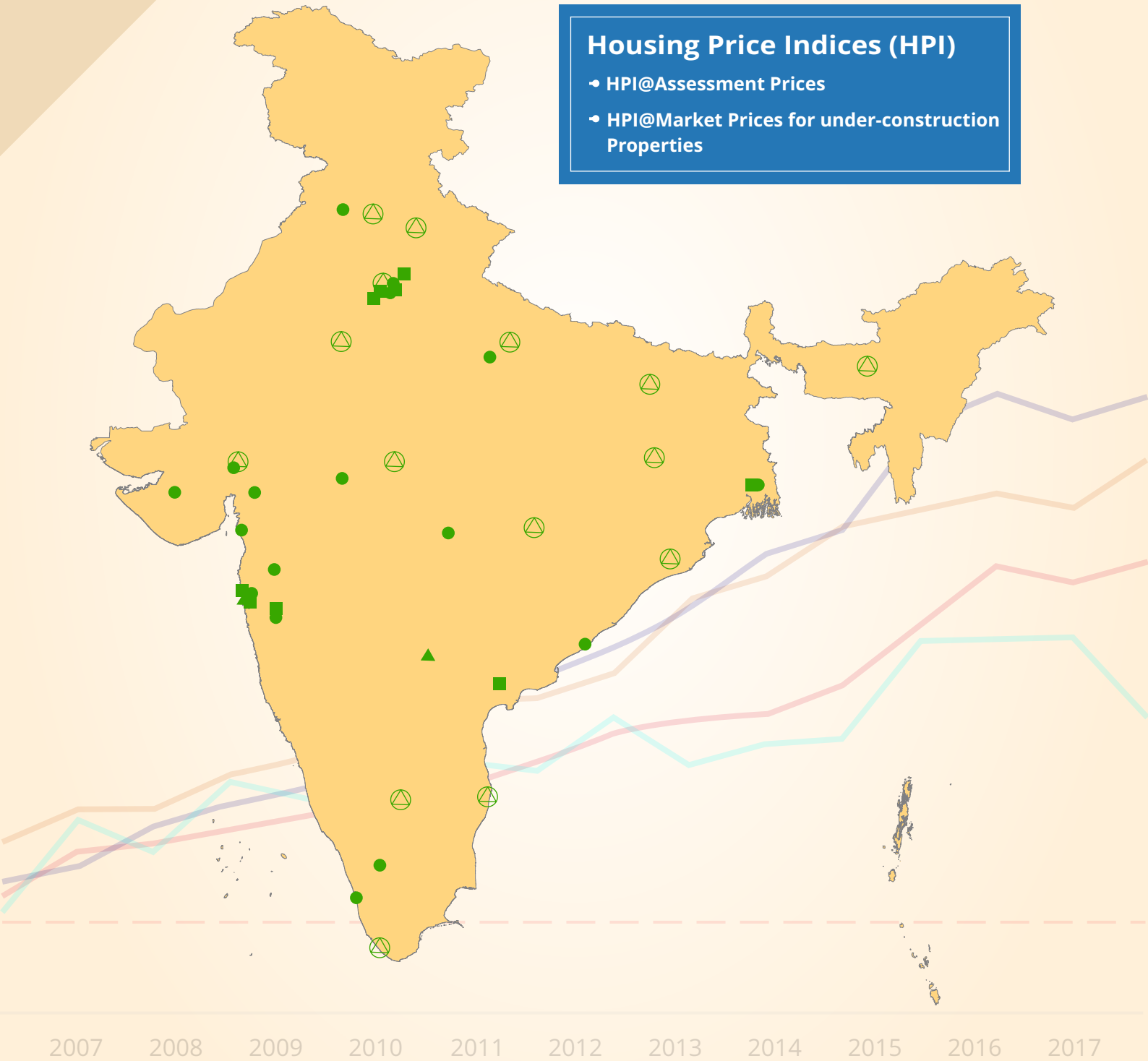


## Housing Price Indices (HPI)

- HPI@Assessment Prices
- HPI@Market Prices for under-construction Properties





## NHB RESIDEX

### TECHNICAL ADVISORY COMMITTEE MEMBERS

#### Government of India

1. Ministry of Finance – Shri Arun Kumar, Adviser, Economic Division, Department of Economic Affairs
2. Ministry of Housing & Urban Affairs - Shri Anupam Mishra, Economic Advisor (Housing)
3. Ministry of Statistics & Programme Implementation – Shri D.K.Sinha, Deputy Director General, Price Statistics Division, Central Statistics Office
4. Ministry of Statistics & Programme Implementation - Shri Vivek Srivastava, Deputy Director, National Accounts Division, Central Statistics Office

#### Reserve Bank of India

5. Shri. Anujit Mitra, Adviser, Department of Statistics and Information Management (DSIM)

#### Experts

6. Smt. Balbir Kaur, Ex-Adviser, Department of Economic and Policy Research, Reserve Bank of India
7. Dr. Bimal Roy, Professor, Indian Statistical Institute, Kolkata
8. Dr. Deepayan Sarkar, Professor, Indian Statistical Institute, New Delhi
9. Dr. Neeraj Hatekar, Professor, Department of Economics, Mumbai University

#### National Housing Bank

10. Shri S.K.Hota, Managing Director, NHB
11. Dr. A.K. Tripathi, Executive Director
12. Shri K. Chakravarthy, General Manager

#### Financial Institutions

13. Shri Sanjeev Naryani, Chief General Manager, REHBU, State Bank of India
14. Shri Sanjay Joshi, General Manager, HDFC Limited

#### Industry Institutions

15. Brig. (Retd.) R.R. Singh, Director General, NAREDCO, Industry Association

#### NHB RESIDEX TEAM

Shri. Vishal Goyal, Deputy General Manager (Email: [vishal.goyal@nhb.org.in](mailto:vishal.goyal@nhb.org.in))

Shri. Niladri Bose, Regional Manager (Email: [niladri.bose@nhb.org.in](mailto:niladri.bose@nhb.org.in))

#### SUPPORT AGENCY

##### Liases Foras Real Estate Rating & Research Private Limited

Shri Pankaj Kapoor, Founder & Managing Director (Email: [pankaj@liasesforas.com](mailto:pankaj@liasesforas.com))

Ms. Tanvi Goyal, Head Client Engagement (Email: [tanvi@liasesforas.com](mailto:tanvi@liasesforas.com))

For more details visit us on <https://residex.nhbonline.org.in/>

#### DISCLAIMER

National Housing Bank ("NHB"), which has been established under the National Housing Bank Act, 1987, has made its best effort to collect/collate the data/information from various Banks, HFCs for providing a cluster of housing related indices under NHB RESIDEX. The views and opinions expressed in the NHB RESIDEX are those of NHB and do not necessarily reflect its official policy or position of any other agency, organization, employer, or company. Assumptions made in the analysis are not reflective of the position of NHB or any other entity. These views are subject to change, revision, rethinking at any time and NHB do not hold them in perpetuity. The primary purpose of the NHB RESIDEX is to educate and inform and do not constitute either professional or investment advice or any service. NHB assumes no responsibility or liability for any omissions or any errors in the content of the NHB RESIDEX. The information contained is provided on an "AS-IS" basis with no guarantee of completeness, accuracy, usefulness or timeliness and without any warranties of any kind whatsoever, express or implied. NHB does not warrant any information or material printed in NHB RESIDEX.

