RESEARCH

India Real Estate

Residential and Office

JULY - DECEMBER 2018

AHMEDABAD | BENGALURU | CHENNAI | HYDERABAD | KOLKATA | MUMBAI | NCR | PUNE

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Content

India

RESIDENTIAL MARKET

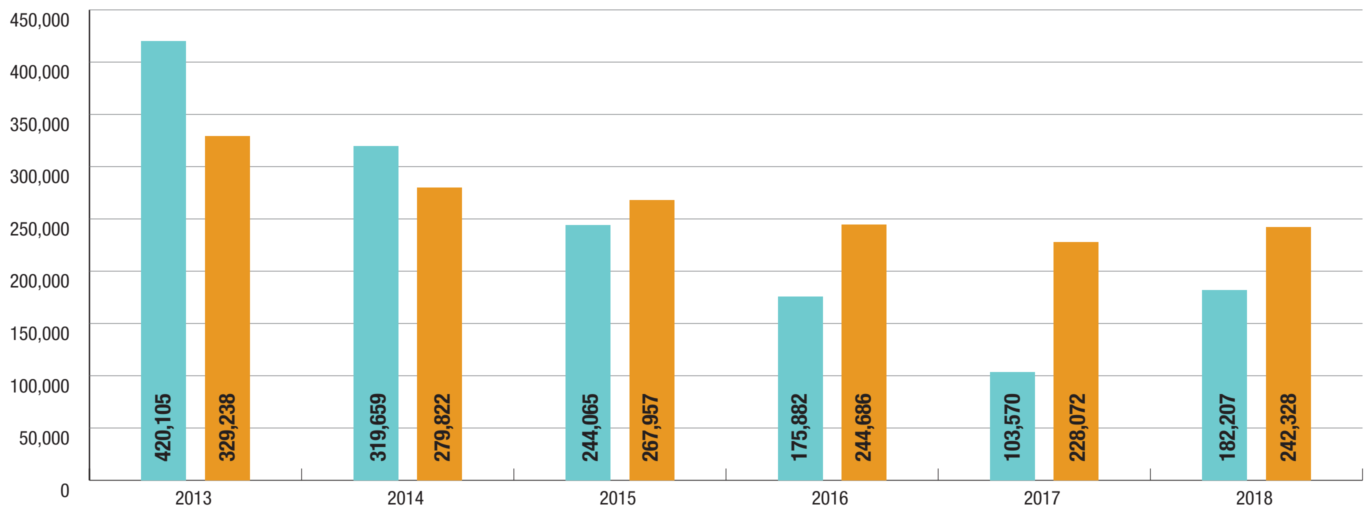
India Market Snapshot

Parameter	H2 2018	Change YoY	2017	2018	Change YoY
Launches (housing units)	89,509	119%	103,570	182,207	76%
Sales (housing units)	118,040	10%	228,072	242,328	6%
Unsold inventory (housing units)	-	-	528,494	468,372	-11%
Quarters to sell	-	-	11.2	10.2	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)

Source: Knight Frank Research

All India Annual Residential Launches and Sales



Source: Knight Frank Research

- Despite the massive need for housing in India, every successive year of the current decade has seen residential volumes in terms of launches and sales only plummet. Huge unsold inventories caused by a prolonged focus of the developers on the wrong apartment ticket sizes had brought the residential real estate industry to a standstill.
- Vast unsold inventory levels that peaked in 2014 at 0.72 mn units forced developers to curtail supplies in a bid to lighten this inventory load. This course of action has seen reasonable success even in the face of lacklustre demand as unsold inventory levels have fallen 29% since H1 2016 to 0.47 mn units in H2 2018.
- Regulations imposed by the government to ensure accountability on the developer such as the Real Estate (Regulations and Development) Act, 2016 (RERA), Goods and Services Tax Act (GST) and the Benami Transactions (Prohibition) Amendment Act, 2016 have discouraged speculators and laid the foundation of a healthy end users' market.
- The government's 'Housing for All By 2022' and the granting of infrastructure status to the affordable housing sector have also been aimed at boosting housing supply for the low and mid-income segments and improving affordability of the home-buyer.
- While these measures have helped home-buyer sentiment, they have irrevocably changed the business of real estate for the developer. The developers' community is coming to terms with these unprecedented events and just beginning to stabilise and find its footing as can be seen by the recovery in the volume of apartments launched in 2018.
- This period of stabilisation, right-sizing and right-pricing of new residential product and improving home-buyer sentiment due to increased transparency have culminated in a 76% YoY growth in units launched during 2018 and a more modest 6% YoY growth during the same period for sales. The half-yearly YoY growth in launches and sales was even more pronounced thanks largely to an especially depressed H2 2017, at 119% and 10%, respectively during H2 2018.
- The YoY growth in supply and sales during 2018 is especially exceptional considering that this is the first year that saw any YoY growth in both sales and supply during this decade.
- Market traction could have been even better during H2 2018 but for the NBFC liquidity crunch that put a spanner in the works for the already cash strapped developer who has few financing options left in the market today.
- Of the eight cities under coverage, only Kolkata and Ahmedabad saw supply fall further during 2018 while supply volumes in Mumbai and Pune vaulted by a massive 220% and 157%, respectively. Maharashtra has been the frontrunner in applying the RERA in letter and spirit and caused some distress on the supply side in 2017 but this seems to be gradually resolving itself as can be inferred from the fact that they have accounted for almost 59% of the units launched during the year. This impact has been more pronounced in Mumbai at 413% in H2 2018 due to the construction ban that was in effect during 2017 in Greater Mumbai and contributed to the restricted supply during that period.

- While this is the first time that sales have increased YoY in any year during this decade, volumes are still a far cry from 2011 highs. The Mumbai residential market experienced the largest sales volume among all the cities. However, the most YoY growth was experienced by Bengaluru at 27% and 35% for 2018, and H2 2018 respectively. The home-buyer in this city has been especially receptive to the relaxations in the qualification criteria for projects under the PMAY, such as interest subsidies and increase in the extent of carpet area to 160 square metres for MIG – I and 200 square metres for MIG – II.
- The current QTS level stands lower at 10.2 quarters at the end of 2018 compared to 11.2 quarters for the previous year thanks to significantly higher sales and lower unsold inventory levels. However, the age of unsold inventory has been progressively increasing across the eight major cities signifying that more unwinding is warranted for this to be interpreted as a clear sign of revival.
- Weighted average prices have stagnated across cities with Mumbai seeing the most decline at 7% YoY and NCR and Bengaluru growing at 2% YoY. Hyderabad saw prices move up by 7% due to the high proportion of ready inventory and very little supply coming online during 2018.
- During the last four years, the growth in residential prices in most of the top eight cities of India has been below retail inflation growth and the gap has progressively increased since H1 2016. This fact has helped keep the de-growth in sales much more muted compared to launches and more notably, reduced unsold inventory levels by 29% in the past three years.
- The reduction in prices has in fact significantly improved home affordability, and average ticket sizes of housing units in most cities are now inching closer or are below the Knight Frank Affordability Benchmark of 4.5 times the annual household income of the city. City-wide average affordability statistics are useful, however disparity in prices across locations and the income spectrum may depict a different picture.
- The long-awaited drop in prices is a healthy step toward market recovery as this along with other measures such as reduction in unit sizes across cities will address the contemporary home-buyer's needs, boost affordability and eventually get buyers back to the market. The pace at which developers align themselves to the new regulatory norms and launch new products in the right ticket sizes that appeal to the homebuyer's interests, will determine the trajectory of the market going forward.
- While it would be presumptuous to consider the current periods' growth in market traction as a turning point in the residential market's fortunes, it does hold the promise of a more sustained recovery. However, developers still need to grapple with the funding crisis and buyer inertia that is a big threat to their financial survival in the short term. The government relaxing norms for NBFCs to liquidate their loan portfolios and contemplating the roll-back of taxes to reduce costs for the home-buyer will play its part in stimulating the market.

Affordability Matrix

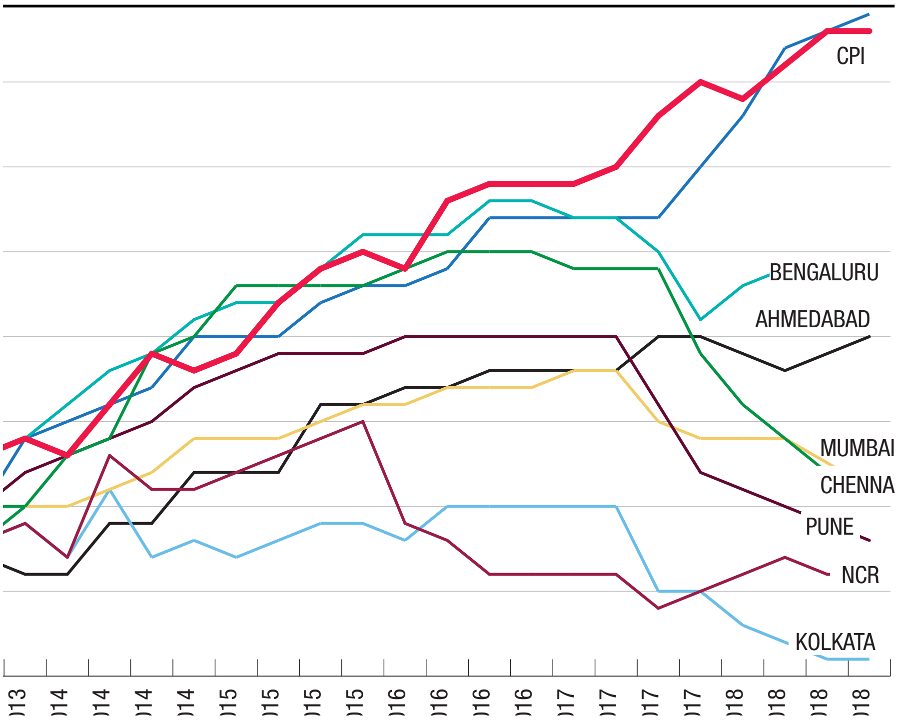
House price to Income Ratio

City	2010	2018
Mumbai	11.0	7.2
NCR	6.0	5.0
Bengaluru	5.6	4.0
Pune	4.6	2.6
Chennai	5.4	4.1
Hyderabad	5.7	4.9
Kolkata	5.7	3.0
Ahmedabad	4.3	3.3

Note: Knight Frank Affordability Benchmark is 4.5 times household income

Source: MOSPI, Knight Frank Research

Consumer Price Inflation well above real estate price growth

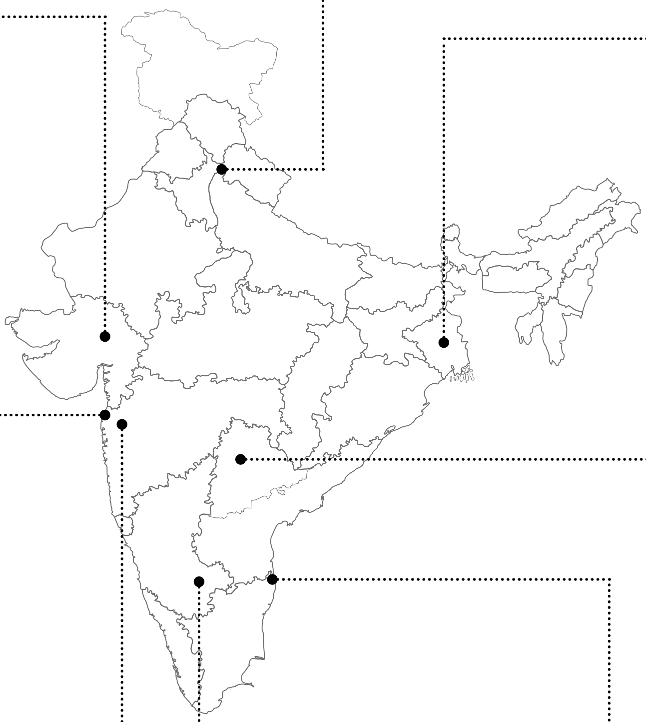


Note: November CPI used for Q4 2017

Source: Knight Frank Research

Residential Launches and Sales

Launches (housing units) | Sales (housing units) | % Change (YoY)

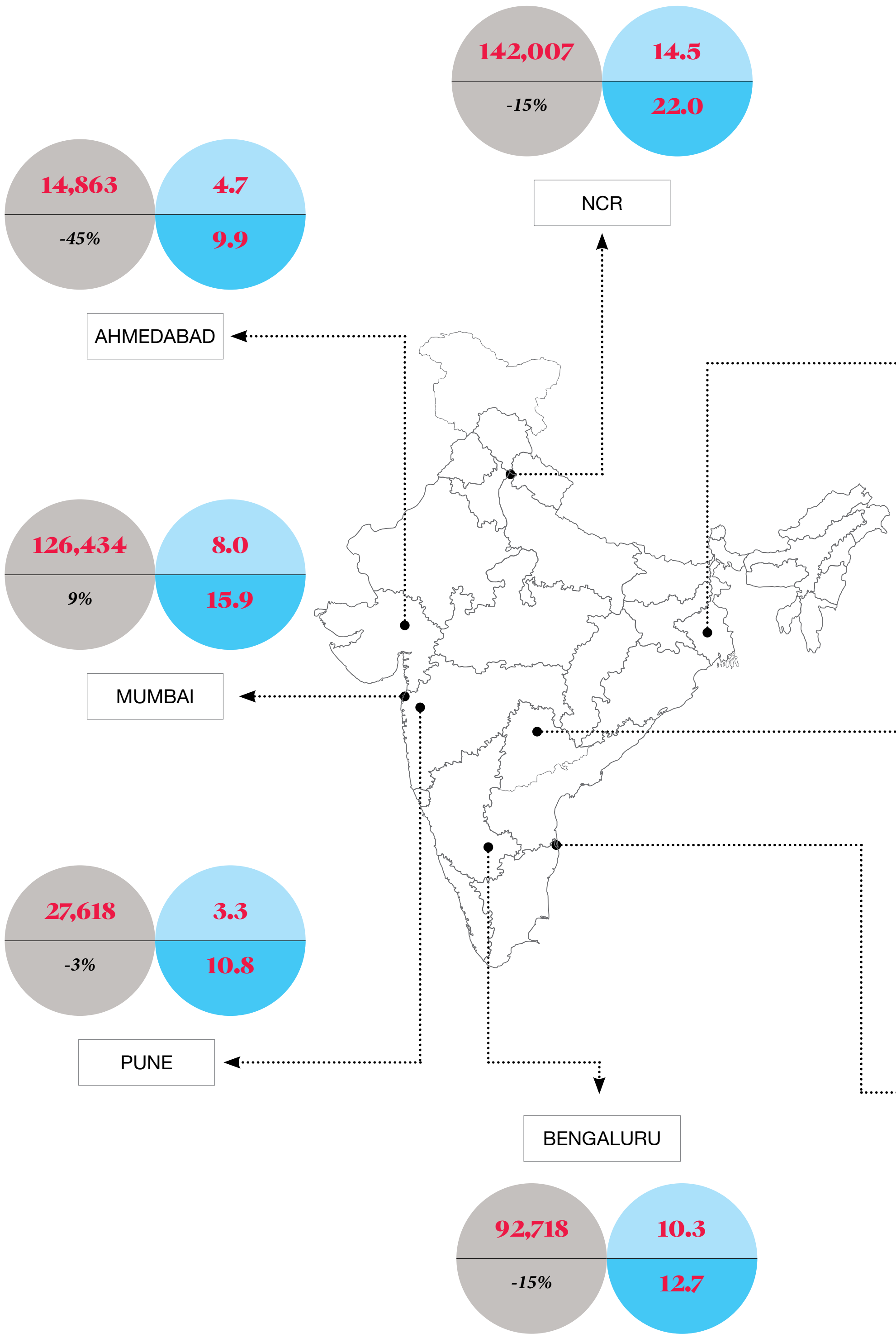


City	H2 2018 Launches	% Change (YoY)	H2 2018 Sales	% Change (YoY)	2018 Launches	% Change (YoY)	2018 Sales	% Change (YoY)
NCR	6,696	-3%	22,596	10%	15,819	35%	40,643	8%
AHMEDABAD	2,844	-2%	8,101	4%	4,167	-13%	16,188	3%
KOLKATA	5,622	-9%	6,140	2%	12,015	25%	12,731	-10%
MUMBAI	38,389	413%	31,481	4%	74,363	220%	63,893	3%
HYDERABAD	1,698	81%	7,278	15%	5,404	54%	15,591	9%
PUNE	18,584	287%	17,070	4%	32,684	157%	33,521	-1%
CHENNAI	3,850	20%	7,401	11%	10,373	12%	15,986	3%
BENGALURU	11,826	41%	17,973	35%	27,382	22%	43,775	27%

All maps are for representational purpose not to scale

Residential Unsold Inventory

Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)



All maps are for representational purpose not to scale

Knight Frank

Residential Pricing

■ Price range in H2 2018 in ₹/sq m ■ Price range in H2 2018 in (₹/sq ft)

■ 12 month change (YoY) ■ 6 month change (YoY)

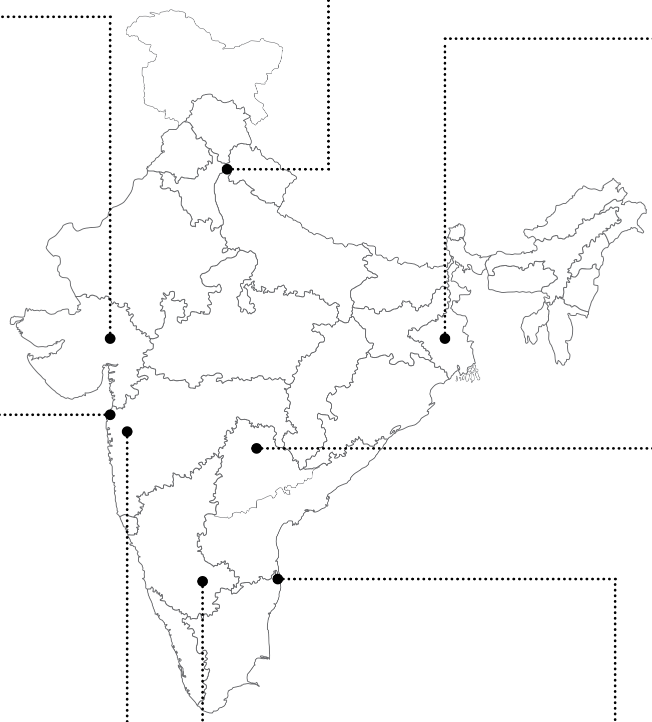
NCR
45,635
■ (4,240)
■[-1%] ■[2%]

AHMEDABAD
30,570
■ (2,840)
■[1%] ■[1%]

KOLKATA
35,080
■ (3,259)
■[-4%] ■[-1%]

MUMBAI
77,418
■ (7,192)
■[-7%] ■[-2%]

HYDERABAD
44,025
■ (4,090)
■[7%] ■[2%]



PUNE
47,068
■ (4,373)
■[-3%] ■[-2%]

CHENNAI
47,245
■ (4,389)
■[-3%] ■[-2%]

BENGALURU
50,386
■ (4,681)
■[2%] ■[-1%]

All maps are for representational purpose not to scale

OFFICE MARKET

12%

YoY increase in transaction volumes across Indian cities

India Office Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
New completions mn sq m (mn sq ft)	1.74 (18.7)	49%	3.0 (32.7)	3.4 (36.9)	13%
Transactions mn sq m (mn sq ft)	2.32 (25.2)	12%	3.9 (41.8)	4.3 (46.8)	12%
Weighted average rental in ₹/sq m/month (₹/sq ft/month)	-	-	776 (72)	855 (79)	10%
Stock mn sq m (mn sq ft)	-	-	58.7 (631)	62.2 (669)	6%
Vacancy (%)	-	-	11.6%	12.3%	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
ource: Knight Frank Research

- Office space supply has lagged demand since 2013 as developers chose to commit a majority of investments into residential real estate in hopes of saving existing projects or scoring a comparatively quicker profit, despite a strong underlying demand from office occupiers. Even private equity investors have been more inclined to acquire stabilised assets as an overwhelming majority of their investments have been routed toward the acquisition of already matured assets.
- The ensuing supply crunch caused vacancy levels to plummet to 11.6% by 2017 and rental levels to rise across cities as occupiers were left with increasingly fewer choices in subsequent years.
- This slide in office space development was arrested in early 2018 and gained momentum during the remainder of the year as supply increased by 13% YoY to (36.9 mn sq ft), the highest YoY increase in this decade.
- Transaction levels that were limited largely due to the abject dearth of viable office space, responded in kind and clocked a historical high of 4.3 mn sq m (46.8 mn sq ft) for space transacted in a calendar year.
- Additionally, five out of the seven markets under coverage experienced double digit rental growth underscoring the underlying strength of the Indian office market. Mumbai and Chennai were the only exceptions that saw 2% and 3% YoY growth, respectively,

solely due to the negative growth in supply during 2018. Average rental values across the seven cities grew at 10% YoY during 2018. Bengaluru experienced the maximum YoY rental growth at 17%, while Hyderabad and Ahmedabad grew at 14% YoY during 2018.

- The IT/ITeS sectors' share in transactions has increasingly been showing signs of weakening in recent periods due to macro headwinds in the form of a slowdown in spending as well as an inclination to insource by the USA and several European countries. Losing ground since 2016, it accounted for 32% of the transacted volume in H2 2018 as compared to the 37% in the previous period.
- The BFSI sector saw the most increase in transactions' share largely due to payment gateway companies taking up spaces in a big way especially in Bengaluru. Bengaluru accounted for 42% of the space taken up by BFSI in the country, eclipsing Mumbai which is the most preferred market for BFSI sector companies. The BFSI industry accounted for close to 0.42 mn sq m (4.6 mn sq ft) in H2 2018 compared to 0.27 mn sq m (2.9 mn sq ft) in the previous period.
- The Other Services sectors' share has jumped from 23% in H2 2016 to 35% in the recently concluded period, exceeding the share of the IT/ITeS sector. This is because of increased take up by ecommerce and co-working companies.
- The co-working phenomenon is gathering momentum in India and this can be observed in the increasing quantum of space companies such as Coworks, Wework, Daftar India and Awfis which have been taking up space in Mumbai, Bengaluru, Pune and the NCR. Across the top seven cities, such co-working space providers have taken up around approximately 0.18 mn sq m (2.0 mn sq ft) of office space during H2 2018, a 52% growth over H2 2017.

Sector-wise split of transactions

Industry	*H2 2017*	*H2 2018*
BFSI	14%	18%
IT/ITeS	37%	31%
Manufacturing	14%	14%
Other Services	36%	36%

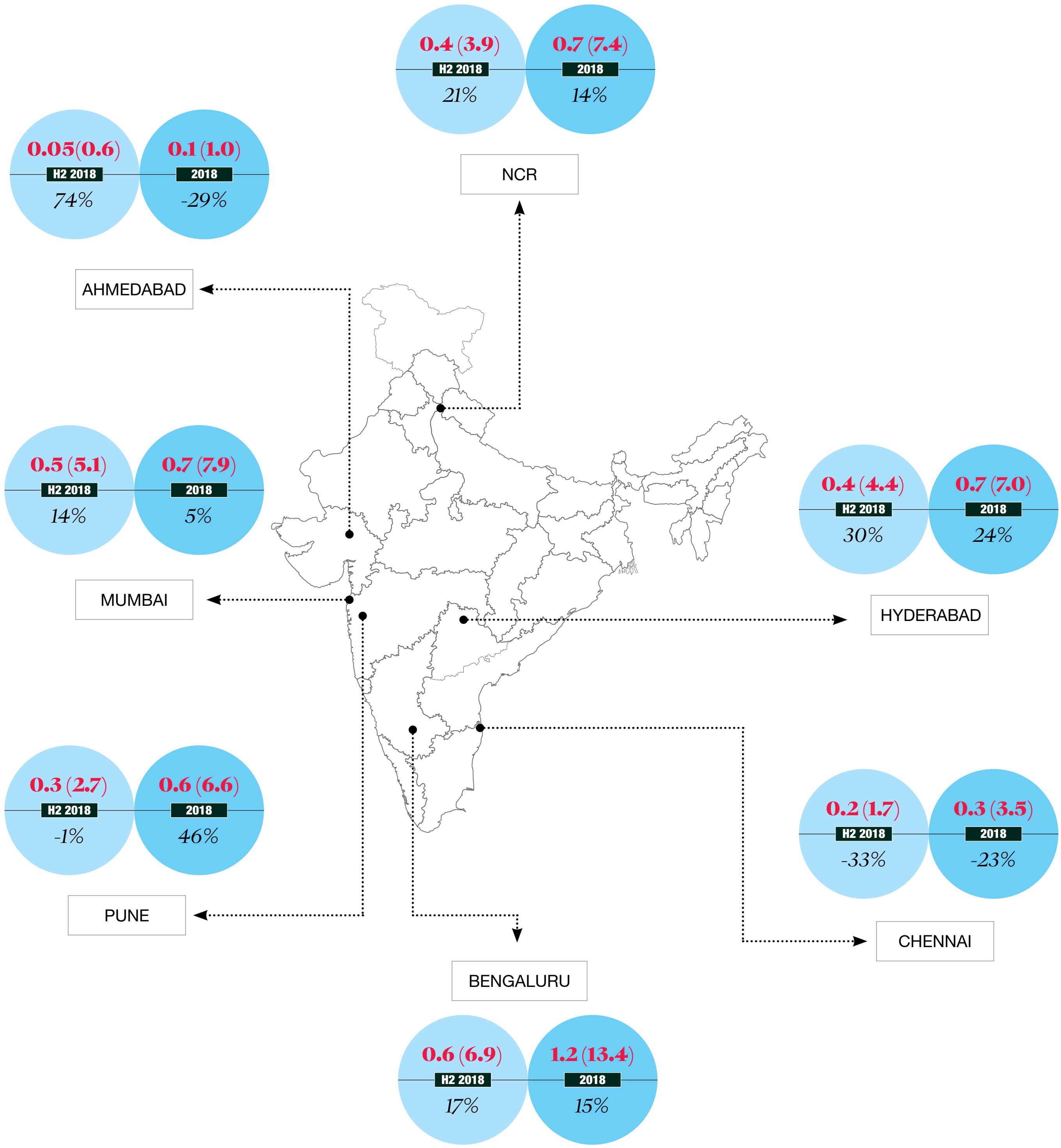
Note: BFSI includes BFSI support services

49%

YoY increase in new completions across Indian cities

Office Transactions

Transactions mn sq m (mn sq ft) % Change (YoY)



All maps are for representational purpose not to scale

Office Rentals

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

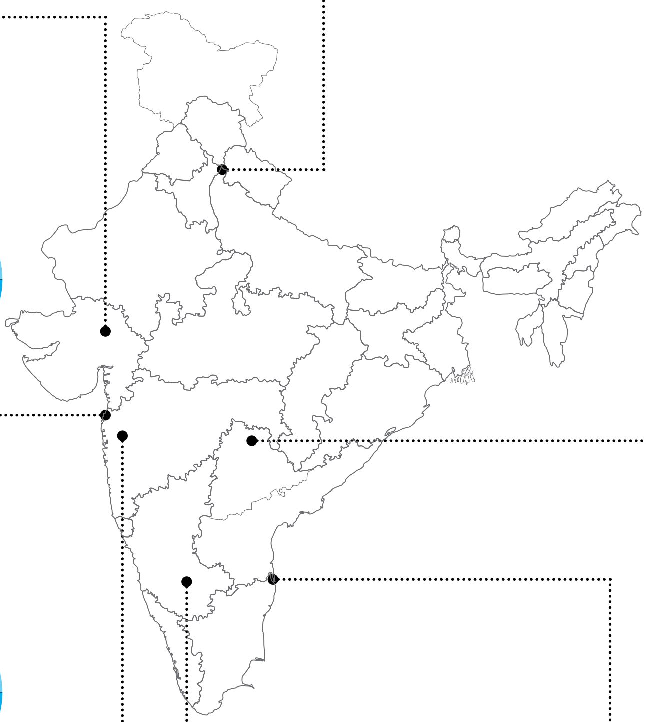
12-month change | 6-month change

NCR
893 (83)
10.7%
7.7%

AHMEDABAD
495 (46)
14%
9.5%

MUMBAI
1,259 (117)
1.7%
7.5%

HYDERABAD
624 (58)
13.7%
9.4%



PUNE
764 (71)
12.7%
8%

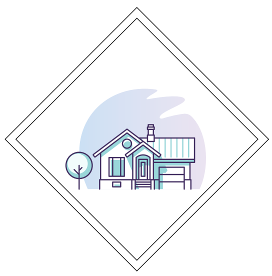
CHENNAI
631 (59)
3.0%
2.1%

BENGALURU
797 (74)
17.2%
5.6%

All maps are for representational purpose not to scale

Ahmedabad

RESIDENTIAL MARKET



-2%

Decrease in launches compared to H2 2017

Ahmedabad Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	2,844	-2%	4,790	4,167	-13%
Sales (housing units)	8,101	4%	15,741	16,188	3%
Price (weighted average)	₹ 30,570/ sq m (₹ 2,840/ sq ft)	1%	₹ 30,354 /sq m (₹ 2,820/sq ft)	₹ 30,570/ sq m (₹ 2,840/ sq ft)	
Unsold inventory (housing units)	14,863	-45%	26,884	14,863	-45%
Quarters to sell	3.7		7.0		
Age of unsold inventory (in quarters)	9.9		10.3		

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

- “This time during H2 2018 (between July-December), launches have been few compared to the same period last year,” the common view across various stakeholders in the city. The dip in new launches in H2 2018, compared to the same period last year has nothing to do with any fundamental flaw in the market but more with the market coming to terms with a new policy introduced by the state government.

- In May this year the state government with the aim of removing corruption from the system approved the Online Development Permission System (ODPS). Under this new system, building permission to real estate developers and builders was to be provided within 24 hours and that too without any human interference. While the intentions of the state government were good, the new initiative had teething problems, to the extent that new launches took a dip in the city.

- The state government too realised that there were problems with the ODPS and consequently moved to the offline mode in October 2018. Once that happened, new launches started to pick up. As a result, new launches in H2 2018 were down by only 2% compared to the same period last year.

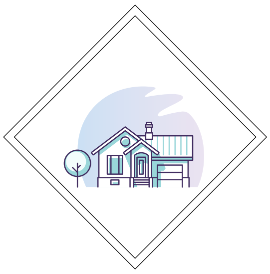
- Going forward, we feel that all necessary systems are in place for the real estate sector to flourish in the city. Thus, new launches should move up in days to come.

- Sales remained steady. In the city, they were 4% up in H2 2018 compared to the same period last time. Steady demand and availability of ready to move in houses, within a particular price bracket ensured that sales maintained its healthy momentum.

- While launches in H2 2018 have been slightly low compared to H2 2017, sales have been much better. A similar story is unfolded when one looks at the yearly numbers. New launches in the city were down 13% in 2018 compared to the pervious year. Sales, on the other hand, have been very healthy in 2018 compared to the previous year and were in fact 13% up.

- Of the 2, 844 units launched in H2 2018, a major part of it happened in the affordable housing segment. To give an

Steady demand and availability of ready to move in houses, within a particular price bracket ensured that sales maintained its healthy momentum.



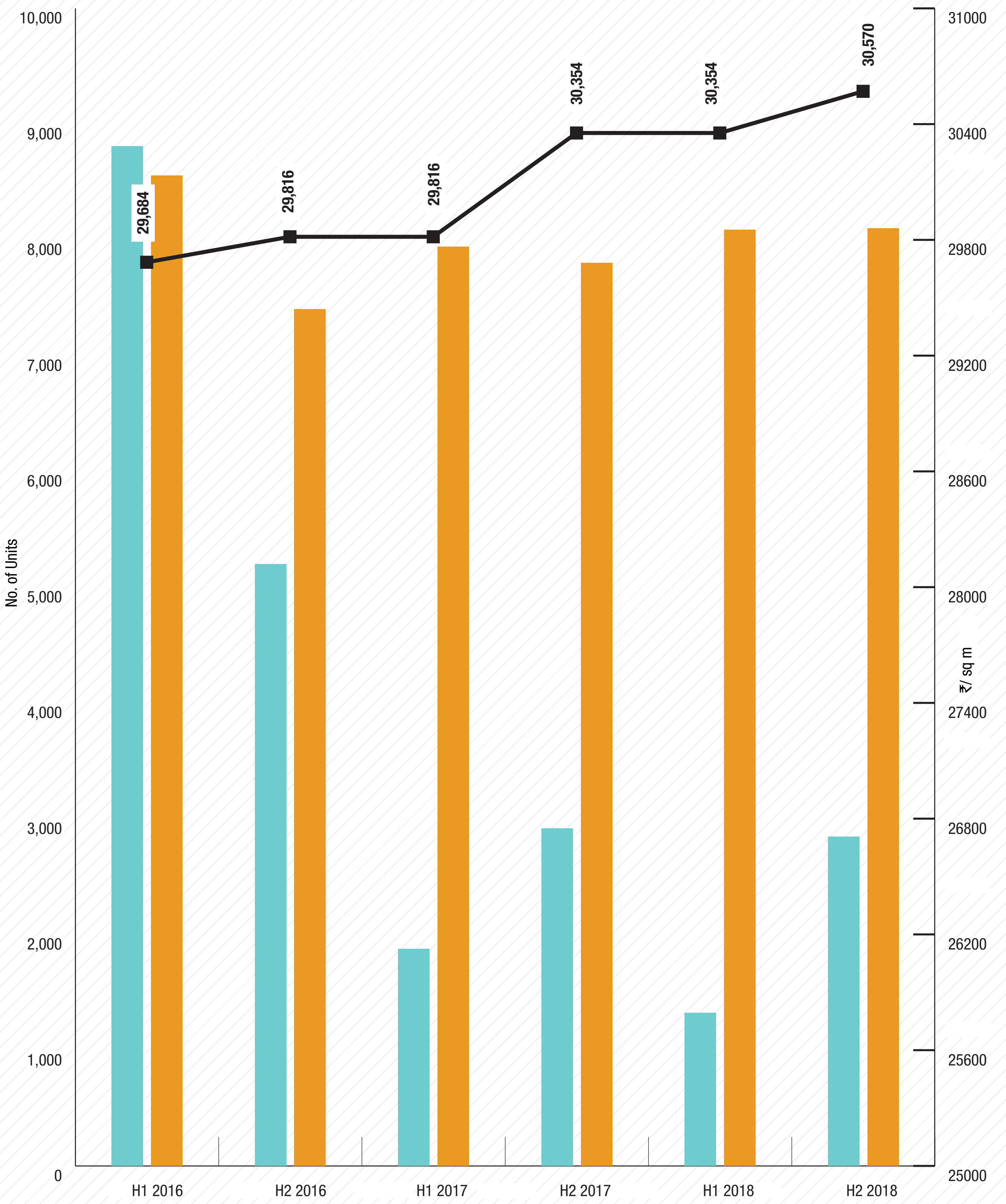
4%

Increase in sales compared to H2 2017

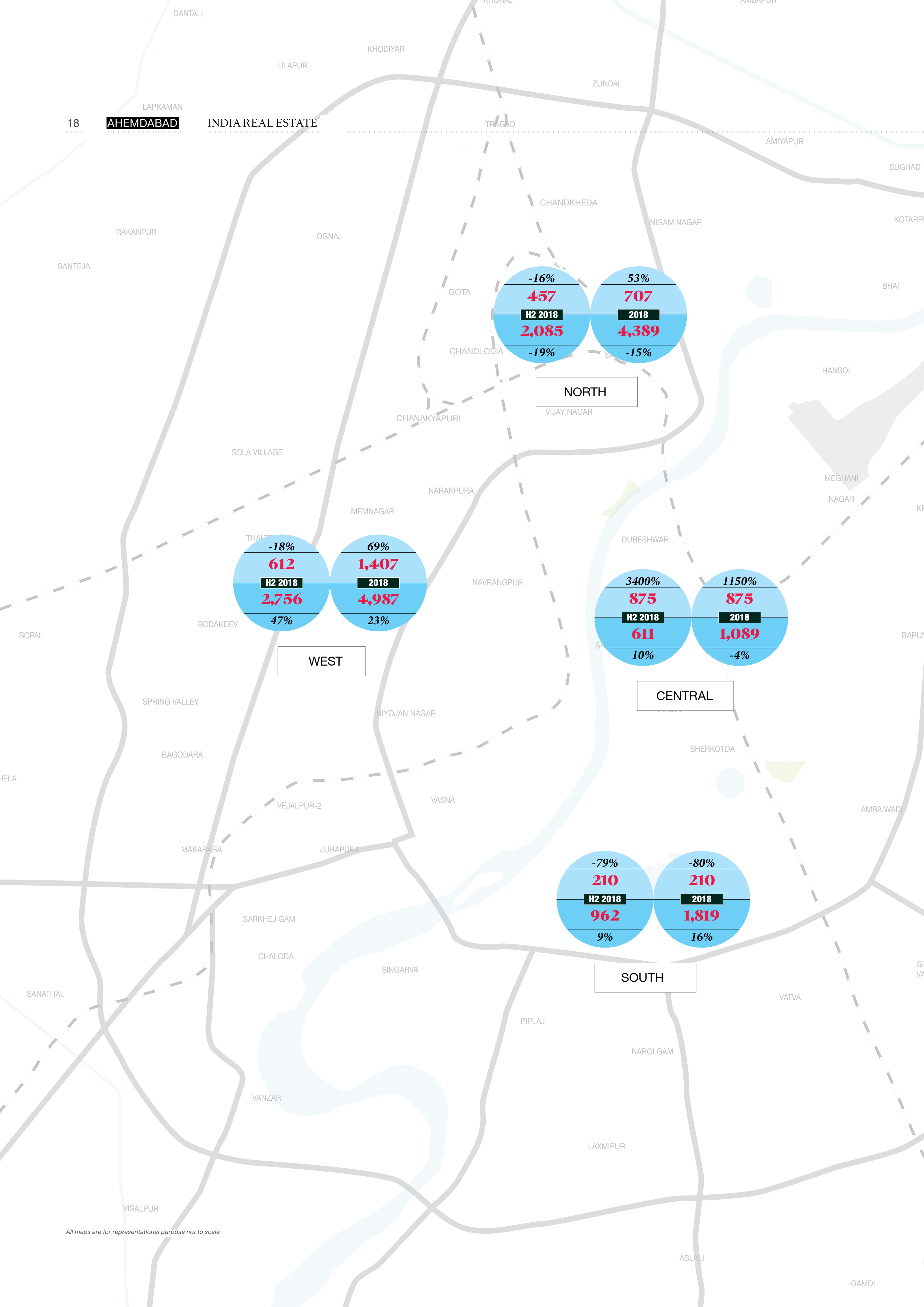
idea of the total units launched in H2 2018, 61% took place in the less than ₹ 5 mn price category. It has generally been believed that Ahmedabad is a price sensitive market and is largely affordable. While the same remains true even today, what is striking about the launches in H2 2018 is that the 11% of the units launched in H2 2018 were in the price bracket of ₹ 1-2 mn.

