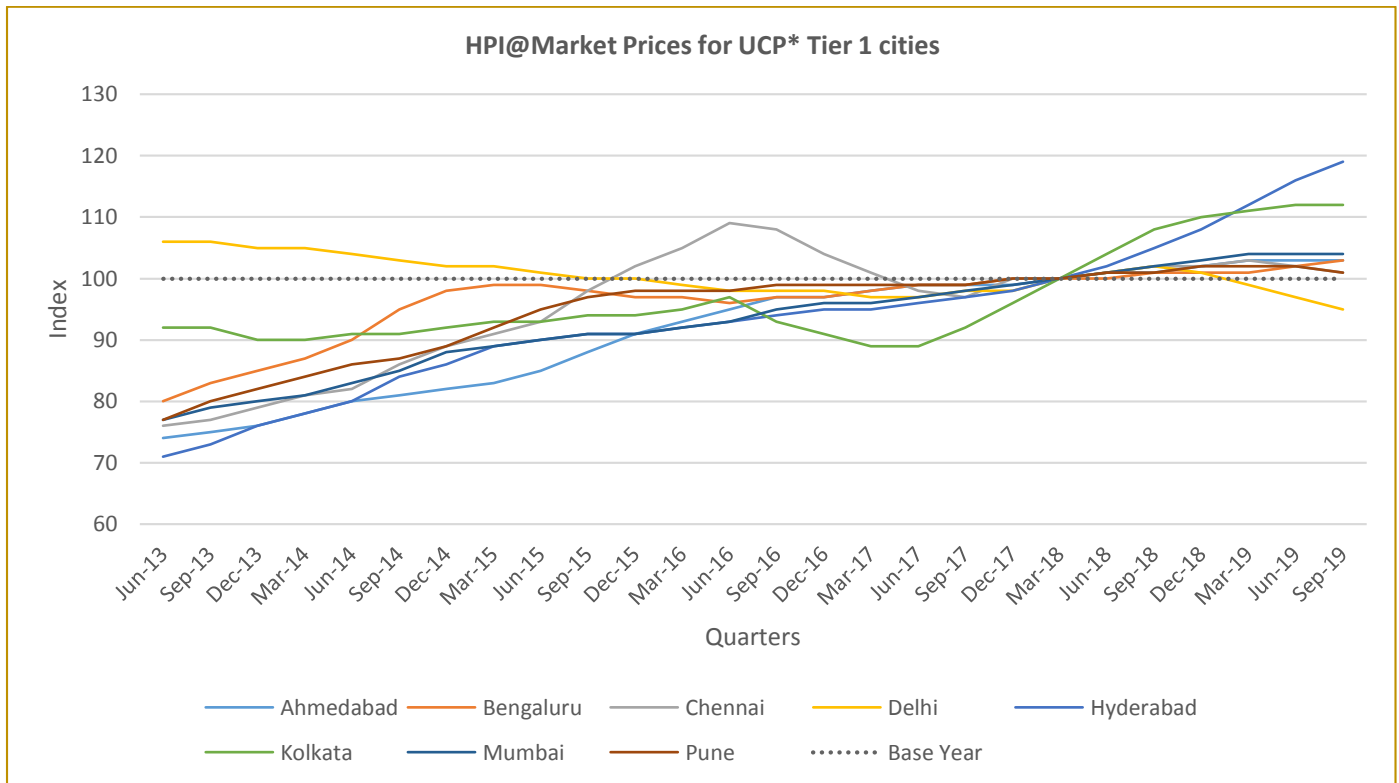
### Tier-wise movement

Annually, the 8 Tier 1 cities showed growth with Hyderabad (13.3%) leading, followed by Kolkata (3.7%), Ahmedabad, Bengaluru and Mumbai (2.0%). Pune witnessed no change in the index, while Delhi and Chennai witnessed a fall in Index by (-) 6.9% and



(-)1.0%, respectively. On quarterly basis, Hyderabad witnessed the maximum increase by (2.6%), followed by Bengaluru (1.0%). Mumbai, Ahmedabad and Kolkata witnessed no change in index while Delhi witnessed the maximum fall of (-2.1%) followed by Chennai and Pune, both at (-1%).