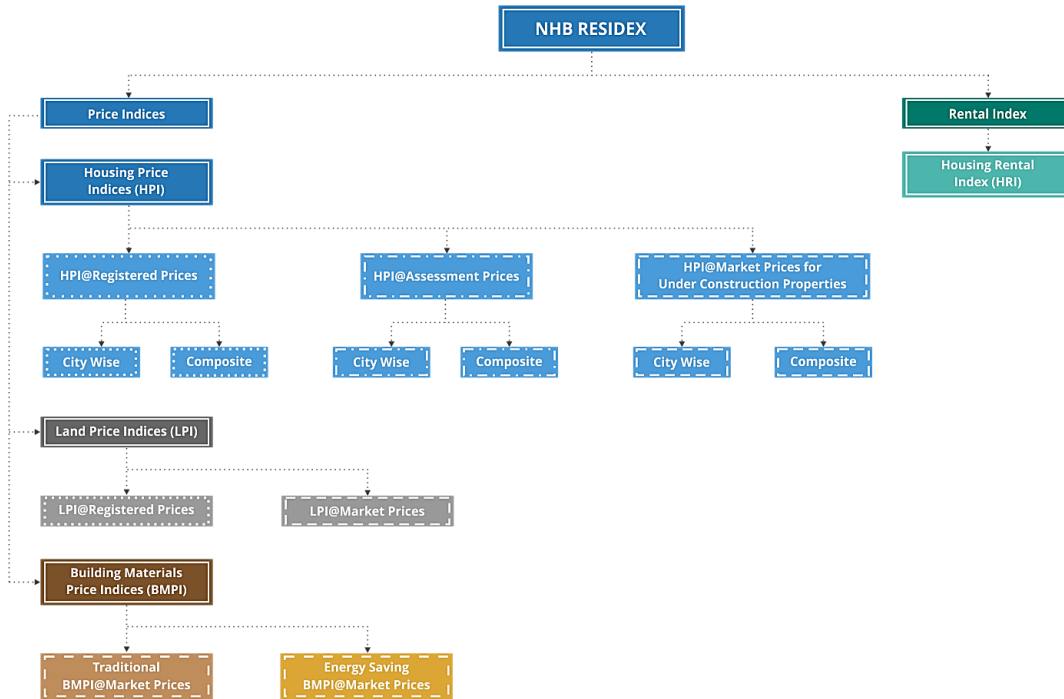
NHB assumes NO RESPONSIBILITY OR LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES and assumes no responsibility or liability, for any loss or damage suffered by any person as a result of the use, misuse or reliance of any of the information or content in NHB RESIDEX/this website.

NHB RESIDEX and NHB RESIDEX logo are registered trademarks of NHB. No part of this publication may be reproduced, stored in a retrieval system or transferred in any form or by any means, mechanical, electronic, photo-copying, recording or otherwise without the prior written permission of the publisher."



## 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, 2018

HPI recorded an overall increase in 44 cities, decrease in 4 cities and no change in 2 cities on Y-o-Y basis and increase in 32 cities, decrease in 1 city and no change in 17 cities on Q-o-Q basis.

Annual growth in HPI ranged from 25.8% in Ranchi to (-) 2.9% in Kanpur at the end of the quarter, whereas, the quarterly growth in HPI ranged from 8.7% in Ranchi to (-) 1.0% in Kanpur.

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

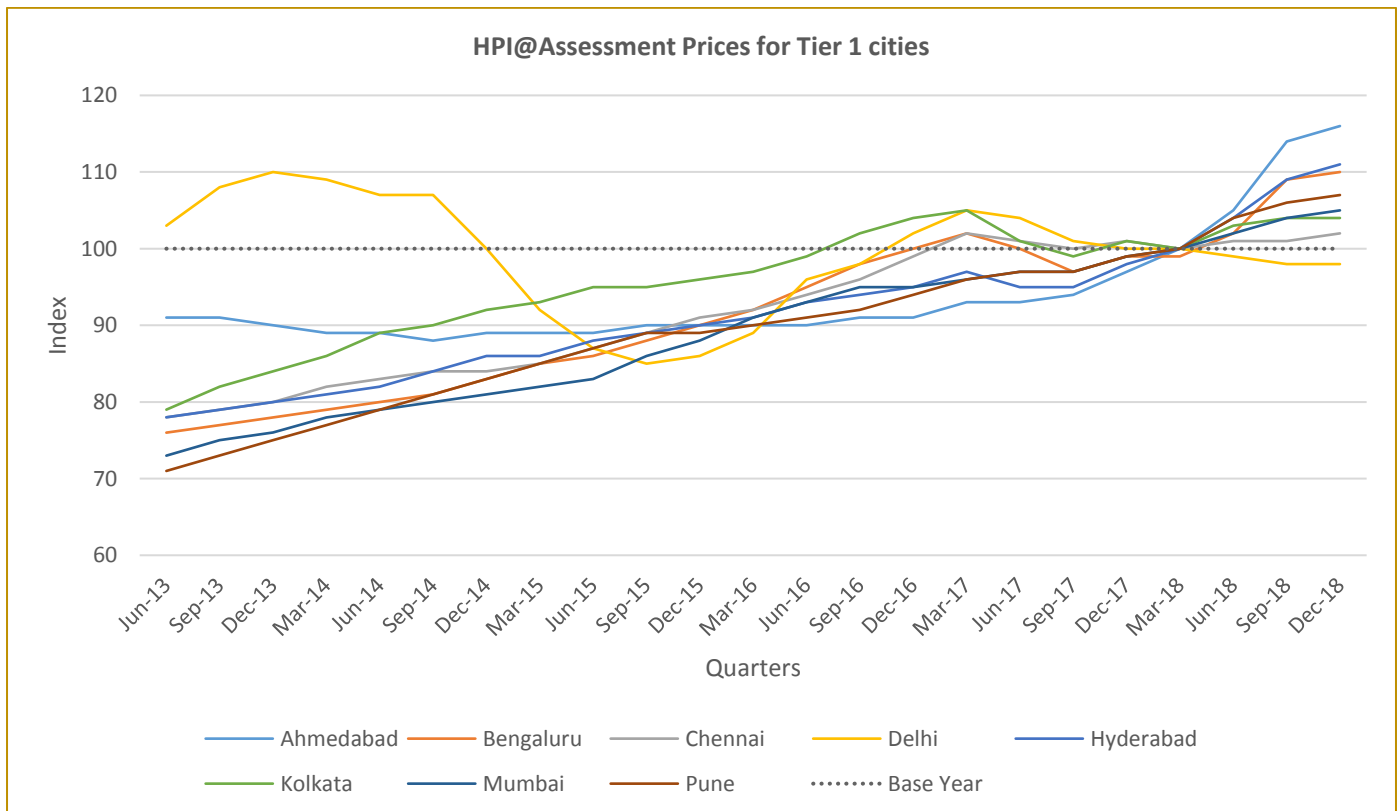
Composite HPI@Assessment Prices stood at 83 in June, 2013 and has moved up to 105 in the current quarter i.e. December, 2018. The index has moved up with a CAGR of 4.2% over the years.

The index increased by 6.1% on YoY basis.

### Tier-wise movement

Among the **8 Tier-1** cities, Ahmedabad witnessed maximum increase at 19.6% on Y-o-Y basis followed by Hyderabad at 13.3%, Bengaluru at 11.1%, Pune at 8.1%, Mumbai at 6.1%, Kolkata at 3.0% and Chennai at 1.0%. Delhi witnessed a fall in index by (-) 2.0%. On Q-o-Q basis, Ahmedabad and Hyderabad both witnessed maximum rise at 1.8% followed by Chennai and Mumbai at 1.0%, Pune and Bengaluru at 0.9%. Delhi and Kolkata witnessed no change.

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



Of the **29 Tier-2** cities being covered, significant rise in indices was seen in Ranchi (25.8%) followed by Coimbatore (13.4%), Noida (8.8%) and Chandigarh (8.2%), while significant fall in indices was seen in Kanpur (-2.9%) and Ludhiana (-1.9%) on Y-o-Y basis



On the other hand, on Q-o-Q basis, Ranchi (8.7%) witnessed maximum increase in indices.