- In line with the above findings, more than 40% of the new launches happened in east and north Ahmedabad, which are largely affordable markets in the city. The western part of the city is largely the hub of housing activity and it witnessed 22% of the launches.
- 34% of the sales took place in the western part of the city. The areas that witnessed the lion's share of activity were areas like south Bopal, areas along Sindhu Bhavan Road and Bopal Ambli Road. What has made these areas, especially south Bopal, more liveable, is the fact that social infrastructure is taking shape and access has improved in recent months.
- The affordable housing markets of east and north Ahmedabad were also in the thick of action. Some of the areas that witnessed hectic sales activity were areas like Ranip, Chandkheda, Gota, Naroda and Vastral.
- The affinity of homebuyers towards affordable housing projects is very evident in Ahmedabad. Markets of east and north Ahmedabad, which are largely considered hubs for affordable housing projects, witnessed close to 40% of the sales in H2 2018.
- Due to its proximity to business districts along SG Highway and Sanand, west Ahmedabad in recent years has been a favourite among homebuyers, especially those with white-collar jobs. Of the total sales in the city, the share of west Ahmedabad in H2 2018 was 22%.
- Prices of housing units in the city have largely remained stable in recent years. If one looks at capital values of housing units, they have moved up by 1% in H2 2018, compared to the same period last year.
- The low level of new launches and steady sales have had a bearing on the quarters to sell (QTS) and the existing unsold inventory. In H2 2018, the QTS stood at 3.7. At present, the city has more than 14,000 unsold units, which are in various stages of construction.
- East Ahmedabad is one of the better performing markets in the city, which attests homebuyers' affinity towards affordable houses. This micro market has a low QTS of 3.7 and its age of inventory is 9.5. Affordable pricing coupled with easy access to major employment hubs and integrated development has helped this micro market in attracting homebuyers.
- In H2 2018, north Ahmedabad has the highest level of inventory. This, however, should not be much of a concern because its QTS is only 3.6 and the age of inventory is only 8.8. This micro market along with east Ahmedabad has emerged as a major hub for affordable housing projects and as already indicated earlier is a favourite among homebuyers.
- Like north Ahmedabad, the western part of the city too has a high level of unsold inventory but in the recent past this micro market has witnessed a lot of traction. It is a preferred location for people working in GIDC Sanand and companies located along SG Highway.

Ahmedabad Market Activity



Source: Knight Frank Research



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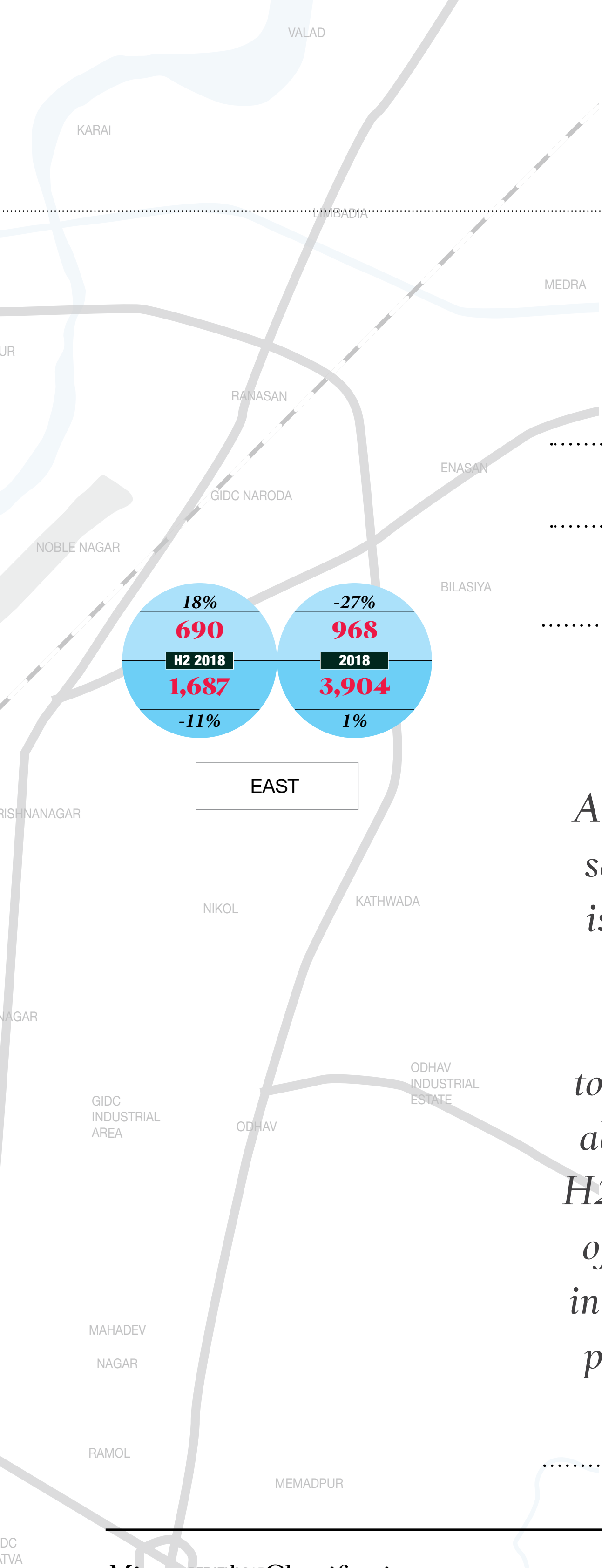
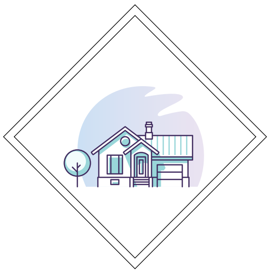


Residential Launches and Sales

Launches (housing units) | Sales (housing units) | % Change (YoY)

It has generally been believed that Ahmedabad is a price sensitive market and is largely affordable. While the same remains true even today, what is striking about the launches in H2 2018 is that the 11% of the units launched in H2 2018 were in the price bracket of ₹1-2 mn.



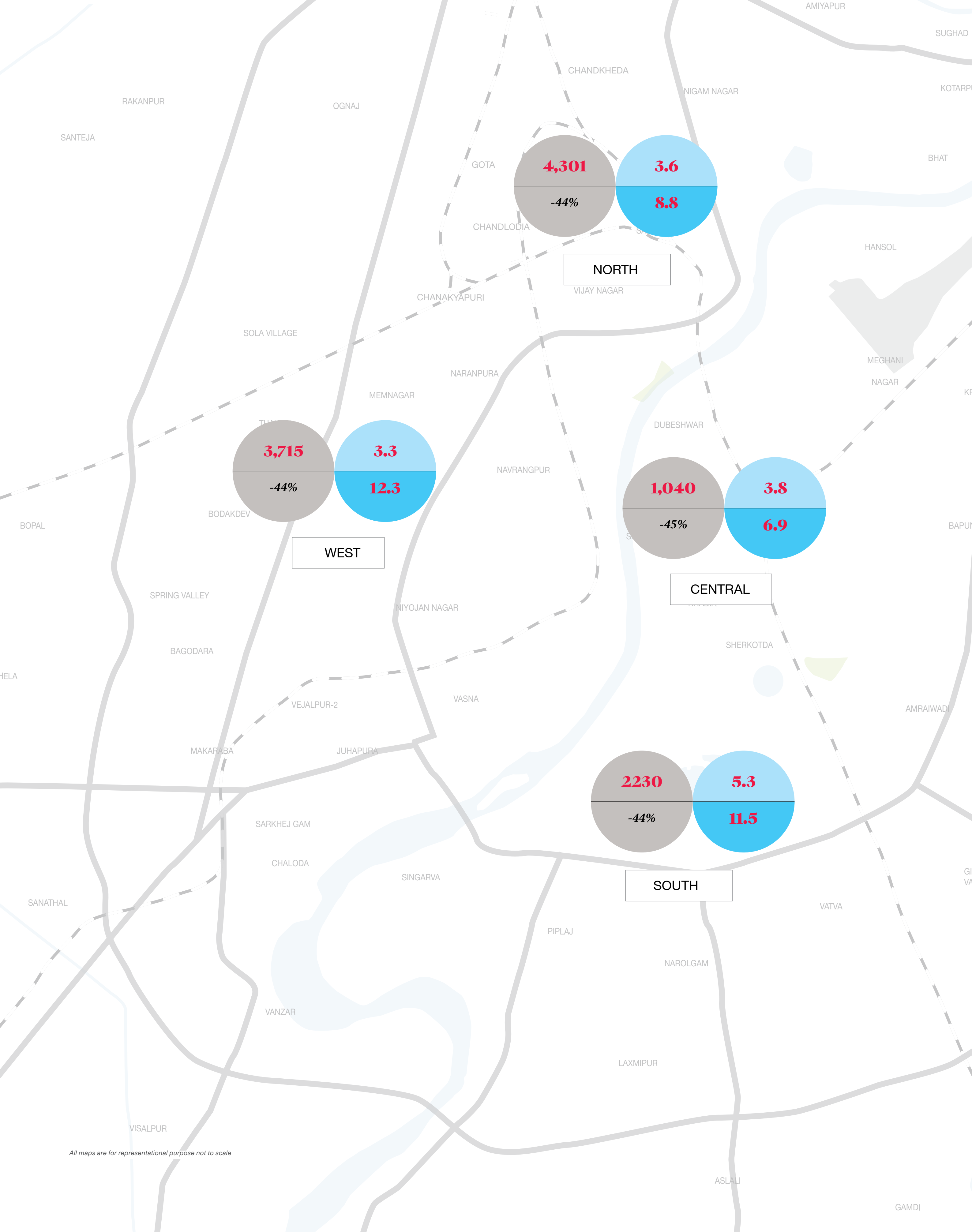
4%

Increase in sales compared to H2 2017

Micro-market Classification

MICRO-MARKET	*LOCATIONS*
CENTRAL	Paldi, Vasna, Navrangpura, Maninagar, Dudheshwar, Ambawadi
EAST	Naroda, Vastral, Nikol, Kathwada Road, Odhav
NORTH	Gota, New Ranip, Tragad, Chandkheda, Motera
SOUTH	Narol, Vatva, Vinzol, Hathijan
WEST	SG Highway, Prahlad Nagar, Bopal, Thaltej, Science City Road

Source: Knight Frank Research



All maps are for representational purpose not to scale

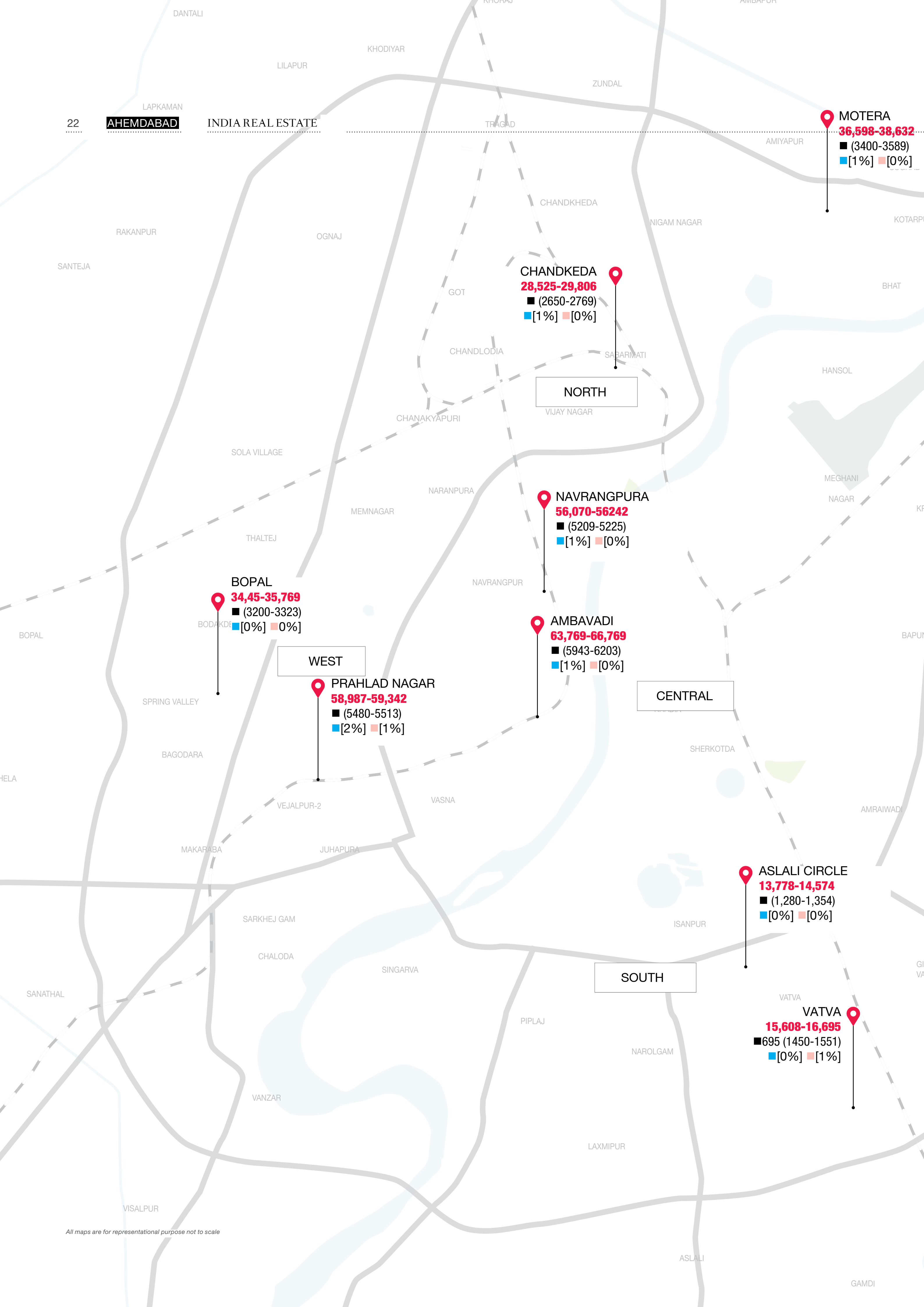
Residential Unsold Inventory

Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)

The affinity of homebuyers towards affordable housing projects is very evident in Ahmedabad. Markets of east and north Ahmedabad, which are largely considered hubs for affordable housing projects, witnessed close to 40% of the sales in H2 2018.

45%

Decrease in unsold inventory-compared to H2 2017



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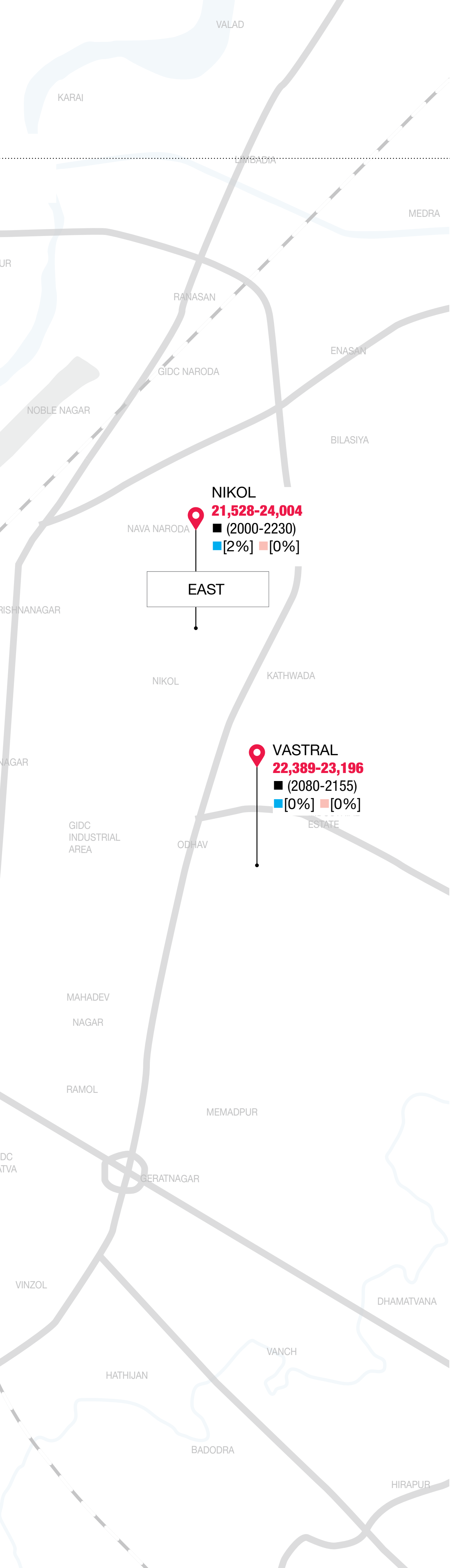


Residential Pricing

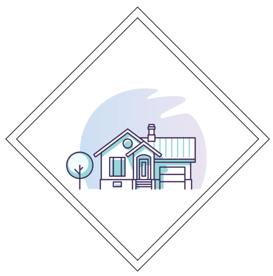
Price range in H2 2018 in ₹/sq m

Price range in H2 2018 in (₹/sq ft)

12 month change

6 month change

Prices of housing units in the city have largely remained stable in recent years. If one looks at capital values of housing units, they have moved up by 1% in H2 2018, compared to the same period last year.



1%

Negligible increase in price compared to H2 2017

OFFICE MARKET

74%

Increase in transaction activity compared to H2 2017

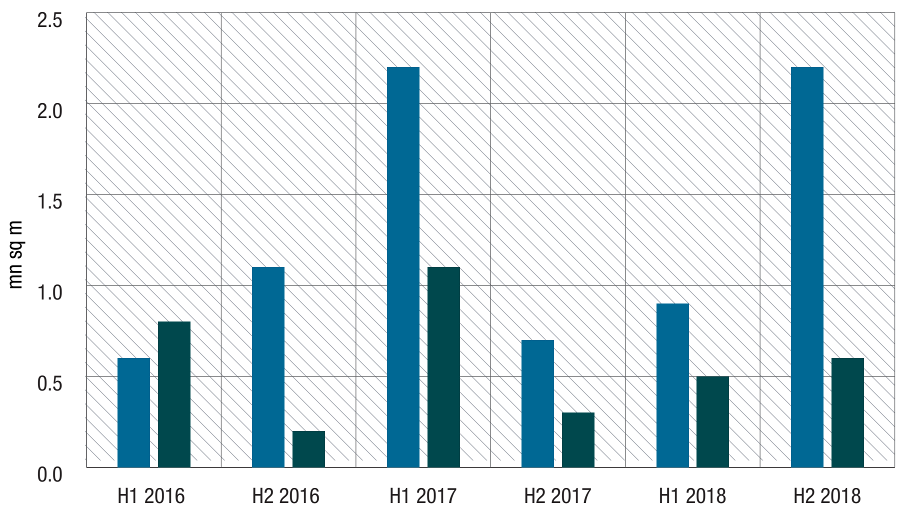
Ahmedabad Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
New completions mn sq m (mn sq ft)	0.20 (2.18)	216%	0.27 (2.92)	0.29 (3.09)	6%
Transactions mn sq m (mn sq ft)	0.05 (0.56)	74%	0.14 (1.46)	0.10 (1.03)	-29%
Weighted average rental in ₹/sq m/ month (₹/sq ft/month)	506 (47)	15%	441 (41)	506 (47)	15%
Stock mn sq m (mn sq ft)	2.0 (21.54)	17%	1.7 (18.46)	2.0 (21.54)	17%
Vacancy (%)	26.40%		23.70%	26.40%	

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

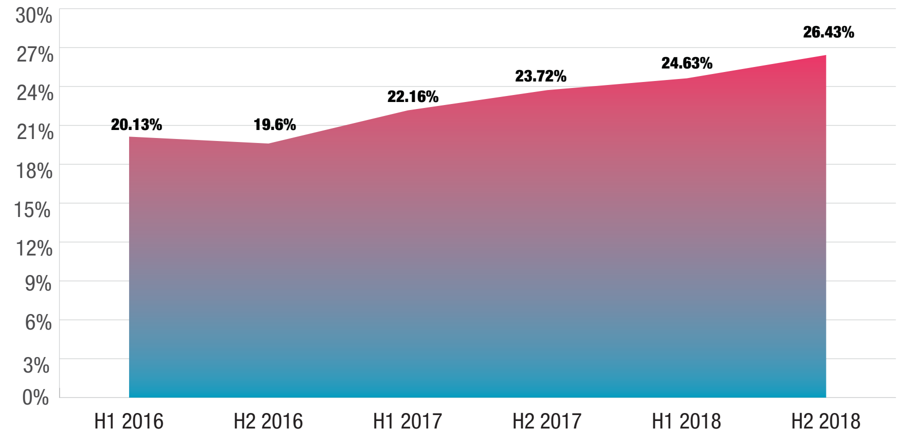
- In many ways H2 2018 was a better period for the Ahmedabad office market. First office transactions went up by 74% in H2 2018 compared to the same period last year.
- In addition to the 0.05 mn sq m (0.56 mn sq ft) of transacted office space in the city, an additional 0.14 mn sq m (1.6 mn sq ft) of office space was picked up by investors, which should have ideally been picked up by occupiers, especially considering the fact that there is lack of quality office space in the city.
- However, if one looks at transaction numbers for 2018, they are down by 29% compared to the previous year. This is largely because the volume of transactions dipped in the first half of the year.
- What is also heartening is that good quality supply has started to make its way into the city. H2 2018 witnessed infusion of 0.20 mn sq m (2.18 mn sq ft) of office space in the

Ahmedabad office market activity



Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Ahmedabad office market vacancy



Source: Knight Frank Research

26.4%

Vacancy levels in Ahmedabad office market

city. In recent years, this level of quality supply made its way into the market only in H1 2017.

- Some of the micro markets which were in the thick of action, with regards to new supply entering into the market are Shyamal Cross Road, Corporate Road, CG Road, SG Highway, Keshav Baug, Sindhu, Bhavan Road and Manek Baug.
- New completions witnessed an increase of 216% in H2 2018 compared to the same period last year. Even when compared to 2017, 2018 witnessed a 6% uptick in new completions.
- The office market in Ahmedabad is still in its infancy, compared to urban centres like Mumbai, Bengaluru and Delhi NCR. The necessary infrastructure is in place, and of late, developers have moved in to meet the requirements of companies that are either moving into the city or expanding their presence in the city. In the present day, this has led to a situation where the supply outstrips demand. This explains the double-digit vacancy rates in the city, which increased slightly since H1 2016. In H2 2018, the vacancy rate in the city was 26.34%, up from 24.63% in H1 2018.
- Unlike other real estate markets such as Bengaluru and Hyderabad, the office market in Ahmedabad is not driven by the IT/ITeS sector. Till H1 2018, the BFSI sector used to garner the lion's share of transacted office space in the city. In H2 2018, however, the share of the BFSI sector has gone down to 26%; the share stood at 42% in H2 2017.

A noticeable trend with regards to the office market is that companies operating in the co-working space are gradually moving into the city. While there was only a single transaction related to co-working spaces in H1 2018, there were two transactions in the space in H2 2018, even though the combined transacted space was lower than in H1 2018.

- Among sectors, the biggest gainer has been the other services sector. The share of this sector has moved up from 36% in H2 2017 to 61% in H2 2018.

- Another noticeable trend with regards to the office market is that companies operating in the co-working space are gradually moving into the city. While there was only a single transaction related to co-working spaces in H1 2018, there were two transactions in the space in H2 2018, even though the combined transacted space was lower than in H1 2018.

- The share of the manufacturing sector has improved from 8% in H2 2017 to 13% in H2 2018.

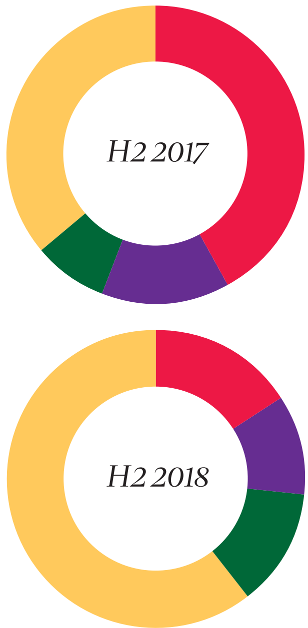
- The average deal size in H2 2018 is reported to be 1,114 sq m (11,995 sq ft), which is 37% lower than the average deal size in H2 2017. The number of deals closed at 47 in H2 2018 rose sharply compared to the 17 deals done in H2 2017.

- CBD West garnered the largest amount of office space within the city. Of the total transacted office space in the city, CBD West accounted for 83%, thereby making it one of the most preferred business districts in the city. Further within CBD West, SG Highway accounted for 46% of the transacted space in SBD. In H1 2018, this share of SG Highway was 32%. This further attests the growing fondness of occupiers for this part of Ahmedabad and more so SG Highway.

- Even though the office market in Ahmedabad is in its infancy, among the early signs of this market steadily growing is that rentals are firming up both in CBD West and the peripheral business district (PBD). Lack of quality office space is creating an upward pressure on rentals in the city. As a result, rentals in H2 2018 moved up by 15% compared to H2 2017.

- Though the office market in the city is considered to be in its nascent stage, there are a couple of transactions where rents have been above ₹ 753/sq m/month (₹70/sq ft / month). To give an example, there is a transaction at Ranip where the rent is ₹ 775/sq m/month (₹72/sq ft /month). There was also a transaction on Drive in Road which was done at ₹ 753/sq m/month (₹70/sq ft per month). Elsewhere, on SG Highway there were transactions done at ₹ 699/sq m/month (₹65/sq ft /month).

Sector-wise split of transactions



Industry	H2 2017	H2 2018
BFSI	42%	16%
IT/ITeS	14%	11%
Manufacturing	8%	13%
Other Services	36%	61%

Note: BFSI includes BFSI support services

Average deal size and number of deals

H2 2017

1,771 (19,062)
Average Deal Size in sq m (sq ft)

17
Number of Deals

H2 2018

1,114 (11,995)
Average Deal Size in sq m (sq ft)

47
Number of Deals

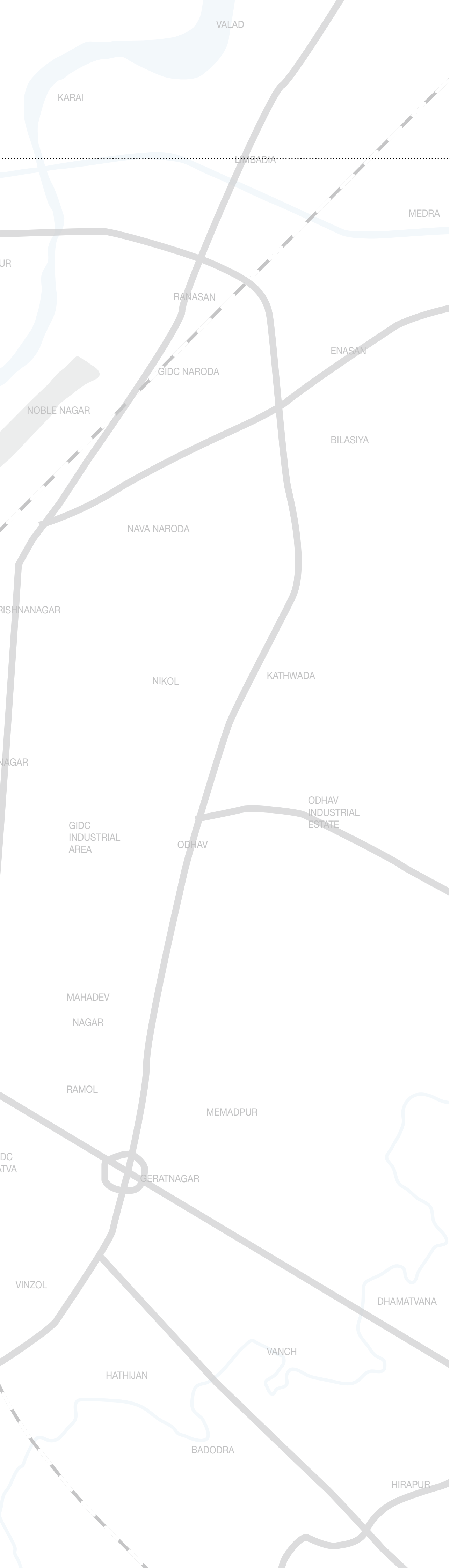
Note - 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Business district classification

Business district	Micro markets
CBD West	Bodakdev, Keshav Baug, Prahladnagar, Satellite, SG Highway, Thaltej
PBD	Gandhinagar, GIFT City
CBD	Ashram Road, Ellis Bridge, Paldi

Source: Knight Frank Research

All maps are for representational purpose not to scale



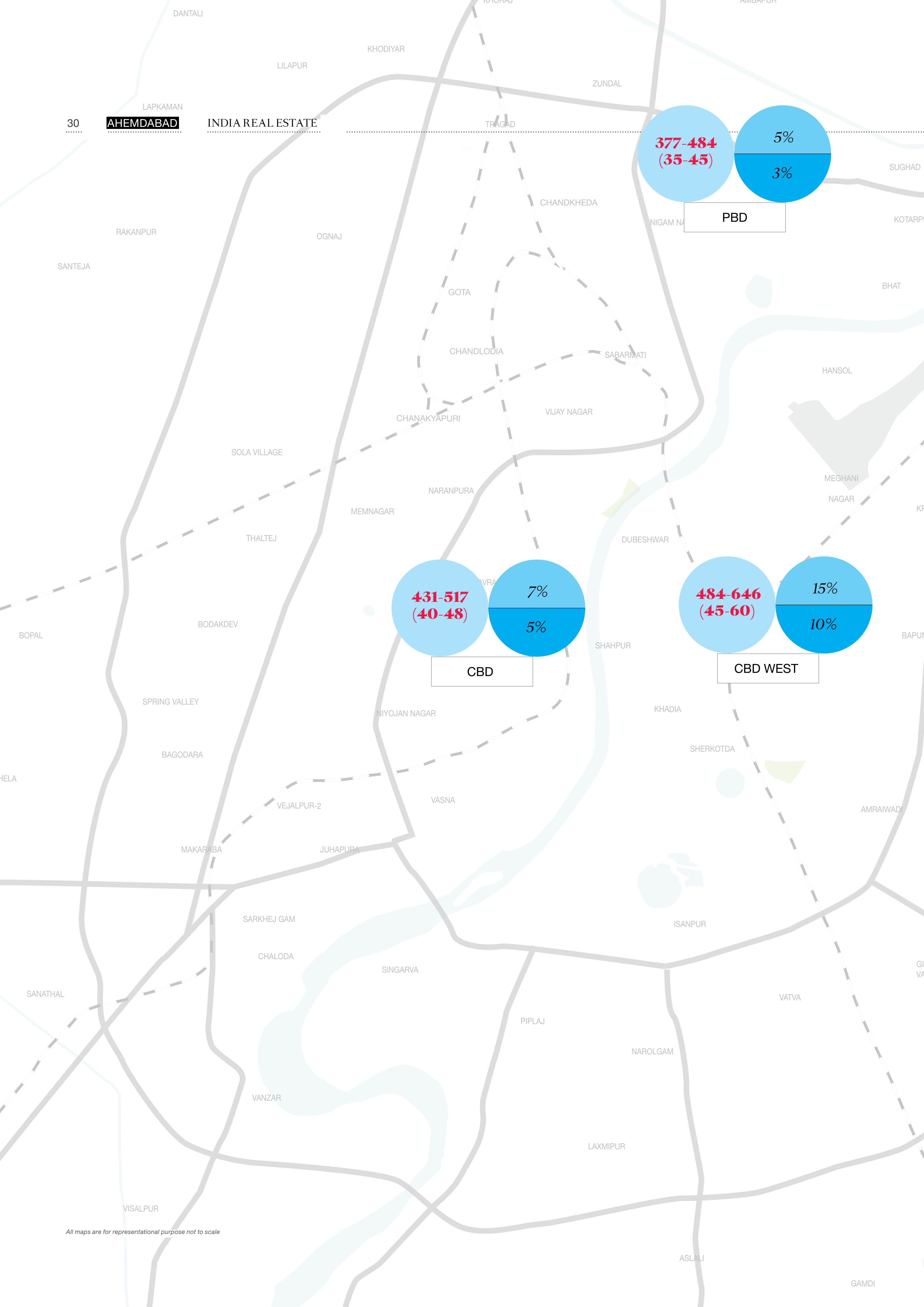
Office Transactions

Transactions mn sq m (mn sq ft) % Change (YoY)

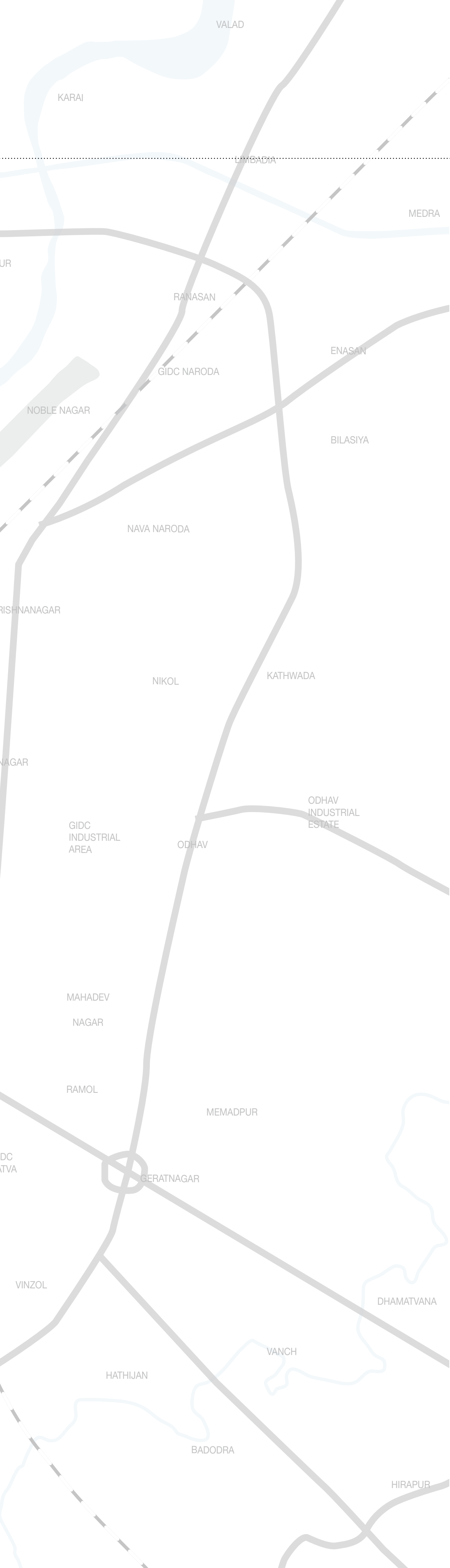
Some of the micro markets which were in the thick of action, with regards to new supply entering into the market are Shyamal Cross Road, Corporate Road, CG Road, SG Highway, Keshav Baug, Sindhu, Bhavan Road and Manek Baug.

74%

Increase in transactions compared to H2 2017.



All maps are for representational purpose not to scale



Knight Frank

Office Rentals

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

12-month change

6-month change

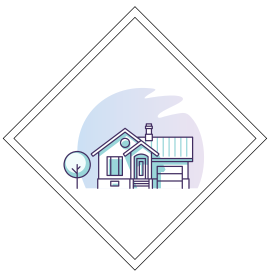
Till H1 2018, the BFSI sector used to garner the lion's share of transacted office space in the city. In H2 2018, however, the share of the BFSI sector has gone down to 26%; the share stood at 42% in H2 2017.

15%

Inncrease in overall weighted average rentals compared to H2 2017.

Bengaluru

RESIDENTIAL MARKET



35%

Increase in sales over H2 2017

Bengaluru Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	11,826	41%	22,410	27,382	22%
Sales (housing units)	17,973	35%	34,546	43,776	27%
Price (weighted average)	₹ 50,390/sq m (₹ 4,681/sq ft)	2%	₹ 49,400/sq m (₹ 4,589/sq ft)	₹ 50,390/sq m (₹ 4,681/sq ft)	2%
Unsold inventory (housing units)	92,718	-15%	109,112	92,718	-15%
Quarters to sell	10.3	-	10.6	10.3	-
Age of unsold inventory (in quarters)	12.7	-	13.0	12.7	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

The policy changes have helped in the positive transition of the residential real estate market into a transparent and efficient sector where latent demand has started translating into healthy sales volume.

- In 2018, Bengaluru's residential real estate market transcended the short-term challenges associated with the implementation of the Karnataka Real Estate Regulation and Development Act, 2017 and Goods and Services Tax (GST) and bounced back with vibrancy. The policy changes have helped in the positive transition of the residential real estate market into a transparent and efficient sector where latent demand has started translating into healthy sales volume. End-users have realised that the residential real estate market has become more organised and transparent and awaiting any further price moderation will only keep them away from realising their home ownership dreams.

- The positivity ushered in due to a transparent regulatory environment led to heightened enquiries across many product categories with ticket sizes up to ₹ 3.5 mn and ₹ 5.0 - 8.0 mn leading the sales momentum. In H2 2018, residential sales improved by 35% over H2 2017, primarily due to a 57% jump in sales in North Bengaluru followed by 28% in South Bengaluru over the same period. Locations in the northern belt such as Bellahalli, Hebbal, Yelahanka as well as Sarjapur Road in the south have particularly witnessed good sales traction, which has boosted developer confidence.

- Strong office space consumption trends are indicative of new job creation intensifying, which bodes well for Bengaluru's residential segment as 2018 witnessed nearly 1.25 mn sq m (13.4 mn sq ft) office space being leased out. Coupled with the boost given to affordable housing by the Narendra Modi government, Bengaluru has witnessed strong sales growth.

- Aggressive marketing strategies of developers have paid off and freebies ranging from no pre-EMI schemes, gold coins to e-commerce vouchers

Of the total new launches in H2 2018, ticket sizes between ₹ 2.5 - 5.0 mn garnered the highest share of 41% followed by ₹ 5.0 – 7.5 mn at 28%.

41%

Increase in launches compared to H2 2017

in addition to selective cash discounts have done the trick for the cautious home buyer who was tired of sitting on the fence for further price correction as the regulatory reforms unfolded in 2016 and 2017.

- Good sales volume and a clean operating environment is encouraging large developers to make hay while the sun shines. As small and mid-sized developers struggle to operate as per RERA guidelines, leaving fewer players in the space, some developers have started increasing prices of ready-to-move-in units and in northern micro markets in a bid to capture a larger market share. As a result, the weighted average prices of residential products in H2 2018 increased marginally by 2% over H2 2017.

- The improved buyer sentiment coupled with RERA registrations coming along for new projects has motivated many developers to launch new residential projects in H2 2018. As a result, the new launches in H2 2018 noted a 41% upswing over H2 2017. Of the total new launches in H2 2018, ticket sizes between ₹ 2.5 - 5.0 mn garnered the highest share of 41% followed by ₹ 5.0 – 7.5 mn at 28%.

- Though the ₹ 2.5 – 5. 0 mn category still comprises the largest share of the total pie, its share as a percentage of overall launches has reduced from 51% in H2 2017 to 41% in H2 2018 as mid-segment projects come back in vogue on the back of popularity of Credit Linked Subsidy Schemes (CLSS) for middle income group (MIG I and MIG II) categories under Pradhan Mantri Awas Yojna (PMAY). The enhancement of carpet area limit for MIG I category from 120 sq m to 160 sq m and MIG II category from 150 sq m to 200 sq m in June 2018 has been instrumental in giving a fillip to new residential supply in Bengaluru as there are ready takers for these large-sized products.