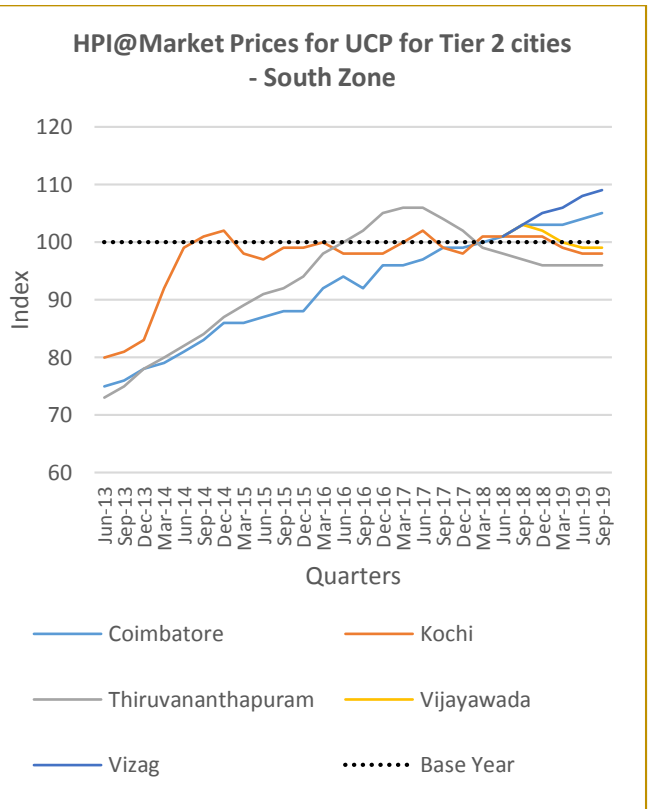
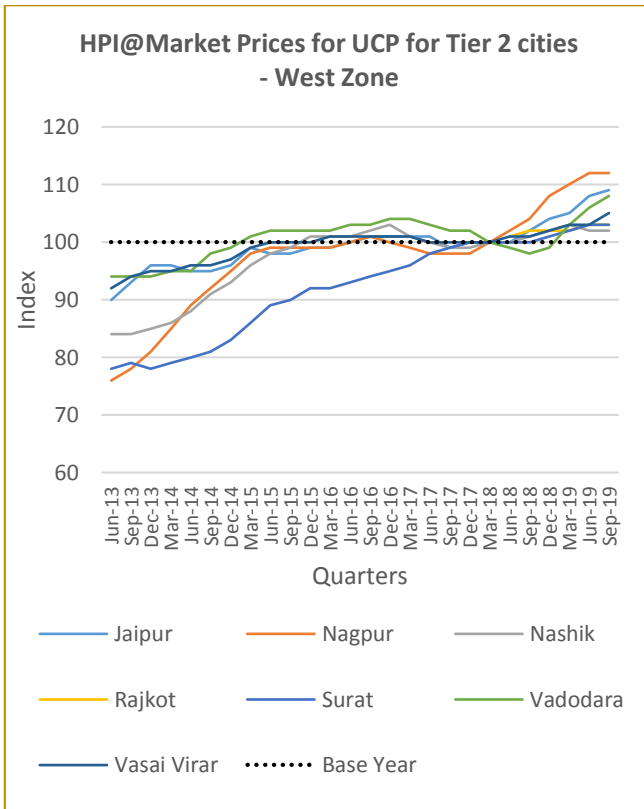
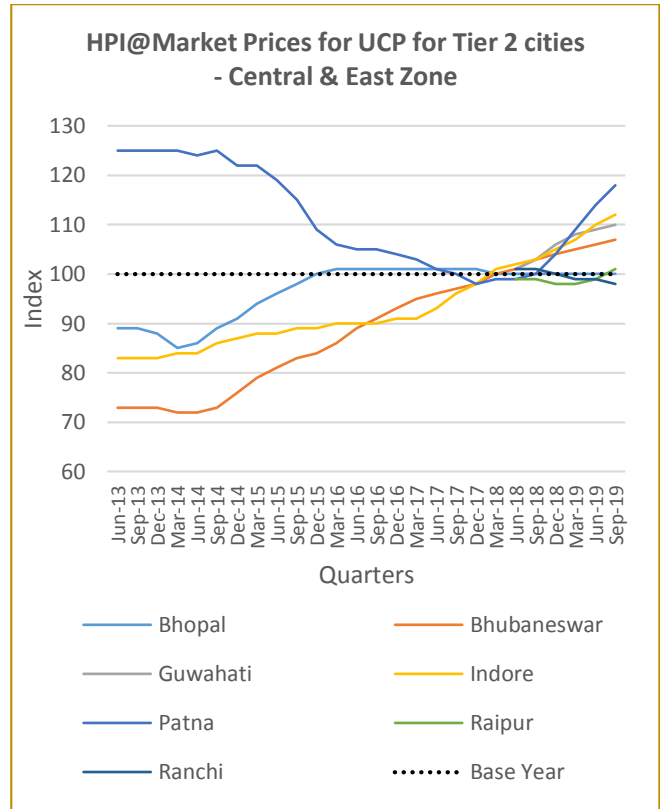
