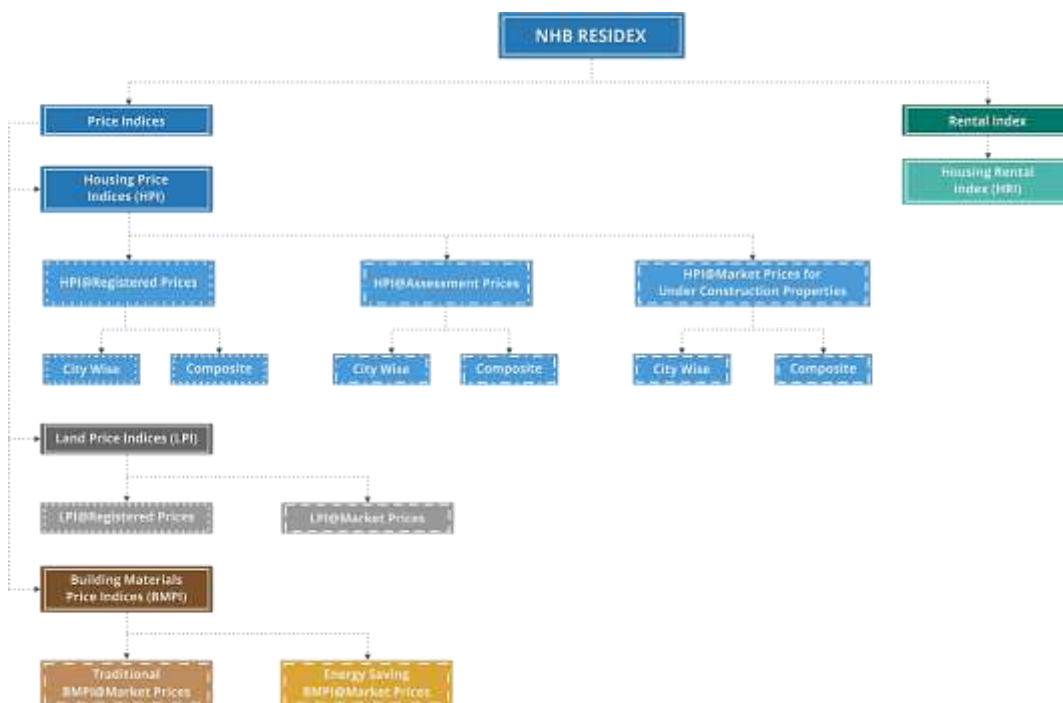




## Introduction to NHB RESIDEX

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 Oct-Dec, 2020

HPI recorded an overall increase in 28 cities, decrease in 19 cities and no change in 3 cities on Y-o-Y basis and increase in 25 cities, decrease in 18 cities and no change in 7 cities on Q-o-Q basis.

Annual growth in HPI ranged from 15.5% in Patna, 12.2 % in Gandhinagar, 11.6 % in Thiruvananthapuram to (-) 10.3% in Noida and (-) 5,8% in Coimbatore at the end of the quarter Dec,2020.

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

Composite HPI@Assessment Prices stood at 83 in June, 2013 and has moved up to 112 in the current quarter i.e. December, 2020. The index has moved up with a CAGR of 3.9 % over the years.