- Increasing office space consumption in North Bengaluru coupled with excellent road infrastructure propelled large-scale new residential launches in this micro market, which garnered 44% share of overall new launches in H2 2018. Locations such as Thirumenahalli, Devanahalli, Jakkur, Yelahanka and Hennur Road witnessed many projects launches in the mid-segment category.

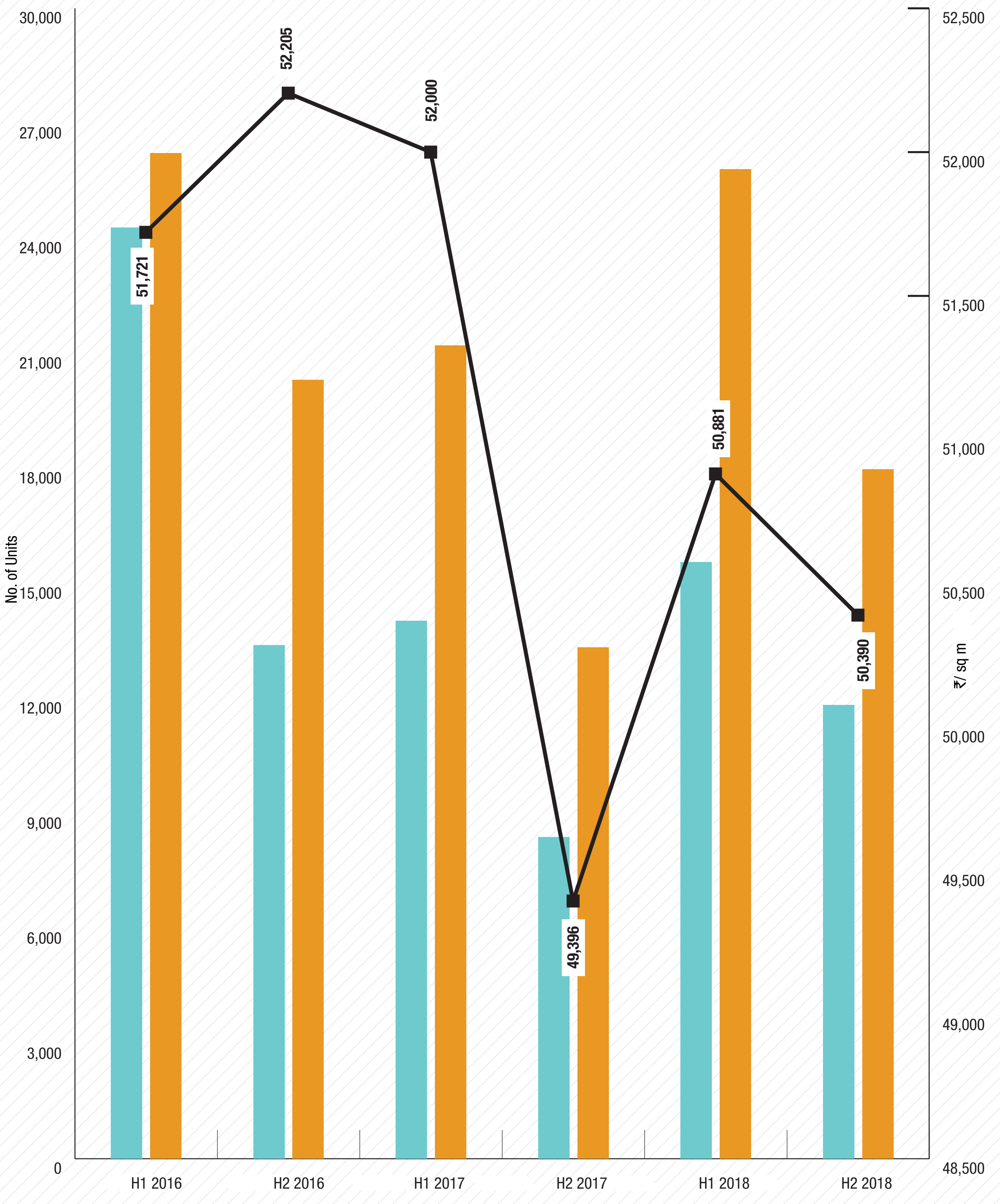
- The southern micro market remained popular and accounted for a 32% share of total launches in H2 2018. On a year-on-year (YoY) basis, this micro market witnessed a 22% upswing in total launches as proximity to the Outer Ring Road employment hub prompted new project launches in locations such as Kanakpura Road, Sarjapur, Hosa Road, Electronic City and Harlur Road.

- Revival in residential sales and rationalisation in residential property prices during H1 2018 have acted as a catalyst to bring down the unsold inventory in the city. In H2 2018, the unsold inventory in Bengaluru reduced by 15% over H2 2017. Of all the micro markets, East and South Bengaluru witnessed a 19% and 16% reduction in unsold residential units, respectively, during this period.

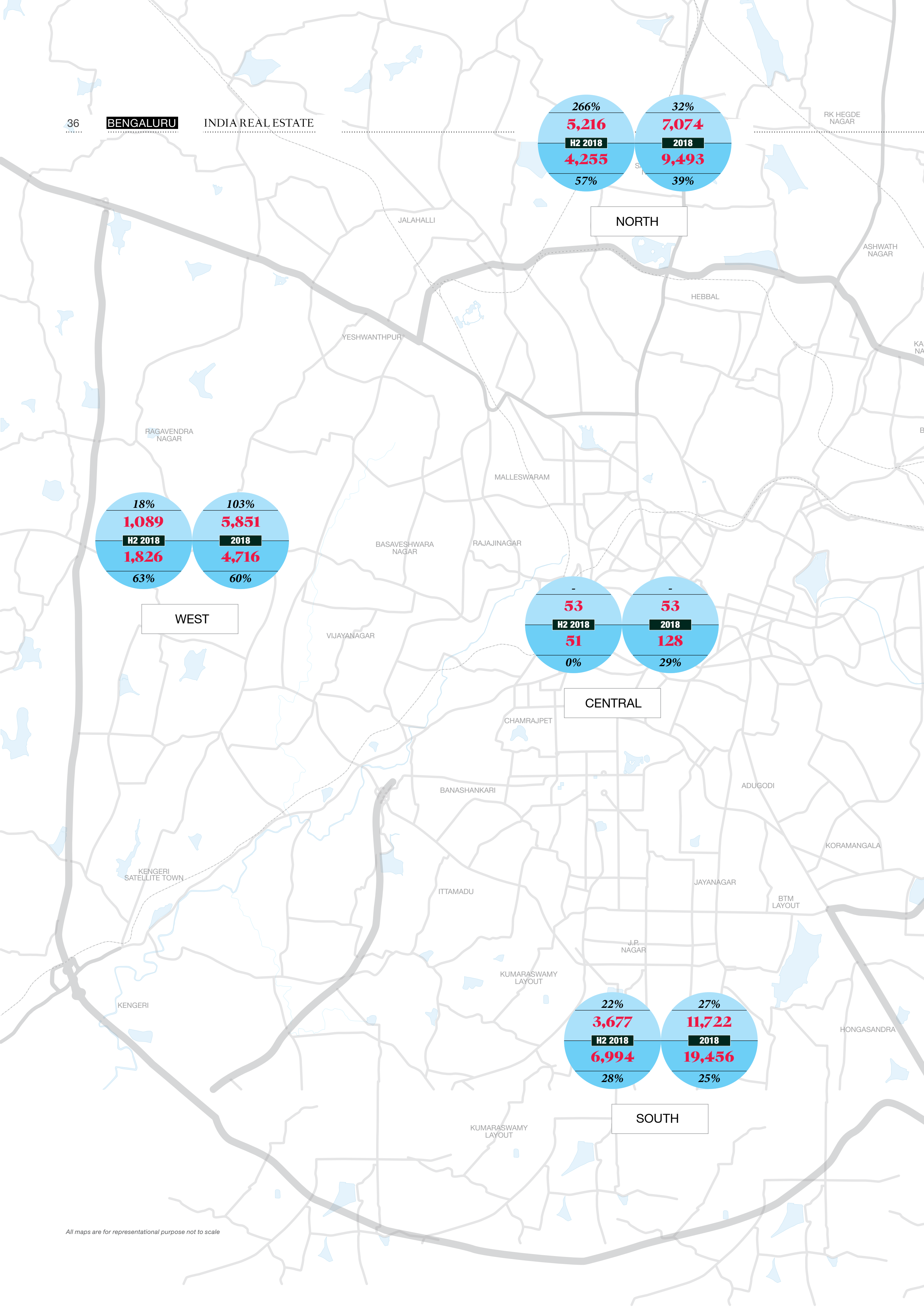
- Quarters-to-sell (QTS), an important indicator to check market health, also climbed down from 10.6 in H2 2017 to 10.3 in H2 2018. However, the age of inventory remained high at 12.7, as many under-construction projects are still struggling to attract buyers and project execution and delivery challenges still grapple the developer community, barring a few large players.

- In the wake of growing concern over Non-Banking Financial Companies (NBFCs) liquidity issues arising out of their asset liability momentum, fears of negative sentiment about the lender-borrower relationship amongst different stakeholder and consumer groups cannot be ignored, even though they may be far-fetched. It may adversely impact the sales and launches momentum in the residential segment in the first few months of 2019.

Bengaluru Market Activity



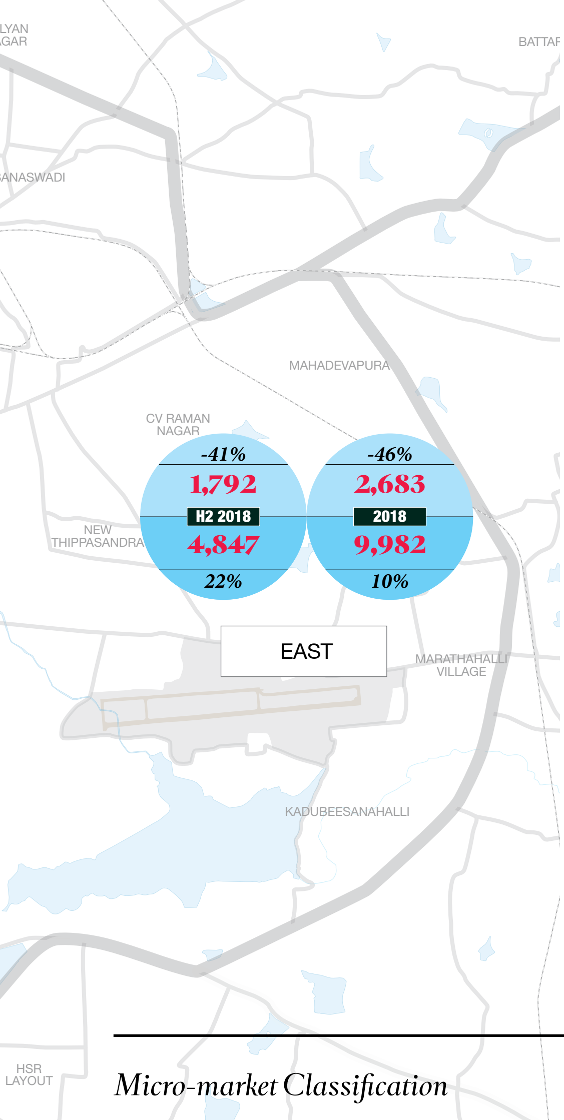
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Launches and Sales

Launches (housing units) | Sales (housing units) | % Change (YoY)



Locations in the northern belt such as Bellahalli, Hebbal, Yelahanka as well as Sarjapur Road in the south have particularly witnessed good sales traction, which has boosted developer confidence.

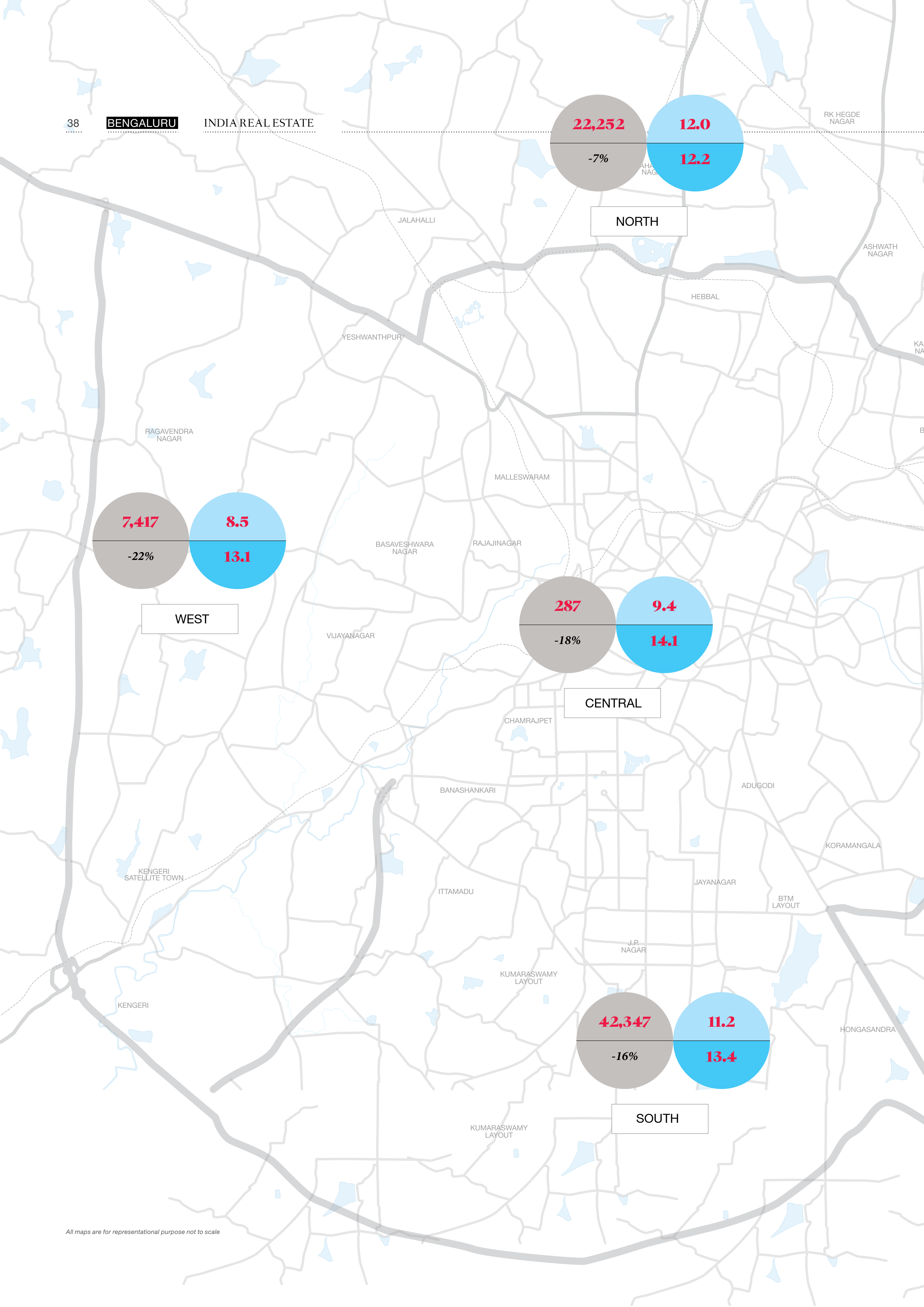
57%

Increase in sales in Northern micro-market over H2 2017

Micro-market Classification

Micro-market	*Locations*
CENTRAL	MG Road, Lavelle Road, Langford Town, Vittal Mallya Road, Richmond Road
EAST	Whitefield, Old Airport Road, Old Madras Road, KR Puram, Marathahalli
WEST	Malleswaram, Rajajinagar, Yeshwantpur, Tumkur Road, Vijayanagar
NORTH	Hebbal, Bellary Road, Hennur, Jakkur, Yelahanka, Banaswadi
SOUTH	Koramangala, Sarjapur Road, Jayanagar, JP Nagar, HSR Layout, Kanakpura Road, Bannerghatta Road

Source: Knight Frank Research



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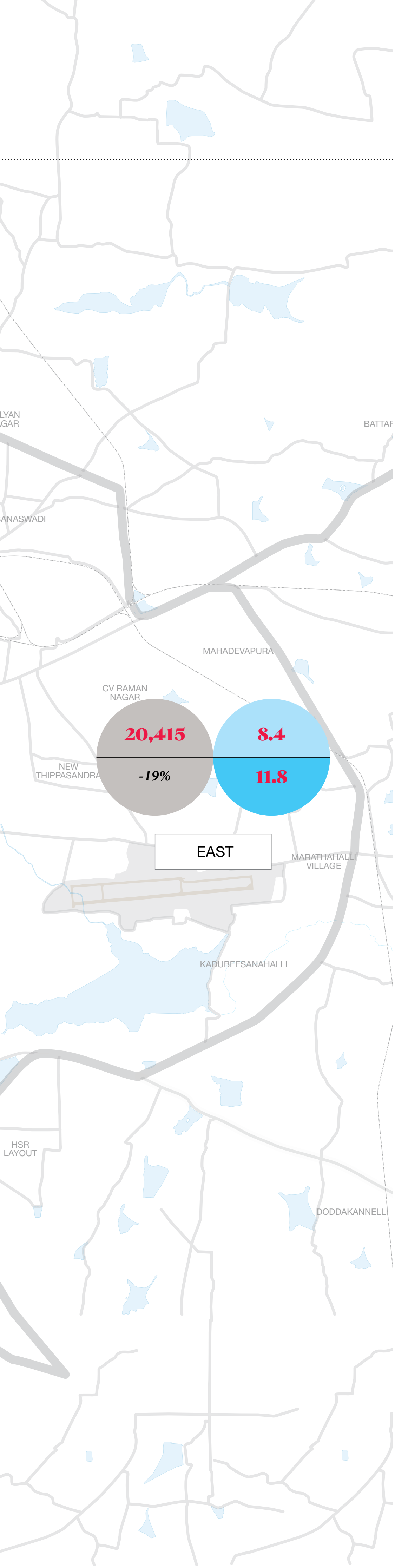
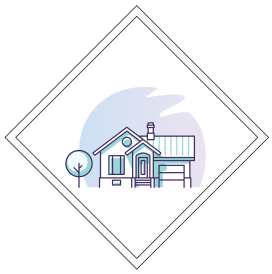


Residential Unsold Inventory

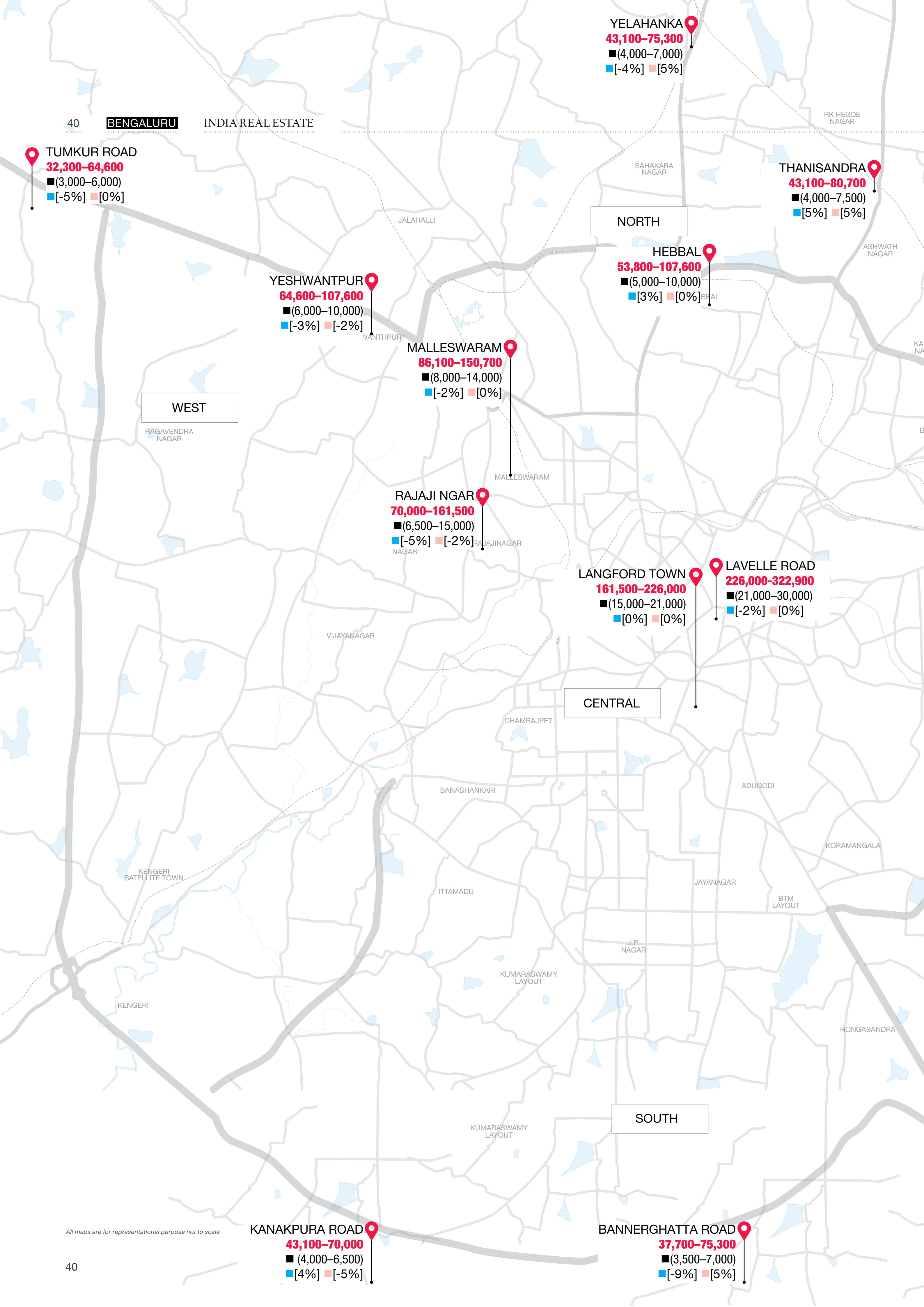
Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)

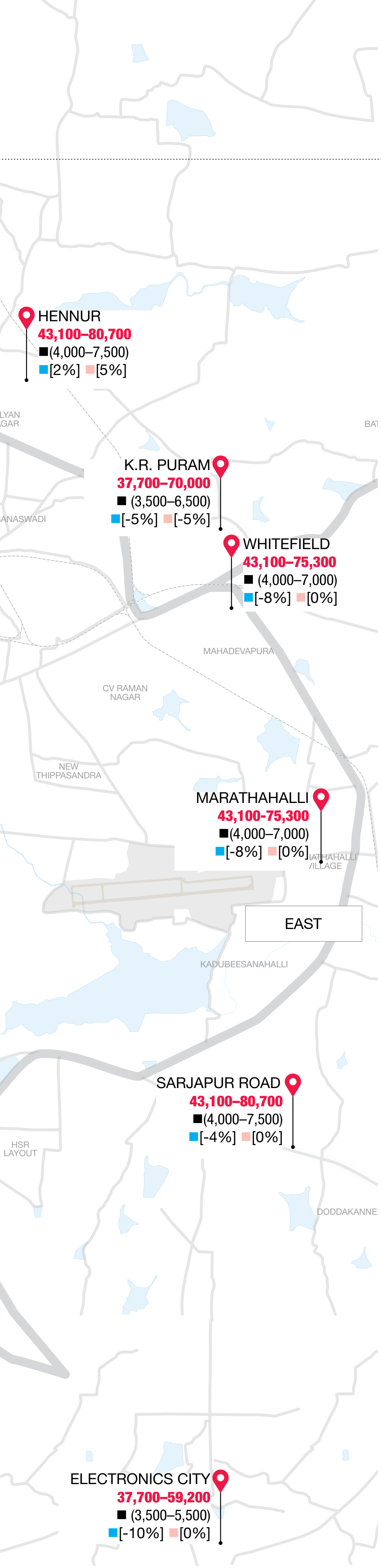
Of all the micro markets, East and South Bengaluru witnessed a 19% and 16% reduction, respectively in unsold residential units in H2 2018.



15%

Decline in unsold inventory over H2 2017 on an overall basis for the city


YELAHANKA
43,100–75,300
(4,000–7,000)
[-4%] [5%]
TUMKUR ROAD
32,300–64,600
(3,000–6,000)
[-5%] [0%]
THANISANDRA
43,100–80,700
(4,000–7,500)
[5%] [5%]
NORTH
HEBBAL
53,800–107,600
(5,000–10,000)
[3%] [0%]
YESHWANTPUR
64,600–107,600
(6,000–10,000)
[-3%] [-2%]
MALLESWARAM
86,100–150,700
(8,000–14,000)
[-2%] [0%]
WEST
RAJAJI NGAR
70,000–161,500
(6,500–15,000)
[-5%] [-2%]
LANGFORD TOWN
161,500–226,000
(15,000–21,000)
[0%] [0%]
LAVELLE ROAD
226,000–322,900
(21,000–30,000)
[-2%] [0%]
CENTRAL
SOUTH
KANAKPURA ROAD
43,100–70,000
(4,000–6,500)
[4%] [-5%]
BANNERGHATTA ROAD
37,700–75,300
(3,500–7,000)
[-9%] [5%]
RK HEGDE NAGAR
SAHAKARA NAGAR
JALAHALLI
ASHWATH NAGAR
RAGAVENDRA NAGAR
MALLESWARAM
RAJAJINAGAR
VIJAYANAGAR
CHAMRAJPET
BANASHANKARI
ADUGODI
KORAMANGALA
KENGERI SATELLITE TOWN
ITTAMADU
JAYANAGAR
BTM LAYOUT
J.P. NAGAR
KUMARASWAMY LAYOUT
KENGERI
HONGASANDRA



Knight Frank

Residential Pricing

Price range in H2 2018 in ₹/sq m

Price range in H2 2018 in (₹/sq ft)

12 month change

6 month change

Locations in northern micro-market such as Thanisandra, Hebbal and Hennur witnessed a 2-5% uptick in residential prices as compared to H2 2017

5%

Increase in residential prices in Thanisandra over H2 2017

4%

Vacancy levels in Bengaluru office market

OFFICE MARKET

Bengaluru Market Snapshot

Parameter	H2 2018	Change YoY	2017	2018	Change YoY
New completions mn sq m (mn sq ft)	0.36 mn sq m (3.9 mn sq ft)	-10%	0.75 mn sq m (8.1 mn sq ft)	0.71 mn sq m (7.6 mn sq ft)	-6%
Transactions mn sq m (mn sq ft)	0.64 mn sq m (6.9 mn sq ft)	17%	1.09 mn sq m (11.7 mn sq ft)	1.25 mn sq m (13.4 mn sq ft)	15%
Weighted average rental in ₹/sq m/ month (₹/sq ft/month)	796.55 (74)	17%	678.13 (63)	796.55 (74)	17%
Stock mn sq m (mn sq ft)	13.81 mn sq m (148.7 mn sq ft)	6%	13.09 mn sq m (140.9 mn sq ft)	13.81 mn sq m (148.7 mn sq ft)	6%
Vacancy (%)	4%	-	3%	4%	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

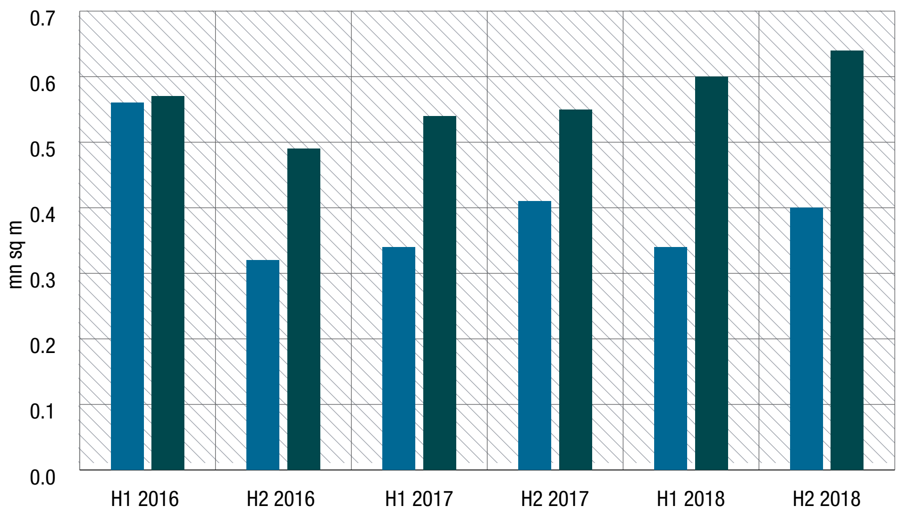
- In 2018, Bengaluru's gross leasing continued its successive year-on-year (YoY) uptrend recording the highest ever gross leasing in the past one decade. 2018 was the healthiest year for Bengaluru's office market in terms of total leasing volume and is indicative of its strong foothold as the country's key market leading office space demand. This year Bengaluru recorded total leasing volume of about 1.25 mn sq m (13.4 mn sq ft) signifying an annual growth of 15% over 2017.

- In H2 2018, the total transaction volume was noted at 0.64 mn sq m (6.9 mn sq ft) registering a 17% YoY growth over H2 2017. In line with past trends, Bengaluru retains its top position across the top eight cities of India in terms of total office space absorbed during H2 2018.

- In H2 2018, hiring has gone up in payment gateway companies and food app companies. In the IT/ITeS sector too, demand for ''new skill sets'' have given a boost to hiring. Compared to 2017, headcount projections are up significantly which have helped total transaction volume to surpass the levels recorded in 2017.

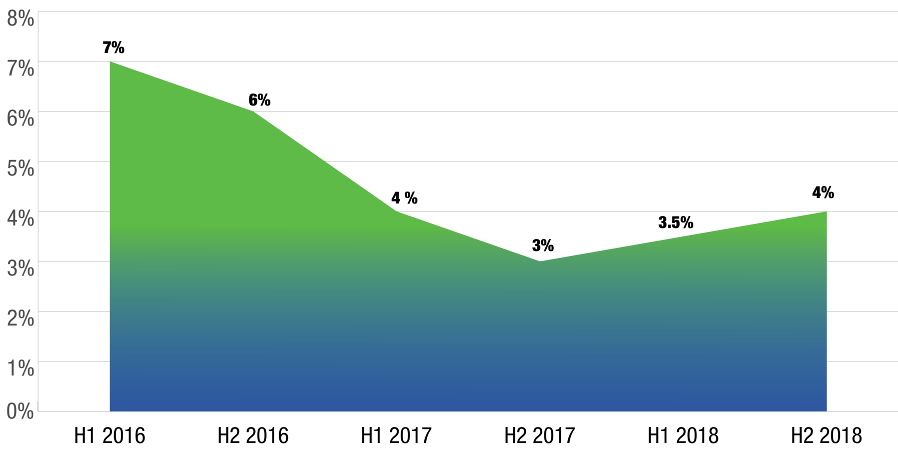
- Of the total leasing volume, Outer Ring Road (ORR) accounted for the highest share of nearly 69% in H2 2018. Due to lack of new supply in this micro-market in the past one year, the transaction volume in this belt had slowed down as occupiers who had not pre-committed spaces in this micro-market had to resort to other options reducing the

Bengaluru office market activity



Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Bengaluru office market vacancy



Source: Knight Frank Research

17%

Growth in transaction volume over H2 2017

share of ORR in H2 2017 to only 47% of the total transaction pie.

- This micro-market was followed by Peripheral Business District (PBD) South accounting for 8% of the total transaction volume in H2 2018, Central Business District (CBD) and Off-CBD at 7% and Suburban Business District (SBD) at 6%. PBD East and PBD North, both accounted for a share of 5% each.

- The ORR micro-market has witnessed a massive YoY growth in transaction volume of 72% over H2 2017 and continues to be the most preferred micro-market amongst occupiers and the fastest growing tech-corridor in the city where office space demand always exceeds supply. However, completion of multiple blocks of a prime IT Park in 2018 led occupiers to commit to office spaces readily and eased the supply crunch temporarily. Coupled with some pre-committed spaces, this belt recorded this massive leasing growth in H2 2018.

- In H2 2018, the share of PBD North micro-market noticed a steep YoY growth of 216% in the city's total leasing volume. With superb connectivity and multiple office parks already established in North Bengaluru, we expect the northern peripheral office market to become the next growth corridor and to take up much bigger share in the city's total transactions going forward.

- Bengaluru's office market noted an average deal size of 6,110 sq m (65,769 sq ft) in H2 2018 even though the number of deals recorded dropped

Embassy Office Parks, a joint venture of Bengaluru's realty firm, Embassy Group along with the US-based Private Equity fund partner, Blackstone, has filed a draft offer document with the Securities and Exchange Board of India (SEBI) for a Real Estate Investment Trust (REIT). Embassy Office Parks plans to list around 3.07 mn sq m (33 mn sq ft) of office real estate portfolio under this REIT which will also be Asia's largest in terms of space of office portfolio listed.

significantly over H2 2017. Nearly half of the transactions during this period in the city amount to more than 4,600 sq m (50,000 sq ft).

- Of the overall transaction pie, the share of Information Technology and Information Technology Enabled Services (IT/ITeS) sector in the total leasing activity remained the largest at 37% in H2 2018 but declined from 44% of the same in H2 2017. In H2 2018, Banking, Financial Services and Insurance (BFSI) sector comprised of a 28% share, followed by the Other Services Sector at 21% and the Manufacturing sector at 14%.

- The demand for office spaces in H2 2018 has been primarily driven by multinational companies like JP Morgan, Google, Samsung, Xiaomi, Nvidia, ABB and Walmart. It is also noted that the office space leasing by e-commerce sector has slowed down as it accounted for just 2% of the total transactions in H2 2018, denoting a dip of almost 82% YoY.

- The share of co-working sector in the total leasing volume scaled up by 12% in H2 2018 over the 28,600 mn sq m (0.3 mn sq ft) leased in H2 2017 as co-working operators like WeWork, Indiqube, Simpli Work and Awfis expanded operations in the city to capture a larger share of the flexible office space market. The high demand for co-working spaces is disrupting the traditional leasing models and "space-as-a-service" is emerging as a key theme. Co-working culture is garnering wider acceptance due to their cost-effectiveness, innovative design and flexibility and many developers have started apportioning flexible workspaces in their portfolios. On an annual basis, the growth in co-working operators' space occupancy in 2018 increased by a massive 121% over the past year.

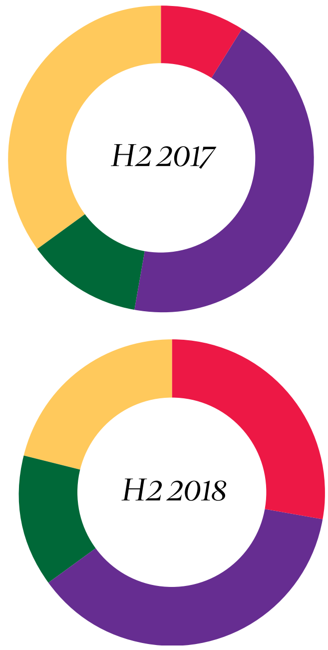
- As of H2 2018, Bengaluru clocked 0.36 mn sq m (3.90 mn sq ft) of new supply infusion, recording a drop of 10% over H2 2017. Of the total new supply that came on the block in the city, 92% became available in the ORR micro-market as a large IT Park witnessed completion of multiple blocks which momentarily eased the supply pressure in this much preferred micro-market that was grappling with lowest ever vacancy in the past one year.

- With office transactions at an all-time high, the vacancy level for the city's office market remained low at 4% at the end of H2 2018. As office space leasing has been continually outpacing supply in the past two years, the gap between transaction growth rate and supply infusion has only widened.

- Due to limited new office supply and strong demand for office spaces, the city's weighted average rentals experienced a substantial growth of 17% YoY in H2 2018. Although the CBD and Off-CBD experienced limited gross leasing and very minimal supply due to lack of new land parcels for development, this micro-market observed the highest rental growth of about 17% YoY on the back of occupier interest to maintain foothold in centrally located office buildings. Due to ease of supply pressure in the short-term, the rentals in ORR witnessed 6% YoY increase. We expect rentals in ORR to go up again in 2019 as the same supply infusion in this micro-market may not be matched.

- Embassy Office Parks, a joint venture of Bengaluru's top realty firm, Embassy Group along with the US-based Private Equity fund partner, Blackstone, has filed a draft offer document with the Securities and Exchange Board of India (SEBI) for a Real Estate Investment Trust (REIT). Embassy Office Parks plans to list around 3.07 mn sq m (33 mn sq ft) of office real estate portfolio under this REIT which will also be Asia's largest in terms of space of office portfolio listed. With Embassy Office Parks, India will join the global REIT markets and provide an opportunity to retail investors for an easy entry and exit investment avenue in Indian real estate sector.