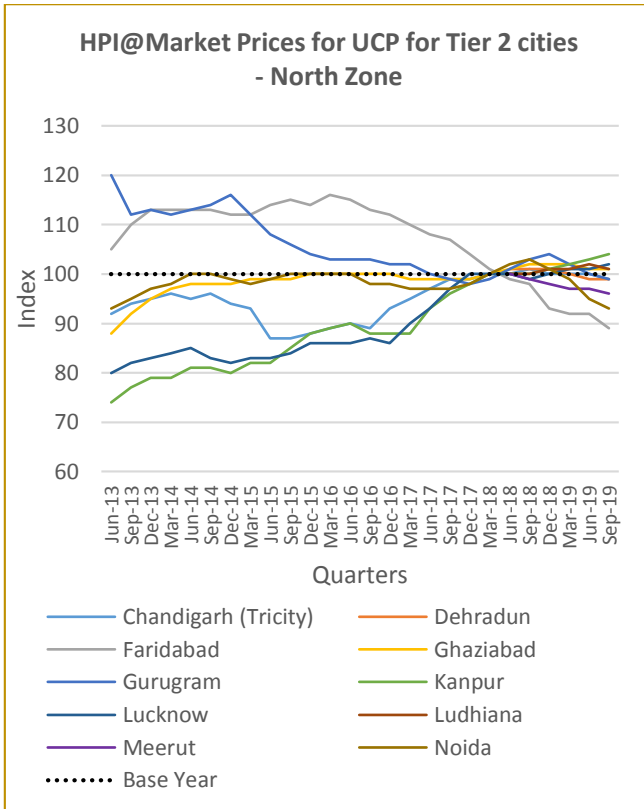
Figure: HPI@Market Prices for Under Construction Properties for Tier-1 cities (Base Year FY 2017-18 = 100)