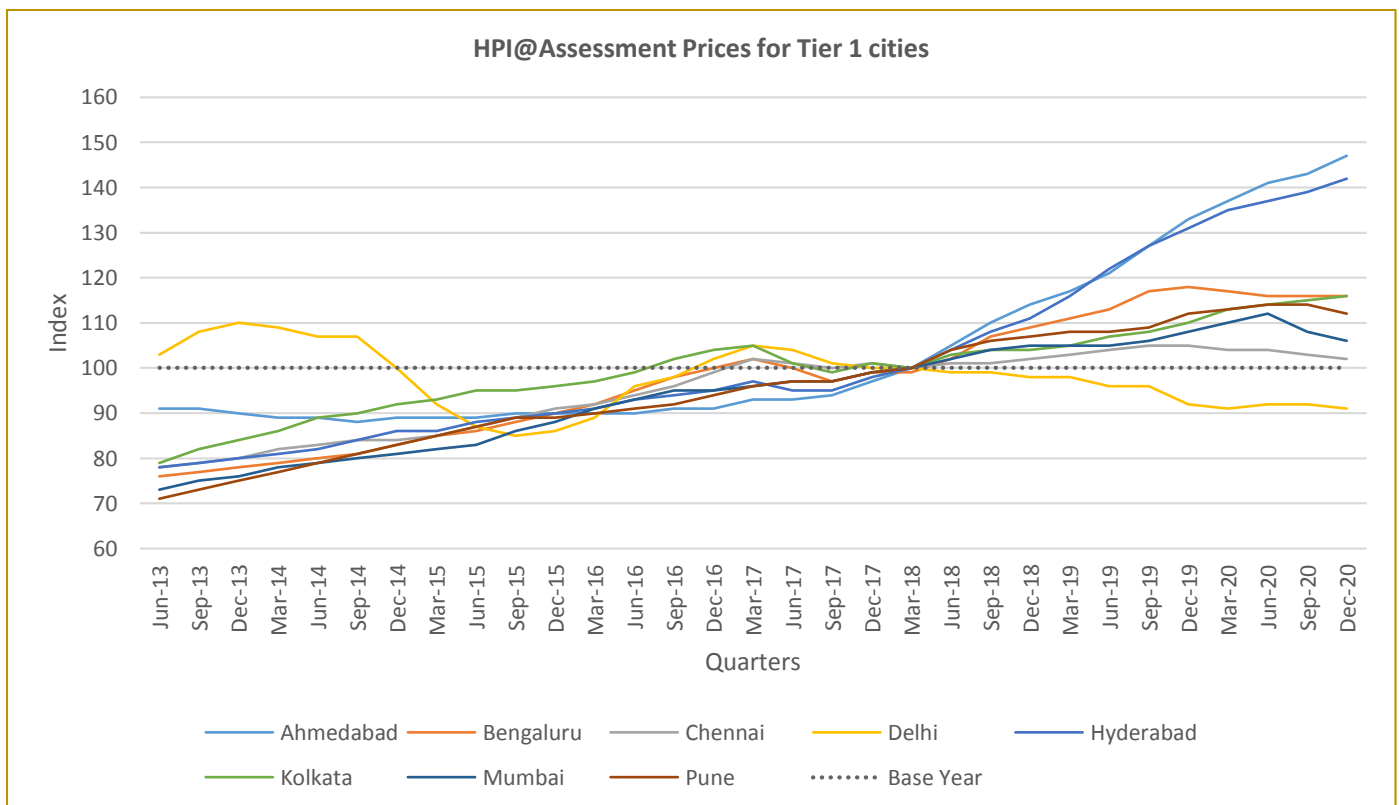
The index increased by 1.8 % on Y-o-Y basis.

#### Tier-wise movement

Among the 8 Tier-1 cities, Ahmedabad witnessed maximum increase at 10.3% on Y-o-Y basis followed by Hyderabad at 8.4%, Kolkata at 5.5%. Chennai witnessed a maximum fall in Index by (-2.9%) followed by Mumbai (-1.9%), Bengaluru (-1.7%), Delhi (-1.1%). Pune witnessed no change in index on Y-o-Y basis.

On Q-o-Q basis, Ahmedabad witnessed maximum rise (2.8%) followed by Hyderabad (2.2%), Kolkata (0.9%) while Mumbai (-1.9%), Pune (-1.8%), Delhi (-1.1%) and Chennai (-1.0%) witnessed a fall in index. Bengaluru witnessed no change in 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 Patna (15.5%), Ludhiana (12.0%) followed by Ludhiana (12.0%), Dehradun (9.4%), Guwahati (8.3%) Kochi and Vizag (8.1%), while fall in indices was seen in Noida (-10.3%), Coimbatore (-5.9%) and Nagpur (-4.5%) on Y-o-Y basis.



On the other hand, on Q-o-Q basis, Thiruvananthapuram maximum increase in index by (3.8%) followed by Dehradun (3.6%), and Vasai Virar (3.0%), while significant fall in index was witnessed in Nagpur (-3.7%), Bhubaneswar (-2.5%), and Rajkot by (-1.9%). Coimbatore, Indore, Ludhiana, Vadodara, 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)