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

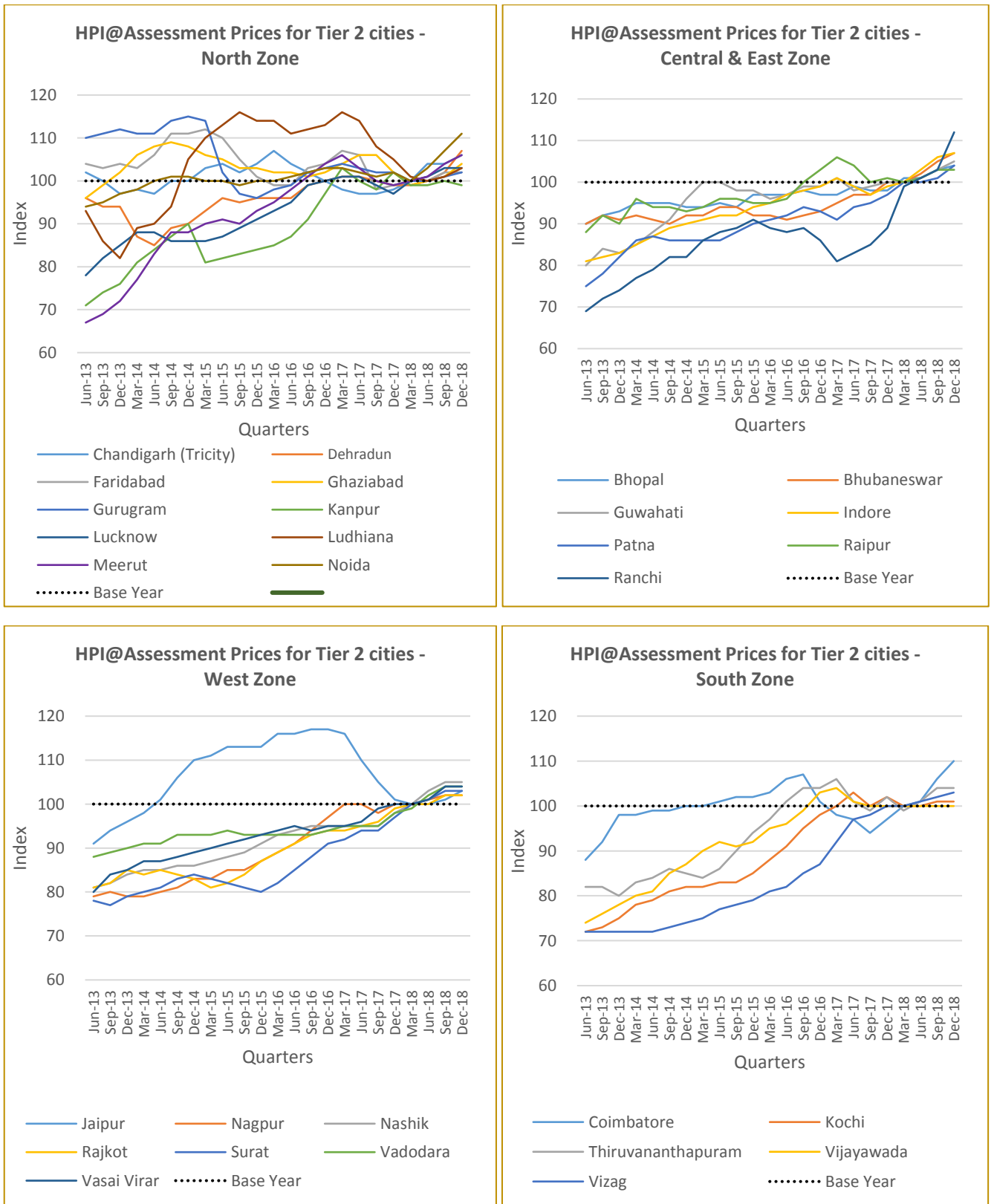
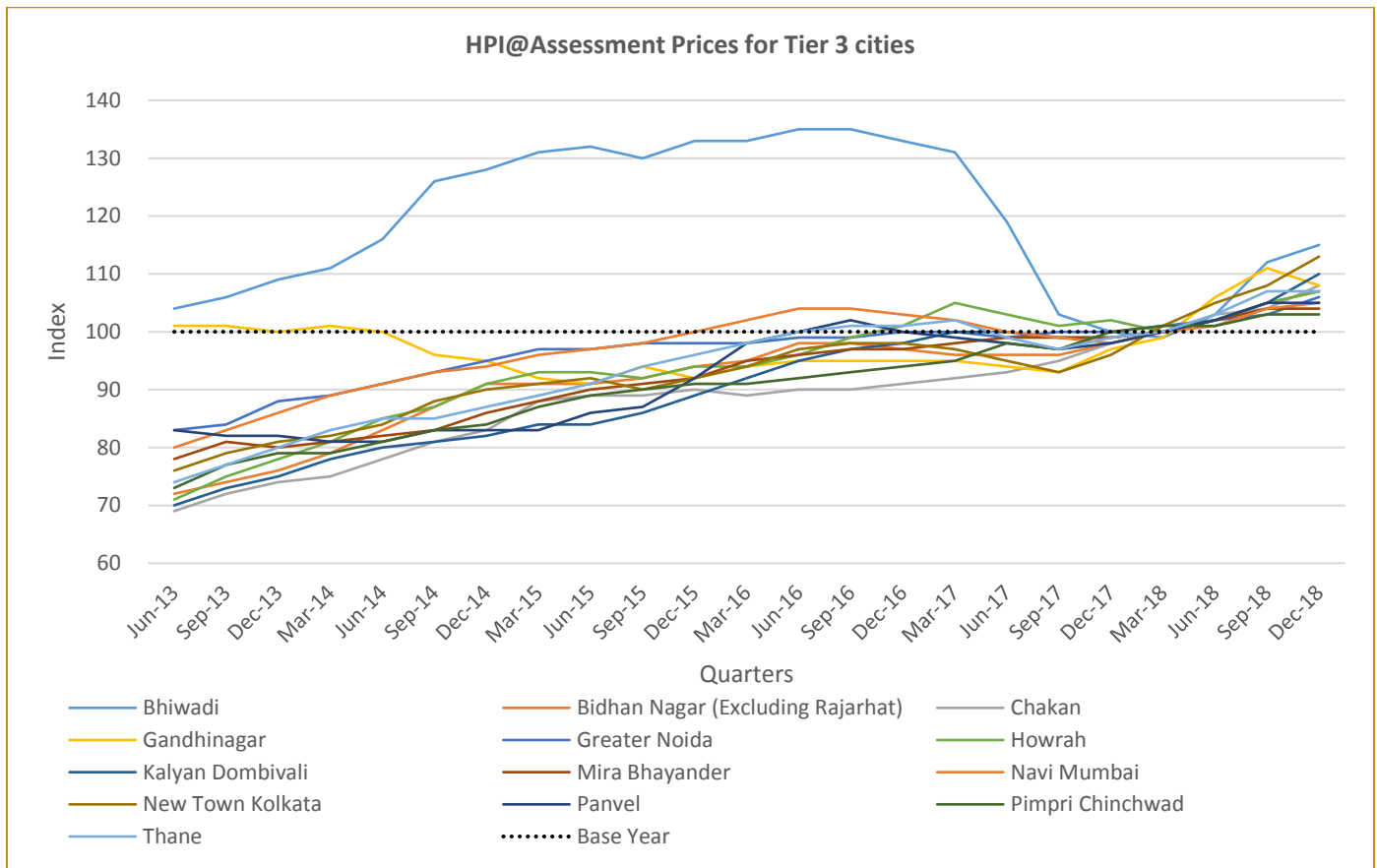




Figure: HPI@Assessment Prices for Tier 3 cities classified as per geographic location (Base Year FY 2017-18 = 100)



On Y-o-Y basis, all Tier 3 cities showed growth with Gandhinagar (18.6%) in the lead followed by New town Kolkata (14.6%) and Bhiwadi (13.0%) showing significant increase in indices. On Q-o-Q basis, Gandhinagar (3.6%) recorded the maximum increase while no Tier 3 city recorded a fall in indices.

### HPI@Market Prices for Under Construction Properties during the quarter October-December, 2018

HPI recorded an overall, increase in 42 cities, decrease in 5 cities and no change in 3 cities on Y-o-Y and increase in 30 cities, decrease in 6 cities and no change in 14 cities on Q-o-Q basis.

Annual growth in HPI ranged from 14.6% in Kolkata to (-) 10.6% in Faridabad at the end of the quarter, whereas, the quarterly growth in HPI ranged from 4% in Patna to (-) 5.1% in Faridabad.

### 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 103 in the current quarter i.e. December, 2018. The index has moved up with a CAGR of 3.4% over the years.