Sector-wise split of transactions



	Industry	H2 2017	H2 2018
■	BFSI	9%	28%
■	IT/ITES	44%	37%
■	Manufacturing	12%	14%
■	Other Services	35%	21%

Note: BFSI includes BFSI support services

Average deal size and number of deals

3,640 (39,163)
Average Deal Size in sq m (sq ft)

H2 2017

151
Number of Deals

6,110 (65,769)
Average Deal Size in sq m (sq ft)

H2 2018

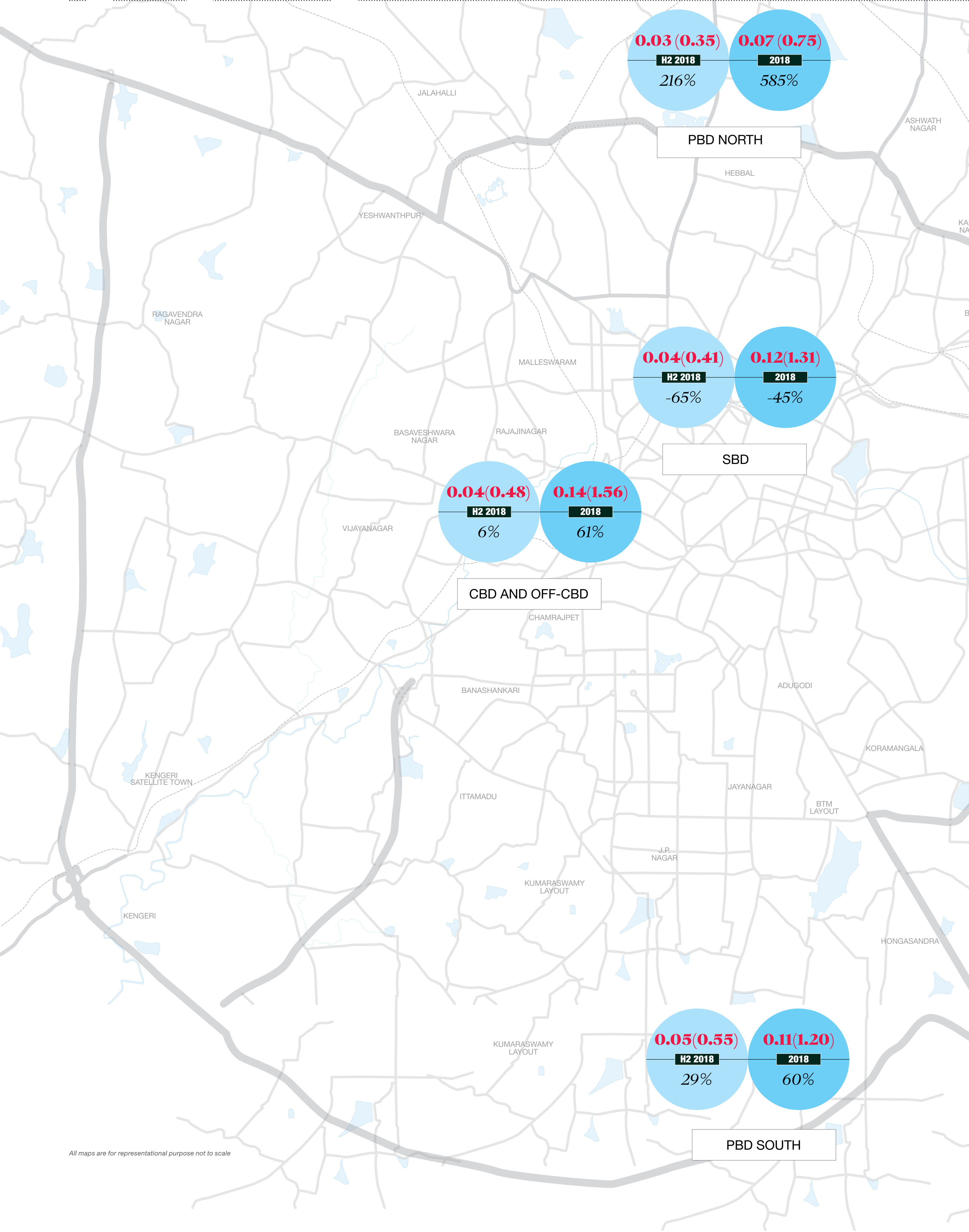
71
Number of Deals

Note - 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Business district classification

Business district	Micro markets
Central business district (CBD) and off CBD	MG Road, Residency Road, Cunningham Road, Lavelle Road, Richmond Road, Infantry Road
Suburban business district (SBD)	Indiranagar, Koramangala, Airport Road, Old Madras Road
Peripheral business district (PBD) East	Whitefield
Peripheral business district (PBD) South	Electronics City, Bannerghatta Road
Peripheral business district (PBD) North	Thanisandra, Yelahanka, Devanahalli
Outer Ring Road (ORR)	Hebbal ORR, Marathahalli ORR, Sarjapur Road ORR

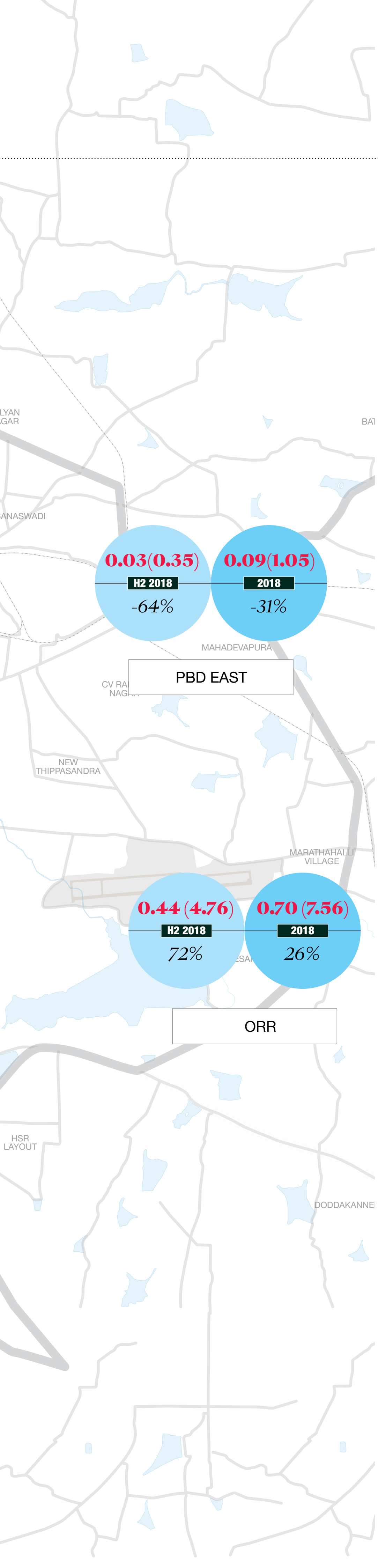
Source: Knight Frank Research



All maps are for representational purpose not to scale

Office Transactions

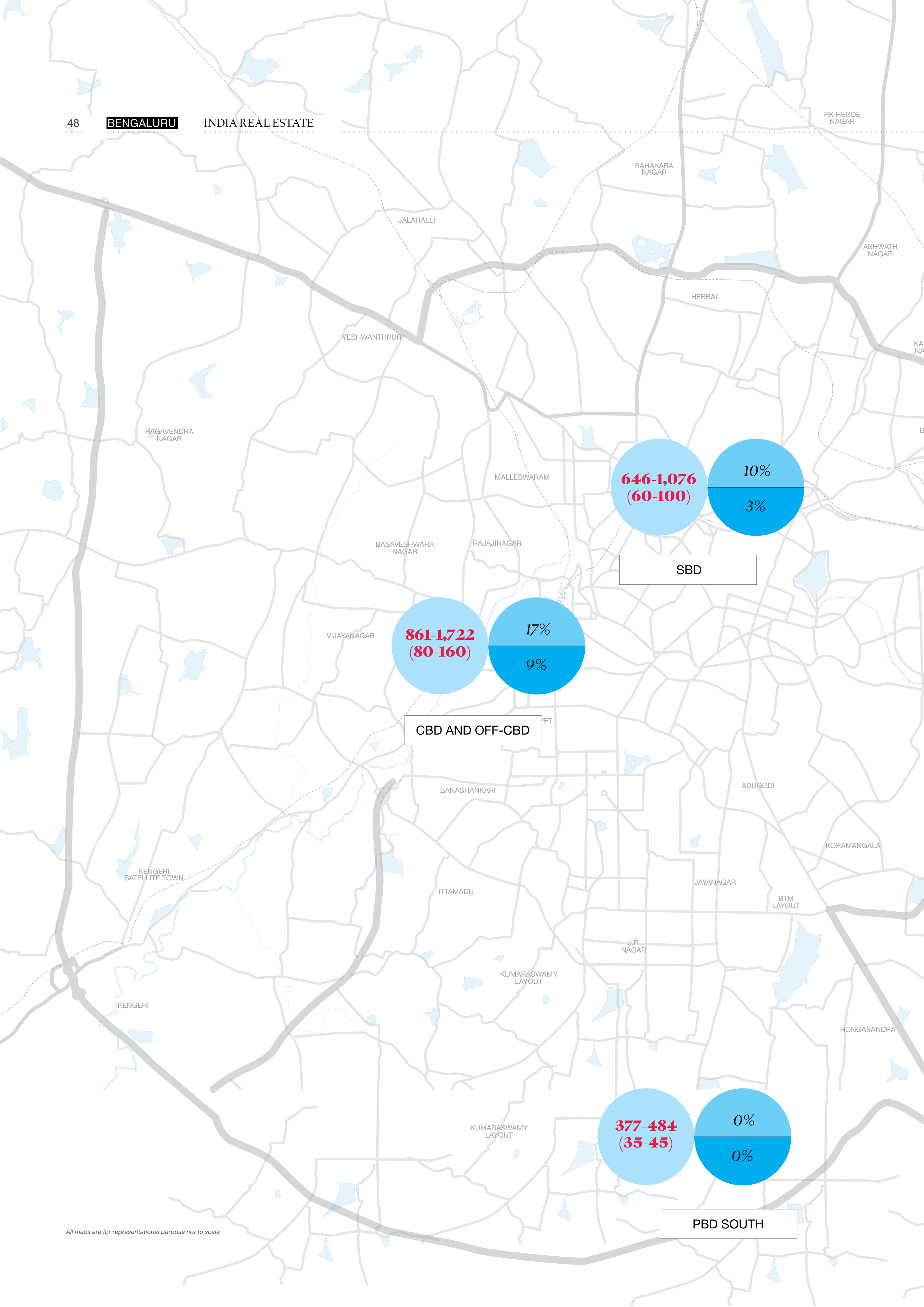
Transactions mn sq m (mn sq ft) | % Change (YoY)



The ORR micro-market has witnessed a massive YoY growth in transaction volume of 72% over H2 2017 and continues to be the most preferred micro-market amongst occupiers where office space demand always exceeds supply.

72%

YoY increase in office space transactions in ORR in H2 2018



All maps are for representational purpose not to scale

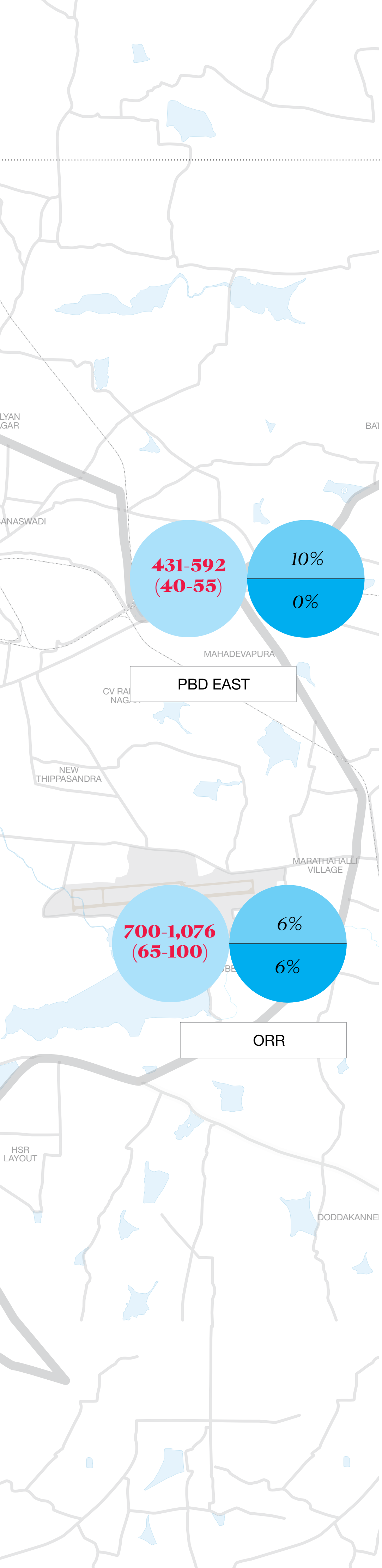
Knight Frank

Office Rentals

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

12-month change

6-month change

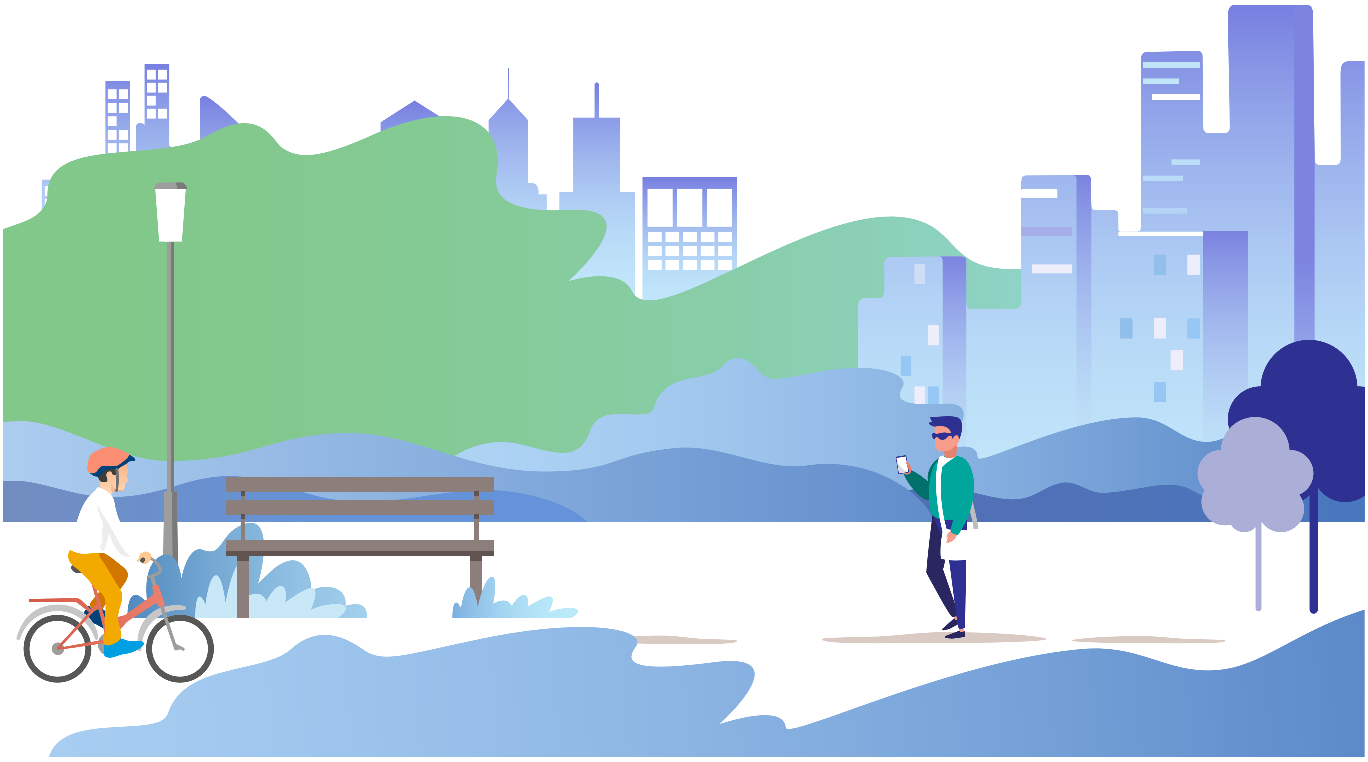


17%

YoY increase in weighted average rentals in the city

Although the Central Business District and Off -Central Locations (CBD and Off-CBD) experienced limited gross leasing and very minimal supply due to lack of new land parcels for development, this micro-market observed the highest rental growth of about 17% YoY on the back of occupier interest to maintain foothold in centrally located office buildings.

Chennai



RESIDENTIAL MARKET

20%

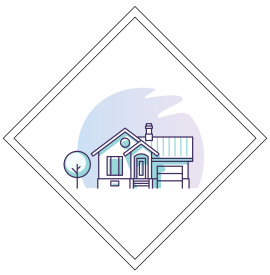
YoY increase in launches in H2 2018

Chennai Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	3,850	20%	9,235	10,373	12%
Sales (housing units)	7,401	11%	15,520	15,986	3%
Price (weighted average)	₹47,245/sq m ₹(4,389/sq ft)	-3%	₹ 48,706/sq m ₹ (4,525/ sq ft)	₹ 47,245/sq m ₹(4,389/ sq ft)	-3%
Unsold inventory (housing units)	19,027	-23%	24,640	19,027	-23%
Quarters to sell	4.8	-	6.2	4.8	-
Age of unsold inventory (in quarters)	14.5	-	14.2	14.5	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)

Source: Knight Frank Research



11%

YoY growth in sales in H2 2018

- 2018 has been a year of slow recovery for Chennai real estate. The first half recorded a three-year high in launches along with a slowdown in the continuous drop in sales. This created expectations of further growth in performance in the second half of the year. But H2 2018 failed to live up to this promise of further recovery as launches dwindled and sales failed to gather enough momentum.

- Launches and sales in the Chennai real estate market have grown by 20% and 11% year-on-year (YoY), respectively, during H2 2018, but this growth is by virtue of the base effect.

- Launches took a hit as developers are choosing to wait it out while sales have been marred by poor demand resulting from an expectation of a further fall in prices and changing mindset of homebuyers to be asset light. The situation has been further worsened by the Non-Banking Financial Companies' (NBFCs) credit crisis that created a capital crunch for the real estate sector nationwide.

- The developer community is still struggling to find their feet in the Real Estate (Regulation and Development) Act, 2016 (RERA) and Goods and Services Tax (GST) world. Doing business has become difficult as threats of RERA penalties or of being stuck with unsold inventories loom large. Cost of construction has escalated, and poor sales are not helping. A market-driven price reduction of up to 3% YoY has further eaten into the profit margins. With such a bleak scenario, developers are choosing to hold back new launches until the market recovers.

- Another important reason for reduced launches is the Tamil Nadu Combined Development Regulations (TNCDR) and Building Rules 2018, which will bring into effect the increase in floor space index (FSI) from 1.5 to 2 for all types of buildings in the state. Developers most certainly want to avail this benefit and are therefore holding back until it is officially notified.

- On a positive note, this slowdown in new launches has positively impacted the quarters-to-sell (QTS), indicating that the Chennai market now holds a little more than a year's inventory.

- Even though the supply side seems plagued by the challenges mentioned above, positive signs of recovery in the near future come from the large-scale land transactions that happened in 2018 such as the ₹ 200 crore deal by Baashyaam Constructions for a land parcel on the Old Mahabalipuram Road (OMR). Such deals indicate that developers have already acquired land parcels to launch new projects.

- On the demand side, there has been a modest growth in sales, but it is much lower than was anticipated. Also, sales are mostly concentrated in two categories, viz. the ₹ 3–5 mn ticket size segment and the ready-to-move-in segment. The former category is always in demand owing to its affordability while the latter category is picking up because of no GST and no risk of project delays. Many units in OC-ready projects of prominent developers across OMR-1 have been sold in the last 2–3 months.

- Also, micro-markets such as Navallur that are within a reasonable travelling distance from existing employment hubs and where social infrastructure is gradually evolving, are doing well and are expected to continue to do so in the future.

- But overall, demand continues to be lacklustre as homebuyers continue to resist high property prices. Additionally, emerging trends like preference to be asset-light and choosing to pay rents over EMIs are significantly contributing to low demand from homebuyers, especially millennials.

- Over the years, a major driver of the Chennai real estate market has been the information technology / information technology enabled service (IT/ITeS) and industrial sectors. However, in recent times, no new businesses are coming to Chennai and the existing ones have either deferred expansion plans or moved out to other states that have aggressively wooed them. Consequently, the flow of immigrants to Chennai has downsized and so has the subsequent residential demand.

- Another contributor to low sales is the demand-supply discord in ticket size. While buyers prefer the sub-₹ 6 mn product owing to affordability, many developers had launched projects upwards of ₹ 8 mn with a larger unit size.

- The NBFC crisis squeezed credit flows to developers as well as homebuyers, negatively affecting supply as well as demand. However, this impact was marginal in the Chennai real estate market as the dependence of developers on NBFC capital is lower. Nonetheless, home loan disbursals have reduced, and this significantly contributed to low sales in H2 2018.

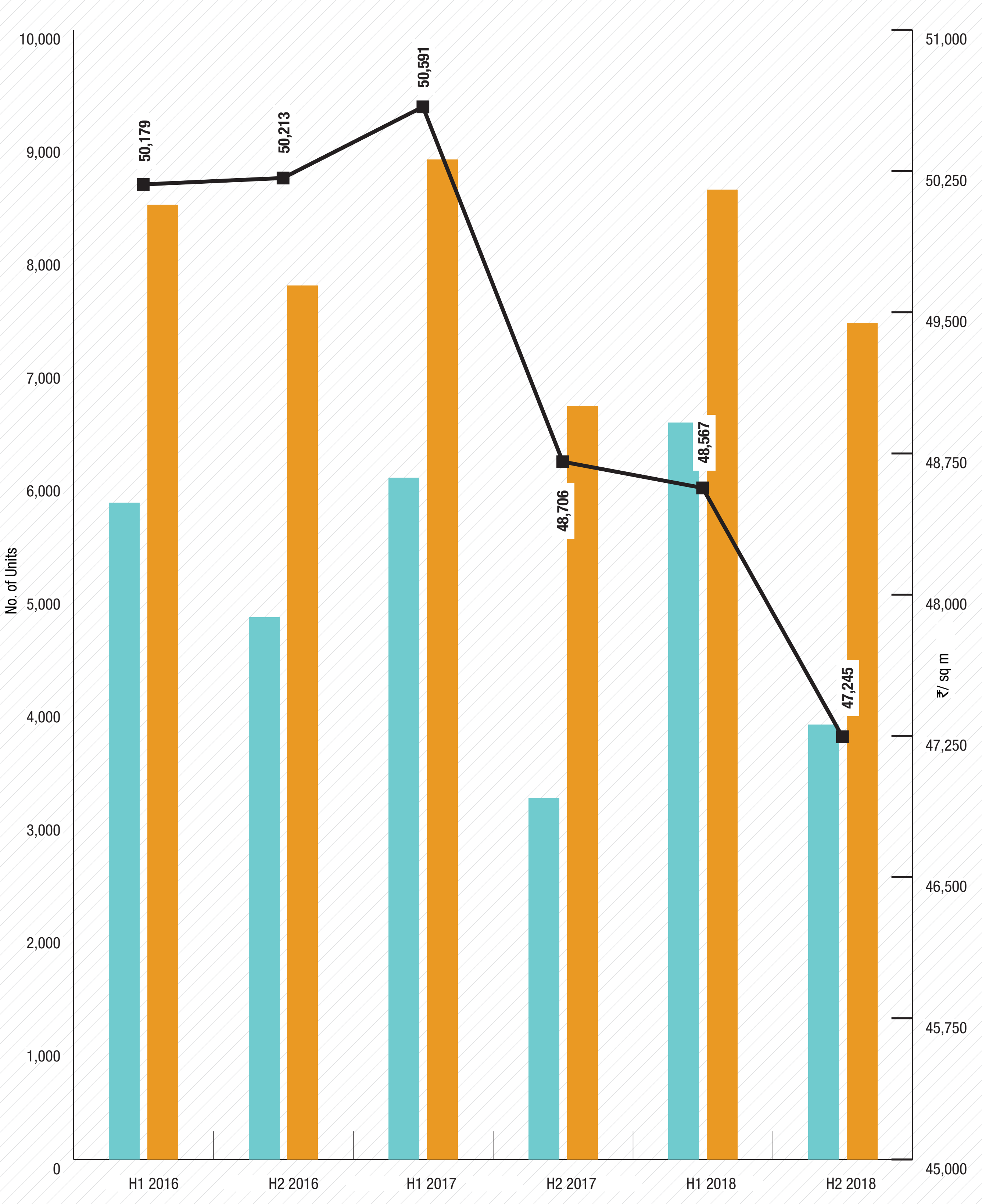
- Residential prices have corrected by a further 3% YoY in H2 2018. However, this has helped encourage sales during the period.

- To increase sales, developers are running attractive discount deals and offering subvention schemes. However, these schemes and deals have been observed to have a much greater impact in the sub - ₹ 6 mn ticket size segments.

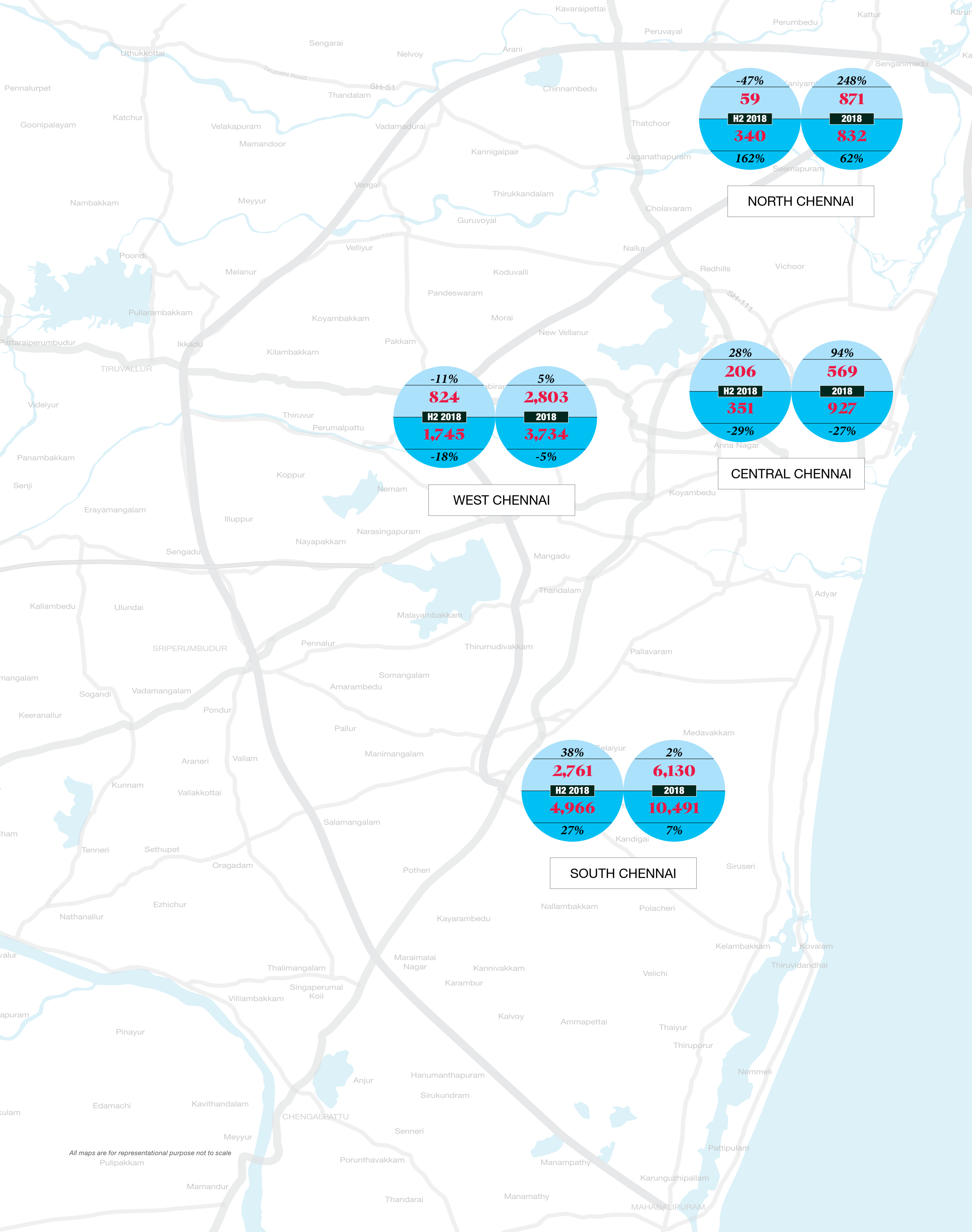
- Overall, the situation looks lacklustre, but it is just a matter of time. Notification of TNCDR 2018, expected in Q1 2019, will certainly bring in more project launches. Also, the upcoming festive season i.e. Pongal in January 2019 is expected to clock much greater sales. However, for the real estate market to see significant and steady activity (like old times) developers will have to adjust and adapt to the needs of homebuyers, and compromise on prices. Homebuyers have been holding back their purchases for the second year in a row in anticipation that prices will correct further. They might continue to hold back as the attraction of real estate as investment is fast diminishing. Unless, there is a significant scope for capital appreciation and investment returns in real estate, developers will find it hard to cater to the new and changed homebuyer.

Residential prices have corrected by a further 3% YoY in H2 2018. However, this has helped encourage sales during the period.

Chennai Market Activity



Source: Knight Frank Research

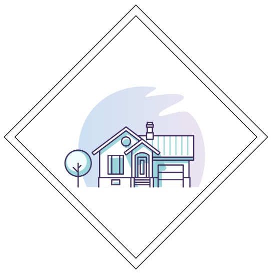


All maps are for representational purpose not to scale

Residential Launches and Sales

Launches (housing units) Sales (housing units) % Change (YoY)

YoY volume growth in launches and sales in H2 2018 is by virtue of a base effect



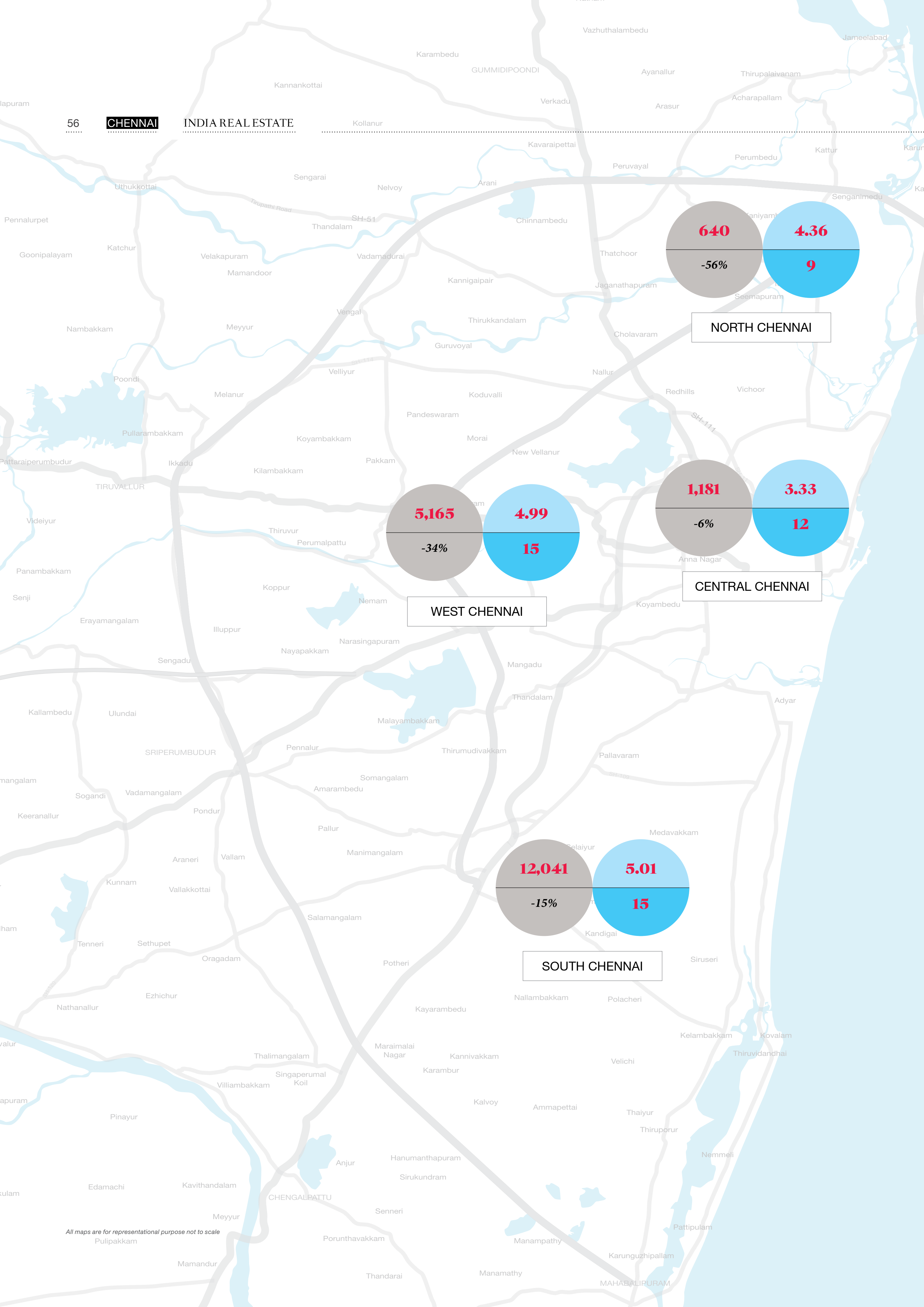
27%

YoY growth in sales in South Chennai during H2 2018

Micro-market Classification

Micro-market	*Locations*
Central Chennai	T. Nagar, Alandur, Nungambakkam, Kodambakkam, Kilpauk
West Chennai	Porur, Ambattur, Mogappair, Iyyappanthangal, Sriperumbudur
South Chennai	Perumbakkam, Chrompet, Sholinganallur, Guduvancheri, Kelambakkam
North Chennai	Tondiarpet, Kolathur, Madhavaram, Perambur

Source: Knight Frank Research



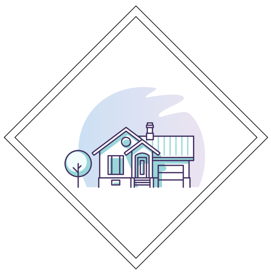
All maps are for representational purpose not to scale

Knight Frank

Residential Unsold Inventory

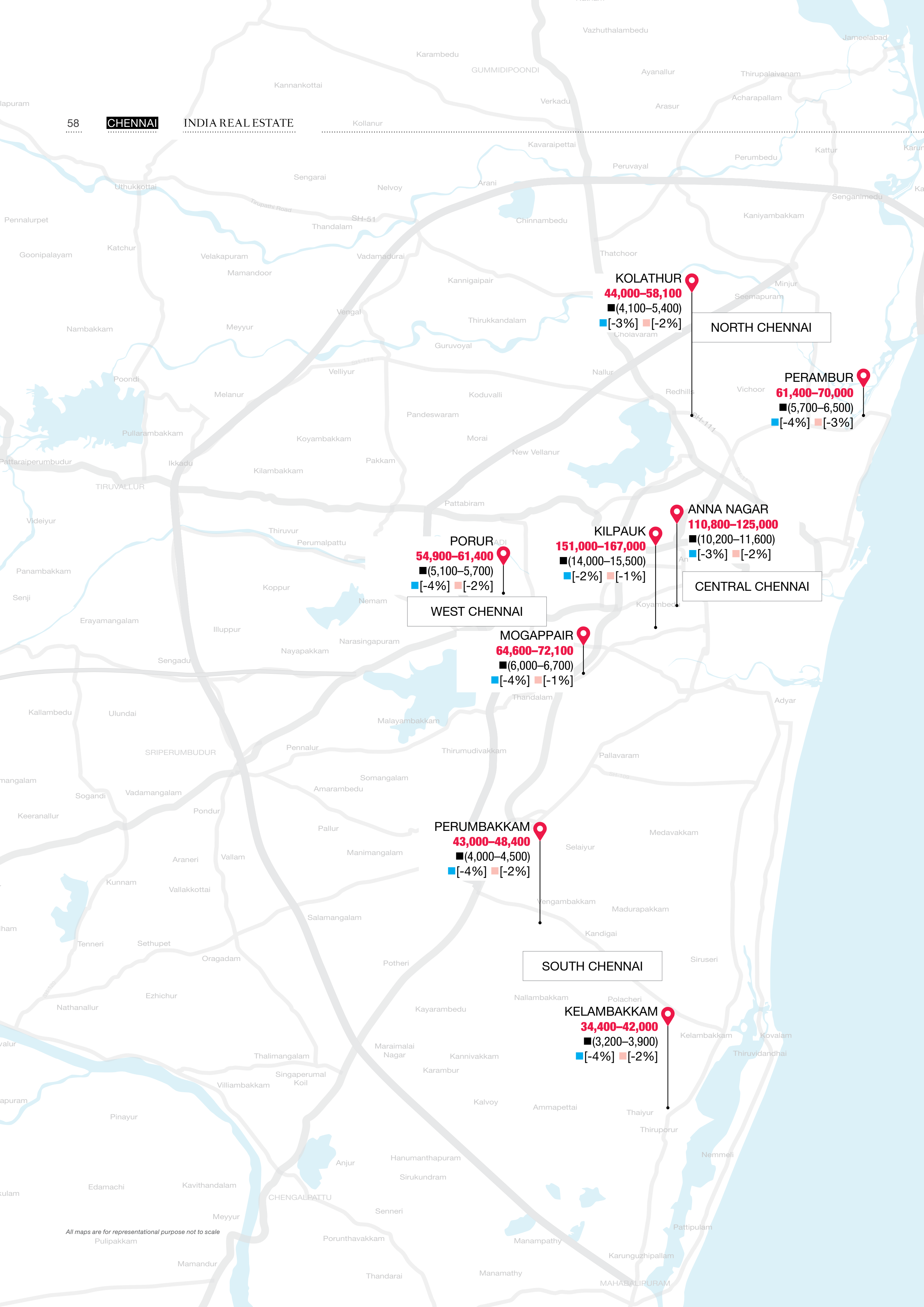
Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)

Age of inventory has gone up from 14.2 quarters to 14.5 quarters



-23%

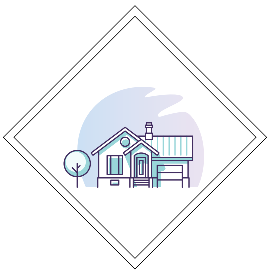
YoY change in unsold inventory in H2 2018



NORTH CHENNAI
KOLATHUR
44,000–58,100
(4,100–5,400)
[-3%] [-2%]
PERAMBUR
61,400–70,000
(5,700–6,500)
[-4%] [-3%]
CENTRAL CHENNAI
ANNA NAGAR
110,800–125,000
(10,200–11,600)
[-3%] [-2%]
KILPAUK
151,000–167,000
(14,000–15,500)
[-2%] [-1%]
WEST CHENNAI
PORUR
54,900–61,400
(5,100–5,700)
[-4%] [-2%]
MOGAPPAIR
64,600–72,100
(6,000–6,700)
[-4%] [-1%]
SOUTH CHENNAI
PERUMBAKKAM
43,000–48,400
(4,000–4,500)
[-4%] [-2%]
KELAMBAKKAM
34,400–42,000
(3,200–3,900)
[-4%] [-2%]
All maps are for representational purpose not to scale

Residential Pricing

Sales are mostly concentrated in the ₹ 3–5 mn ticket size segment and the ready-to-move-in segment.