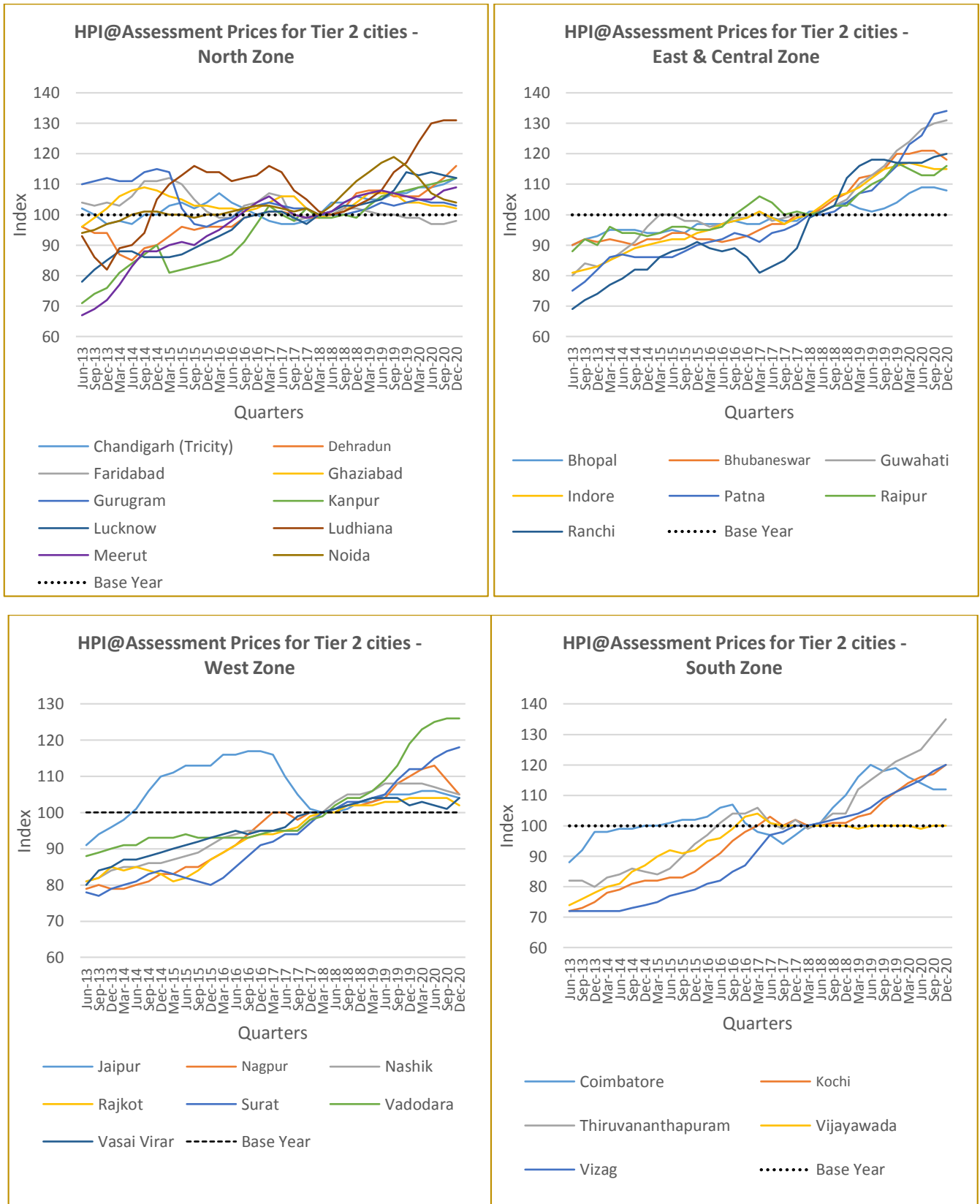
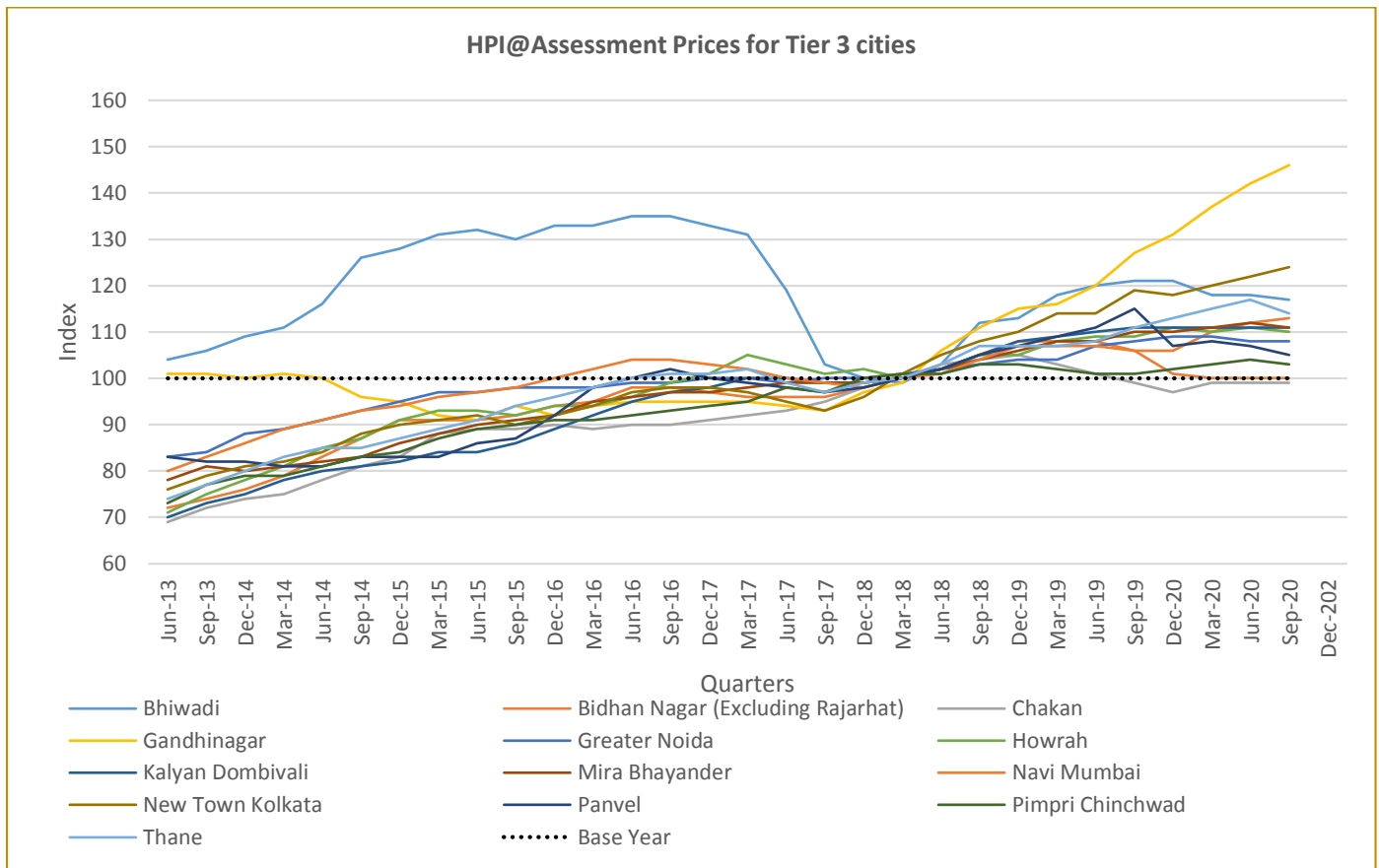