Of the 29 Tier-2 cities being covered, maximum increase in indices was seen in Patna (18.0%) followed by Vadodara (10.2%), Indore (8.7%) and Nagpur (7.7%), while maximum decrease in indices was seen in Noida (-9.7%), Faridabad (-9.2%), Vijayawada and Gurugram (-3.9%), Kochi, Meerut and Ranchi (-3.0%), Chandigarh, Dehradun and Kochi (-2.0%) on Y-o-Y basis.

On Q-o-Q basis, maximum increase in indices was seen in Patna (3.5%) followed by Raipur (2.0%) Vasai Virar and Vadodara (1.9%), Indore (1.8%). Maximum decline was witnessed in Faridabad (-3.3%) and Noida (-2.1%) Whereas, no change was seen in cities like, Bhopal, Dehradun, Ghaziabad, Kochi, Ludhiana, Nagpur, Nashik, Rajkot, Ranchi Surat, Thiruvananthapuram, and Vijayawada.

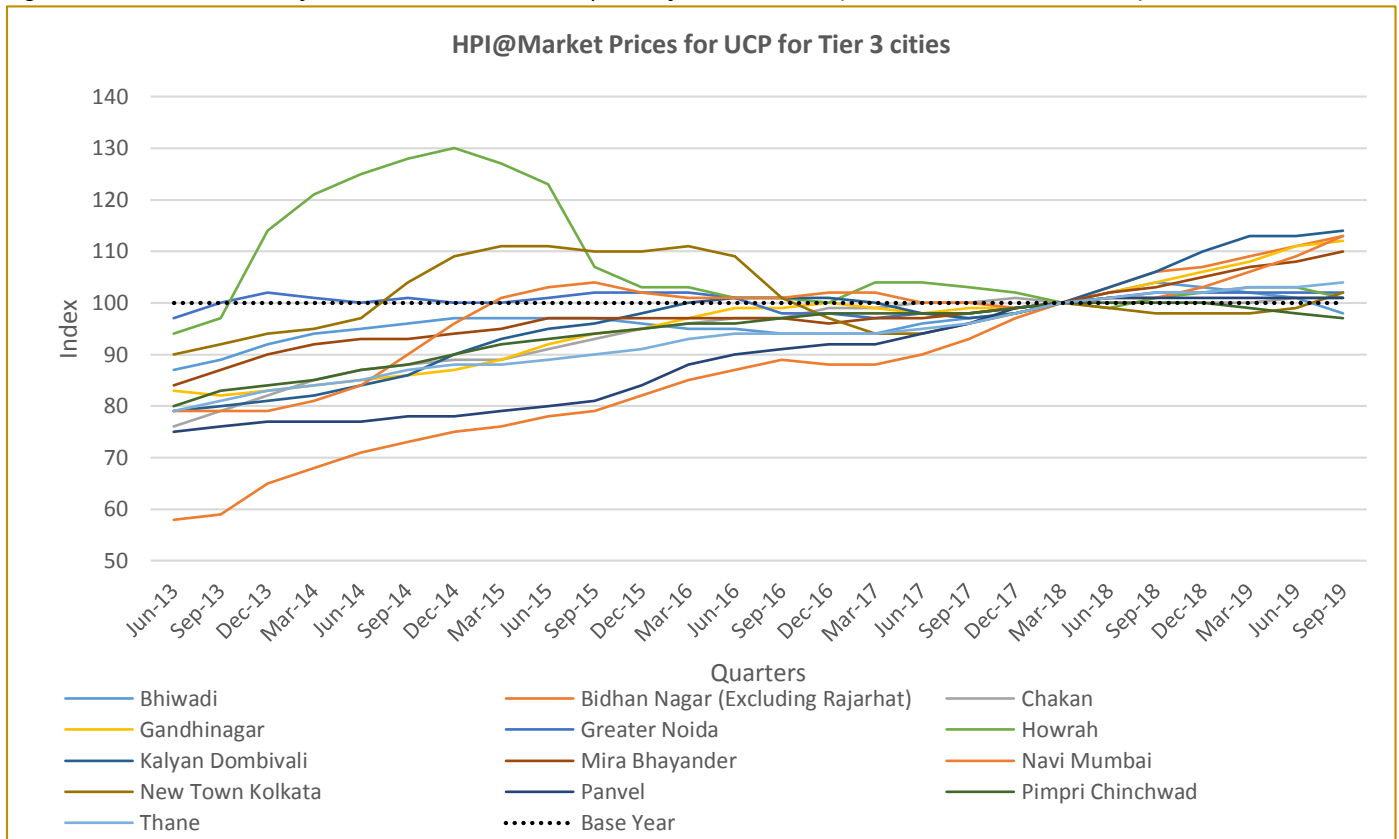
Figure: HPI@Market Prices for Under Construction Properties for Tier-2 cities (Base Year FY 2017-18 = 100)



Among the **13 Tier-3** cities, the variations ranged from 11.9% in Navi Mumbai, 7.7% in Gandhinagar, 7.5% in Kalyan Dombivali 7.9% to (-) 5.8% 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 July-September 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 7 cities and no change in 3 cities and decrease in 3 cities. Rise in Housing Price Index was witnessed in Ludhiana (5.6%), Lucknow (2.9%), Chandigarh (1.9%), Noida (1.7%), Greater Noida and Kanpur, both at (1.9%), and Bhiwadi (0.8%). Dehradun (-1.9%), Gurugram (-1.0%) and Meerut (-0.9%) witnessed a fall in House Price Index. Index remained stable in Ghaziabad, Faridabad and Delhi.