–4%

YoY change in prices of South Chennai in H2 2018

-33%

YoY drop in office transactions during H2 2018

OFFICE MARKET

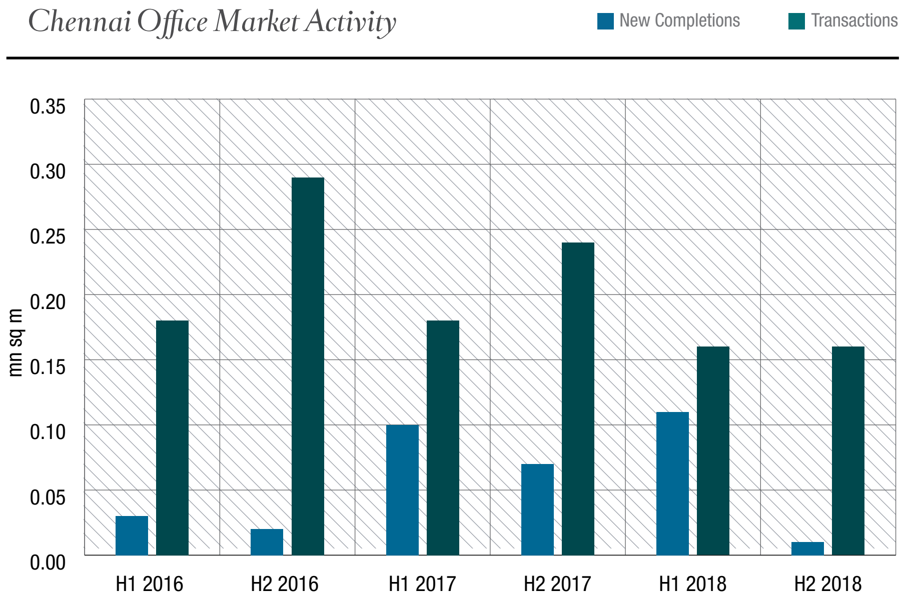
Chennai Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
New completions mn sq m (mn sq ft)	0.01 (0.2)	-81%	0.17 (1.8)	0.12 (1.3)	-28%
Transactions mn sq m (mn sq ft)	0.16 (1.7)	-33%	0.42 (4.5)	0.32 (3.5)	-23%
Weighted average rental in ₹/sq m/month (₹/sq ft/month)	631(59)	3%	613 (57)	631 (59)	3%
Stock mn sq m (mn sq ft)	-	-	6.49 (69.9)	6.61 (71.2)	2%
Vacancy (%)	-	-	10.2%	10.6%	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

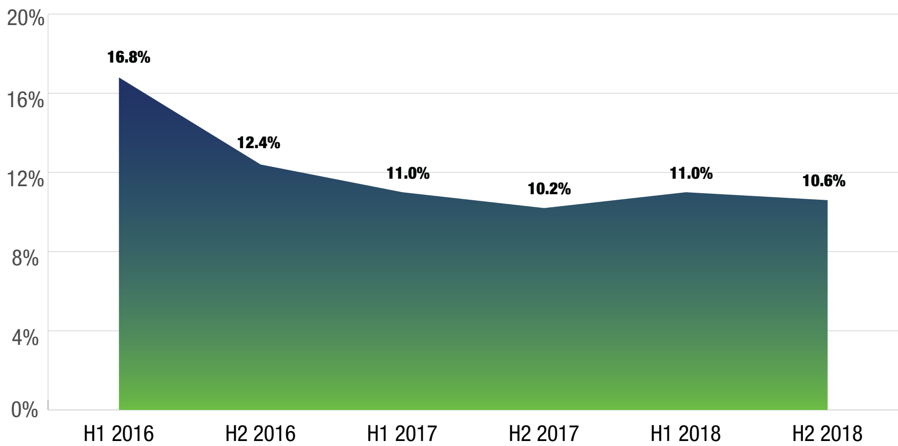
- Chennai office market mirrored the lacklustre scenario existing in the city's residential market during the first half of the year. New supply fell by 81% year-on-year (YoY) during H2 2018 while transaction volumes weakened by 33% YoY in the same period.
- New office supply numbers stayed doggedly low at 0.01 mn sq m (0.2 mn sq ft) in H2 2018, further worsening the supply crunch that continues to hamstring the Chennai office space market.
- Only 0.16 mn sq m (1.7 mn sq ft) office space was absorbed during second half of 2018 as against 0.17 mn sq m (1.8 mn sq ft) in H1 2018.
- This stark decline in absorption, 23% in the entire year, can be attributed to an acute shortage of viable, good quality office space in the preferred commercial districts of Chennai viz., the suburban business districts (SBDs).

Chennai Office Market Activity



Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Chennai Office Market Vacancy



Source: Knight Frank Research

-81%

YoY fall in new office supply in H2 2018

- However, on a positive note, up to 2.3 mn sq m (25 mn sq ft) of new office space is scheduled to come online by 2021-22. Most of this new supply is being built in the adjacent areas of Guindy – Mount Poonamallee High Road stretch, and of Old Mahabalipuram Road (OMR) – near Perungudi, i.e. SBD and SBD OMR districts.

- Weighted average rentals have grown by a modest 3% overall for the Chennai office space. SBD and SBD OMR have witnessed a 5% average rental growth YoY in H2 2018 as a result of the rising demand and inadequate supply of good quality office space in these areas.

- Over the last 2-3 years, demand for existing office stock in SBD and SBD OMR districts has picked up significantly. Sound public infrastructure, lesser crowd and low rentals in the nearby housing options are the primary reasons for this demand surge. Additionally, the quality of buildings in SBD and SBD OMR is much better than that in central business district (CBD) as most of them are newly built structures with modern facilities. But, as the supply here is limited, rentals have been showing an upward trend; so much so that they are now at par with those in CBD.

- The information technology/information technology enabled services (IT/ITeS) sector, the largest consumer of office space in the city, had been showing a declining share in the total transactions pie, coming down from 43% in H2 2016 to 27% in H1 2018. In H2 2018, the sector accounted for 44% of

IT/ITeS sector, traditionally the largest occupier of office space in Chennai, bounced back to a 44% share of total office space consumption in H2 2018 after having gone down from 43% in H2 2016 to 27% in H1 2018.

9%

Share of BFSI sector in total transactions pie in H2 2018, down from 21% in H2 2017

the total office space consumption, indicating a possible trend correction. However, important to note here is that the largest deal in terms of area in H2 2018 was by Valeo, an IT/ITeS sector company, for 0.02 mn sq m (0.19 mn sq ft) accounting for 27% of the total space taken up by the IT/ITeS sector companies during this period.

- Also, the share of high value services such as those in the domain of cloud computing, coding and big data has been increasing within the entire gamut of the IT/ITeS industry and supplementing demand coming from the established technology oriented BPOs, contributing further to the increasing consumption of IT/ITeS sector.

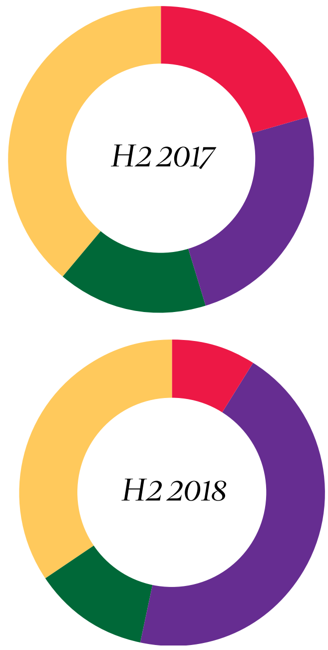
- Other noticeable trends in office space consumption are the significant drop in share of the Banking, Financial Services and Insurance (BFSI) sector and the steadily increasing share of the Other Services sector, predominantly due to the increase in co-working transactions. The BFSI sector consumption has dropped from 21% in H2 2017 to a meagre 9% in H2 2018 owing to the lack of enough large format office spaces, sought by back offices of BFSI, in SBD and SBD OMR districts.

- On the other hand, co-working players have shown significant growth in transactions activity as is indicated by the top ten transactions of H2 2018 in terms of the transacted area. Four out of these ten transactions are by co-working players and they include 0.008 mn sq m (0.09 mn sq ft) by The Hive, another 0.008 mn sq m (0.09 mn sq ft) by CoWrks, and 0.007 mn sq m (0.07 mn sq ft) by Smartworks. Further, all these transactions are in SBD and SBD OMR markets.

- All the above mentioned trends firmly reiterate the case for SBD and SBD OMR business districts being the most sought after office locations in the city that are hampered only by the lack of supply.

- Going forward, as a consequence of the demand-supply imbalance in SBDs, the PBD OMR business district is expected to pique commercial interest.

Sector-wise Split Of Transactions



Industry	*H2 2017*	*H2 2018*
BFSI	21%	9%
IT/ITeS	25%	44%
Manufacturing	16%	12%
Other Services	38%	34%

Note: BFSI includes BFSI support services

Average deal size and number of deals

2,062 (22,194)
Average Deal Size in sq m (sq ft)

H2 2017

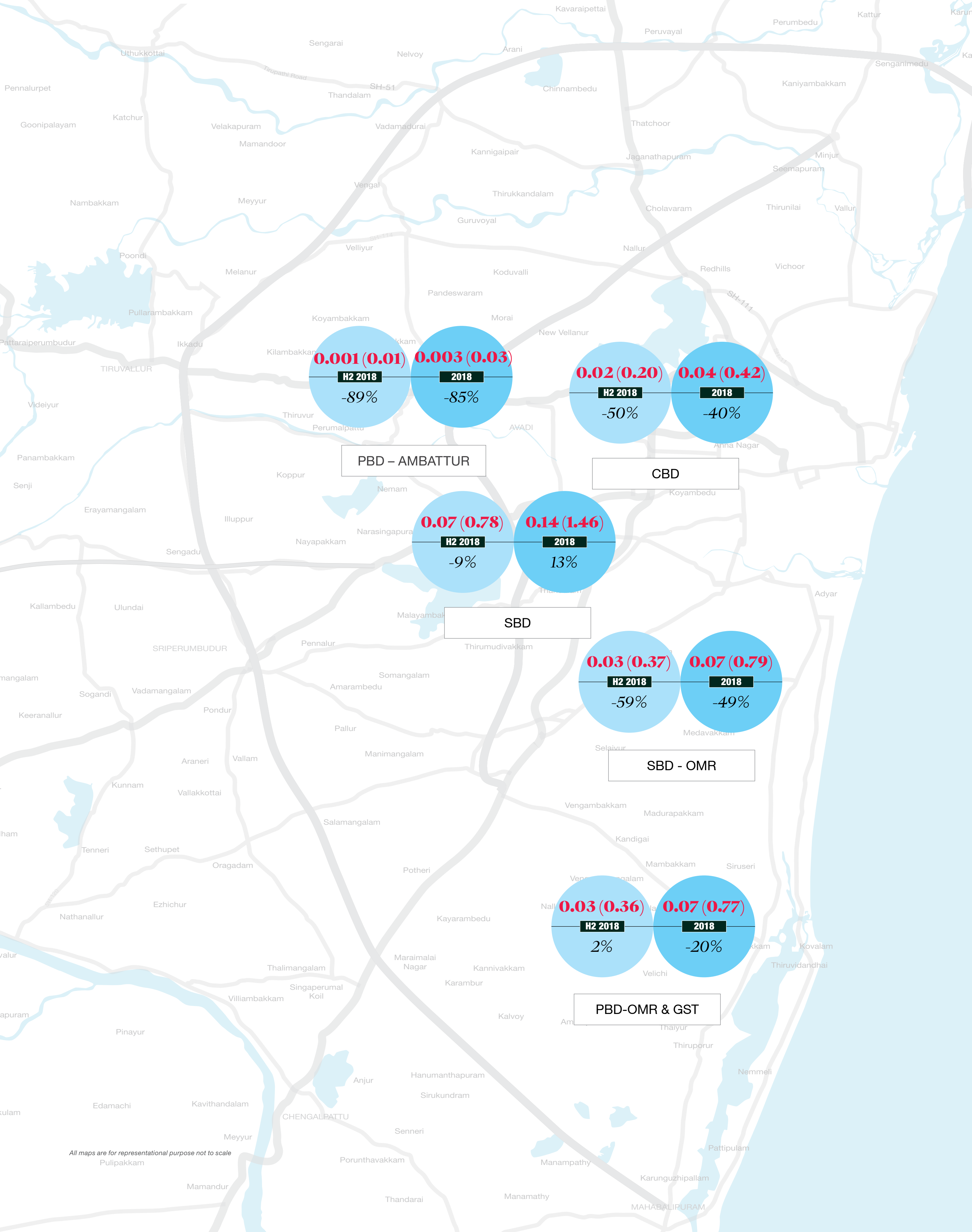
116
Number of Deals

2,158 (23,232)
Average Deal Size in sq m (sq ft)

H2 2018

74
Number of Deals

Note - 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research



All maps are for representational purpose not to scale

Office Transactions

Transactions mn sq m (mn sq ft) % Change (YoY)

10.6%

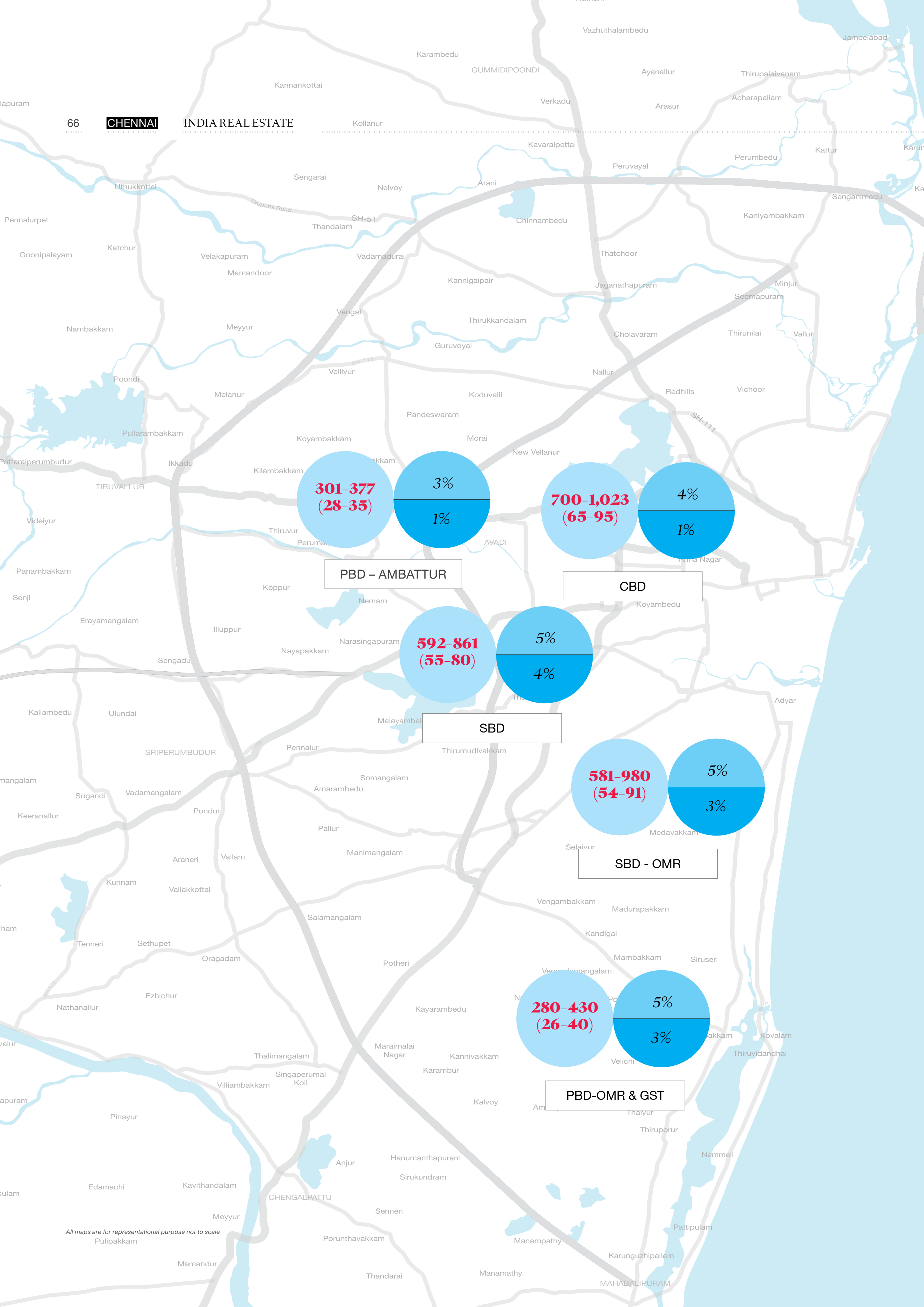
Vacancy levels in Chennai office market in H2 2018

Up to 2.3 mn sq m (25 mn sq ft) of new office space is scheduled to enter Chennai office market by 2021-22

Business district classification

Business district	*Micro-markets*
Central business district (CBD and off CBD)	Anna Salai, RK Salai, Nungambakkam, Greams Road, Egmore, T. Nagar
Suburban business district (SBD)	Mount-Poonamallee Road, Porur, Guindy, Nandanam
SBD – Old Mahabalipuram Road (OMR)	Perungudi, Taramani
Peripheral business district (PBD) – OMR and Grand Southern Trunk Road (GST)	OMR beyond Perungudi Toll Plaza, GST Road
PBD – Ambattur	Ambattur

Source: Knight Frank Research



All maps are for representational purpose not to scale

Office Rentals

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

12-month change

6-month change

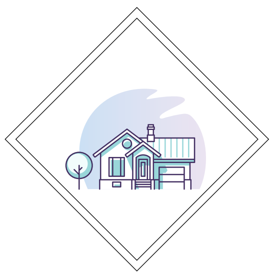
Significant growth in office space consumption of co-working players in Chennai. 4 of the top 10 transactions in terms of transacted area in H2 2018 are by co-working operators.

3%

YoY growth in weighted average rentals for Chennai overall in H2 2018

Hyderabad

RESIDENTIAL MARKET



8%

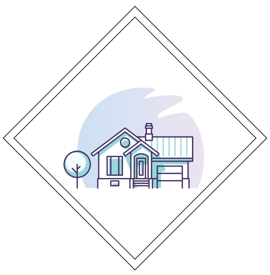
Increase in launches compared to H2 2017

Hyderabad Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	1,698	81%	3,511	5,404	54%
Sales (housing units)	7,278	15%	14,243	15,591	9%
Price (weighted average)	₹44,025/sq m ₹(4,090/sq ft)	7%	₹41,129/sq m ₹(3,821/sq ft)	₹44,025 /sq m ₹(4,090 /sq ft)	7%
Unsold inventory (housing units)	7,169	-45%	17356	-59%	-45%
Quarters to sell	1.9		5	1.9	
Age of unsold inventory (in quarters)	17.5		17.8	17.5	

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)

Source: Knight Frank Research



15%

Increase in sales compared to H2 2017

- The worst seems to be behind Hyderabad, especially with respect to new launches, of residential units in the city. The inability of the state administration to ensure a smooth implementation of its RERA rules had put brakes on new launches in the city. It is worth noting that H1 2017 witnessed the second lowest number of units launched in the city since 2010.

- H1 2018, on the other hand, started on a bright note for the real estate sector in the state. While the state had notified its RERA rules in the fag end of July 2017, the necessary body to implement those rules was not appointed till the end of 2017. The absence of the necessary body to implement RERA rules in the state put brakes on new launches in the city, almost bringing it to a halt. In January 2018, however, the state appointed the RERA Appellate Tribunal and its Authority.

- What it did for the developers, however, is that it did give them a window to start work on projects, which had all the necessary approvals, except RERA registration. “We have gone ahead and started work on projects for which we had the necessary approvals. We have submitted the necessary documents at the office of the Appellate Authority for the said project. We will, however, start marketing the project once we get the RERA registration for the same, which we hope, will happen very soon,” stated one of the developers during our previous surveys in May 2018.

- Finally, in September 2018 the RERA

website of Telangana was up and running. This meant that projects which received approvals after December 2016 and were launched, now required a RERA registration number to be marketed. As a result, there is a huge backlog of projects at the RERA office waiting to get their registration numbers. Till the time they don't get RERA registration numbers, they cannot be marketed. This explains for the very low QTS number in the city, even though there are projects on the ground.

- During our surveys with stakeholders in the city, we found that there are as many as 2,000 projects which are waiting to receive their registration number. "I have 4 projects which are on the ground and have applied for a registration number. When I receive the same will start marketing the projects," stated a developer. Once that happens the QTS numbers should move up to more reasonable levels.

- The new launches which had gathered steam from January 2018 slowed down a bit post August 2018, as projects could now only be launched after they received the RERA registration number. However, considering the fact that new launches in H2 2017 were the lowest ever in the city (it was less than 1,000), new launches in H2 2018 were up 81%. However, it needs to be remembered that a major part of these new launches happened between July and August, 2018.

- With RERA becoming a reality, new launches dipped between September and December. This is, however, a minor hiccup and more of teething problems. Going forward, new launches in the city will pick up. Also, projects that have been waiting for their registration number will also get added to the supply side.

- Only the western and northern parts of the city witnessed new launches in the city. The western part of the city at 84% saw the lion's share of new launches, while the remaining took place in north Hyderabad.

- Manikonda, Tellapur, KPHB, Bachupally, Narsingi and Kompally are some of the locations which witnessed launches of new housing units in H2 2018.

- An interesting trend with regards to new launches in the city is the fact that while Hyderabad has always been an affordable housing market compared to more mature markets, this time around affordable housing (housing units priced between ₹ 2.5-3.0 mn) projects made their entry into the city. Going forward, we feel that the northern part of the city, typically in and around Bachupally, will witness the launch of a number of affordable housing projects.

- On a y-o-y comparison, new launches in 2018 were up 54% compared to 2017. One needs to remember that new launches took a hit in 2017 because of policy initiatives like RERA and GST.

- In the past few years, sales have been gathering steam with every passing year and 2018 was no different. Healthy sales with every passing year are a direct result of the good show of the office market in the city. Sales in 2018 were up 9% compared to the previous year. Even in H2 2018 sales was up 15% compared to H2 2017.

- During our field surveys, it was apparent that there was a clear preference among homebuyers for ready-to-move-in units or those housing units where the possession was within the next 6 months. Further, homebuyers preferred housing units by reputed developers. .

- The western part of the city continued to hold sway even with regards to sales of housing units. Of the total sales in H2 2018, 69% happened in western Hyderabad. Proximity to office locations like Financial District, Madhapur, Gachibowli and Kondapur coupled with the presence of robust infrastructure have been the major pull factors for homebuyers in Hyderabad.

- The share of sales of east and north Hyderabad, which are the more affordable markets, has remained largely steady in H2 2018 compared to H2 2017.

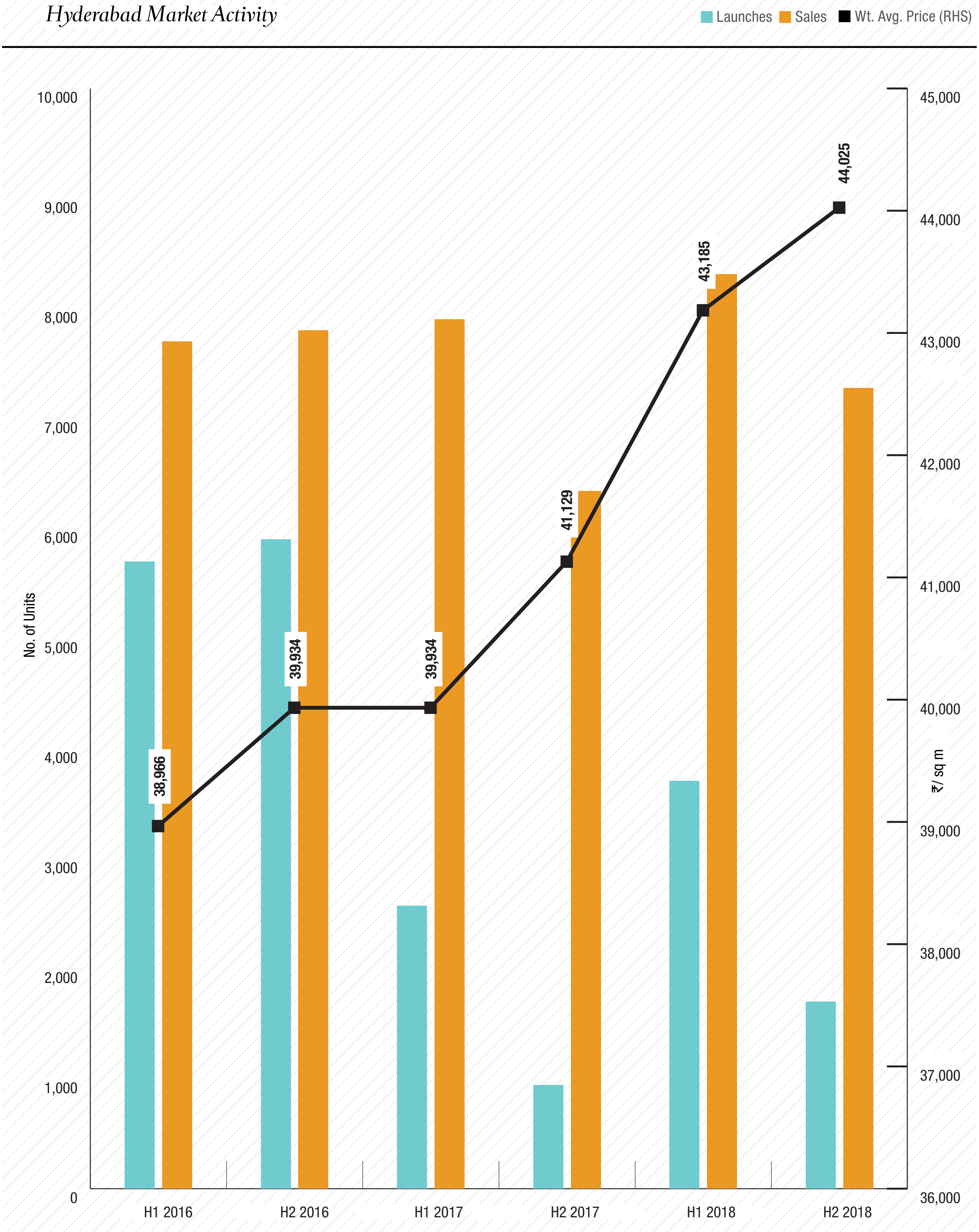
- The (QTS) of unsold inventory is the number of quarters required to exhaust the existing unsold inventory in the market. The existing unsold inventory is divided by the average sales velocity of the 8 preceding quarters to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market.

- With a drastic reduction in launches and steady sales, the QTS has further reduced in H2 2018 compared to H2 2017. As already mentioned earlier, QTS which stands at 1.9 quarters will move to more reasonable levels after housing projects waiting to get their registration number are added to the supply.

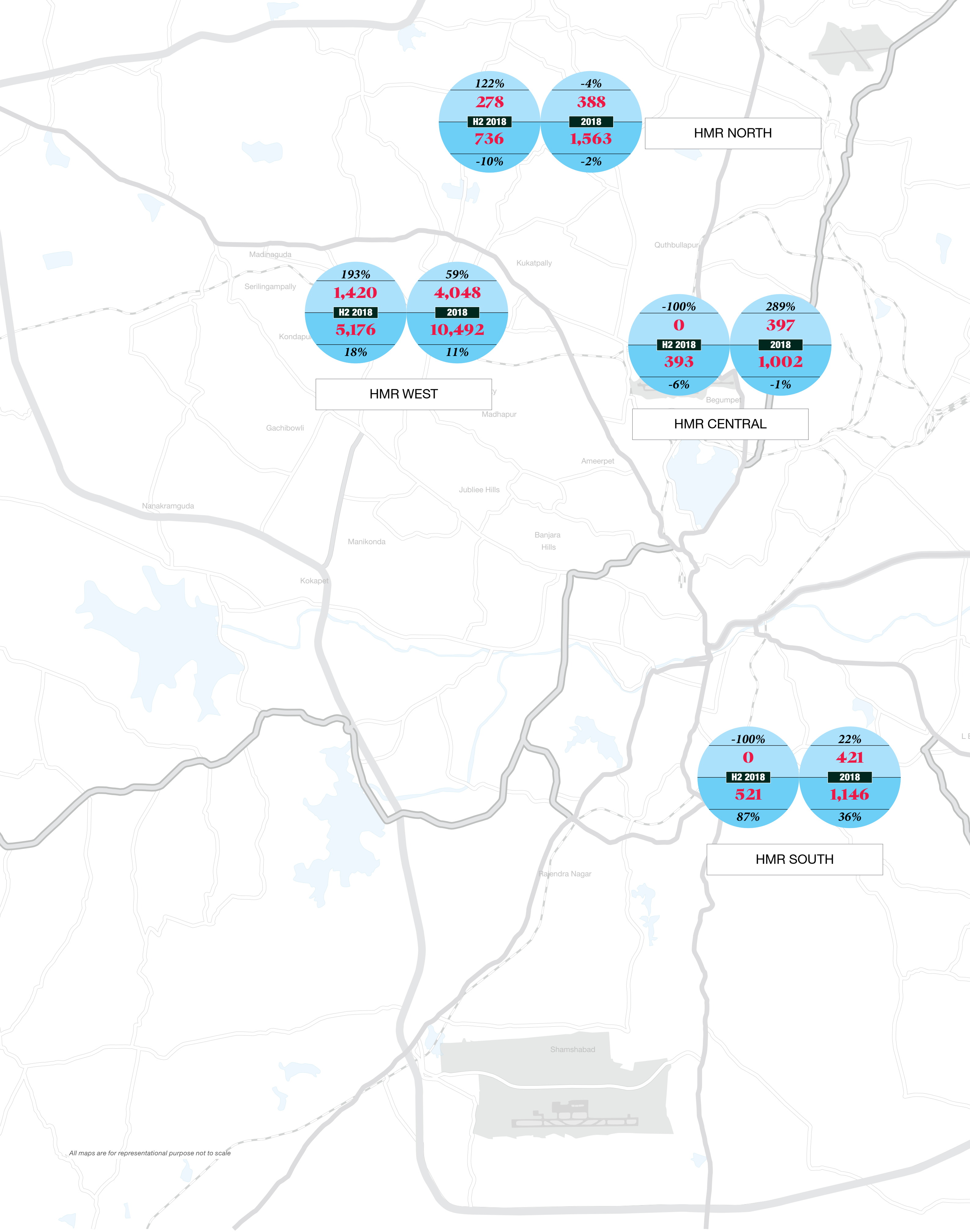
- With a clear mismatch between demand and supply of housing units, prices have started to firm up. In H2 2018, prices moved up by 7% compared to H2 2017. Ready-to-move in homes continue to command a premium and so do housing units at a good location from reputed developers.

- The mismatch created in demand and supply, because of new launches, should push up prices in Hyderabad in the coming days.

Hyderabad Market Activity



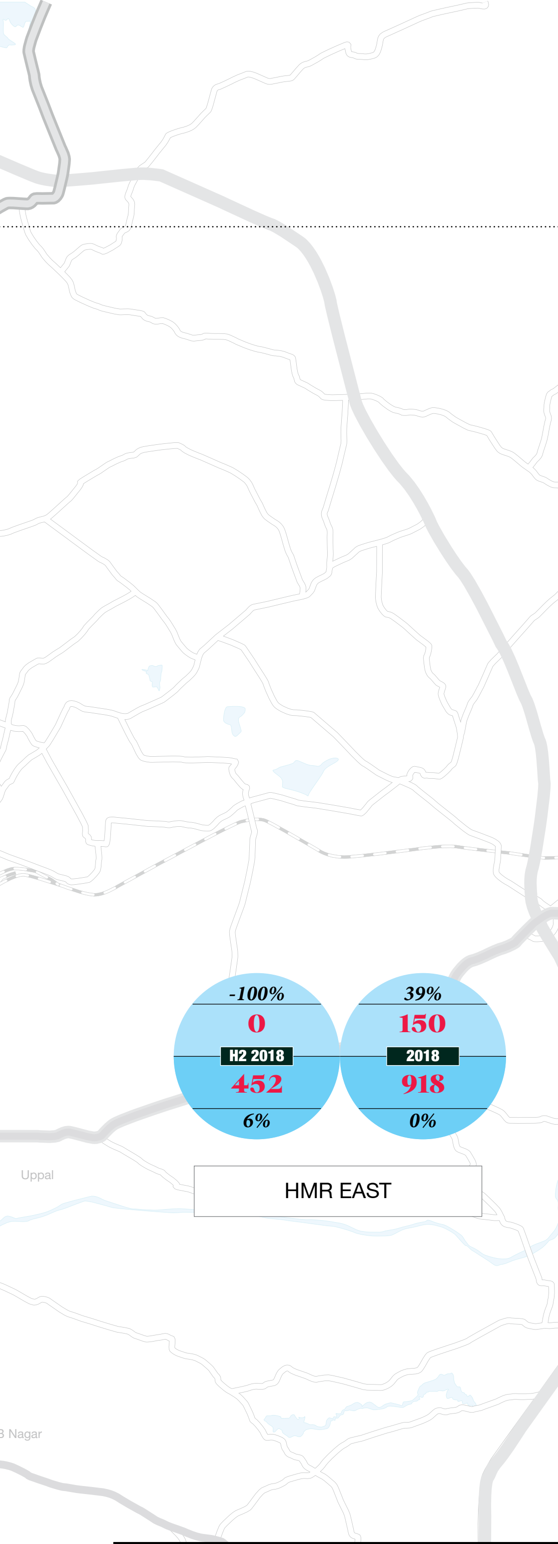
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Launches and Sales

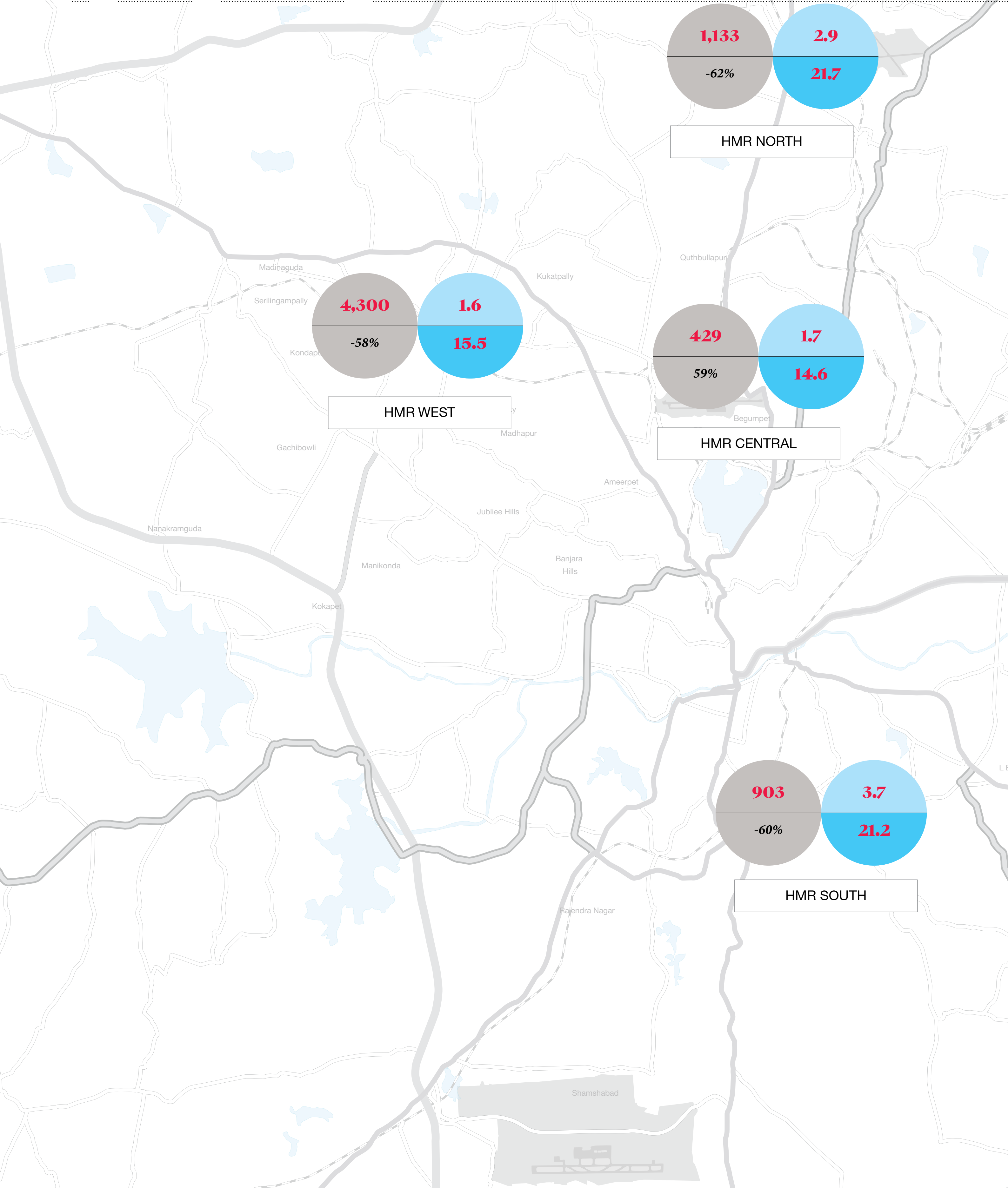
Launches (housing units) | Sales (housing units) | % Change (YoY)



Micro-market Classification

Micro-market	*Locations*
HMR – CENTRAL	Begumpet, Banjara Hills, Jubilee Hills, Panjagutta, Somajiguda
HMR – WEST	Kukatpally, Madhapur, Kondapur, Gachibowli, Raidurgam, Kokapet
HMR – EAST	Uppal, Malkajgiri, LB Nagar
HMR – NORTH	Kompally, Medchal, Alwal, Quthbullanpur
HMR-South	Rajendra Nagar, Shamshabad

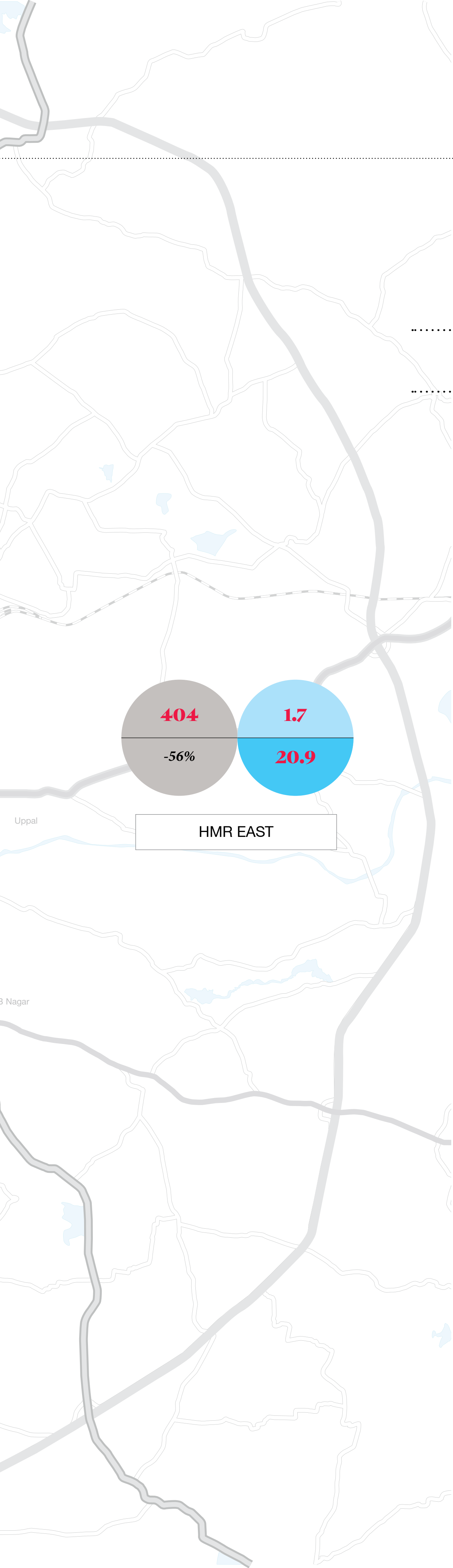
HMR = Hyderabad Metropolitan Region
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Unsold Inventory

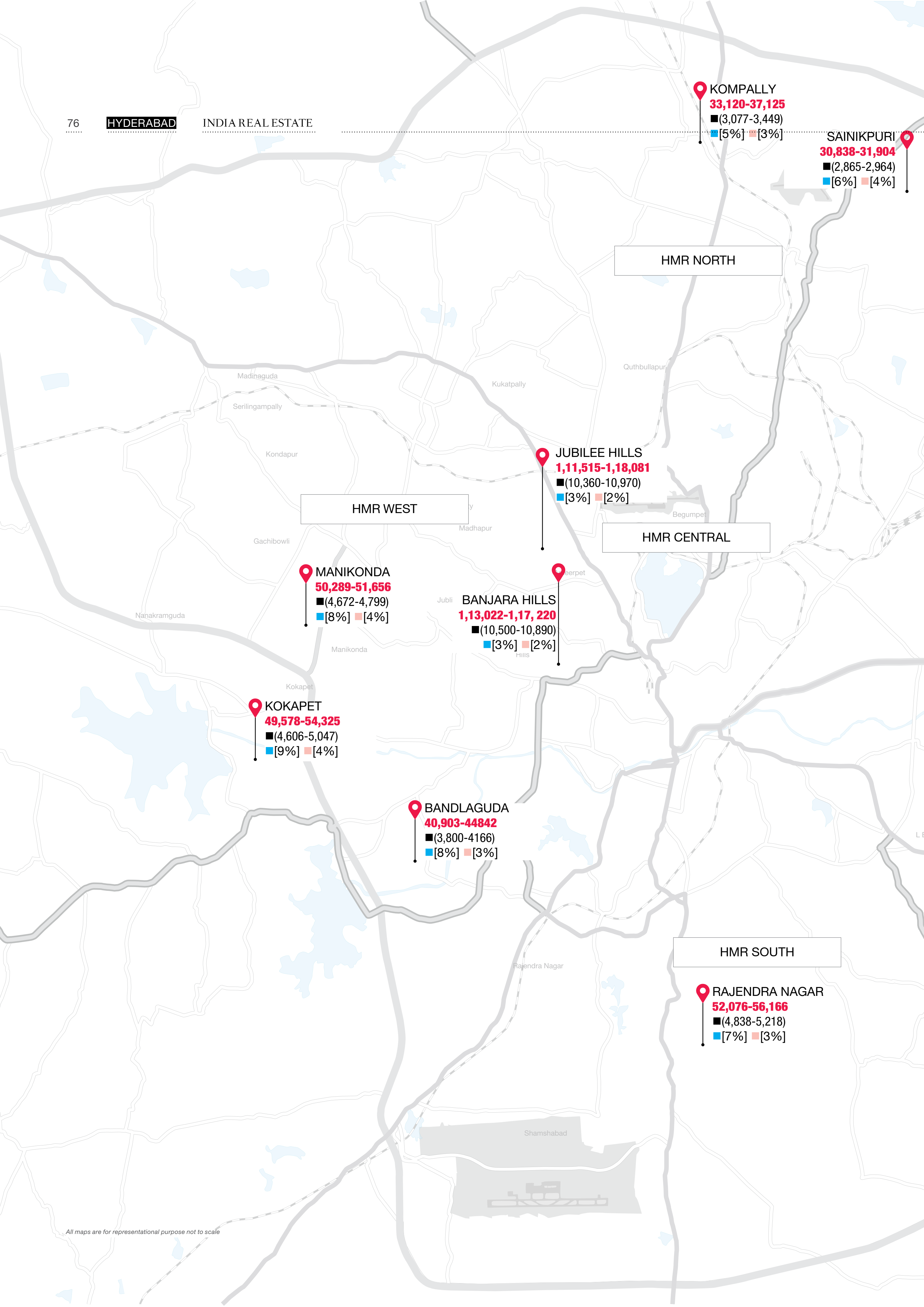
Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)



45%

Decrease in unsold inventory compared to H2 2017

An interesting trend with regards new launches in the city is the fact that while Hyderabad has always been an affordable housing market compared to more mature markets, this time around affordable housing (housing units priced between ₹ 2.5-3.0 mn) projects made their entry into the city.