Figure: HPI@Assessment Prices for Tier 3 cities classified as per geographic location (Base Year FY 2017-18 = 100)



On Y-o-Y basis, 10 out of 13 Tier-3 cities showed growth with Gandhinagar (12.2%) in the lead followed by New Town Kolkata (7.6%) and Panvel (6.5%) showed significant increase in indices. Bhiwadi (-4.1%) and Howrah (-2.7%) witnessed drop in indices on Y-o-Y basis.

On Q-o-Q basis Panvel (8.6%) recorded the maximum increase followed by Navi Mumbai (7.0%) while four Tier 3 cities recorded a fall in indices with Howrah (-1.8%) Pimpri Chinchwad (-1.0%), Bhiwadi and Bidhan Nagar (-0.9%) registering the fall in indices. Thane witnessed no change in index.

### HPI@Market Prices for Under Construction Properties during the Oct-Dec, 2020

HPI recorded an overall, increase in 26 cities, decrease in 15 cities and no change in 9 cities on Y-o-Y and increase in 22 cities, decrease in 11 cities and no change in 17 cities on Q-o-Q basis.

Annual growth in HPI ranged from 9.8% in Hyderabad to (-) 6.4% in Jaipur at the end of the quarter December, 2020.

### 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 105 in the current quarter i.e. December, 2020. The index has moved up with a CAGR of 2.8% over the years.

On Y-o-Y basis, the index increased by 1.8%.