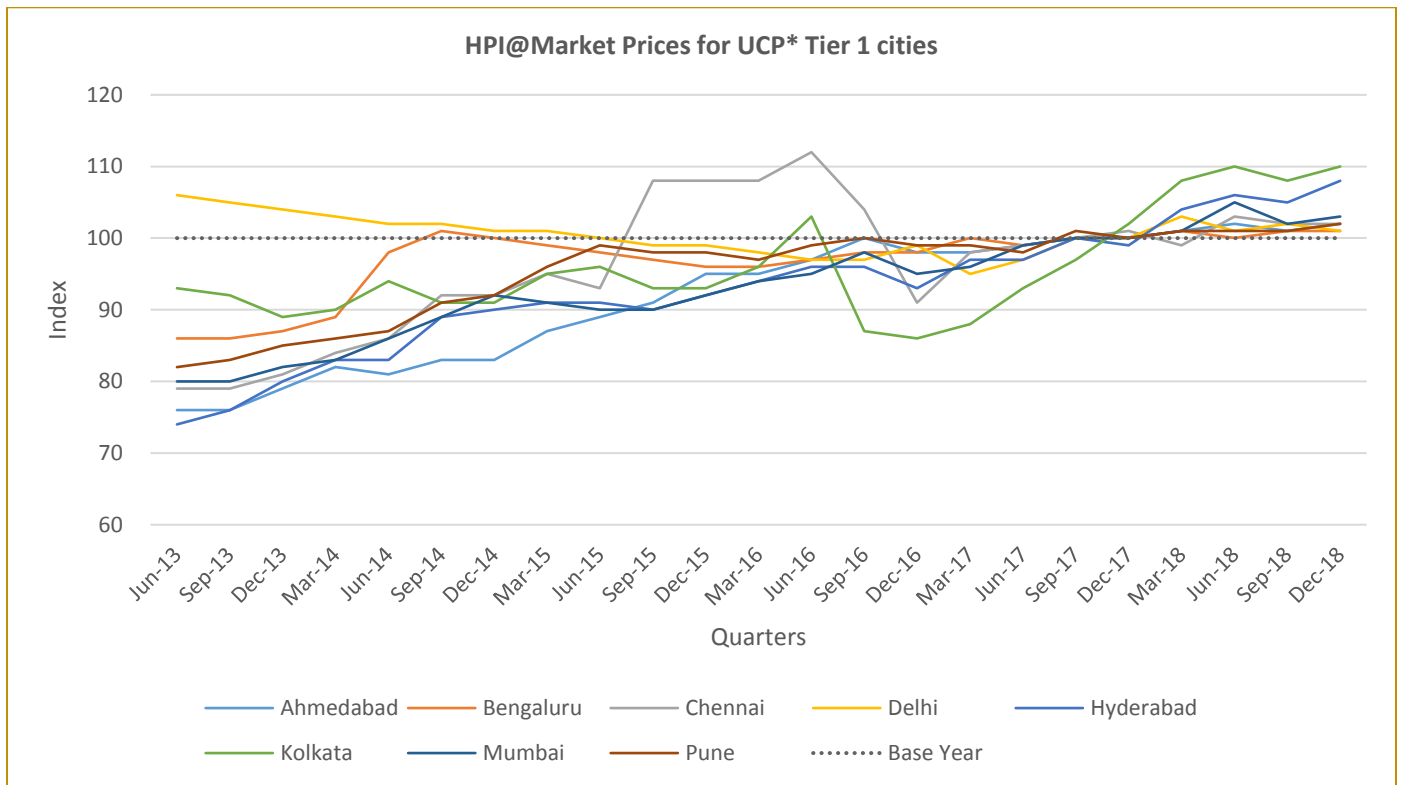
On YoY basis, the index has witnessed a rise of 4.0%.

### Tier-wise movement

Annually, all the 8 Tier 1 cities showed growth with Kolkata (14.6%) leading, followed by Hyderabad (10.2%), Mumbai (4.0%), Delhi (3.1%), Ahmedabad (3.0%), Chennai and Pune (2%), and Bengaluru at 1.0%. On quarterly basis, Bengaluru and Chennai witnessed no change. Among cities witnessing rise, Hyderabad (2.9%) is leading, followed by Kolkata (1.9%), Mumbai, and Ahmedabad stood at 1.0% while Delhi witnessed a fall of (-1%).

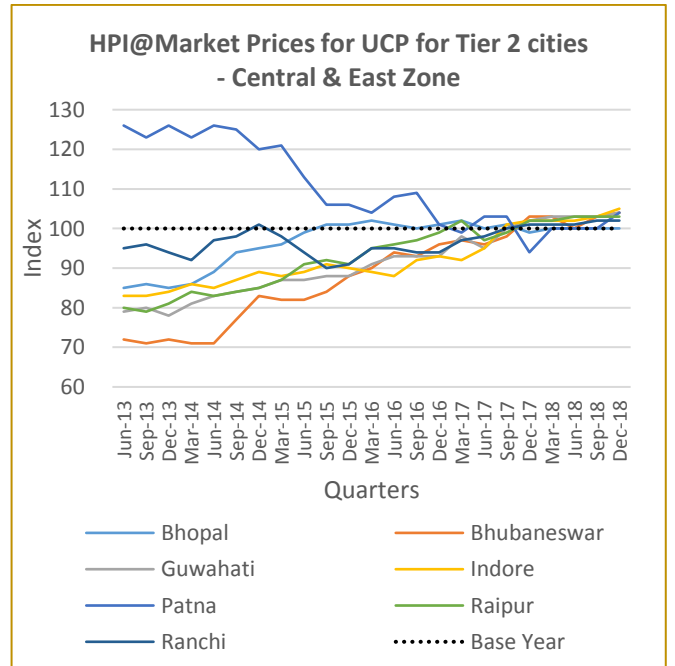
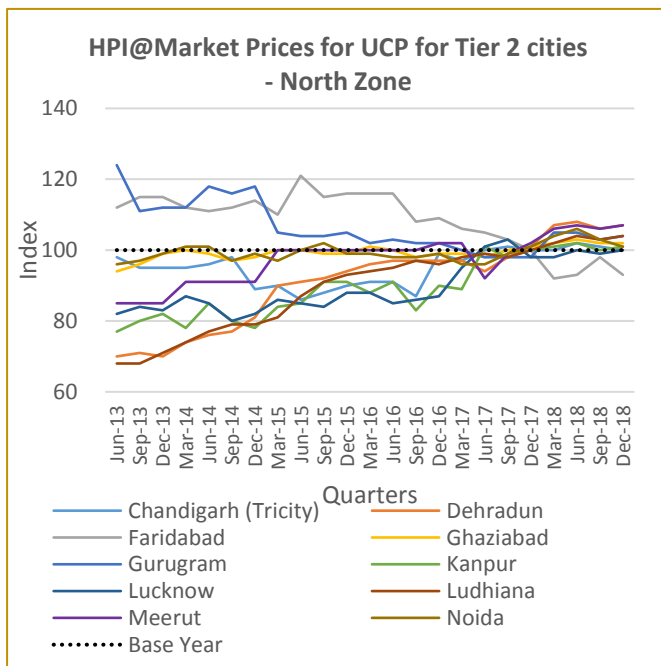