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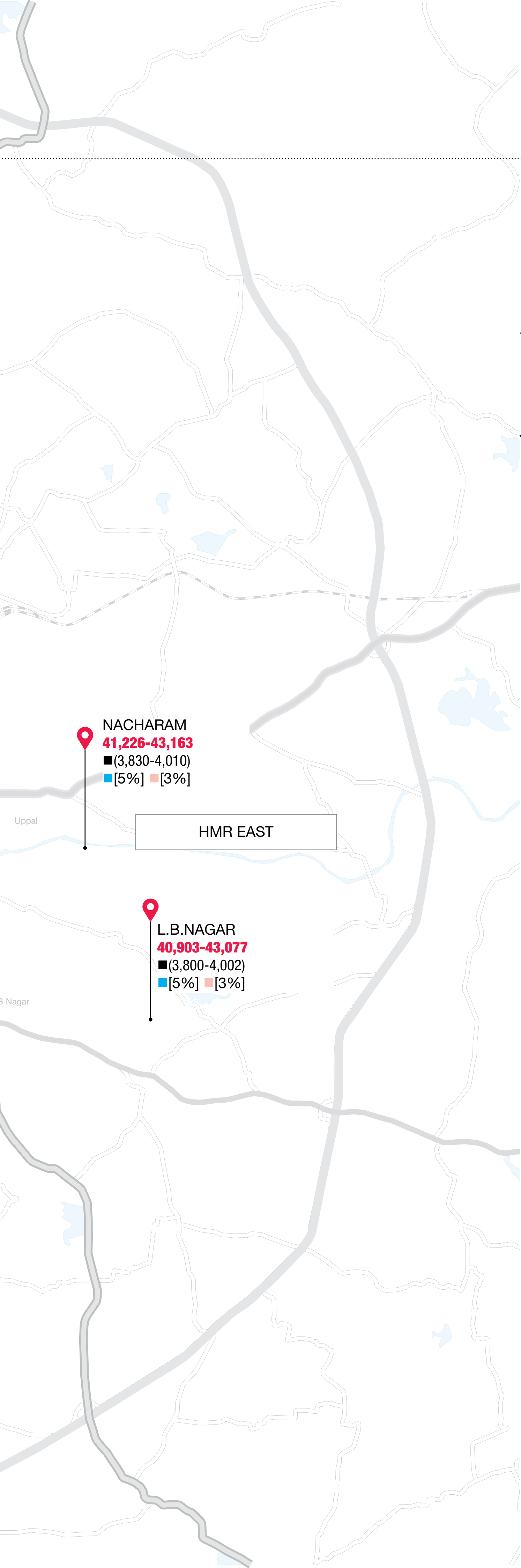
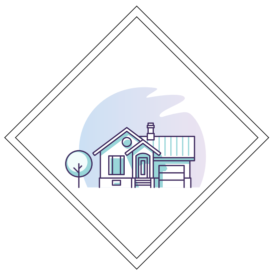


Residential Pricing

■ Price range in H2 2018 in ₹/sq m
■ Price range in H2 2018 in (₹/sq ft)
■ 12 month change
■ 6 month change

With a clear mismatch between demand and supply of housing units, prices have started to firm up. In H2 2018, prices moved up by 7% compared to H2 2017.



7%

Increase in weighted average price compared to H2 2017

30%

Increase in transacted space compared to H2 2017.

OFFICE MARKET

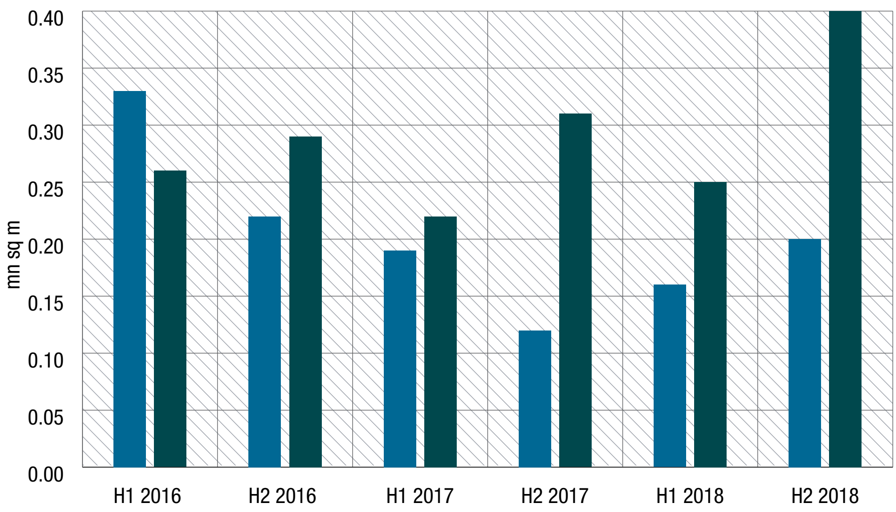
Hyderabad Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
New completions mn sq m (mn sq ft)	0.20 (2.13)	70%	0.36 (3.86)	0.30 (3.25)	19%
Transactions mn sq m (mn sq ft)	0.40 (4.35)	30%	0.53 (5.67)	0.65 (7.03)	24%
Weighted average rental in ₹/sq m/month (₹/sq ft/month)	624 (58)	14%	549 (51)	624 (58)	14%
Stock mn sq m (mn sq ft)	6.0 (64.4)	6%	5.6 (60.53)	5.6 (64.4)	6%
Vacancy (%)	7.38%		5.05%	7.38%	

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

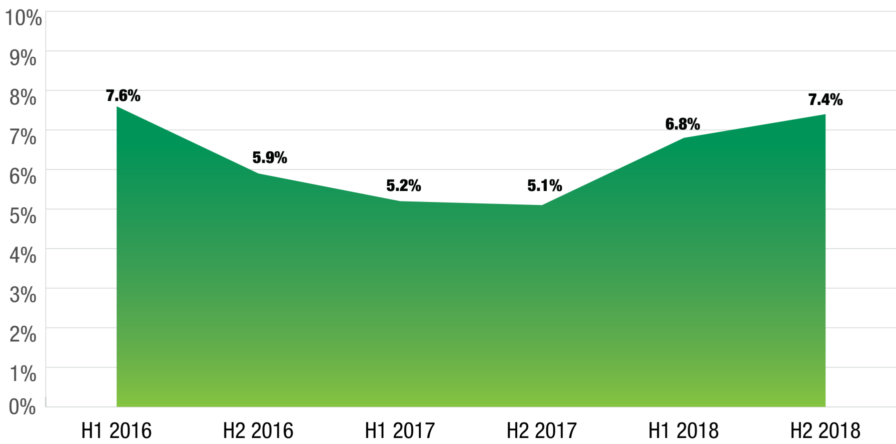
- 2018 has been undoubtedly one of the best years for the office market in Hyderabad. Office transactions were up 19% compared to 2017. For the first time, more than 0.65 mn sq m (7.03 mn sq ft) of office space was transacted in the city.
- On similar lines, the city recorded highest amount of office space ever transacted during a six-month period in H2 2018. During this period 0.40 mn sq m (4.35 mn sq ft) of office space was transacted, and as compared to H2 2017, the amount of transacted space went up by 30% in H2 2018. It needs to be noted that of the total transactions 49% is pre-committed and is expected to enter the market in 2019.
- There are a couple of factors that have made Hyderabad the favoured location for occupiers. First is the robust infrastructure which gets augmented over a regular period. While other markets are trying to catch up in terms of providing the requisite infrastructure, Hyderabad already has the necessary infrastructure that will meet future

Hyderabad office market activity



Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Hyderabad office market vacancy



Source: Knight Frank Research

70%

Increase in new completions compared to H2 2017.

requirements of the city.

- Secondly, even though the rentals of office space in Hyderabad has moved up in recent years, they are still below those prevailing in most mature markets. Furthermore, although demand for office space far exceeds supply, developers in the city have been able to meet requirements of the occupiers and that too at a competitive price.

- Thirdly, and perhaps the most important reason is the fact that Hyderabad is a very welcoming city. It not only has the talent pool to meet requirements of the occupiers, but also is successful in attracting the right talent from across the country.

- It is observed that the supply has been trying to catch up with the demand for office space in the city. The primary reason for this is that there are projects in pipeline that are yet to see the light of day. Even though supply of quality office space continues to remain under stress in the city, H2 2018 was perhaps one of the better years.

- In H2 2018, 0.20 mn sq m (2.13 mn sq ft) of office space entered the city, which is 70% more than H2 2017. During the same period, new completions were up 19% as compared to 2017.

- There has been a marginal increase in vacancy in H2 2018 compared to H1 2018, it still remains in the low single digits. Vacancy levels in the city have moved up marginally from 6.76%, in H1 2018 to 7.38% in H2 2018. In fact, low vacancy is one of the biggest challenges for Hyderabad as occupier interest continues to be on the rise and there is not enough supply to meet the same. Vacancy levels in markets like Madhapur, HITECH City, Gachibowli and Nanakramguda area as low as 2–3%.

- Another visible trend in Hyderabad is that companies have now started to develop their own campus.

- The IT/ITeS sector has traditionally dominated the office transaction pie in Hyderabad. However, in H2 2018, the share of the IT/ITeS sector declined to 36%. In H2 2018, the share of the IT/ITeS space is better as compared to H1 2018, but it's way below the share of the sector in H2 2017. In H2 2017, the share of IT/ITeS sector was 75%, while in H2 2018 the share stands at 44%.

- This is largely due to the unavailability of good quality office space with large floorplates, which are preferred by companies in the IT/ITeS sector. Even though the share of the IT/ITeS sector, in the transacted office space, is not at the same levels as H2 2017, the sector occupies the lion's share in H2 2018.

- While the share the share of BFSI remained at 1% both in H2 2017 and H2 2018, the manufacturing and other services sectors witnessed an increase in their share in H2 2018 as compared to H2 2017.

- The co-working space continues to make its presence felt in Hyderabad. Of the total transacted space in the city, companies operating within the co-working space picked up close to 10% space. It is heartening to note that of the total space picked up by companies operating in the other services sector, the share of companies in the co-working space was 38%, while this share stood at 25% in H1 2018.

- The average deal size in H2 2018 was reported to be 5,690 sq m (61,244 sq ft), which is 40% higher as compared to H2 2017.

- H2 2018 witnessed 76 deals, which is marginally higher than the 71 deals recorded in H2 2017. However, the amount of transacted space is up 30%. This is because of the large amount of space picked up by companies like Service Now, Qualcomm, Google, Micron, S&P Global and Amazon.

- Among business districts, the secondary business district continues to garner the lion's share of transacted office space in the city. It accounted for 79% of the total transacted space, in H2 2018. Next in line was peripheral business district West which accounted for 17% of the transacted office space in H2 2018. The central business district (CBD) and off CBD came in next but it's share was 2%. The share of PBD East was only 1%.

- It should be recalled that in H1 2018, SBD just about managed to beat the peripheral business district (PBD) West as the most preferred business district in Hyderabad. SBD accounted for 43.36% of the transacted office space in the city, while PBD's share was 42.71%. Our research shows that in H2 2018, SBD regained lost ground and continued to be the numero uno business district in the city.

- Until recently, Madhapur was one of the preferred locations for occupiers within SBD. In H2 2018, however, Raidurgam which is an extension of Madhapur occupied 64% of the transacted space within the city. The share of Madhaphur stood at 28%

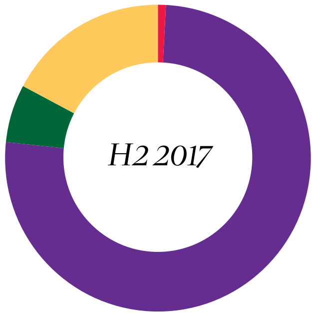
- Going forward, it is expected that office space will further expand in the west, thereby increasing the attractiveness of micro markets like Kokapet, Narsingi and Puppalguda.

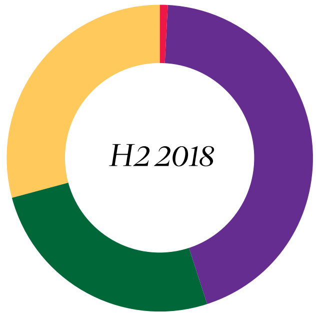
- CBD off CBD and PBD East accounted for only a miniscule share of transacted space in H2 2018.

- Lack of vacant office stock coupled with steady demand has pushed the weighted average rentals in the Hyderabad office market to ₹624 sq m/month (₹ 58 per sq ft per month) at the end of H2 2018, a growth of 14% year-on-year (YoY).

- tH2 2018 witnessed an increase in rentals across micro markets as compared to H2 2017. The upward movement in rentals can be gauged from the fact that rentals in Raidurgam in SBD witnessed transactions at ₹721/sq m/month (₹67 per sq ft per month). Rentals in Gachibowli, in PBD West, too reached ₹700/sq m/month (₹65 per sq ft per month). Elsewhere, in Banjara Hills there were a few transactions at ₹592/sq m/month (₹55 per sq ft per month).

Sector-wise split of transactions





	Industry	*H1 2017*	*H1 2018*
■	BFSI	1%	1%
■	IT/ITeS	75%	44%
■	Manufacturing	6%	26%
■	Other Services	17%	29%

Note: BFSI includes BFSI support services

Average deal size and number of deal

4,077 (43,882)
Average Deal Size in sq m (sq ft)

H2 2017

71
Number of Deals

5,690 (61,244)
Average Deal Size in sq m (sq ft)

H2 2018

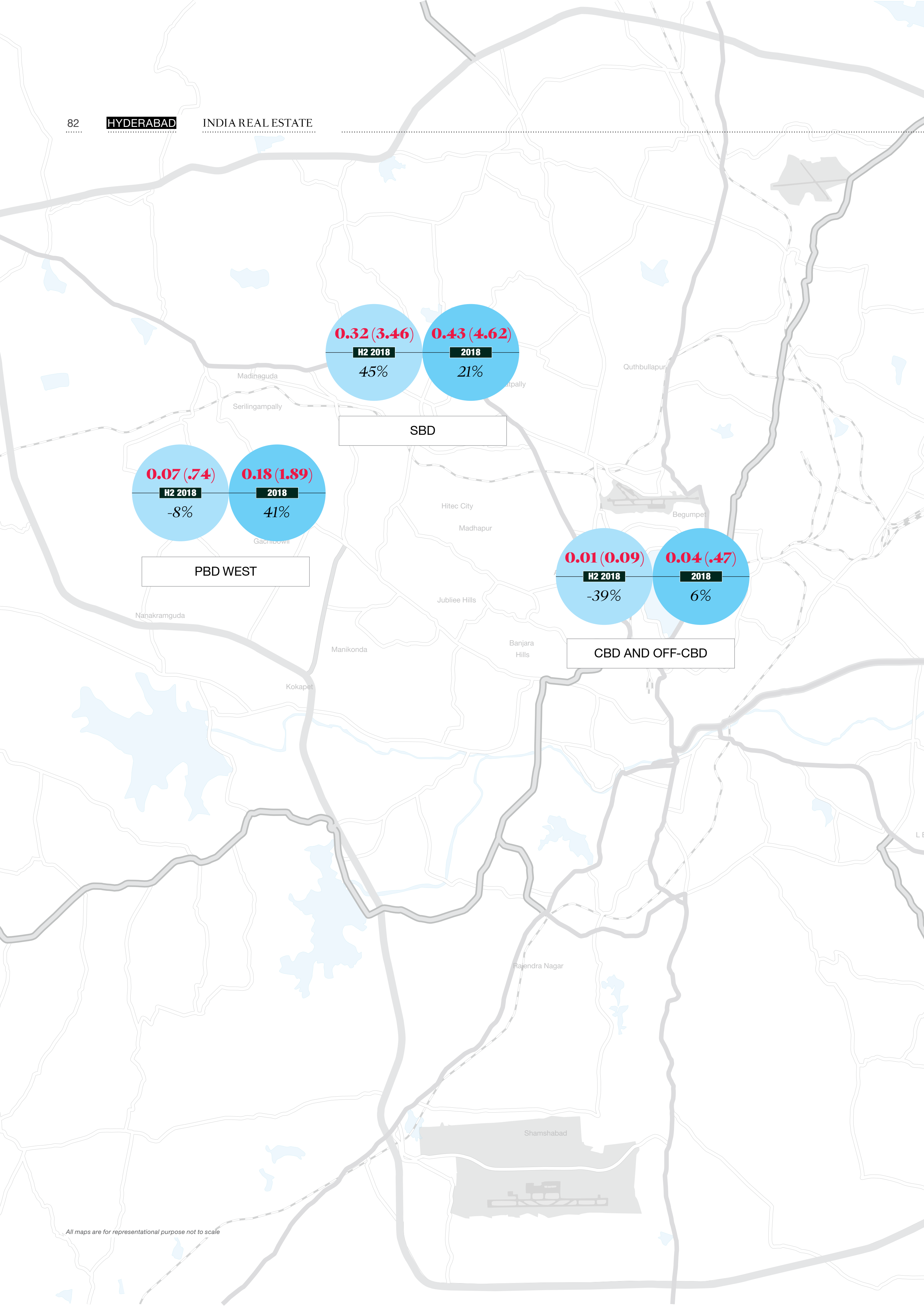
76
Number of Deals

Note - 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Business district classification

Business district	*Micro markets*
CBD & off CBD	Banjara Hills, Jubilee Hills, Begumpet, Ameerpet, Somajiguda, Himayat Nagar, Raj Bhavan Road, Punjagutta
SBD	Madhapur, Manikonda, Kukatpally, Raidurg, Kothaguda
PBD West	Gachibowli, Kokapet, Nanakramguda, Nanakramguda, Serilingampally,
PBD East	Uppal, Pocharam

Source: Knight Frank Research



All maps are for representational purpose not to scale

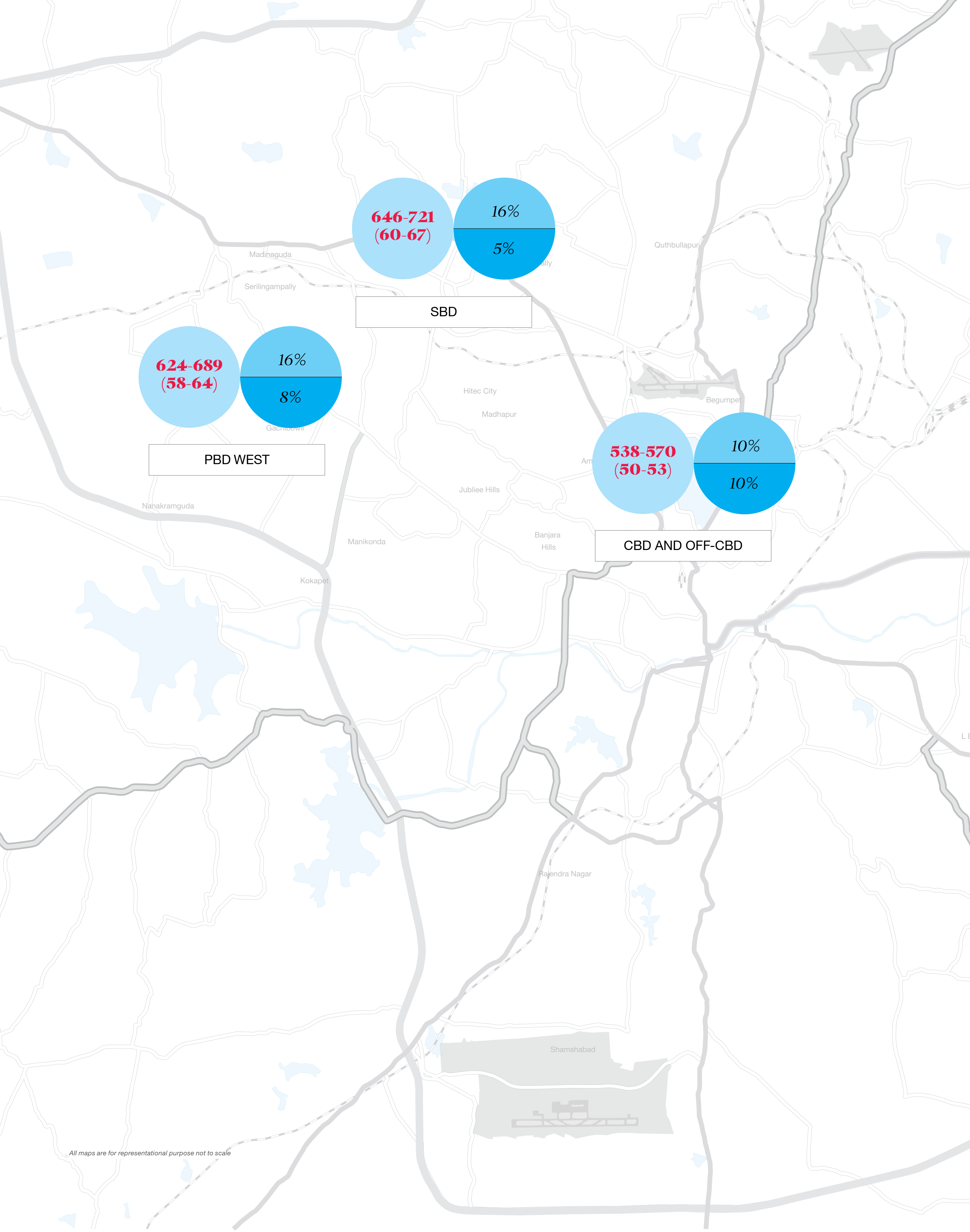
Office Transactions

Transactions mn sq m (mn sq ft) | % Change (YoY)

2018 has been one of the best years for the office market in Hyderabad. Office transactions were up 19% compared to 2017. For the first time, more than 0.65 mn sq m (7.03 mn sq ft) of office space was transacted in the city.

24%

Increase in transacted space compared to 2017.

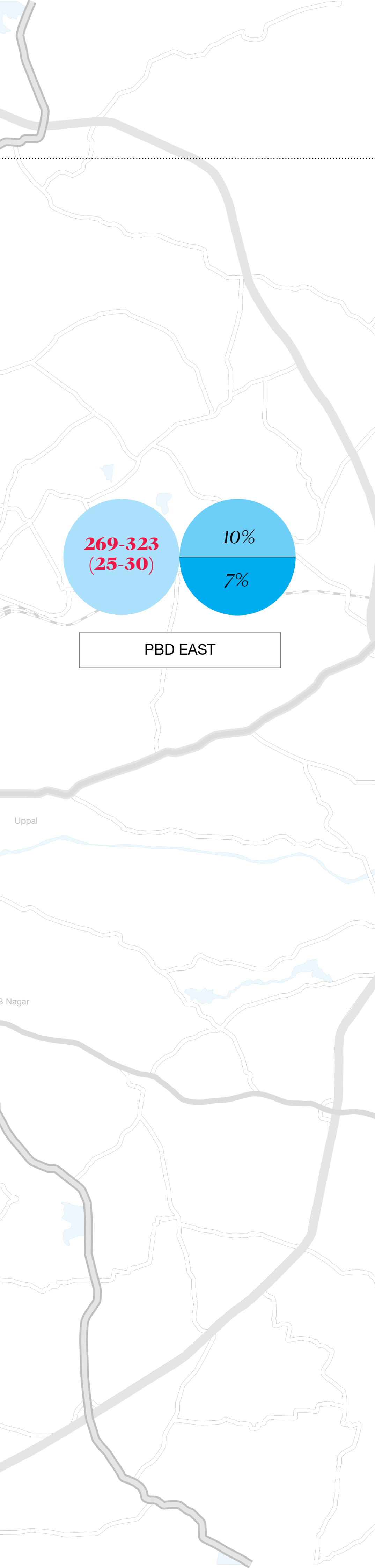


All maps are for representational purpose not to scale

Office Rentals

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

12-month change | 6-month change

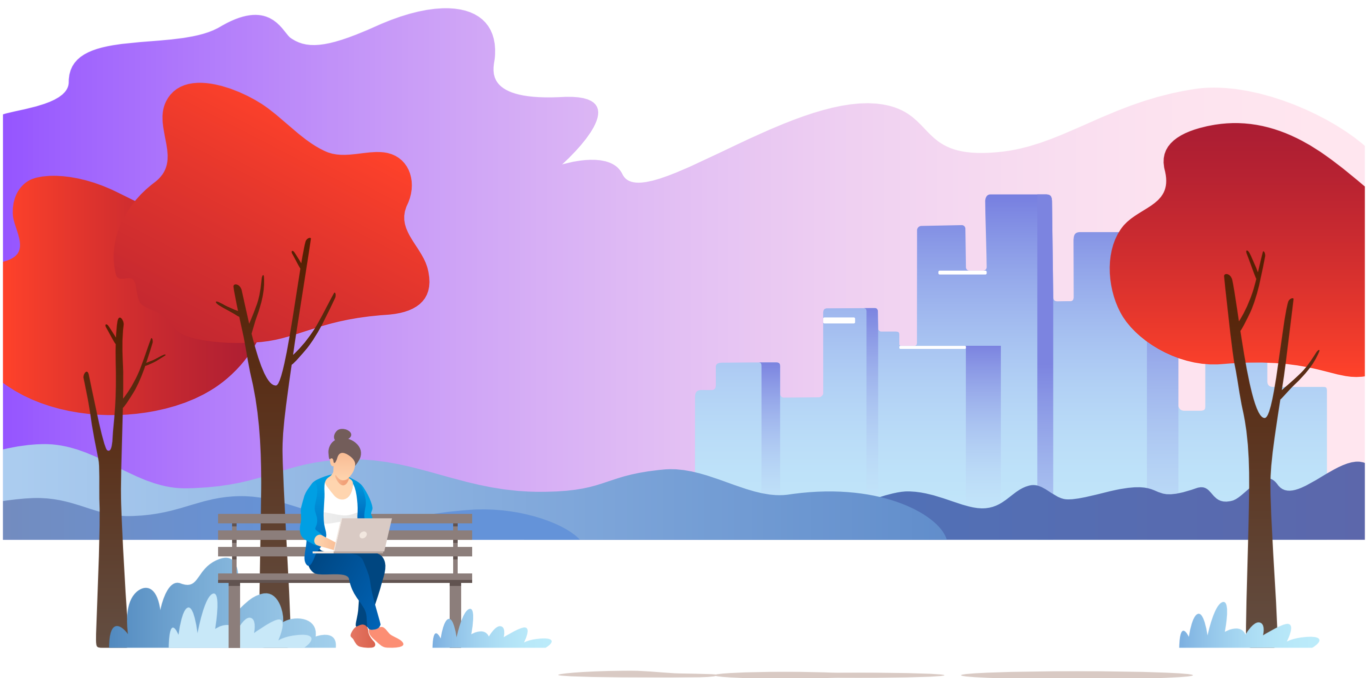


Hyderabad is a very welcoming city. It not only has the talent pool to meet requirements of the occupiers, but also is successful in attracting the right talent from across the country.

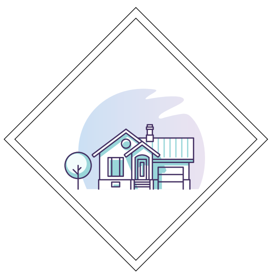
14%

Increase in overall weighted average rents compared to H2 2017.

Kolkata



RESIDENTIAL MARKET



2%

Increase in sales compared to H2 2017

Kolkata Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	5,622	-9%	15,940	12,015	-25%
Sales (housing units)	6,140	2%	14,147	12,731	-10%
Price (weighted average)	₹ 35,080/sq m (₹ 3,259/sq ft)	-4%	₹ 36,540/sq m (₹ 3,395/sq ft)	₹ 35,080/sq m (₹ 3,259/sq ft)	-4%
Unsold inventory (housing units)	38,536	-2%	39,252	38,536	-2%
Quarters to sell	12.6	-	12.1	12.6	-
Age of unsold inventory (in quarters)	13.4	-	12.2	13.4	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Though the residential real estate market in Kolkata is in the preliminary stages of getting regulated, it is a long road to recovery as any growth in vital parameters such as sales volumes, new product launches, or price upswing is yet to be witnessed.

- The West Bengal Housing Industry Act (HIRA), 2017 which came into effect on 1st June 2018 soon came under scrutiny by consumer groups due to the definition of 'garage' and 'force majeure', which was contrary to the Central Government's vision for a real estate act, as prescribed under the Real Estate (Regulation and Development) Act, 2016 (RERA). As a result, the state regulator remains in a deadlock with the central government. The possibility of West Bengal's realty act HIRA's coexistence with RERA is being examined even though the state level HIRA Authority has started operations and registering real estate projects and agents. Though the residential real estate market in Kolkata is in the preliminary stages of getting regulated, it is a long road to recovery as any growth in vital parameters such as sales volumes, new product launches, or price uptick is yet to be witnessed.

- Despite developers' focus on product differentiation, widespread marketing for projects coming up in city peripherals and rampant discounts to lure homebuyers, residential sales volume remained at an all-time low in 2018. In H2 2018, residential sales largely remained stagnant with only a 2% uptick over H2 2017. The primary reason behind low sales velocity is the end-user expectation of price rationalisation in quarters to come, so they continue with their 'wait and watch' approach for homebuying.

- Weak sales volumes were particularly noted in Rajarhat and Eastern micro markets. As residential sales downturn continues, a 50% and 38% year-on-year (YoY) decline was noted in these micro markets, respectively. With large-scale residential development taking place in New Town, Kankurgachi and Eastern Metropolitan (EM) Bypass, these locations, which were once favourite amongst homebuyers, are now grappling to bring them to the negotiation table as they have an oversupply of residential units. However, availability of many mass housing products and a huge inventory of affordable projects in the southern micro market led to a 13% sales growth in H2 2018, over H2 2017.

- In the wake of Kolkata's office sector witnessing below 92,900 square metres (1 mn square feet) office leasing transactions on an annual basis, new job creation remains low and thus, there is no catalyst to foster residential sales growth and bring in the elusive homebuyers. Absence of a mature office market that can attract service sector occupiers and give a fillip to commercial office space consumption is a major laggard that has delayed residential sales recovery in Kolkata.

- Stagnant sales, an oversupplied residential market coupled with a newly set up HIRA have forced developers to curtail new launches, which dwindled by 9% over H2 2017. In line with the sales trend, 2018 also witnessed the lowest launches of new residential units over the past three years.

- Real estate developers in Kolkata have understood that only traditional residential formats and erstwhile pricing will no longer work for customers and many have correctly ascertained the unmet demand that exists for affordable housing projects and the fact that Kolkata, as a city, has a lot of potential for mass housing projects in the < ₹ 2.5 mn ticket size category. In H2 2018, nearly 43% of new residential units were launched in this pricing category, while the ₹ 2.5–5 mn category accounted for 18% of the total pie.

- Despite low sales traction, Rajarhat remains the preferred micro market for developers to venture in, as nearly 35% of the overall new launches in H2 2018 were noted here. Low office space rentals coupled with Rajarhat's emergence as an alternate business district bodes well for office space consumption in the long term due to its large office space formats with huge floor plates. As a result, developers have remained upbeat about concentrating new launches in this micro market even though new launches have declined by 21% YoY over H2 2017.

- After Rajarhat, the southern micro market accounted for a one-third share of the total new launches pie. Unlike the trend in past years, the western micro market witnessed nearly 18% of the total new launches in H2 2018, as more than 1,000 new units were launched in locations such as Howrah, Konnagar and Rishra. All the new supply in this micro market catered to the affordable segment in the ticket size range of less than ₹ 2.5 mn.

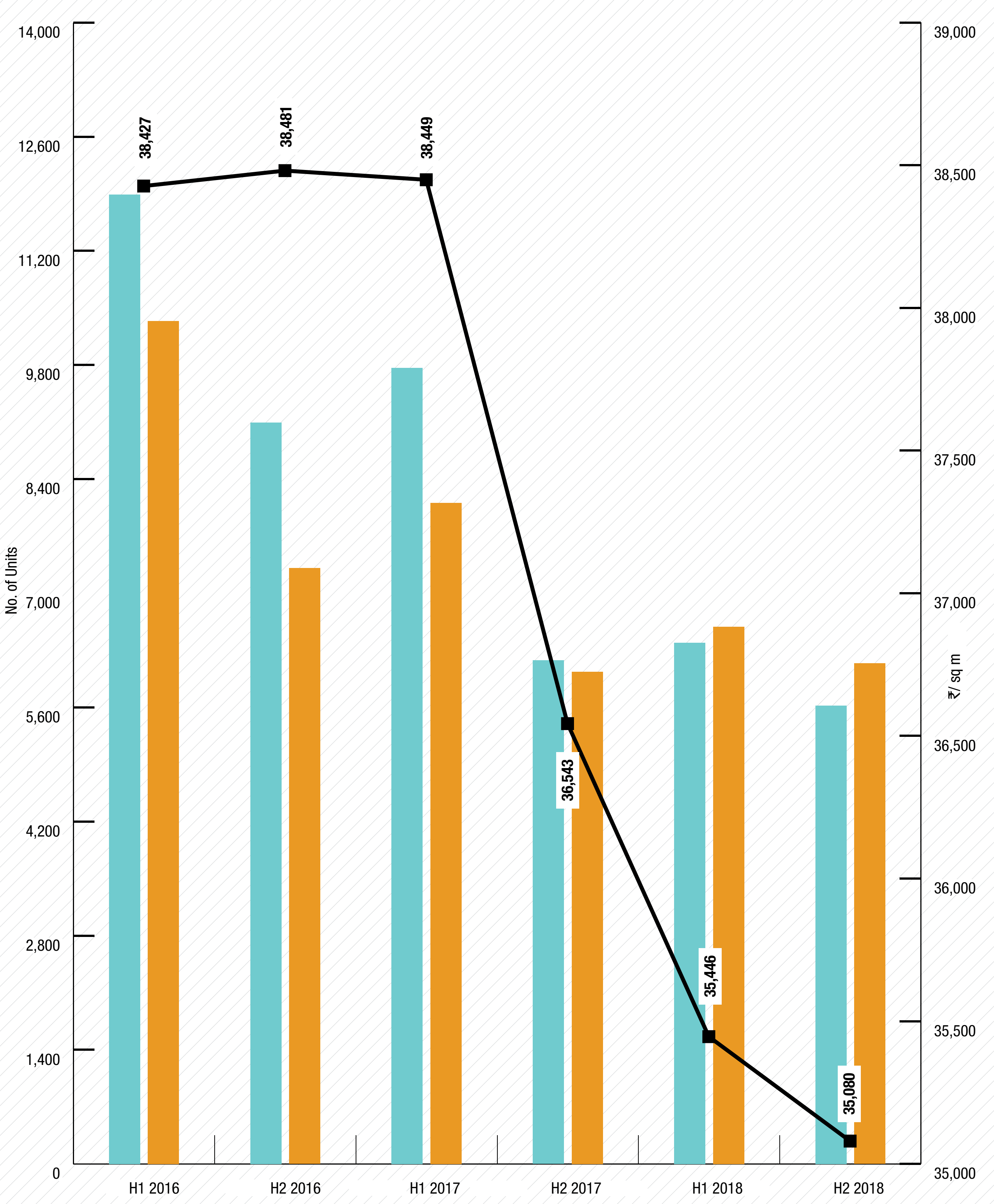
- Post demonetisation in November 2016, residential real estate prices in Kolkata have been significantly affected and developers are shying away from publicising upfront discounts on base selling prices despite low sales velocity, though on a case-by-case basis, property deals with customers are being closed with a 10–15% discount on overall ticket prices on upfront down payment at the negotiation table. Simultaneously, marketing campaigns highlighting freebies such as free modular kitchens, cars, preferential location charge (PLC) waivers are not uncommon. As a result, the weighted average residential prices in Kolkata have dwindled by 4% YoY in H2 2018, the lowest in the past three years. Jessore Road and BT Road noted a 7–9% annual decline in prices due to an oversupply situation.