**On Annual basis**, the index has shown increase in 11 cities and decrease in 2 cities. Rise in Housing Price Index was witnessed in Ludhiana (12.9%), Noida (11.2%), Bhiwadi (8.0%), Kanpur (7.0%), Ghaziabad (5.9%), Lucknow & Greater Noida (4.9%), Dehradun (3.9%), Gurugram (3.0%). and Chandigarh & Meerut both (2.9%). Delhi (-3.0%) and Faridabad (-2.0%) witnessed fall in index.

#### 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, no change in 2 cities and decline in 1 city. Rise in Housing Price Index was witnessed in New Town Kolkata (4.4%), Patna (3.7%), Guwahati and Indore, both at (2.7%) Raipur and



Bhubaneswar, both at (1.8%), Bhopal (1.0%), and Kolkata (0.9%). Bidhan Nagar witnessed a fall in housing index by (-1.9%). Howrah and Ranchi witnessed no change in Housing Price Index.

**On Annual basis**, the index has shown an overall increase in 10 cities and only 1 city witnessed a fall in index. The cities exhibiting increase in index are Ranchi (14.6%), Guwahati (12.6%), Patna (10.9%), New Town Kolkata (10.2%), Bhubaneswar (9.5%), Raipur (8.7%), Indore (8.5%), Howrah and Kolkata, both at (6.7%), and Bidhan Nagar (1.0%). Bhopal witnessed a fall in Housing Price Index by (-1.0%).

## 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 11 cities, no change in 5 and fall in 2 cities. Rise in Housing Price Index was witnessed in Gandhinagar (5.8%), Ahmedabad (5.0%), Nagpur and Surat (3.8%), Vadodara (3.7%), Panvel (3.6%), Thane (2.8%), Mira Bhayander (1.9%), Mumbai (1.0%), Kalyan Dombivali and Pune (0.9%). Jaipur, Nashik, Pimpri Chinchwad, Rajkot & Vasai Virar witnessed no change in index. Chakan (-2.0%) and Navi Mumbai (-0.9%) experienced a fall in index.

**On Annual basis**, the index has shown an overall increase in 16 cities and decrease in 2 cities. The cities exhibiting increase in index are Ahmedabad (15.5%), Gandhinagar (14.4%), Panvel (9.5%), Vadodara (8.7%), Nagpur (5.9%), Surat and Mira Bhayander (5.8%), Kalyan Dombivali (5.7%), Jaipur (4.0%), Thane (3.7%), Nashik (2.9%), Pune (2.8%), Vasai Virar (2.0%), Mumbai and Navi Mumbai, both at (1.9%) and Rajkot (1.0%). On the other hand, cities that witnessed a fall in index are Pimpri Chinchwad (-1.9%) and Chakan (-4.8%).

## South Zone

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

**On Quarterly basis**, the index has shown an overall increase in 6 cities, fall in 1 city and no change in 1 cities. Rise in Housing Price Index was witnessed in Hyderabad (4.1%), Kochi (3.8%), Bengaluru (3.8%), Vizag (2.8%), Thiruvananthapuram (2.6%), and Chennai (1.0%). Vijayawada witnessed no change in Housing Price Index whereas, Coimbatore witnessed a fall in index by (-1.7%)

**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 (17.6%), Thiruvananthapuram (13.5%), Coimbatore (11.3%), Bengaluru (9.3%), Kochi & Vizag, both at (6.9%), and Chennai (4.0%). 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 4 cities witnessing a significant decline. Index remained stable in 11 cities and increased in 32 cities.