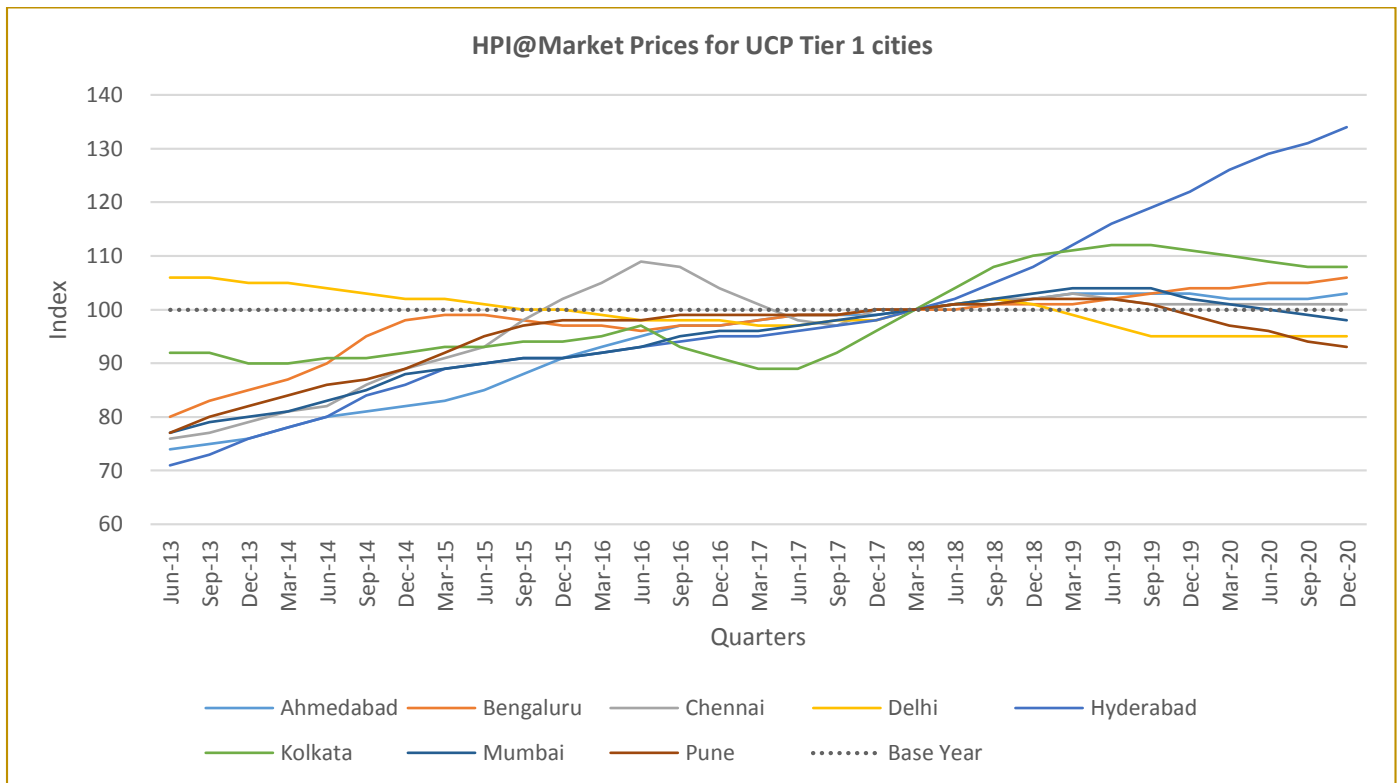
#### Tier-wise movement

Annually, out of 8 Tier-1 cities, the cities that showed growth with Hyderabad (9.8%) leading, followed by Bengaluru (1.9%). Pune, Mumbai and Kolkata witnessed a fall in Index by (-6.1%), (-3.9%) and (-2.7%), respectively. Ahmedabad, Chennai & Delhi witnessed no change in indices.



On quarterly basis, Hyderabad witnessed the maximum increase by (2.3%), followed by Ahmedabad & Bengaluru (1.0%). Chennai, Delhi and Kolkata witnessed no change in index while Pune (-1.1%), and Mumbai (-1.0%) witnessed fall in indices.