- In H2 2018, Kolkata's oversupplied residential market noted only a miniscule 2% YoY decline in unsold inventory over H2 2017 as sales traction was drastically low and buyer preference remained skewed in favour of ready-to-move-in units. Due to many projects being on hold and execution and timely delivery of residential units posing a serious challenge, the quarters-to-sell (QTS) for the city climbed up to 12.6, the highest in the past three years. Developers need to act fast to rationalise prices and bring homebuying affordability to the buyers to save the day and steer sales recovery.

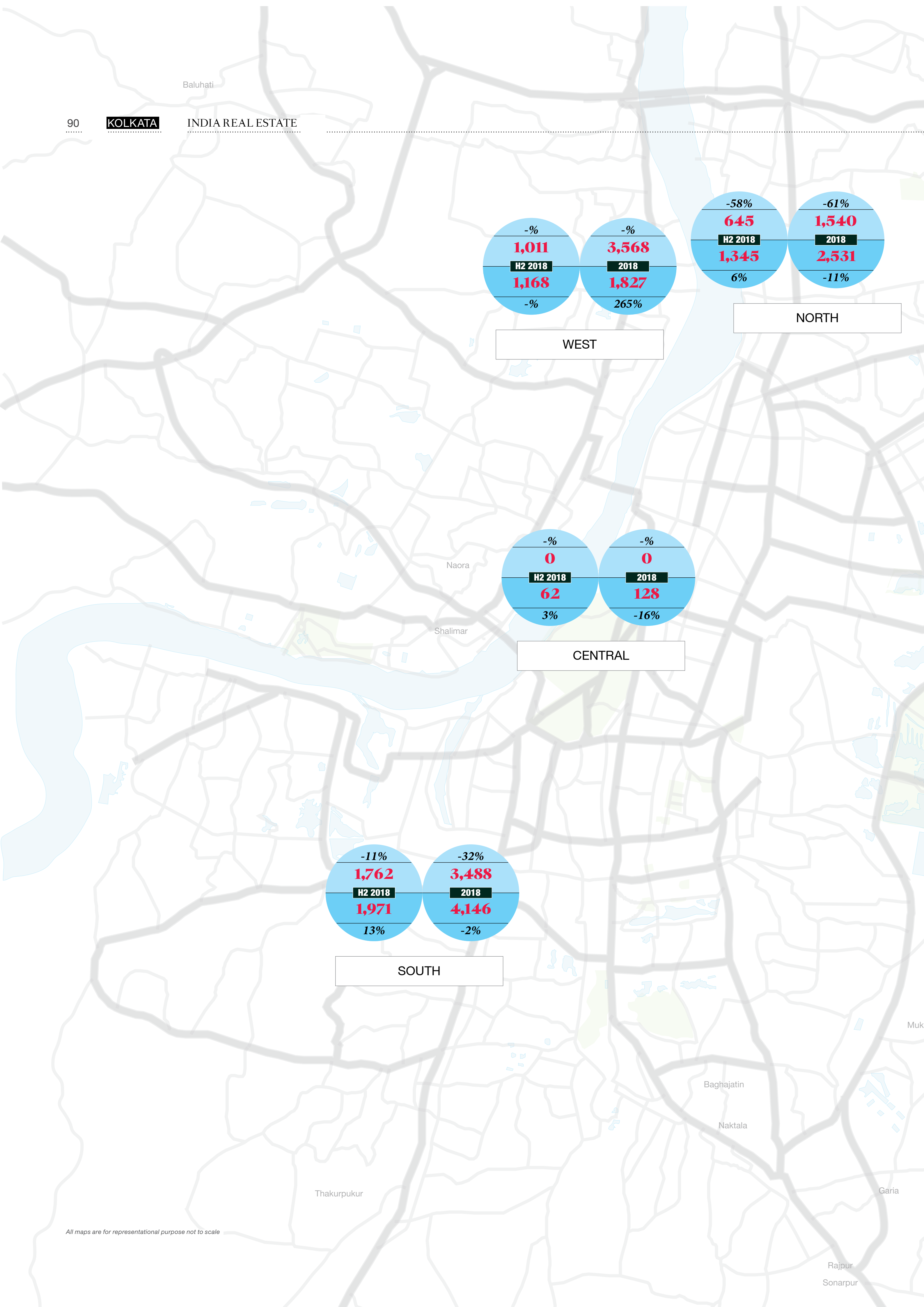
- The Non-Banking Financial Companies' (NBFCs) liquidity problems has created a trust deficit between institutions and cast a negative shadow in the market affecting buyer perception in the short term. Additionally, the delay in Metro construction from Dum Dum to Gariahat due to land acquisition challenges will also delay the planned connectivity from North to South Kolkata and adversely impact the take up of residential units in this belt going forward.

Absence of a mature office market that can attract service sector occupiers and give a fillip to commercial office space consumption is a major laggard that has delayed residential sales recovery in Kolkata.

Kolkata Market Activity



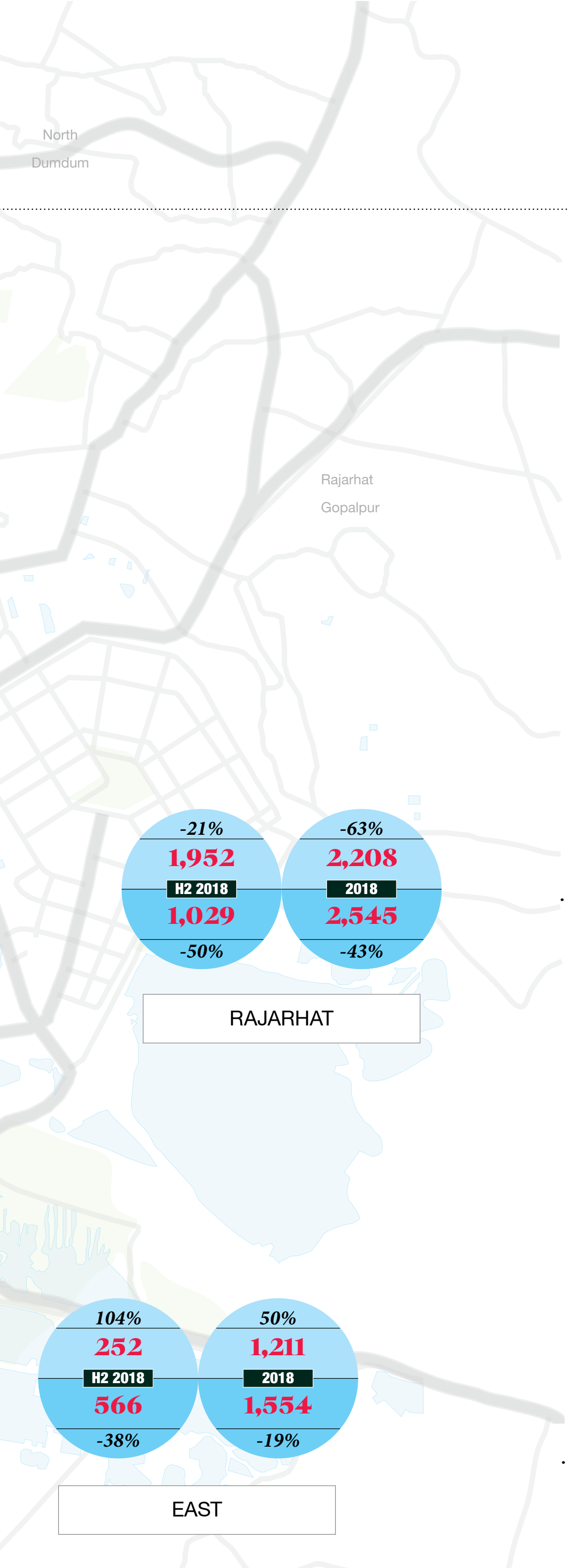
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Launches and Sales

Launches (housing units) | Sales (housing units) | % Change (YoY)



In H2 2018, nearly 43% of new residential units were launched in the less than ₹ 2.5 mn ticket size category, while the ₹ 2.5–5 mn category accounted for 18% of the total pie.

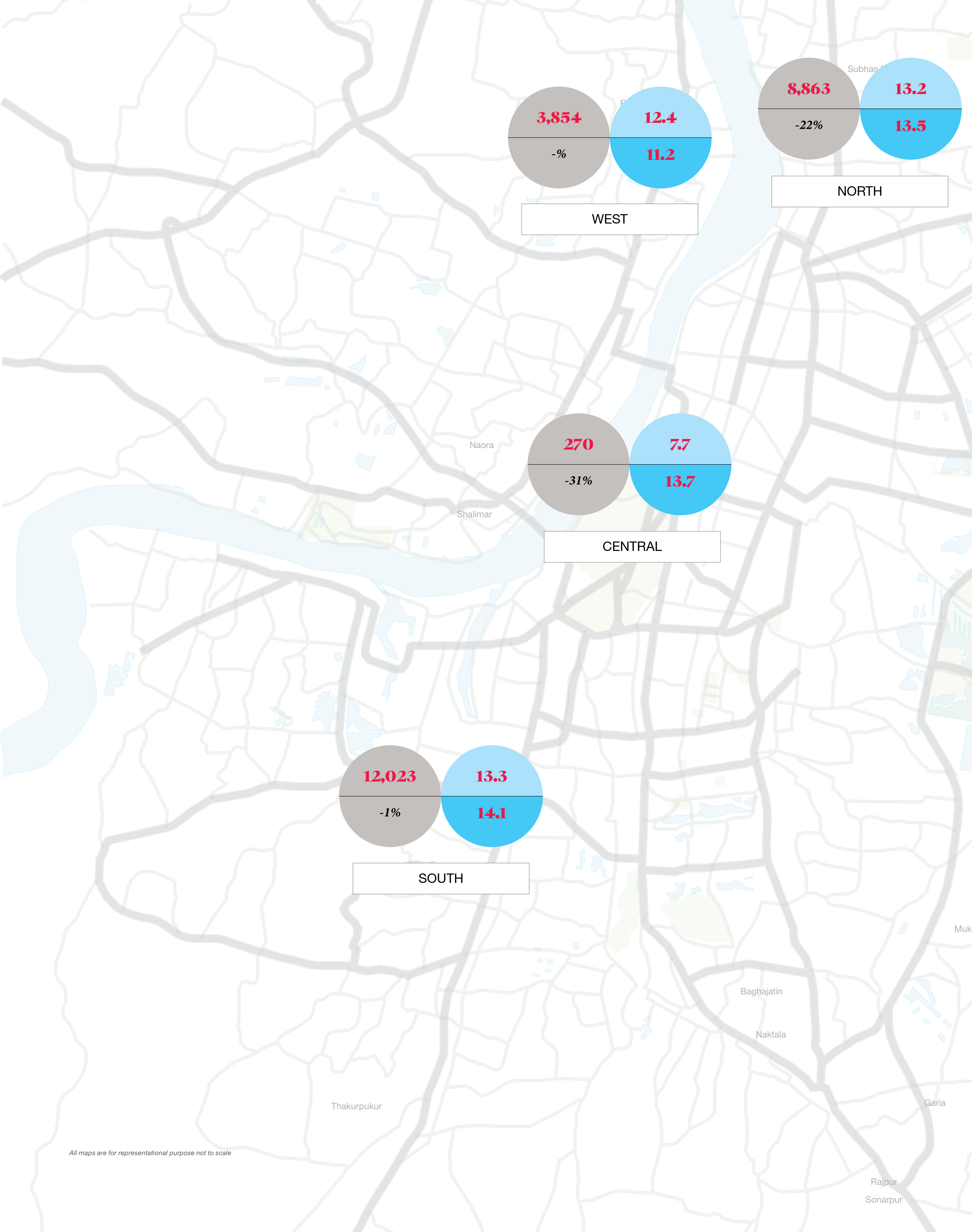
58%

YoY decrease in launches in North in H2 2018.

Micro-market Classification

Micro-market	*Locations*
Central	Park Street, Rawdon Street, AJC Bose Road, Minto Park, Elgin Road
East	Kankurgachi, Beliaghata, Salt Lake, Narkeldanga, Keshtopur, EM Bypass (eastern parts)
North	Baguiati, Uttadanga, Jessore Road, Shyambazar, Lake Town, BT Road, VIP Road
Rajarhat	Rajarhat New Town
West	Howrah, Rishra, Hooghly, Uttarpara, Chandan Nagar, Rajpur, Kona Expressway
South	Ballygunge, Alipore, Tollygunge, Narendrapur, Behala, Garia, Maheshtala, EM Bypass (southern parts)

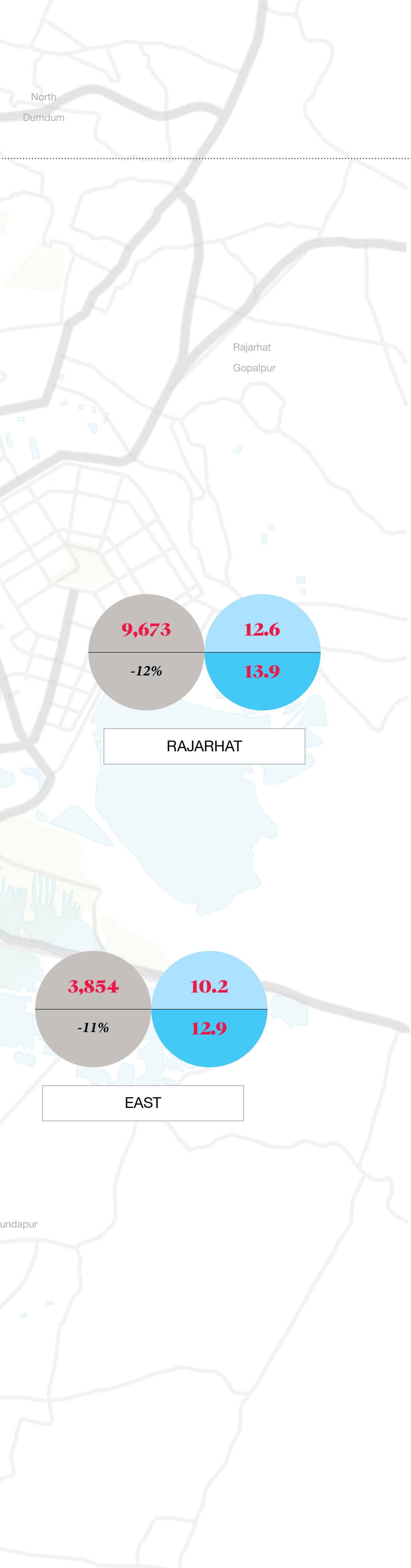
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Unsold Inventory

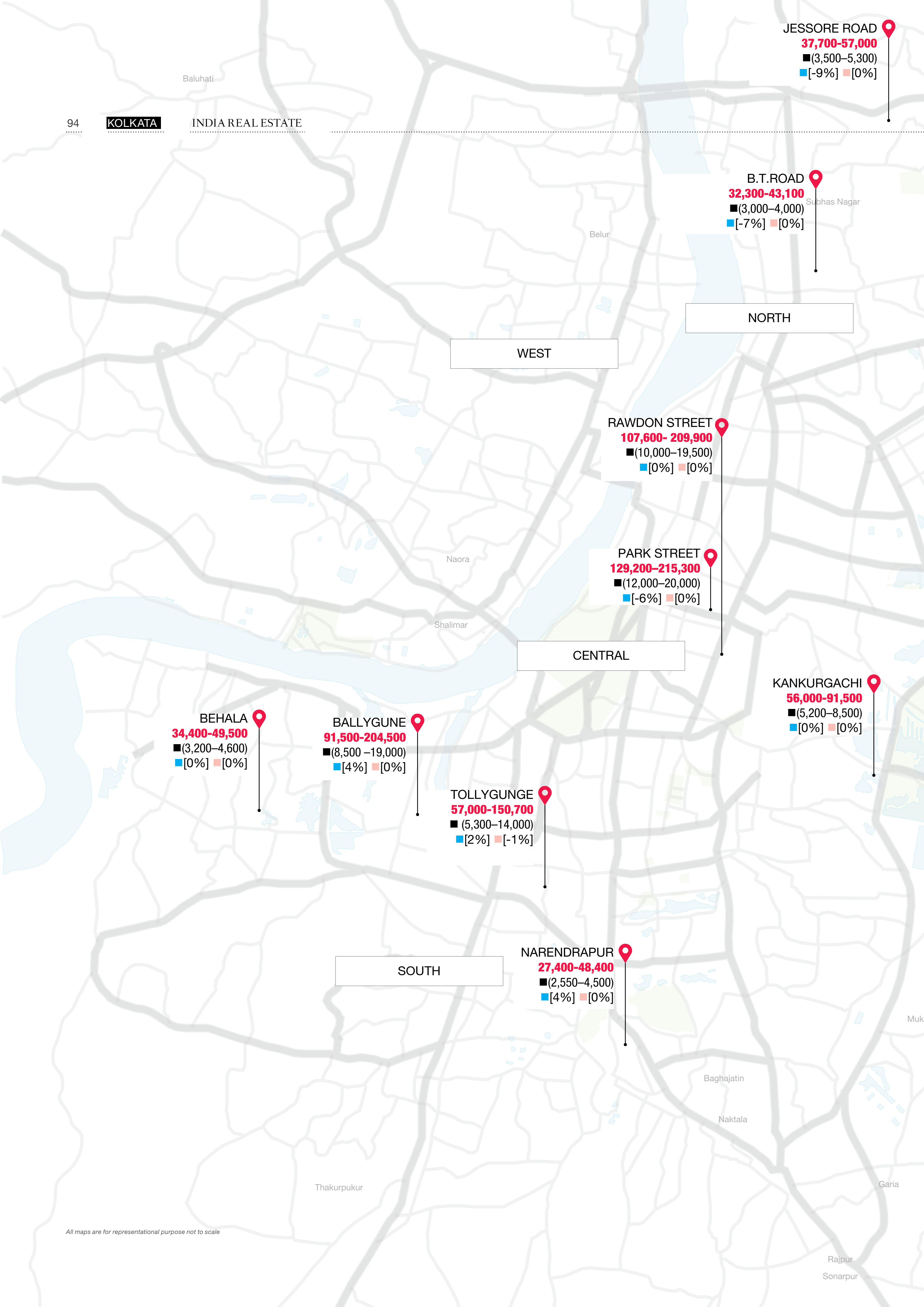
Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)



12%

YoY decrease in unsold inventory in Rajarhat in H2 2018

In H2 2018, Kolkata's oversupplied residential market noted only a miniscule 2% YoY decline in unsold inventory over H2 2017 as sales traction was drastically low and buyer preference remained skewed in favour of ready-to-move-in units.



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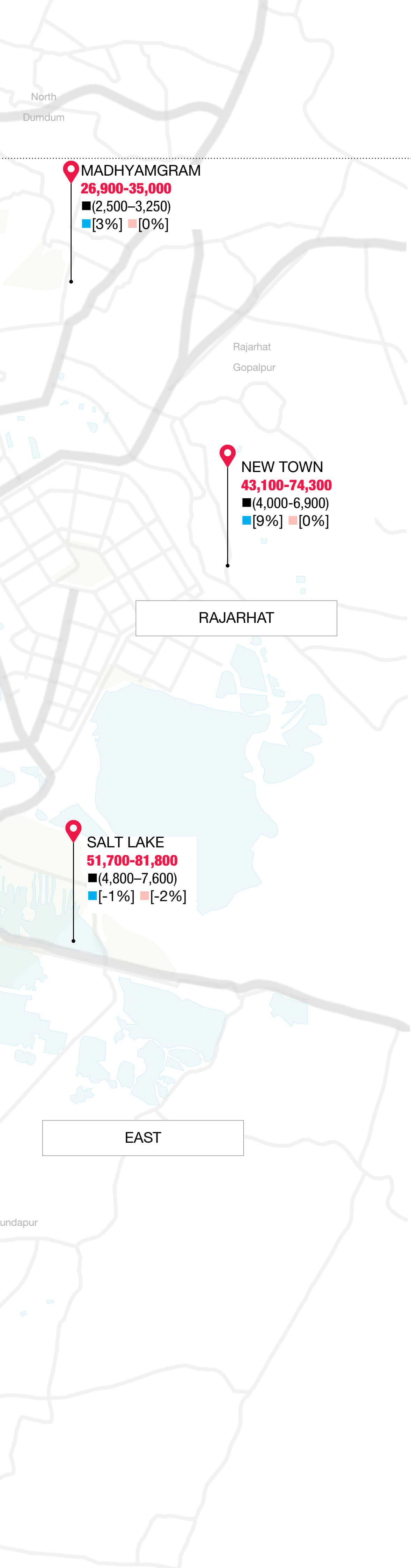


Knight Frank

Residential Pricing

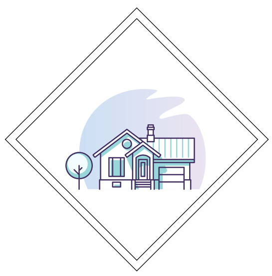
Price range in H2 2018 in ₹/sq m

Price range in H2 2018 in (₹/sq ft)

12 month change

6 month change

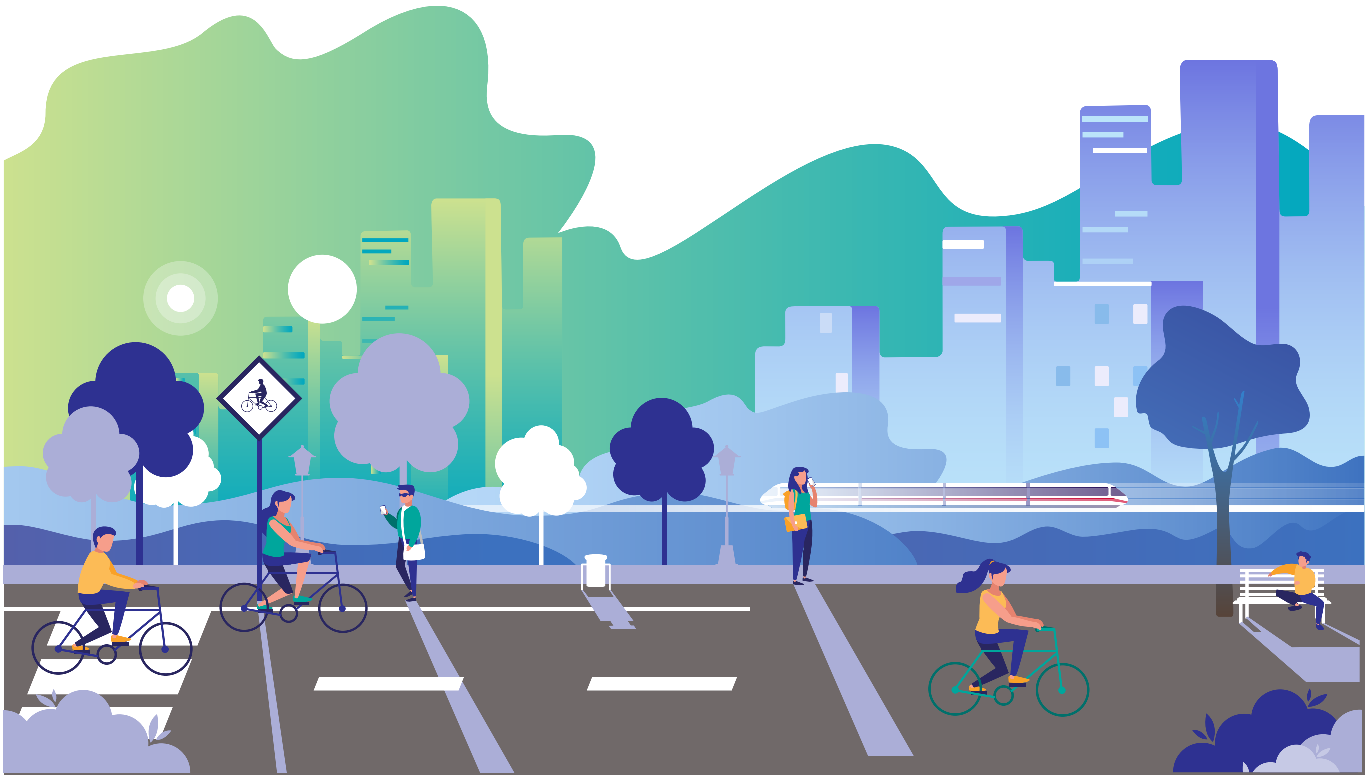
The weighted average residential prices in Kolkata have dwindled by 4% YoY in H2 2018, the lowest in the past three years.



9%

YoY decline in residential prices in Jessore Road in H2 2018

Mumbai



RESIDENTIAL MARKET

- The Mumbai Metropolitan Region (MMR) recorded strong growth in launches in 2018 after many years of subdued launches. The launches grew by 413% year-on-year (YoY) during H2 2018 and by 220% YoY in 2018. However, a point of caution on the strong growth in launches is that this growth comes on the back of a low base of H2 2017 and 2017, which had witnessed the lowest launches in the current decade of 7,490 units and 23,253 units, respectively.

- Overall, 2017 was a bad year for residential launches in general; as there were several policy-level changes in the country which hindered the flow of new supply. The first half of 2017 witnessed a major lull, as Q1 2017 was reeling under the hangover of the demonetisation policy of November 2016 and in Q2 2017, while the market was recovering slowly, the Real Estate (Regulation and Development) Act, 2016 (RERA) fears gripped the market around mid-April. As a result, post

MMR Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	38,389	413%	23,253	74,363	220%
Sales (housing units)	31,481	4%	62,256	63,893	3%
Price (weighted average)	₹ 77,418/sq m (₹ 7,192/sq ft)	-6.8%	₹ 83,071/sq m (₹ 7,717/sq ft)	₹ 77,418/sq m (₹ 7,192/sq ft)	-6.8%
Unsold inventory (housing units)	126,434	9%	115,964	126,434	9%
Quarters to sell	8.0	-	7.6	8.0	-
Age of unsold inventory (in quarters)	15.9	-	15.6	15.9	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)

Source: Knight Frank Research

May, the market took a downturn again and launches took a hit, as developers could not launch new projects without registering on RERA. The RERA effect carried on till July end, as developers were focusing on completing the paperwork for their on-going and new projects. Post that, the Goods and Services Tax (GST) came into effect in Q3 2017. During that period, for the initial few months, there was confusion on the exact rate of GST applicable on the real estate industry and on availability of input tax credit for land. This again impacted the supply in Q3 2017. The impact of GST lingered on till November 2017, as businesses across the board were focusing their efforts on complying with the new GST rules. Further, even the rules and tax slabs applicable under the GST regime was being revised regularly in the initial months which added to the confusion. On account of these policy-level interventions and lack of clarity regarding the changes, developers could not launch new projects for majority of 2017 and preferred to defer their launches. Thus, comparing the 2017 numbers which was an aberration for launches to the launches in 2018 presents a very high 220% YoY growth.

- Further, in the Brihanmumbai Municipal Corporation or BMC region (Central Mumbai, Central Suburbs, South Mumbai and Western Suburbs), the Supreme Court had lifted the ban on new construction approvals for a period of six months starting March 2018. This ban was imposed in March 2016 and had curtailed new launches in the BMC region for two years till March 2018. After the six-month deadline came to an end, the court extended this reprieve further by a month. This window allowed developers to launch new projects as well as build a pipeline for future launches, which they would be launching in the coming years. The units launched due to this window of reprieve from construction ban also contributed to the overall number of launches.

- Compact homes which are priced at a lower ticket sizes and affordable houses continue to dominate launches. 69% of launches during H2 2018 were in the sub-₹ 7.5 mn category.

- During H2 2018, sales in Mumbai grew marginally by 4% YoY to 31,481 units. The annual sales for 2018 were marginally higher by 3% YoY to 63,893 units. Sales in H2 2018 had started on a high however it did not end as envisaged. The sales momentum witnessed in H1 2018 moved upwards as we entered H2 2018. During the initial months of H2 2018, the momentum was building up strongly; however, towards the mid of H2 2018, the liquidity crisis hit the Non-Banking Financial Companies' (NBFCs) post the IL&FS default. Several NBFCs started delaying new loan disbursals and few were not even honouring sanctioned credit lines. This had an adverse impact on the overall buyer sentiments and sales started to witness a significant slowdown since then. Had it not been for the NBFC crisis, the MMR market would have recorded better sales numbers this year.

- Affordable houses continued to drive sales. Sales in the relatively affordable markets of MMR – Thane, Peripheral Central Suburbs and Peripheral Western Suburbs grew by 7% YoY, 6% YoY and 6% YoY respectively during H2 2018. However, sales in the pricier BMC markets grew only by 1% YoY in the same period. The Western Suburbs was the only market in the BMC region to record positive sales growth at 9%

YoY during H2 2018. A slew of new launches in these markets at lower ticket sizes, price cuts by developers, the large latent demand and on-going work on infrastructure projects have helped drive sales in this micro-market. Thane witnessed the second highest growth in sales at 7% YoY during H2 2018. The price cuts were more evident in the Thane market and this aided the sales growth.

- The trend of constructing compact homes in Mumbai continues and is becoming pervasive. In some locations, the projects with such compact apartments have done well, while in others, despite the project being in better locations and established catchments, they are struggling. It is a big challenge for developers to get the product size right as per the location in this segment.

- Goods and Services Tax (GST) has been a big deterrence for sale of under-construction apartments. Buyers are reluctant to pay the 12% GST applicable only on under-construction apartments and are willing to wait for projects to get Occupation Certificate (OC) on which GST is not applicable. As a consequence, majority of sales are happening in the Occupation Certificate (OC) ready projects or during pre-launch or just launch phases where developers offer a significant price discount, thereby reducing the impact of GST.

- As GST has been a major factor keeping buyers away from under-construction apartments, several developers are now willing to absorb majority of the GST impact on buyers. The rise in apartment prices due to GST should ideally be borne by the customer; however, the developer willing to bear the cost is a form of an indirect discount offered to buyers.

- The prices of apartments in MMR continue to correct and several locations have witnessed reduction in prices. The weighted average price for MMR was down 6.8% YoY during H2 2018. Apart from reduction in base prices, several freebies such as: no-floor rise, two-year free maintenance, free clubhouse membership, various subvention plans, GST waivers, assured two-year rental schemes and a host of other indirect discounts continue to remain in the market. Pre-EMI schemes are in vogue and are being used to lure homebuyers to make a site visit. As the market has been subdued for few years now, some developers are offering deferred payment plans even for OC-ready projects.

- Some developers are tying up with strategic partners/brokers and are offering discounts in the range of 15–30% to clear their inventory. In many cases, the buyer's response to these price cuts has been positive. There is always a huge latent demand for homes in MMR and if the pricing is right the latent demand would translate into sales.

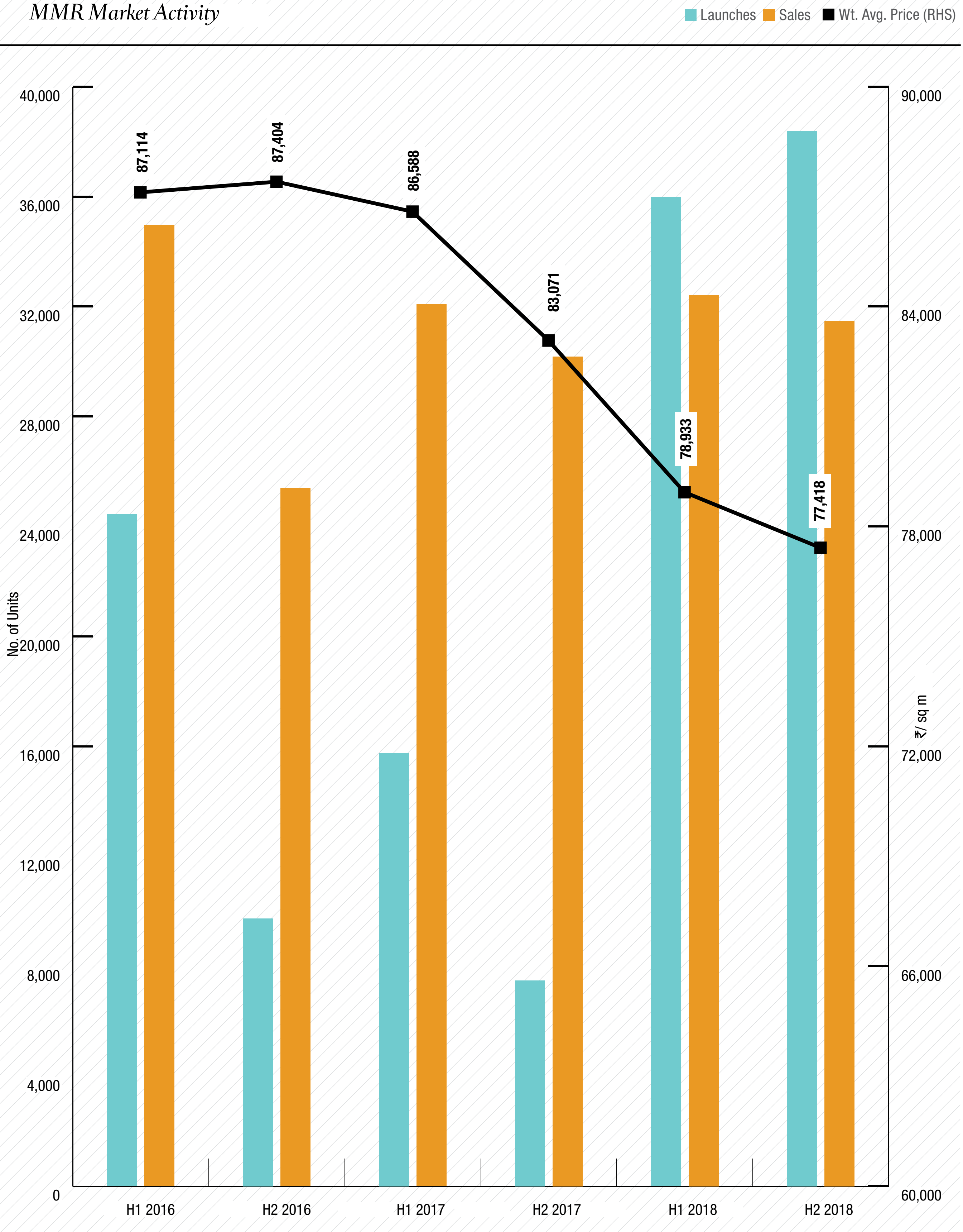
- On account of the strong growth in new launches, the unsold inventory levels in MMR inched up 9% YoY to 126,434 units. Quarters-to-sell (QTS) for the MMR market went up from 7.6 quarters in H2 2017 to 8.0 quarters in H2 2018 and the age of unsold inventory increased 15.6 quarters to 15.9 quarters in the same period.

- The current QTS of 8 quarters should not be interpreted as a sign of healthy market. Over the past few years, in MMR, launches have constantly lagged the sales (from H2 2014 till H2 2017). This has led to decline in unsold inventory from 204,070 units to 126,434 units and QTS from 11.5 quarters to 7.6 quarters in the same period. If we look at the latest QTS of 8.0 quarters in conjunction with the age of inventory of 15.9 quarters, then the sum of the age of inventory and QTS results in a total of 23.9 quarters or almost six years. This implies that the existing unsold inventory has been languishing in the market for almost four years and it will take another two years to sell assuming no new launches come in.

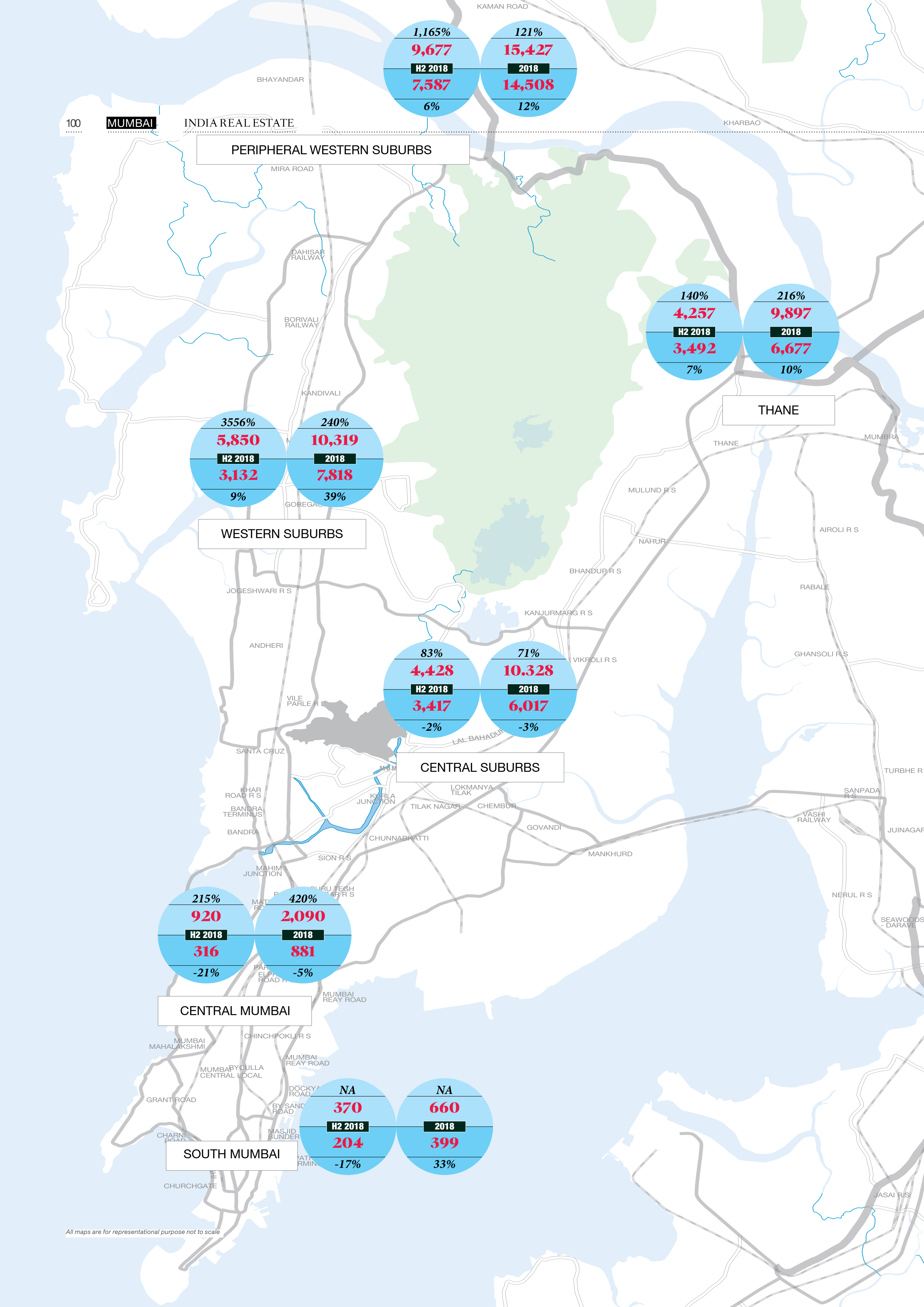
- The current residential demand is driven by end-users and the scale is tilted in the favour of buyers. Developers who have been willing to negotiate on prices are able to generate sales. But it has been observed that if the developer is not willing to reduce prices, most buyers are ready to wait and are in no hurry to close the transaction. They are expecting the prices to come down in the future, which was not the case until a few years back.