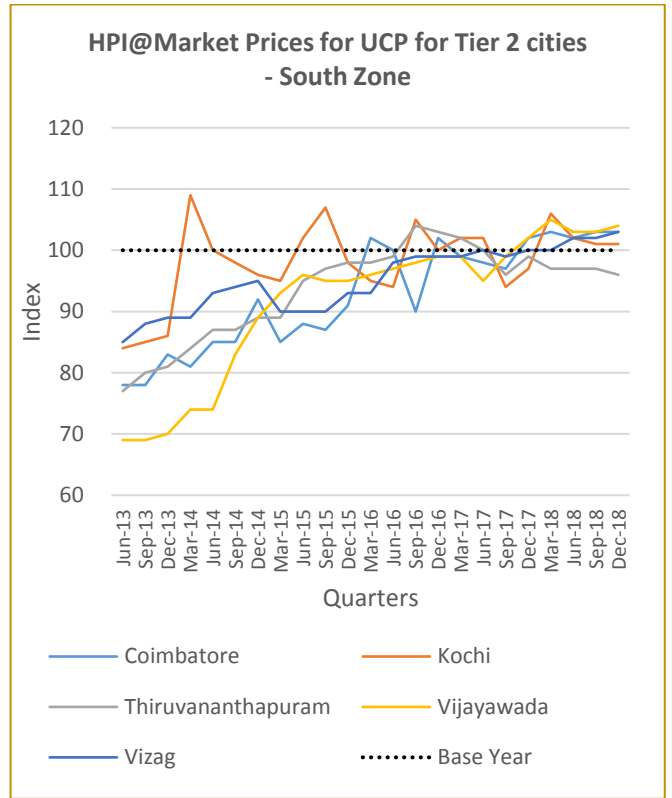
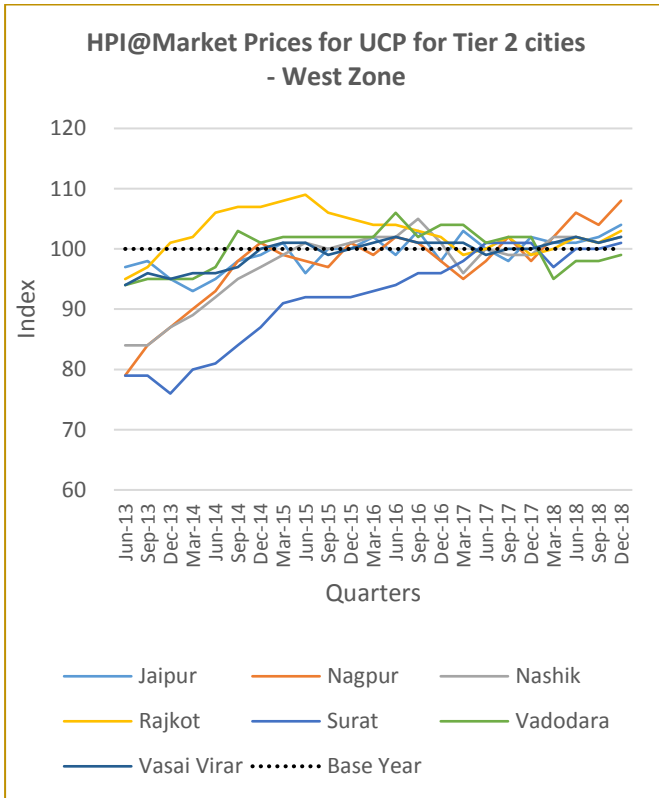
Figure: HPI@Market Prices for Under Construction Properties for Tier-1 cities (Base Year FY 2017-18 = 100)



Of the **29 Tier-2** cities being covered, maximum increase in indices was seen in Nagpur (10.2%) followed by Dehradun (9.2%) and Meerut (8.1%) Indore (7.1%), while maximum decrease in indices was seen in Faridabad (-10.6%), Thiruvananthapuram (-5.9%) and Vadodara (-2.9%), on Y-o-Y basis. On Q-o-Q basis, maximum increase in indices was seen in Patna (4.0%), Nagpur (3.8%), Rajkot and Jaipur, both at (2%), while Faridabad maximum decrease at (-5.1) % followed by Noida (-1.9%), Thiruvananthapuram, Chandigarh and Bhiwadi, all at (-1%).

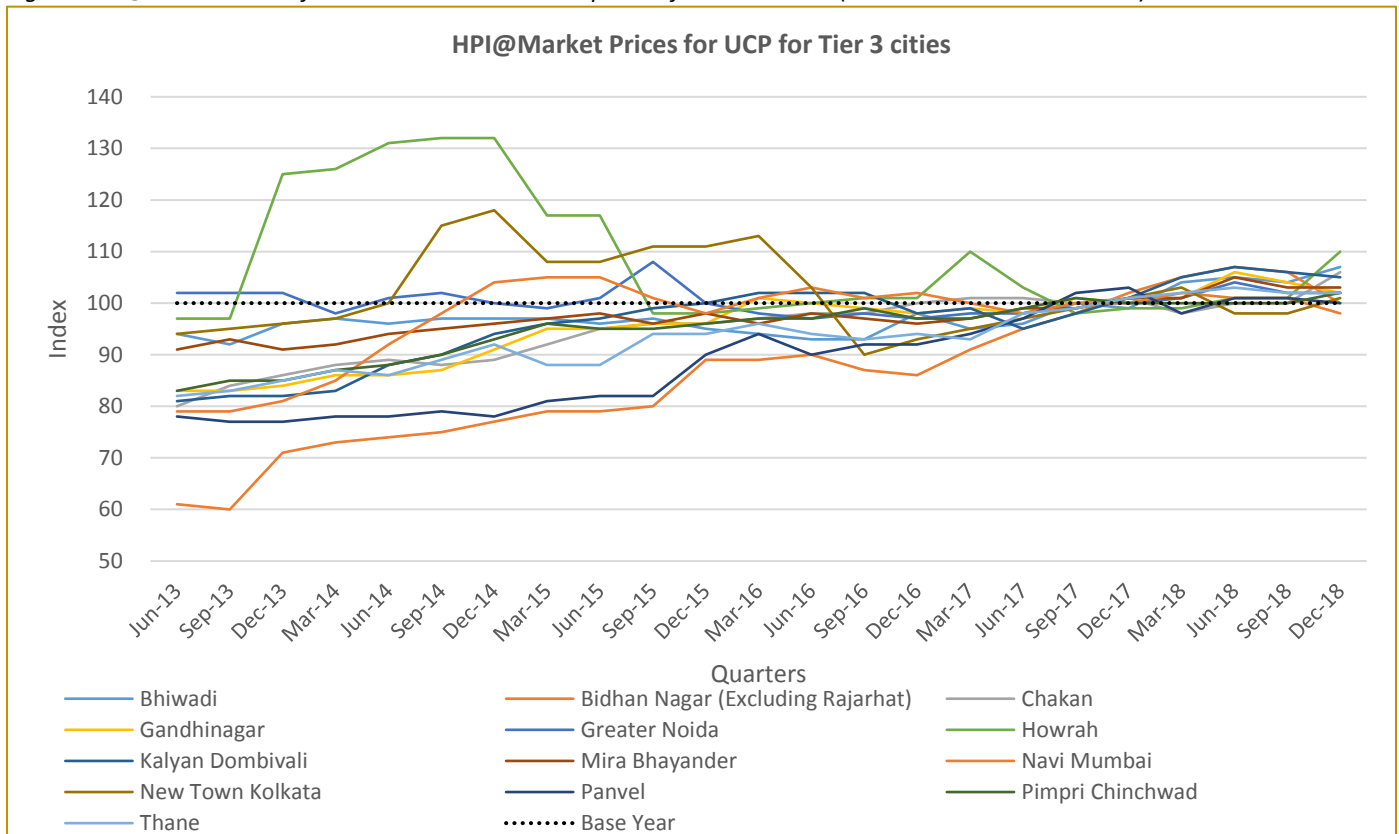
Figure: HPI@Market Prices for Under Construction Properties for Tier-2 cities (Base Year FY 2017-18 = 100)





Among the 13 Tier-3 cities, the variations ranged from 12.2% in Kalyan Dombivali to (-) 1.0% in Chakan Y-o-Y basis. On Q-o-Q basis, maximum increase in indices was seen Kalyan Dombivali (3.8%) followed by Navi Mumbai (2%) and Mira Bhayandar and Gandhinagar, both at (1.9%).

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 October-December, 2018,

#### 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 9 cities, decrease in 1 city and no change in 3 cities. Rise in housing price index was witnessed in Dehradun (4.9%), Noida (3.7%), Ghaziabad (3%), Ludhiana (2%), Meerut (1.9%), Chandigarh (Tricity) (1.9%), Gurugram (1%), Greater Noida (1%) and Bhiwadi (0.9%). Kanpur (-1.0%) witnessed a fall and index remained stable in Faridabad, Lucknow and Delhi.

**On Annual basis**, the index has shown increase in 9 cities, decrease in 3 cities and no change in 1 city. Rise in housing price index was witnessed in Bhiwadi (13%), Noida (8.8%), Chandigarh (Tricity) (8.2%), Dehradun (8.1%), Meerut (7.1%), Lucknow (6.2%), Greater Noida (4%), Faridabad (3%) and Ghaziabad (2%). Gurugram witnessed no change. The 3 cities witnessing a fall in index are Kanpur (-2.9%), Delhi (-2%) and Ludhiana (-1.9%).

#### 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 no change in 3 cities. Ranchi (8.7%), Patna (3%), Bidhan Nagar (Excluding Rajarhat) (2.9%), Guwahati (1.9%), Bhubaneswar (1.9%), New Town Kolkata (1.9%), Bhopal (1%) and Indore (0.9%) witnessed a rise in prices. Kolkata, Raipur and Howrah witnessed no change in housing index.