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

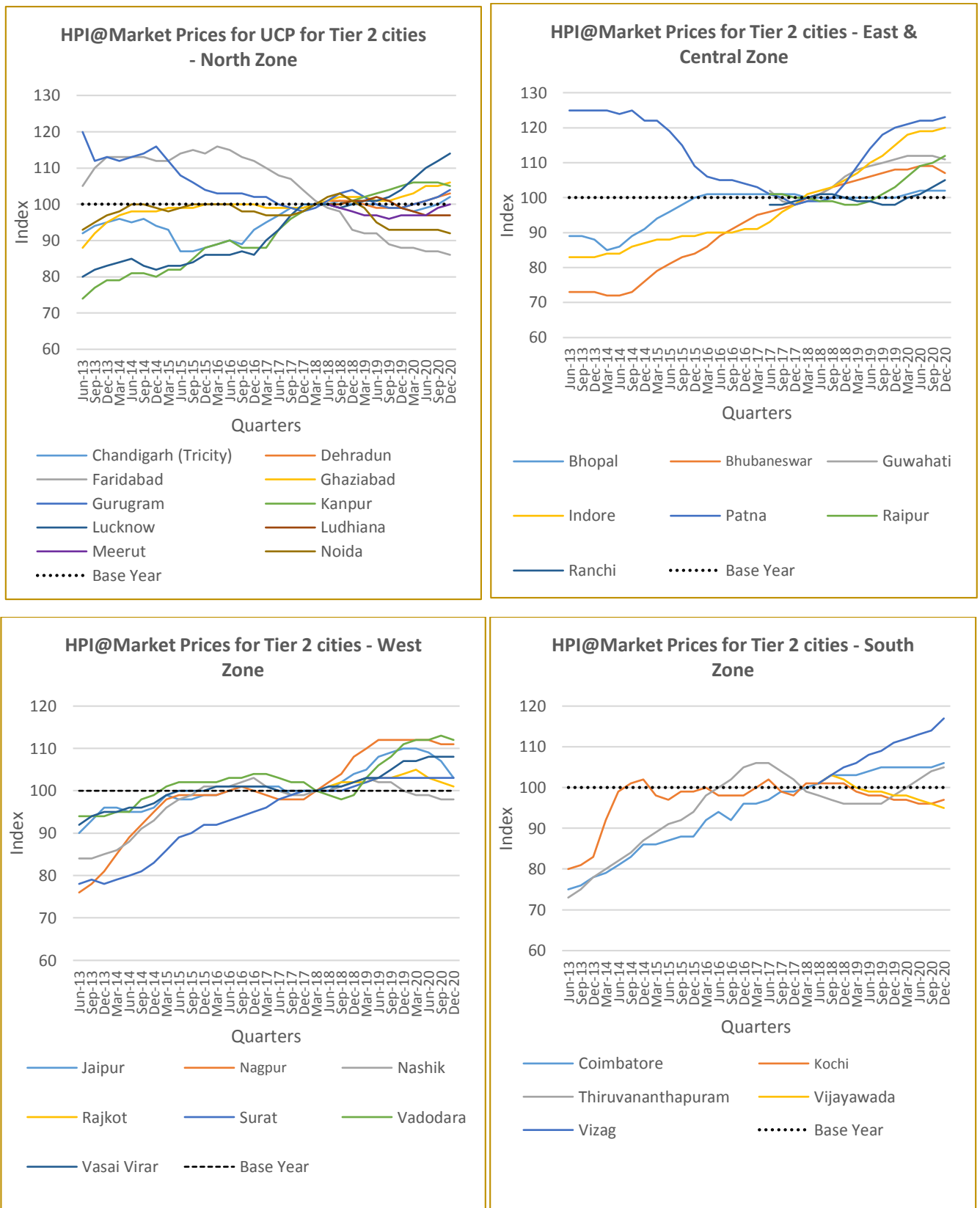


Of the 29 Tier-2 cities being covered, maximum increase in indices was seen in Lucknow (9.6%) followed by Raipur (8.7%), Ranchi & Thiruvananthapuram (7.1%), while maximum decrease in indices was seen in Jaipur (-6.4%), Vijayawada (-3.1%) on Y-o-Y basis. Guwahati, Kanpur, Kochi & Surat witnessed no change in indices.

On Q-o-Q basis, maximum increase in indices was seen in Vizag (2.0%) followed by Chandigarh & Gurugram (2.0%), Ranchi (1.9%). Maximum decline was witnessed in Jaipur (-3.7%), Bhubaneswar (-1.8%). Whereas, no change was seen in cities like, Bhopal, Ludhiana, Nagpur, Nashik, Surat & Vasai Virar.