## Zone Wise movement under HPI@Market Prices for Under Construction Properties during the quarter July-September 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 2 cities, decrease 8 cities and no change in 3 cities. Rise in Housing Price Index was witnessed in Lucknow and Kanpur both by (1.0%). Ghaziabad, Greater Noida and Dehradun witnessed no change





and index fell in Faridabad (3.3%), Bhiwadi (3.0%), Delhi and Noida, both (2.1%) and Gurugram, Chandigarh and Ludhiana and Meerut, all by (-1.0%)

**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 (4.0%), Lucknow (3.0%) and Ludhiana (1.0%). Greater Noida witnessed no change and index fell in Noida (-9.7%), Faridabad (-9.2%), Delhi (-6.9%), Bhiwadi (-5.8%), Gurugram (3.9%), Meerut (-3.0%) and Dehradun and Chandigarh (Tricity), both at (-2.0%) and Ghaziabad (-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 Patna (3.5%), New Town Kolkata (3.0%), Raipur (2.0%), Indore and Bidhan Nagar, 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 2 cities and decrease in 1 city. The 8 cities exhibiting increase in index are Patna (18.0%), Indore (8.7%), Guwahati (6.8%), Bidhan Nagar (Excluding Rajarhat) (6.6%), New Town Kolkata (4.1%), Bhubaneswar (3.9%), Kolkata (3.7%) and Raipur (2.0%). and Howrah (4.0%). Bhopal and Howrah saw a stable index. Index fell in Ranchi (-3.0%)

## 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 8 cities and fall in 2 cities. Rise in Housing Price Index was witnessed in Navi Mumbai (3.7%), and Mira Bhayander, Vasai Virar and Vadodara, all (1.9%), Thane (1.0%) and Jaipur, Gandhinagar and Kalyan Dombivali, all (0.9%). Ahmedabad, Nagpur, Surat, Mumbai, Chakan, Nashik, Rajkot and Panvel experienced a stable index. A decrease in Housing Price Index was evident in Pune and Pimpri Chinchwad (-1.0%).

**On Annual basis**, the index has shown an overall increase in 15 cities, no change in 2 cities and decrease in 1 city. The cities exhibiting increase in index are Navi Mumbai (11.9%), Vadodara (10.2%), Gandhinagar and Nagpur, both (7.7%), Kalyan Dombivali (7.5%), Jaipur (6.9%), Mira Bhayander (6.8%), Vasai Virar (4.0%), Surat (3.0%), Ahmedabad, Mumbai and Thane, all (2.0%) and Chakan, Nashik and Rajkot, all (1.0%). (Navi Mumbai (7.9%), and Vadodara (7.1%) Mira Bhayander (5.9%), Mumbai and Surat (3.0%), , Ahmedabad, Thane, Nashik and Vasai Virar, all at (2.0%), Rajkot (1.9%), Chakan and Pune, all at (1.0%). On the other hand, cities that witnessed a fall in index are Pimpri Chinchwad (-3.0%) The index remained stable in Panvel and Pune.

## 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 1 city and no change in 3 cities. Rise in Housing Price Index was witnessed in Hyderabad (2.6%), Bengaluru and Coimbatore, both (1.0%) and Vizag (0.9%). Thiruvananthapuram, Kochi and Vijayawada witnessed no change in index, while Chennai, (-1.0%) witnessed a fall in Housing Price Index.



**On Annual basis**, the index has shown an overall increase in 4 cities and decrease in 4 cities. The cities exhibiting increase in index are Hyderabad (13.3%), Vizag (5.8%), Bengaluru (2.0%) and Coimbatore, (1.9%), and Chennai and Thiruvananthapuram (-1.0%), Kochi (-3.0%) and Vijayawada (-3.9%) witnessed a fall in indices.

Overall, on quarterly basis, 21 cities witnessed a rise in indices, followed by 16 cities in which the index remained stable. 13 cities witnessed a fall in indices. Highest decrease was seen in cities in north zones. Cities in the South zone did not witness fall in indices.