**On Annual basis**, the index has shown an overall increase in all 11 cities. The cities exhibiting increase in index are Ranchi (25.8%), New Town Kolkata (14.6%), Bidhan Nagar (Excluding Rajarhat) (10.2%), Indore (8.1%), Patna (7.2%), Bhubaneswar (7%), Bhopal (6.1%), Guwahati (5%), Kolkata (3%), Howrah (2.9%) and Raipur (2%).

#### 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 and no change in 8 cities. Rise in housing price index was witnessed in Gandhinagar (3.6%), Navi Mumbai (2.9%), Kalyan Dombivali (2.9%), Jaipur (2%), Mira Bhayander (1.9%), Panvel (1.9%), Ahmedabad (1.8%), Mumbai (1%), Chakan (1%), Pune (0.9%). Cities showing no change in index include Thane, Vasai Virar, Rajkot, Surat, Pimpri Chinchwad, Vadodara, Nashik and Nagpur.

**On Annual basis**, the index has shown an overall increase in all 18 cities. The cities exhibiting increase in index are Ahmedabad (19.6%), Gandhinagar (18.6%), Panvel (9.2%), Navi Mumbai (9.2%), Kalyan Dombivali (9.1%), Thane (8.1%), Pune (8.1%), Nashik (7.1%), Chakan (7.1%), Mira Bhayander (7.1%), Surat (6.2%), Vadodara (6.1%), Mumbai (6.1%), Vasai Virar (4%), Rajkot (3%), Pimpri Chinchwad (3%), Nagpur (2%) and Jaipur (2%).



## South Zone

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

**On Quarterly basis**, the index has shown an overall increase in 5 cities and no change in 3 cities. Rise in housing price index was witnessed in Coimbatore (3.8%), Hyderabad (1.8%), Chennai (1%), Vizag (1%), and Bengaluru (0.9%). Thiruvananthapuram, Kochi and Vijayawada witnessed no change in index.

**On Annual basis**, the index has shown an overall increase in 6 cities, no change in 1 city and decrease in 1 city. The cities exhibiting increase in index are Coimbatore (13.4%), Hyderabad (13.3%), Bengaluru (11.1%), Vizag (3%), Thiruvananthapuram (2%) and Chennai (1%). Index remained unchanged in Vijayawada and fell in Kochi (-1.0%).

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 1 city in North Zone witnessing decline. Index remained stable in 17 cities and increased in 32 cities.

## Zone Wise movement under HPI@Market Prices for Under Construction Properties during the quarter October-December, 2018

### 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, decrease in 5 cities and no change in 2 cities. Significant rise in housing price index was witnessed in Lucknow (1%), Kanpur (1%), Gurugram (1%), Ludhiana (1%), Meerut (0.9%) and Dehradun (0.9%). Ghaziabad and Greater Noida witnessed no change and index fell in Faridabad (-5.1%), Noida (-1.9%), Chandigarh (Tricity) (-1%), Delhi (-1%) and Bhiwadi (-1%).

**On Annual basis**, the index has shown an overall increase in 11 cities, no change in 1 city and decrease in 1 city. Rise in index was witnessed in Dehradun (9.2%), Meerut (8.1%), Gurugram (6.1%), Bhiwadi (5.1%), Ludhiana (5.1%), Noida (3.1%), Kanpur (3.1%), Delhi (3.1%), Greater Noida (3%), Ghaziabad (3%) and Chandigarh (Tricity) (1%). Lucknow (0%) witnessed no change and index fell in Faridabad (-10.6%).

### 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 and witnessed no change in 4 cities. Rise in housing price index was witnessed in Patna (4%), Indore (1.9%), Kolkata (1.9%), Howrah (1%), Bhubaneswar (1%), Guwahati (1%) and Bidhan Nagar (Excluding Rajarhat) (0.9%). Index remained stable in Ranchi, Raipur, Bhopal and New Town Kolkata.

**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 Kolkata (14.6%), Bidhan Nagar (Excluding Rajarhat) (10.3%), Indore (7.1%), Bhubaneswar (6.1%), Patna (6.1%), Guwahati (5.1%), Ranchi (3%) and Raipur (3%). New Town Kolkata and Howrah saw a stable index. Index fell in Bhopal (-1%).



## 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 14 cities and no change in 4 cities. Rise in housing price index was witnessed in Nagpur (3.8%), Kalyan Dombivali (3.8%), Navi Mumbai (2%), Rajkot (2%), Jaipur (2%), Mira Bhayander (1.9%), Gandhinagar (1.9%), Vadodara (1%), Surat (1%), Nashik (1%), Ahmedabad (1%), Vasai Virar (1%), Pune (1%) and Mumbai (1%). Index remained stable in Chakan, Pimpri Chinchwad, Panvel and Thane.

**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 Kalyan Dombivali (12.2%), Nagpur (10.2%), Gandhinagar (7.1%), Mira Bhayander (6.1%), Thane (4.1%), Mumbai (4%), Navi Mumbai (4%), Jaipur (4%), Ahmedabad (3%), Nashik (3%), Rajkot (3%), Panvel (2%), Pune (2%), Vasai Virar (2%), Pimpri Chinchwad (1%) and Surat (1%). Vadodara (-2.9%) and Chakan (-1%) witnessed a fall in index.

## South Zone

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

**On Quarterly basis**, the index has shown an overall increase in 3 cities, decrease in 1 city and no change in 4 cities. Rise in housing price index was witnessed in Hyderabad (2.9%), Vizag (1%) and Vijayawada (1%). Coimbatore, Bengaluru, Chennai, and Kochi saw a stable index. Thiruvananthapuram (-1%) witnessed a fall in housing price index.

**On Annual basis**, the index has shown an overall increase in 7 cities and decrease in 1 city. The cities exhibiting increase in index are Hyderabad (10.2%), Vijayawada (5.1%), Coimbatore (4%), Kochi (3.1%), Chennai (2%) and Bengaluru (1%), Thiruvananthapuram (-5.9%) witnessed a fall in indices.

Overall, on quarterly basis, 30 cities witnessed a rise in indices, followed by 14 cities in which the index remained stable. 6 cities witnessed a fall in indices. Highest decrease was seen in cities in north zone especially ones which are part of NCR. Cities in the East and West zone did not witness fall in indices. Cities in the south zone largely remained stable.



## APPENDIX 1

Table below comprises of Composite HPI@Assessment Prices computed on basis of 50 cities (Base Year FY 2017-18 =100)

Quarter Ending	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	June-18	Sep-18	Dec-18
Composite HPI@Assessment Prices	83	85	86	88	88	89	90	89	89	90	91	92	95	97	98	100	99	98	99	100	101	103	105

Table below comprises of HPI@Assessment Prices computed for 50 cities (Base Year FY 2017-18 =100)