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

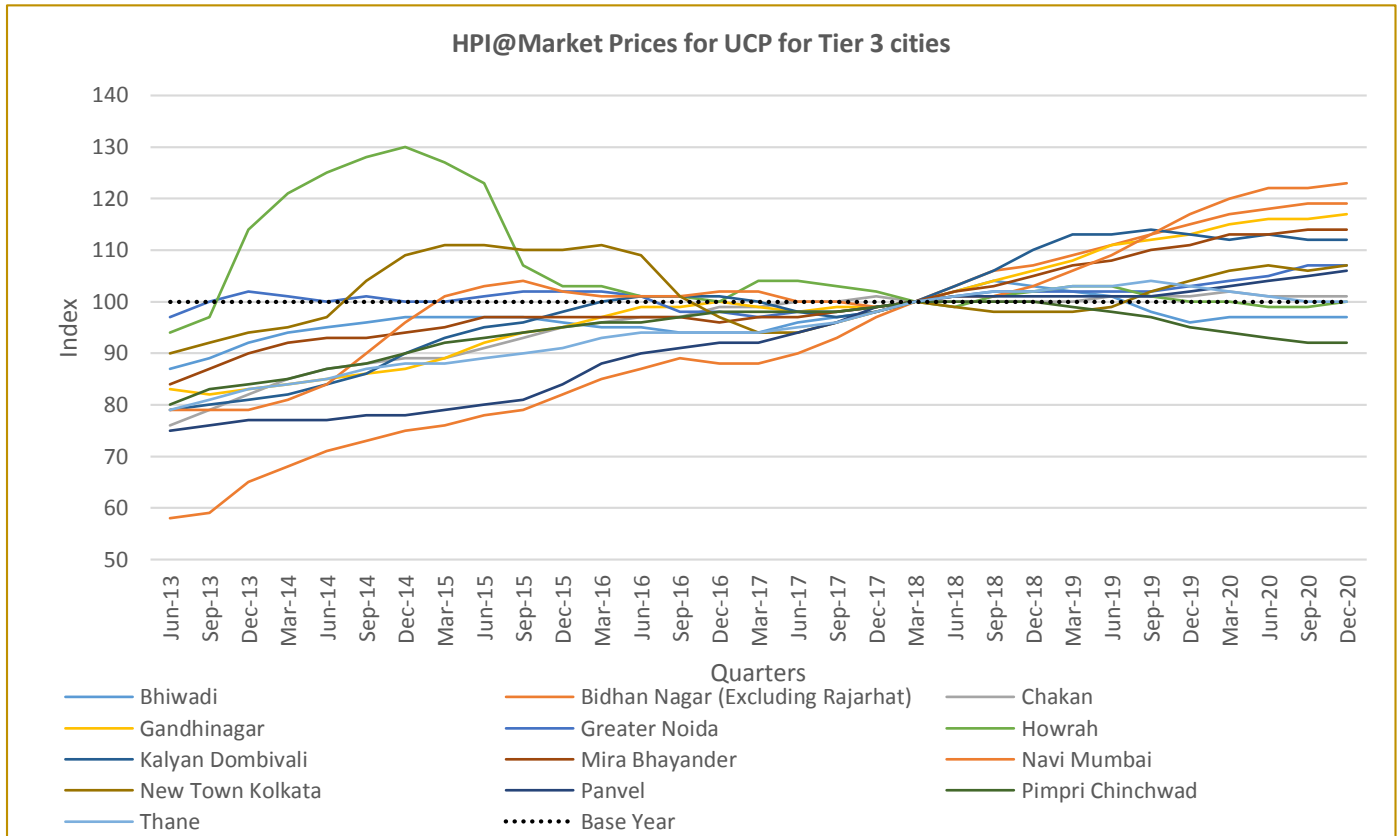


Among the 13 Tier-3 cities, the variations ranged from 5.1% in Navi Mumbai, 3.9% in Panvel & Greater Noida, to (-) 3.2% in Pimpri Chinchwad on Y-o-Y basis



On Q-o-Q basis, maximum increase in indices was seen in Panvel & Howrah (1.0%) followed by Gandhinagar & New Town Kolkata (0.9%). No changes were seen in cities Bhiwadi, Bidhan Nagar, Chakan, Greater Noida, Kalyan Dombivali, Mira Bhayandar, Pimpri Chinchwad and Thane.

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, 2020

#### 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 6 cities, decline in 6 cities and no change in 1 city. Rise in Housing Price Index was witnessed in Dehradun (3.6%) followed by Greater Noida (2.8%), Chandigarh (1.8%), Faridabad (1.0%), Kanpur & Meerut (0.9%). Fall in House Price Index was witnessed in Delhi (-1.1%), Ghaziabad, Gurugram & Noida (-1.0%), Bhiwadi & Lucknow (-0.9%). Index remained stable in Ludhiana.

**On Annual basis**, the index has shown increase in 6 cities and decrease in 7 cities. Rise in Housing Price Index was witnessed in Ludhiana (12.0%), Dehradun (9.4%), Chandigarh (4.7%), Kanpur (3.7%), Meerut (2.8%), and Greater Noida (1.8%). Noida (-10.3%), Bhiwadi (-4.1%), Ghaziabad (-1.9%), Lucknow (-1.8%), Delhi (-1.1%), Gurugram & Faridabad (-1.0%) 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 6 cities and decline in 4 cities and no change in 1 city. Rise in House Price Index was witnessed in Raipur (2.7%), New Town Kolkata (2.4%), Kolkata (0.9%) Guwahati Patna & Ranchi (0.8%). Fall in House Price Index was witnessed in Bhubaneswar (-2.5%), Bidhan Nagar (-1.8%), Bhopal & Howrah (-0.9%). Index remained stable in Indore.

**On Annual basis**, the index has shown an overall increase in 7 cities, and decline in 4 cities. The cities exhibiting increase in index are Patna (15.5%), Guwahati (8.3%), New Town Kolkata (7.6%), Bidhan Nagar (5.7%), Kolkata (5.5%), Bhopal (3.8%), and Ranchi (2.6%). Fall in House Price Index was witnessed in Howrah (-2.7%), Bhubaneswar (-1.7%), Indore & Raipur (-0.9%).

## 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 9 cities, no change in 2 and fall in 7 cities. Rise in Housing Price Index was witnessed in Panvel (8.6%), Navi Mumbai (7.0%), Mira Bhayander (3.6%), Vasai Virar (3.0%), Ahmedabad (2.0%), Chakan (2.0%), Kalyan Dombivali (1.8%), Surat (0.9%) and Gandhinagar (0.7%). Thane and Vadodara witnessed no change in index. Nagpur (-3.7%), Mumbai & Rajkot (-1.9%), Pune (-1.8%), Pimpri Chinchwad & Jaipur both at (-1.0%), Nashik (-0.9%) experienced a fall in index.

**On Annual basis**, the index has shown an overall increase in 11 cities, decrease in 5 cities and no change in index in 2 cities. The cities exhibiting increase in index are Gandhinagar (12.2%), Ahmedabad (10.5%), Panvel (6.5%), Navi Mumbai & Vadodara (5.9%), Surat (5.4%), Mira Bhayander (4.5%), Chakan (4.1%), Vasai Virar (2.0%), Kalyan Dombivali (1.8%) and Thane (0.9%). On the other hand, cities that witnessed a fall in index are Nagpur (-4.5%), Nashik (-2.8%), Mumbai & Rajkot (-1.9%) and Jaipur (-1.0%). Pimpri Chinchwad & Pune 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 4 cities, decline in 1 city and no change in 3 cities. Rise in Housing Price Index was witnessed in Thiruvananthapuram (3.8%), Kochi (2.6%), Hyderabad (2.2%), and Vizag (1.7%). Bengaluru, Coimbatore & Vijayawada witnessed no change in Housing Price Index. Chennai (-1.0%) witnessed a fall in indices.