Quarter Ending	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	June-18	Sep-18	Dec-18
Ahmedabad	91	91	90	89	89	88	89	89	89	90	90	90	90	91	93	93	93	97	97	100	105	114	116
Bengaluru	76	77	78	79	80	81	83	85	86	88	90	92	95	98	100	102	100	97	99	99	102	109	110
Bhiwadi	104	106	109	111	116	126	128	131	132	130	133	133	135	133	131	119	103	100	99	99	103	112	113
Bhopal	90	92	93	95	95	95	94	94	95	94	97	97	97	98	97	97	99	98	98	101	101	103	104
Bhubaneswar	90	92	91	92	91	90	92	92	94	94	92	92	91	92	93	95	97	97	100	100	102	105	107
Bidhan Nagar	72	74	76	79	83	87	91	91	91	92	94	95	98	98	97	96	96	96	98	100	102	105	108
Chakan	69	72	74	75	78	81	83	88	89	89	90	89	90	90	91	92	93	95	98	100	103	104	105
Chandigarh (Tricity)	102	100	97	98	97	100	100	103	104	102	104	107	104	102	100	98	97	97	98	100	104	104	106
Chennai	78	79	80	82	83	84	84	85	87	89	91	92	94	96	99	102	101	100	101	100	101	101	102
Coimbatore	88	92	98	98	99	99	100	100	101	102	102	103	106	107	101	98	97	94	97	100	101	106	110
Dehradun	96	94	94	87	85	89	90	93	96	95	96	96	96	99	100	101	101	100	99	99	100	102	107
Delhi	103	108	110	109	107	107	100	92	87	85	86	89	96	98	102	105	104	101	100	100	99	98	98
Faridabad	104	103	104	103	106	111	111	112	110	105	101	99	99	103	104	107	106	98	99	100	100	102	102
Gandhinagar	101	101	100	101	100	96	95	92	91	94	92	94	95	95	95	94	93	97	99	106	111	115	
Ghaziabad	96	99	102	106	108	109	108	106	105	103	102	102	102	101	102	104	106	106	102	99	100	101	104
Greater Noida	83	84	88	89	91	93	95	97	97	98	98	98	99	99	100	100	99	100	100	101	102	103	104
Gurugram	110	111	112	111	111	114	115	114	102	97	96	98	99	102	103	104	103	102	102	100	100	101	102
Guwahati	80	84	83	85	88	91	96	100	100	98	98	96	97	99	99	101	98	99	100	100	101	103	105
Howrah	71	75	78	81	85	87	91	93	93	92	94	94	96	99	101	105	103	101	102	100	102	105	105
Hyderabad	78	79	80	81	82	84	86	86	88	89	90	91	93	94	95	97	95	95	98	100	104	109	111
Indore	81	82	83	85	87	89	90	91	92	92	94	95	97	98	99	101	99	97	99	100	103	106	107
Jaipur	91	94	96	98	101	106	110	111	113	113	113	116	116	117	117	116	110	105	101	100	100	101	103
Kalyan Dombivali	70	73	75	78	80	81	82	84	84	86	89	92	95	97	98	100	99	99	100	102	105	108	108
Kanpur	71	74	76	81	84	87	90	81	82	83	84	85	87	91	97	103	100	98	102	99	99	100	99
Kochi	72	73	75	78	79	81	82	82	83	83	85	88	91	95	98	100	103	100	102	100	100	101	101
Kolkata	79	82	84	86	89	90	92	93	95	95	96	97	99	102	104	105	101	99	101	100	103	104	104
Lucknow	78	82	85	88	88	86	86	86	87	89	91	93	95	99	100	101	101	99	97	100	101	103	103
Ludhiana	93	86	82	89	90	94	105	110	113	116	114	114	111	112	113	116	114	108	105	101	100	101	103
Meerut	67	69	72	77	83	88	88	90	91	90	93	95	98	101	104	106	103	100	99	100	101	104	106
Mira Bhayander	78	81	80	81	82	83	86	88	90	91	92	95	96	97	97	98	99	99	99	100	102	104	106
Mumbai	73	75	76	78	79	80	81	82	83	86	88	91	93	95	95	96	97	99	100	102	104	105	105
Nagpur	79	80	79	79	80	81	83	83	85	85	87	89	91	94	97	100	100	98	100	100	101	102	102
Nashik	81	82	84	85	85	86	86	87	88	89	91	93	94	95	95	95	95	95	98	100	103	105	105
Navi Mumbai	80	83	86	89	91	93	94	96	97	98	100	102	104	104	103	102	100	98	100	101	104	107	
New Town Kolkata	76	79	81	82	84	88	90	91	92	90	92	94	97	98	98	97	95	93	96	101	105	108	110
Noida	94	95	97	98	100	101	101	100	100	99	100	100	101	102	103	103	102	101	102	100	103	107	111
Panvel	83	82	82	81	81	83	83	83	86	87	92	98	100	102	100	99	98	97	98	100	102	105	107
Patna	75	78	82	86	87	86	86	86	86	88	90	91	92	94	93	91	94	95	97	100	100	101	104
Pimpri Chinchwad	73	77	79	79	81	83	84	87	89	90	91	91	92	93	94	95	98	97	100	101	101	103	103
Pune	71	73	75	77	79	81	83	85	87	89	89	90	91	92	94	96	97	97	99	100	104	106	107
Raipur	88	92	90	96	94	94	93	94	96	96	95	95	96	100	103	106	104	100	101	100	101	103	103
Rajkot	81	82	85	84	85	84	83	81	82	84	87	89	91	93	94	94	95	96	99	100	100	102	102
Ranchi	69	72	74	77	79	82	82	86	88	89	91	89	88	89	86	81	83	85	89	99	101	103	112
Surat	78	77	79	80	81	83	84	83	82	81	80	82	85	88	91	92	94	94	97	100	101	103	103
Thane	74	77	80	83	85	85	87	89	91	94	96	98	100	101	101	102	99	97	99	100	103	107	107
Thiruvananthapuram	82	82	80	83	84	86	85	84	86	90	94	97	101	104	104	106	101	99	102	99	101	104	104
Vadodra	88	89	90	91	91	93	93	93	94	93	93	93	93	93	94	95	95	95	98	99	102	104	104
Vasai Virar	80	84	85	87	87	88	89	90	91	92	93	94	95	94	95	95	96	99	100	100	101	104	104
Vijayawada	74	76	78	80	81	85	87	90	92	91	92	95	96	99	103	104	101	100	100	100	100	100	100
Vizag	72	72	72	72	72	73	74	75	77	78	79	81	82	85	87	92	97	98	100	100	101	102	103



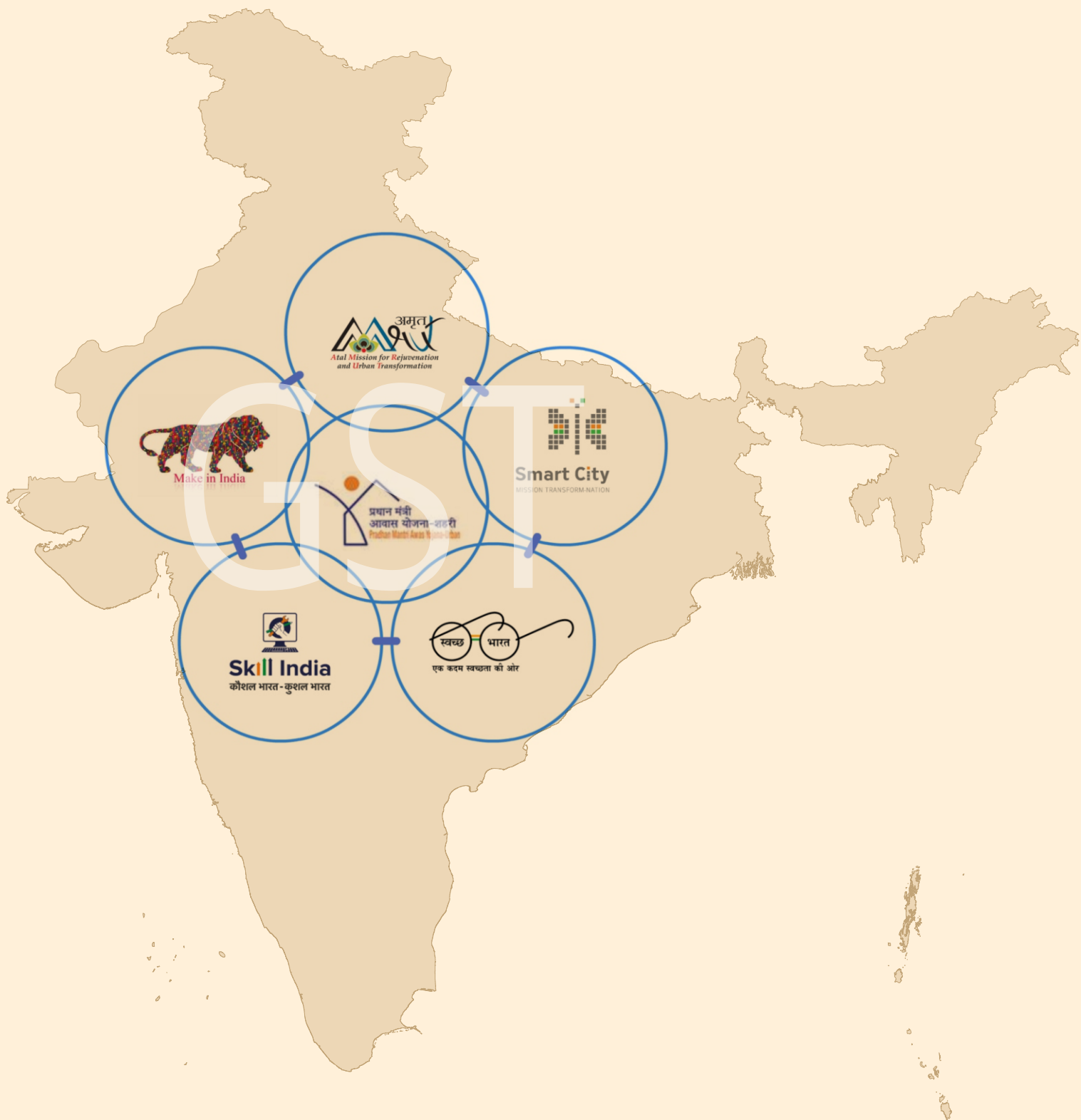
## APPENDIX 2

Table below comprises of Composite HPI@ Market Prices for Under Construction properties computed on basis of 50 cities (**Base Year FY 2017-18 =100**)

Quarter Ending	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	June-18	Sep-18	Dec-18
Composite HPI@Market Prices	85	86	87	88	90	91	92	94	94	95	96	96	97	97	97	97	98	98	99	100	101	102	103

Table below comprises of HPI@Market Prices for Under Construction properties computed for 50 cities (**Base Year FY 2017-18=100**)

Quarter Ending	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	June-18	Sep-18	Dec-18
Ahmedabad	74	75	76	78	80	81	82	83	85	88	91	93	95	97	97	98	99	99	99	100	101	101	102
Bengaluru	80	83	85	87	90	95	98	99	99	98	97	97	96	97	97	98	99	99	100	100	100	101	101
Bhiwadi	87	89	92	94	95	96	97	97	97	97	96	95	95	94	94	94	96	97	98	100	102	104	103
Bhopal	89	89	88	85	86	89	91	94	96	98	100	101	101	101	101	101	101	101	101	100	100	100	100
Bhubaneswar	73	73	73	72	72	73	76	79	81	83	84	86	89	91	93	95	96	97	98	100	101	103	104
Bidhan Nagar	58	59	65	68	71	73	75	76	78	79	82	85	87	89	88	88	90	93	97	100	103	106	107
Chakan	76	79	82	85	87	88	89	89	91	93	95	96	97	97	99	99	100	100	101	100	100	100	100
Chandigarh (Tricity)	92	94	95	96	95	96	94	93	87	87	88	89	90	89	93	95	97	99	99	100	100	101	100
Chennai	76	77	79	81	82	86	89	91	93	98	102	105	109	108	104	101	98	97	100	100	101	102	102
Coimbatore	75	76	78	79	81	83	86	86	87	88	88	92	94	92	96	96	97	99	99	100	101	103	103
Dehradun	67	69	70	71	73	74	77	81	85	89	92	93	95	96	97	97	96	97	98	100	104	106	107
Delhi	106	106	105	105	104	103	102	102	101	100	100	99	98	98	98	97	97	98	98	100	101	102	101
Faridabad	105	110	113	113	113	113	112	112	114	115	114	116	115	113	112	110	108	107	104	101	99	98	93
Gandhinagar	83	82	83	84	85	86	87	89	92	94	95	97	99	99	100	99	98	99	99	100	102	104	106
Ghaziabad	88	92	95	97	98	98	98	99	99	99	100	100	100	100	100	99	99	99	99	100	101	102	102
Greater Noida	97	100	102	101	100	101	100	100	101	102	102	102	101	98	98	97	98	98	99	100	101	102	102
Gurugram	120	112	113	112	113	114	116	112	108	106	104	103	103	103	102	102	100	99	98	99	101	103	104
Guwahati	76	78	79	80	81	82	83	85	86	87	88	89	90	90	91	93	94	95	97	99	100	102	103
Howrah	94	97	114	121	125	128	130	127	123	107	103	103	101	101	100	104	104	103	102	100	99	101	102
Hyderabad	71	73	76	78	80	84	86	89	90	91	91	92	93	94	95	95	96	97	98	100	102	105	108
Indore	83	83	83	84	84	86	87	88	88	89	89	90	90	90	91	91	93	96	98	101	102	103	105
Jaipur	90	93	96	96	95	95	96	99	98	98	99	99	100	101	101	101	101	99	100	100	100	102	104
Kalyan Dombivali	79	80	81	82	84	86	90	93	95	96	98	100	101	101	101	100	98	97	98	100	103	106	110
Kanpur	74	77	79	79	81	81	80	82	82	85	88	89	90	88	88	88	93	96	98	100	100	100	101
Kochi	80	81	83	92	99	101	102	98	97	99	99	100	98	98	98	100	102	99	98	101	101	101	101
Kolkata	92	92	90	90	91	91	92	93	93	94	94	95	97	93	91	89	89	92	96	100	104	108	110
Lucknow	80	82	83	84	85	83	82	83	83	84	86	86	86	87	86	90	93	97	100	100	100	99	100
Ludhiana	60	65	68	70	73	75	77	79	82	85	88	91	93	95	96	97	98	98	99	100	101	103	104
Meerut	83	84	85	87	88	90	91	93	96	98	100	100	100	100	101	101	99	99	99	100	104	106	107
Mira Bhayander	84	87	90	92	93	93	94	95	97	97	97	97	97	97	96	97	97	98	99	100	102	103	105
Mumbai	77	79	80	81	83	85	88	89	90	91	91	92	93	95	96	96	97	98	99	100	101	102	103
Nagpur	76	78	81	85	89	92	95	98	99	99	99	99	100	101	100	99	98	98	98	100	102	104	108
Nashik	84	84	85	86	88	91	93	96	98	99	101	101	101	102	103	101	100	99	99	100	100	101	102
Navi Mumbai	79	79	79	81	84	90	96	101	103	104	102	101	101	101	102	102	100	100	99	100	101	101	103
New Town Kolkata	90	92	94	95	97	104	109	111	111	110	110	111	109	101	97	94	94	96	98	100	99	98	98
Noida	93	95	97	98	100	100	99	98	99	100	100	100	100	98	98	97	97	97	98	100	102	103	101
Panvel	75	76	77	77	77	78	78	79	80	81	84	88	90	91	92	92	94	96	99	100	101	101	101
Patna	125	125	125	125	124	125	122	122	119	115	109	106	105	105	104	103	101	100	98	99	99	100	104
Pimpri Chinchwad	80	83	84	85	87	88	90	92	93	94	95	96	96	97	98	98	98	98	99	100	100	100	100
Pune	77	80	82	84	86	87	89	92	95	97	98	98	98	99	99	99	99	99	100	100	101	101	102
Raipur	80	79	80	81	82	83	84	85	87	89	90	92	94	95	97	99	99	99	100	100	102	103	103
Rajkot	92	94	96	99	102	104	106	107	108	108	107	106	105	104	103	102	101	101	100	101	101	101	103
Ranchi	94	95	95	94	95	95	97	99	98	96	93	93	93	94	95	95	96	97	99	100	101	102	102
Surat	78	79	78	79	80	81	83	86	89	90	92	92	93	94	95	96	98	99	100	100	100	100	101
Thane	79	81	83	84	85	87	88	88	89	90	91	93	94	94	94	94	95	96	98	100	101	102	102
Thiruvananthapuram	73	75	78	80	82	84	87	89	91	92	94	98	100	102	105	106	106	104	102	99	98	97	96
Vadodara	94	94	94	95	95	98	99	101	102	102	102	102	103	103	104	104	103	102	102	100	99	98	99
Vasai Virar	92	94	95	95	96	96	97	99	100	100	100	101	101	101	101	101	100	100	100	100	101	101	102
Vijayawada	68	69	69	71	72	75	80	85	90	93	95	96	96	97	98	98	98	98	99	100	102	103	104
Vizag	80	84	86	88	90	91	93	93	92	91	91	92	94	96	97	99	99	100	100	100	100	102	103



राष्ट्रीय  
आवास बैंक  
NATIONAL  
HOUSING BANK

Core 5-A, India Habitat Centre, Lodhi Road, New Delhi-110003,  
(PBX) 011-2464 9031-35, Fax: 011-2464 9030,  
E-mail: ho@nhb.org.in | Website: www.nhb.org.in