**On Annual basis**, the index has shown an overall increase in 4 cities, decline in 3 cities and no change in 1 city. The cities exhibiting increase in index are Thiruvananthapuram (11.6%), Hyderabad (8.4%), Kochi & Vizag (8.1%). Coimbatore (-5.9%), Chennai (-2.9%), and Bengaluru (-1.7%) witnessed fall in indices. Vijayawada witnessed no change in index.

## Zone Wise movement under HPI@Market Prices for Under Construction Properties during the quarter Oct-Dec, 2020

### 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 6 cities, decline in 4 cities and no change in 4 cities. Rise in Housing Price Index was witnessed in Chandigarh & Gurugram (2.0%) followed by Lucknow (1.8%), Dehradun, Ghaziabad & Meerut all by (1.0%). Bhiwadi, Delhi, Ludhiana and Greater Noida witnessed no change in index. Index fell in Faridabad & Noida (-1.1%) and Kanpur (-0.9%).





**On Annual basis**, the index has shown an overall increase in 8 cities, decrease in 3 cities and no change in 2 cities. Rise in index was witnessed in Lucknow (9.6%), Gurugram (5.1%), Dehradun (4.0%), Ghaziabad & Greater Noida (3.9%), Meerut (3.1%), Chandigarh (3.0%), and Bhiwadi (1.0%). Faridabad (-2.3%), Ludhiana (-2.0%) and Noida (-1.1%) witnessed fall in indices. Index remained stable in Delhi & Kanpur.

### 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 6 cities, decrease in 2 cities and witnessed no change in 3 cities. Rise in Housing Price Index was witnessed in Ranchi (1.9%), Raipur (1.8%), Howrah (1.0%), New Town Kolkata (0.9%), Indore & Patna (0.8%). Index fell in Bhubaneswar (-1.8%) and Guwahati (-0.9%). Bhopal, Bidhan Nagar & Kolkata experienced a stability in Index.

**On Annual basis**, the index has shown an overall increase in 7 cities, decrease in 2 cities and no change in 2 cities. The 9 cities exhibiting increase in index are Raipur (8.7%), Ranchi (7.1%), Indore (4.3%), Bidhan Nagar (3.5%), New Town Kolkata (2.9%), Patna (2.5%), and Bhopal (2.0%). Bhubaneswar (1.9%) and Guwahati (1.8%). Index fell in Kolkata (-2.7%) and Bhubaneswar (-0.9%). Guwahati & Howrah experienced a stability in Index.

### 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 4 cities, no change in 9 cities and fall in 5 cities. Rise in Housing Price Index was witnessed in Ahmedabad & Panvel (1.0%), Gandhinagar (0.9%), and Navi Mumbai (0.8%). Chakan, Kalyan Dombivali, Mira Bhayandar, Nagpur, Nashik, Pimpri Chinchwad, Surat, Thane & Vasai Virar experienced a stability index. A decrease in Housing Price Index was evident in Jaipur (-3.7%), Pune (-1.1%), Mumbai & Rajkot (-1.0%), Vadodara (-0.9%).

**On Annual basis**, the index has shown an overall increase in 6 cities, decrease in 9 cities and no change in 3 cities. The cities exhibiting increase in index are Navi Mumbai (5.1%), Panvel (3.9%), Gandhinagar (3.5%), Mira Bhayander (2.7%), Vadodara & Vasai Virar (0.9%), On the other hand, cities that witnessed a fall in index are Jaipur (-6.4%), Pune (-6.1%), Mumbai (-3.9%), Pimpri Chinchwad (-3.2%), Rajkot & Thane (-2.9%), Nashik (-2.0%), Kalyan Dombivali & Nagpur (-0.9%). Ahmedabad, Chakan & Surat experienced a stability 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, decrease in 1 city and no change in 1 city. Rise in Housing Price Index was witnessed in Vizag (2.6%), Hyderabad (2.3%), Bengaluru, Coimbatore, Kochi & Thiruvananthapuram (1.0%). Bengaluru, Chennai witnessed no change in index, while Vijayawada (-1.0%) witnessed a fall in Housing Price Index.

**On Annual basis**, the index has shown an overall increase in 5 cities, decrease in 1 city and no change in 2 cities. The cities exhibiting increase in index are Hyderabad (9.8%), Thiruvananthapuram (7.1%), Vizag (5.4%), Bengaluru (1.9%) and Coimbatore (1.0%). Vijayawada (-3.1%) witnessed a fall in index. Chennai and Kochi witnessed no change in indices.