- Further, in the MMR residential market, the NBFC crisis has not just affected demand adversely, but it has affected the developers as well and the magnitude is severe on the smaller developers. Smaller developers were already having a tough time managing their cash flows post implementation of RERA; the NBFC crisis has exacerbated the conditions for them. The developers who had taken construction finance from a particular NBFC and had also extended subvention or deferred payment schemes to buyers from the same NBFC were affected the most. These NBFCs had not just stopped honouring sanctioned credit lines of construction finance but were also delaying disbursals on the home loans, which should ideally be released based on achieving the agreed construction milestones (generally slab-wise payment). The construction in such projects had come to a standstill, as the past disbursals due on home loans was not being released by the NBFC and developers were not able get their sanctioned lines of construction finance to continue construction, let alone get new lines of construction finance. While the crisis has adversely impacted the buyer sentiments and the business of smaller developers, it has been a boon for financially sound and large developers. Such developers are finding many opportunities to take over stuck projects at attractive prices. Nowadays it is not difficult to find real estate advertisements carrying names of two different developers for a particular project. Going forward, this trend would become more prevalent.

MMR Market Activity



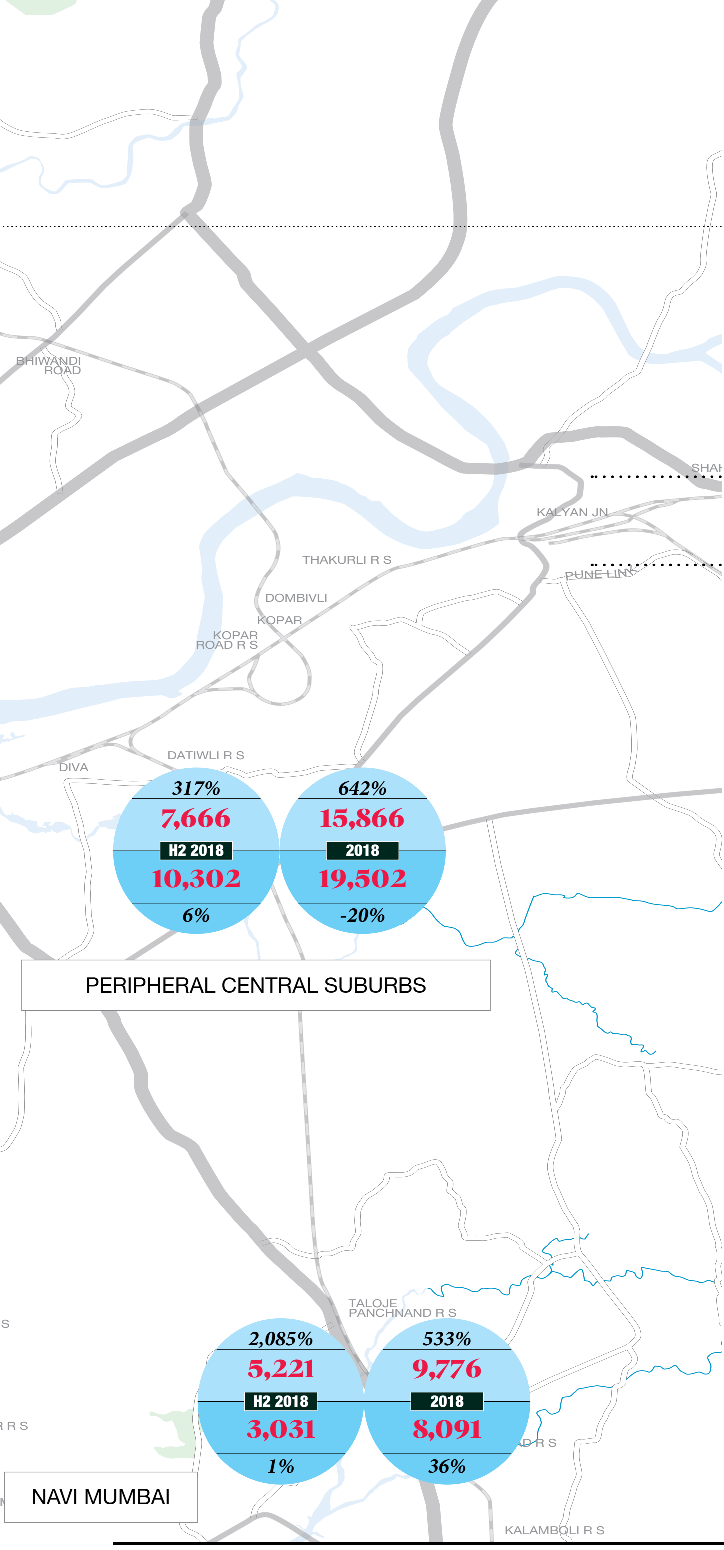
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Launches and Sales

Launches (housing units) | Sales (housing units) | % Change (YoY)

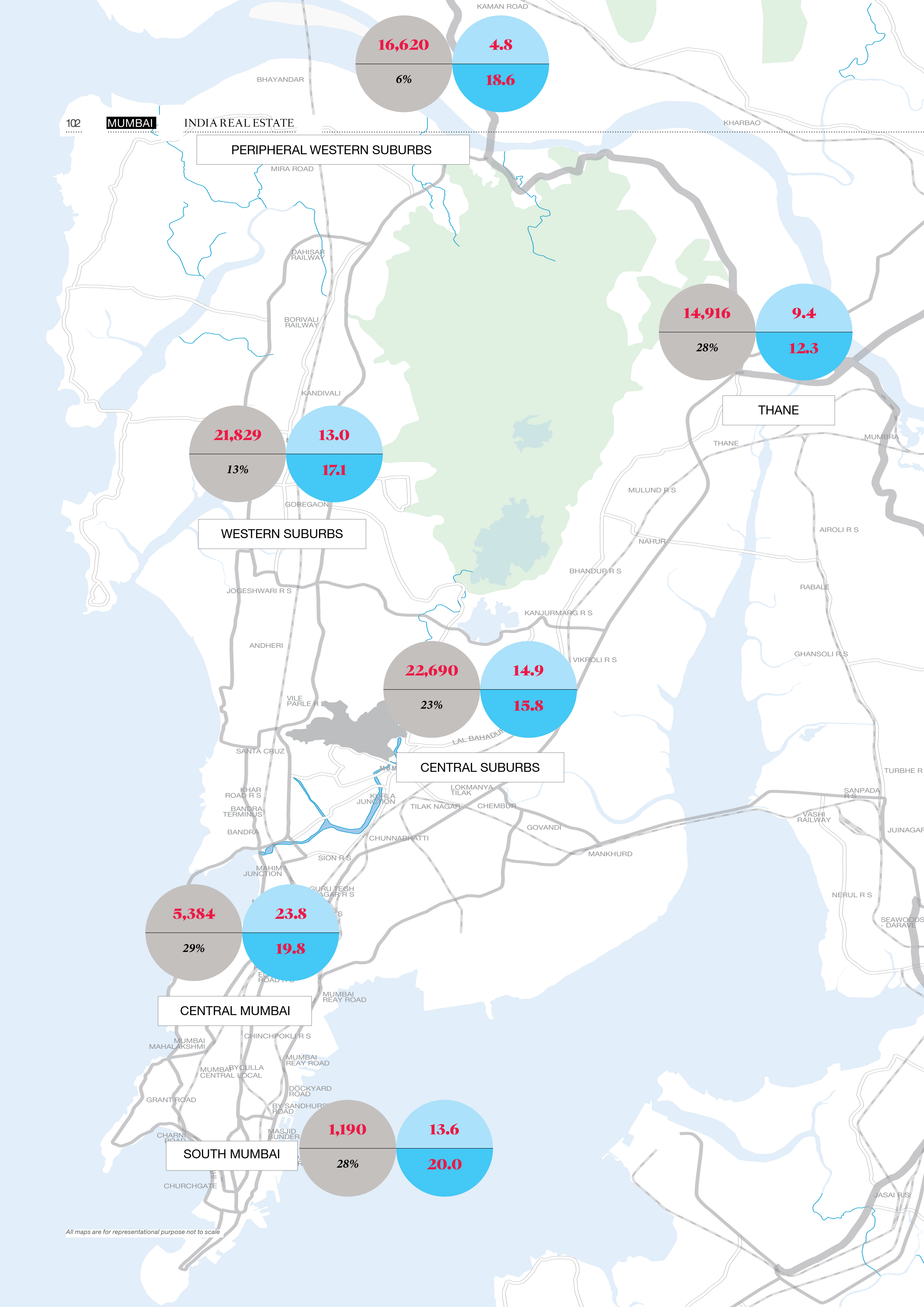


2017 was an aberration for new launches due to the various policy level changes which hindered the flow of new launches. Hence comparing the launches in 2017 to the launches in 2018 presents a very high growth across micro-markets.

Micro-market Classification

Micro-market	*Locations*
Central Mumbai	Dadar, Lower Parel, Mahalaxmi, Worli, Prabhadevi
Central Suburbs	Sion, Chembur, Wadala, Kurla, Ghatkopar, Vikhroli, Bhandup, Mulund
Navi Mumbai	Vashi, Nerul, Belapur, Kharghar, Airoli, Panvel, Ulwe, Sanpada
Peripheral Central Suburbs	Kalyan, Kalwa, Dombivli, Ambernath, Bhiwandi, Mumbra, Karjat
Peripheral Western Suburbs	Vasai, Virar, Boisar, Palghar, Bhayandar, Nalasopara
South Mumbai	Malabar Hill, Napean Sea Road, Walkeshwar, Altamount Road, Colaba
Thane	Naupada, Ghodbunder Road, Pokhran Road, Majiwada, Khopat, Panchpakhadi
Western Suburbs	Bandra, Andheri, Goregaon, Kandivali, Borivali, Santacruz, Vile Parle

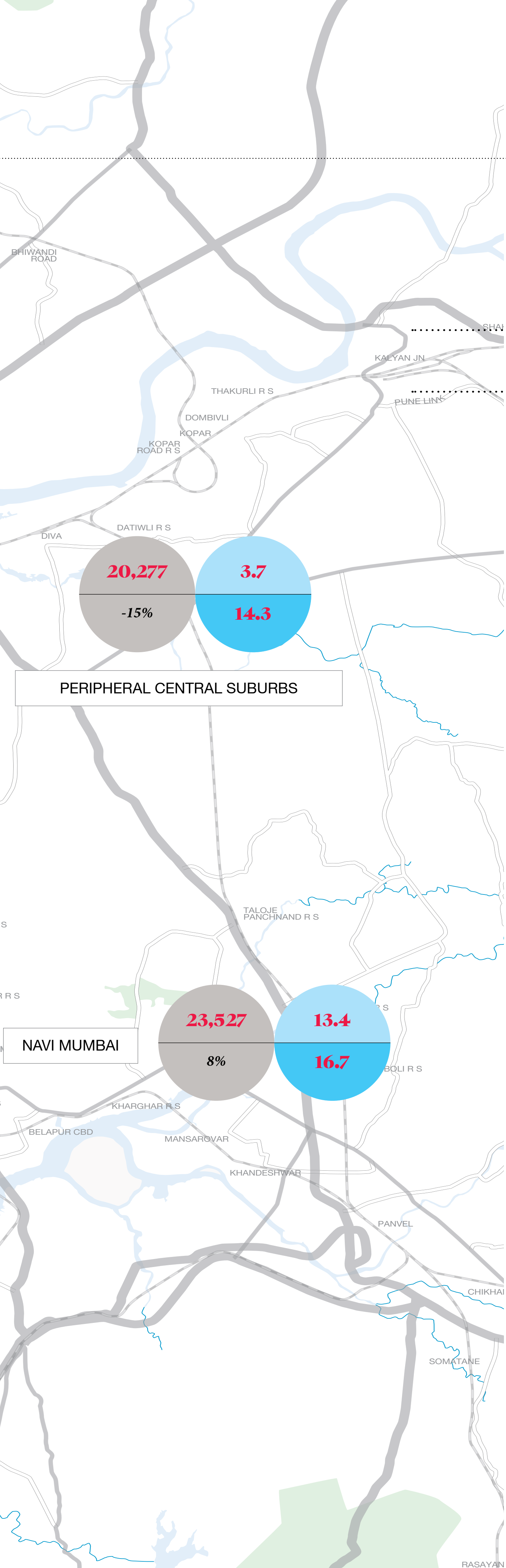
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Unsold Inventory

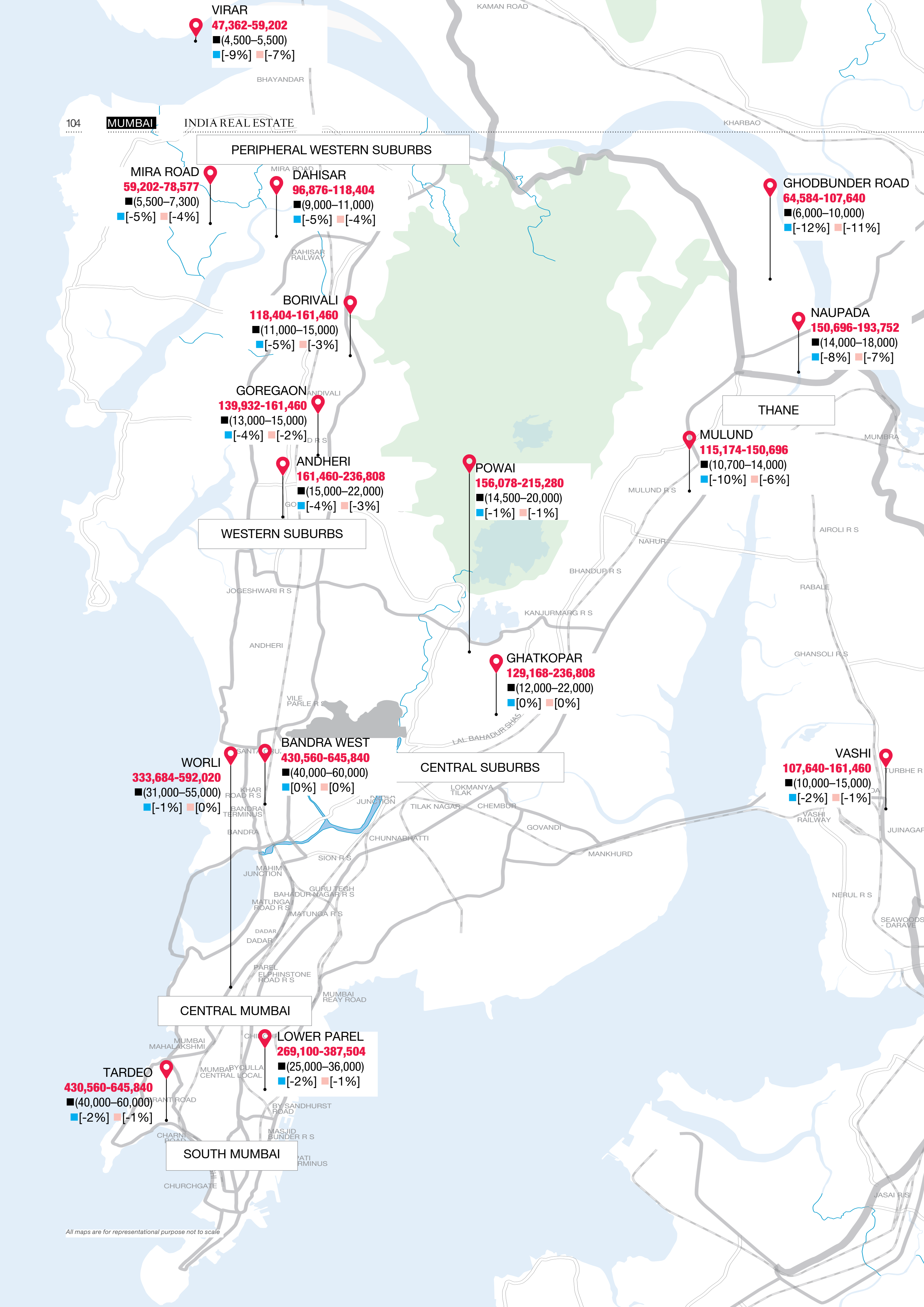
Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)



9%

YoY increase in unsold inventory across MMR

The trend of constructing compact homes in Mumbai continues and is becoming pervasive. In some locations, the projects with such compact apartments have done well, while in others, despite the project being in better locations and established catchments, they are struggling. It is a big challenge for developers to get the product size right as per the location in this segment.



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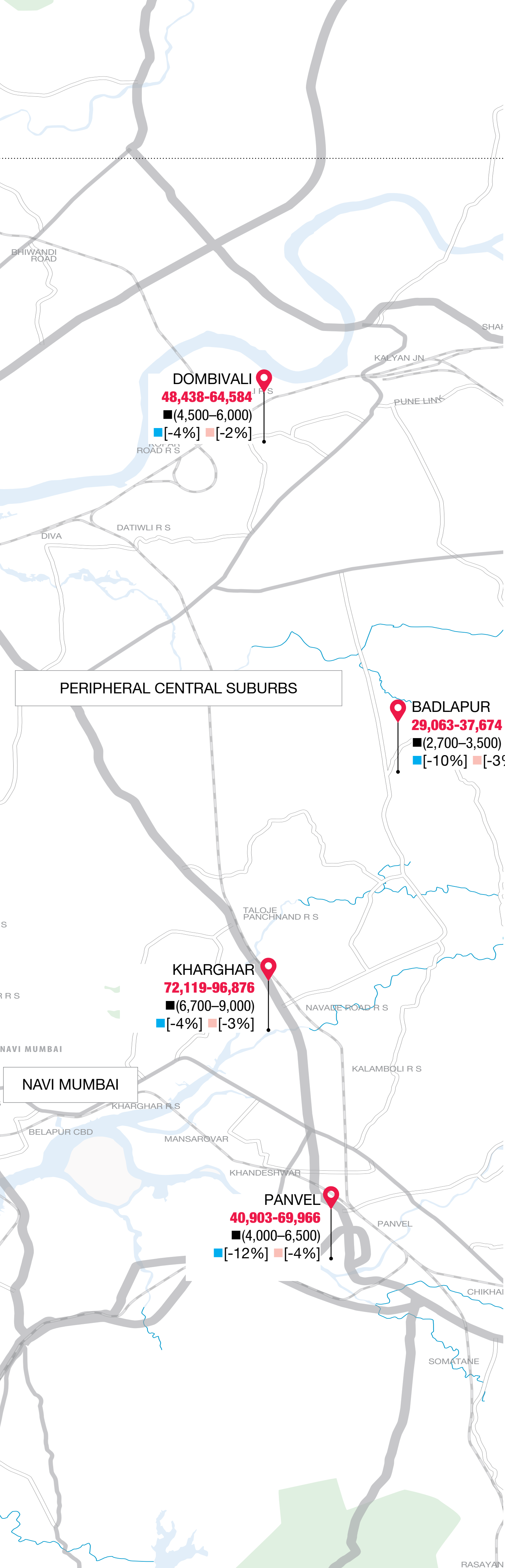
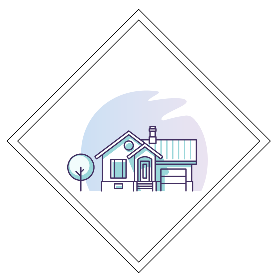


Residential Pricing

Price range in H2 2018 in ₹/sq m
Price range in H2 2018 in (₹/sq ft)
12 month change
6 month change

Some developers are tying up with strategic partners/brokers and are offering discounts in the range of 15–30% to clear their inventory. In many cases, the buyer's response to these price cuts has been positive.



6.8%

Decline in weighted average prices across MMR

19.6%

Vacancy levels in MMR office market

OFFICE MARKET

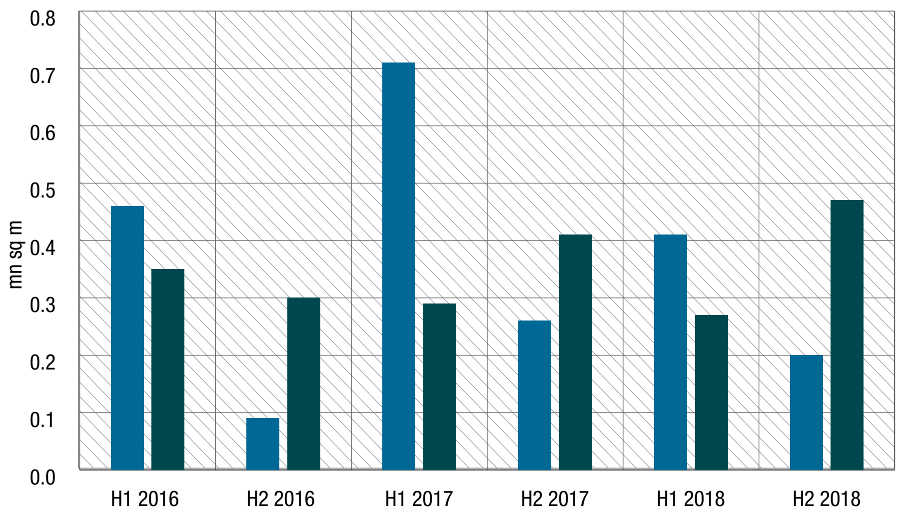
MMR Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
New completions mn sq m (mn sq ft)	0.2 (2.2)	-22%	0.97 (10.4)	0.61 (6.5)	-37%
Transactions mn sq m (mn sq ft)	0.47 (5.1)	14%	0.70 (7.5)	0.74 (7.9)	5%
Weighted average rental in ₹/sq m/month (₹/sq ft/month)	1,259 (117)	1.7%	1,238 (115)	1,259 (117)	1.7%
Stock mn sq m (mn sq ft)	13.1 (141)	5%	12.5 (134)	13.1 (141)	5%
Vacancy (%)	19.6%	-	20.2%	19.6%	-

- Office space supply hits the market in lots and the completion numbers are highly volatile. In H2 2018, new completions were lower by 22% year-on-year (YoY) at 0.2 mn square metres (2.2 mn square feet). Only two business districts witnessed addition in supply in H2 2018 – SBD Central and SBD West during H2 2018. The annual completions in 2018 were lower by 37% YoY at 0.61 mn sq m (6.5 mn sq ft).

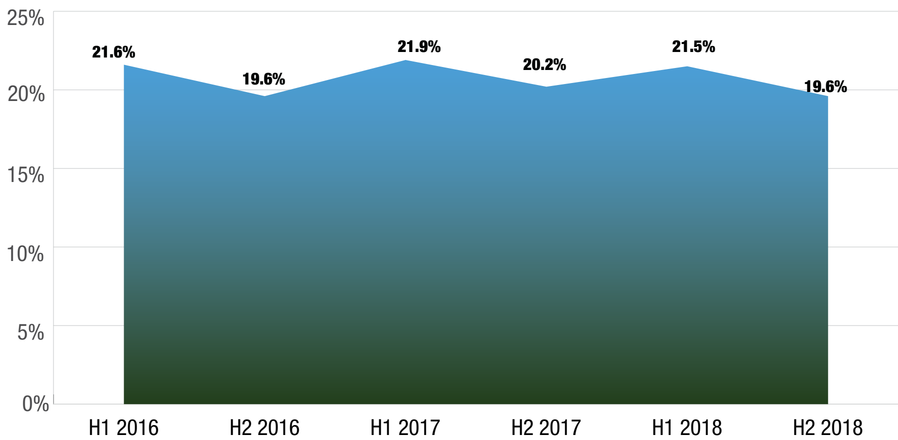
- The transactions in MMR office market have been growing steadily over the past three years and continued to grow during H2 2018. The transaction volumes were up 14% YoY during H2 2018. The annual transaction volumes were higher by 5% YoY during 2018. However, the growth in transactions were curtailed to an extent by lack of required supply in the prime business districts. Even though the city level vacancy numbers remain high, occupiers are going slow in their consolidation and relocation plans as they are not able to find office space in Grade A buildings that suits their requirements. But this latent demand would most likely reflect in the transaction volumes of the next

MMR office market activity



Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

MMR office market vacancy



Source: Knight Frank Research

5%

YoY growth in transactions in 2018

12–18 months as a large amount of supply is expected to hit the market towards the end of 2019.

- Co-working operators have been taking up space aggressively over the past few years and they have now established their presence in almost all major business districts of the city. Many co-working centres in MMR are witnessing robust transaction activity and are running at or reaching full capacity. The transaction volumes indicated above do not capture the space subleased by co-working operators, but the concept of co-working has been adopted widely by occupiers across sector and not just start-ups.

- Other services sector which includes Media, Consulting, E-commerce, co-working, etc. had the highest share of transactions in H2 2018 at 43% followed by BFSI at 32%.

- The suburban business districts (SBD) - SBD West and SBD Central combined garnered 60% share of the transactions in H2 2018 and their shares were 32% and 28%, respectively. This was followed by the markets in Peripheral Business District (PBD) at 27%. Due to limited supply and low vacancy levels, the share of BKC and Central Mumbai were low at 7% and 4%, respectively of total transactions during H2 2018.

- The trend of consolidation of space by occupiers continues across the MMR office market. The average size of deals increased from 2,421 sq m (26,060 sq ft) to 3,241 sq m (34,887 sq ft) while the number of transactions in

The trend of consolidation of space by occupiers continues across the MMR office market. The average size of deals increased from 2,421 sq m (26,060 sq ft) to 3,241 sq m (34,887 sq ft) while the number of transactions in the same period declined from 170 to 145.

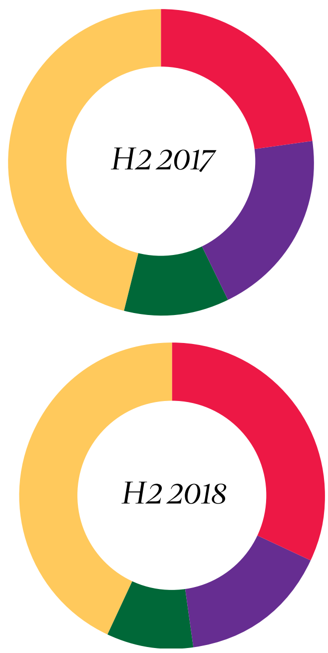
the same period declined from 170 to 145.

- In H2 2018, as supply was much lower than transactions during the period, vacancy levels declined from 20.2% during H2 2017 to 19.6% during H2 2018. Amongst business districts, PBD had the highest vacancy of nearly 30% followed by SBD West at 24.5%.

- Weighted average transacted rentals for MMR office market went up by 1.7% YoY during H2 2018 as the share of suburban business districts in transaction activity was higher than the share of cheaper peripheral business districts. The rentals across most business districts were steady except for Central Mumbai, BKC and off-BKC and CBD and off-CBD areas.

- Central Mumbai witnessed the highest rental growth of 9% YoY during H2 2018, followed by BKC at 5% YoY. The strong rental growth in these markets was on account of low vacancy levels coupled with strong demand from occupiers to take up space in these markets. Only the erstwhile CBDs and off-CBD areas like Nariman Point, Fort, Ballard Estate, etc. witnessed negative growth in rentals in MMR, as these business districts have lost their appeal to newer business districts of Central Mumbai and Bandra Kurla Complex (BKC). The share of CBD & off-CBD areas in total transaction was close to 2% during H2 2018 and this poor demand for office space in these markets is evident in the negative growth of rentals in these markets.

Sector-wise Split Of Transactions



Industry	H2 2017	H2 2018
BFSI	23%	32%
IT/ITeS	20%	16%
Manufacturing	11%	9%
Other Services	46%	43%

Note: BFSI includes BFSI support services

Average deal size and number of deals

2,421 (26,060)
Average Deal Size in sq m (sq ft)
H2 2017
170
Number of Deals

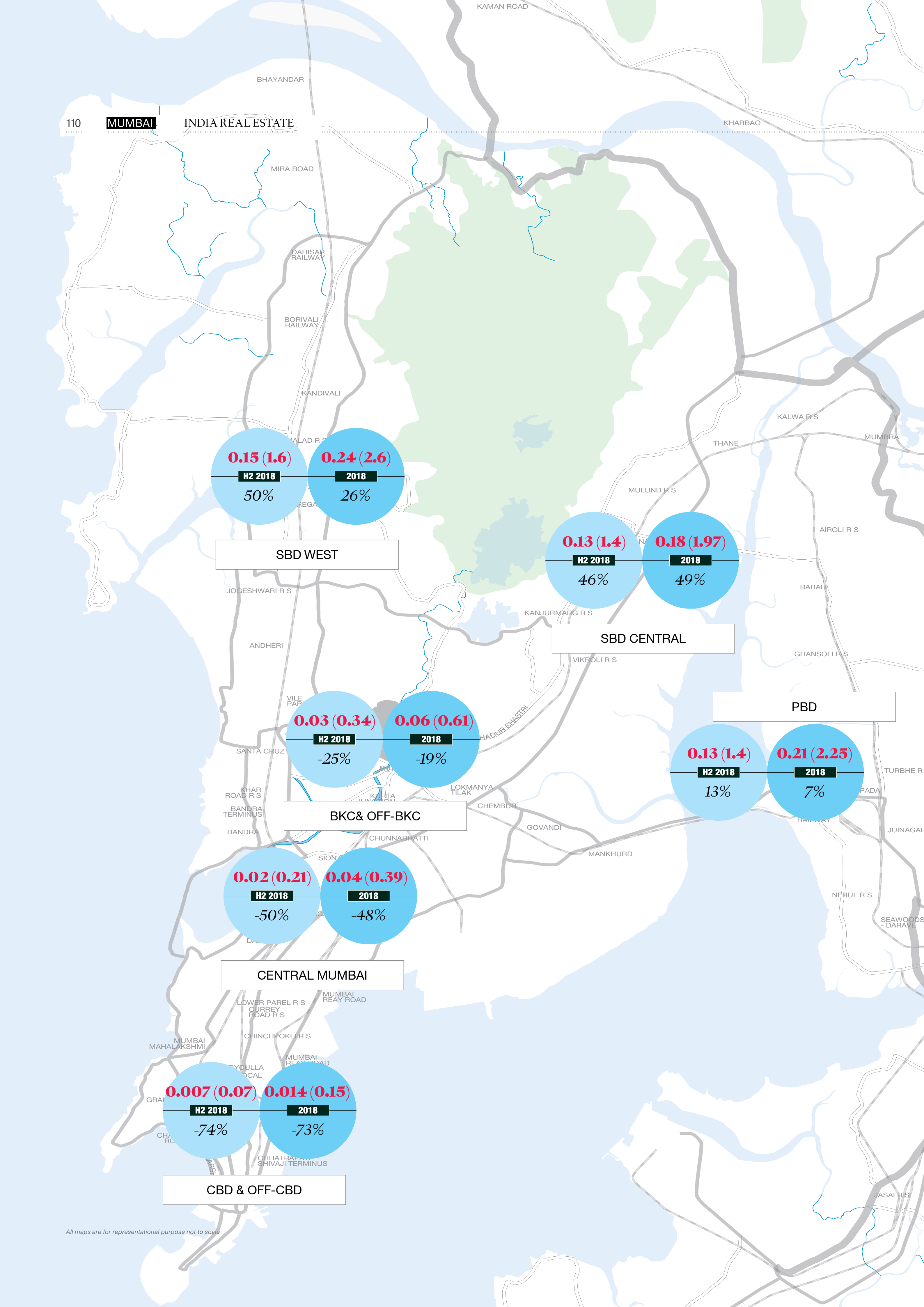
3,241 (34,887)
Average Deal Size in sq m (sq ft)
H2 2018
145
Number of Deals

Note - 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Business district classification

Business district	Micro markets
CBD & off CBD	Nariman Point, Cuffe Parade, Ballard Estate, Fort, Mahalaxmi, Worli
Bandra Kurla Complex & off Bandra Kurla Complex (BKC & off BKC)	BKC, Bandra (East), Kalina, Kalanagar
Central Mumbai	Parel, Lower Parel, Dadar, Prabhadevi
SBD West	Andheri, Jogeshwari, Goregaon, Malad
SBD Central	Kurla, Ghatkopar, Vikhroli, Kanjurmarg, Powai, Bhandup, Chembur
PBD	Thane, Airoli, Vashi, Ghansoli, Rabale, Belapur

Source: Knight Frank Research



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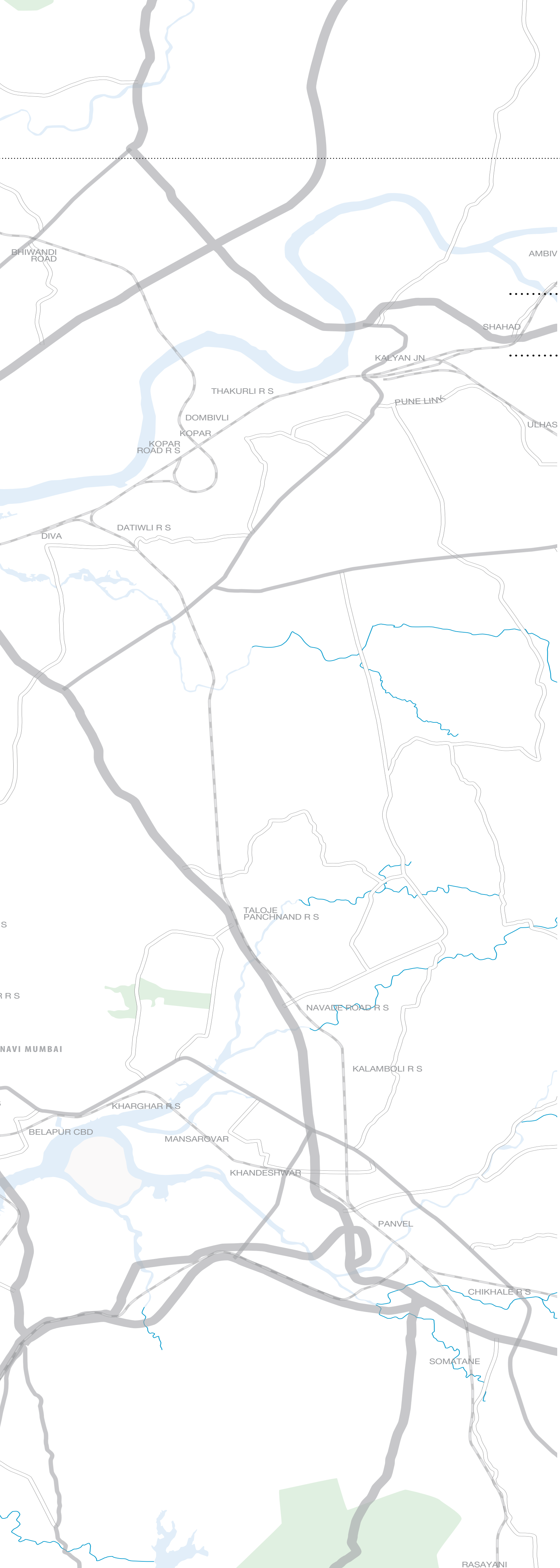


Knight Frank

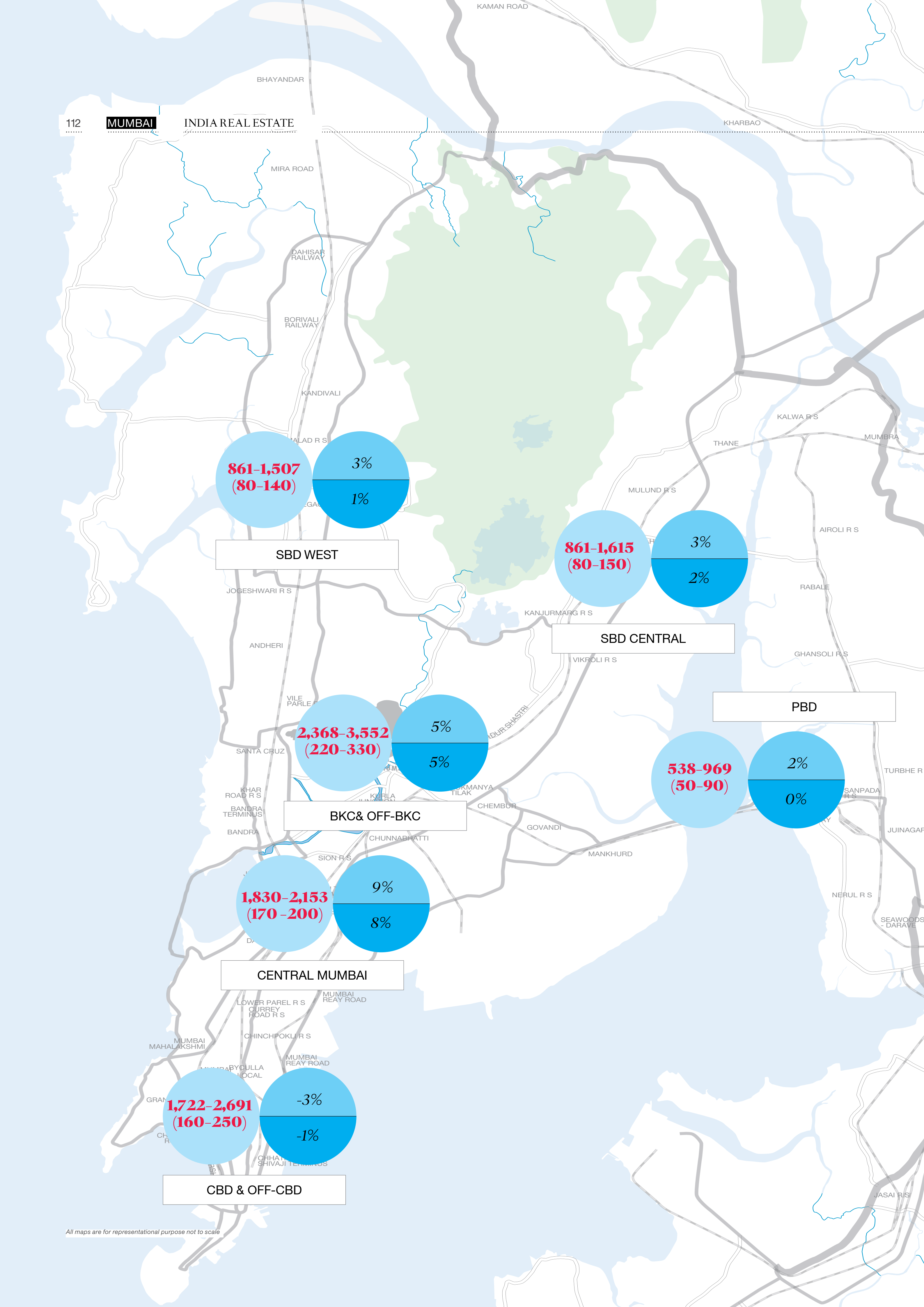
Office Transactions

Transactions mn sq m (mn sq ft) % Change (YoY)

The suburban business districts (SBD) - SBD West and SBD Central combined garnered 60% share of the transactions in H2 2018 and their shares were 32% and 28%, respectively.

49%

YoY growth in transactions in SBD Central in 2018



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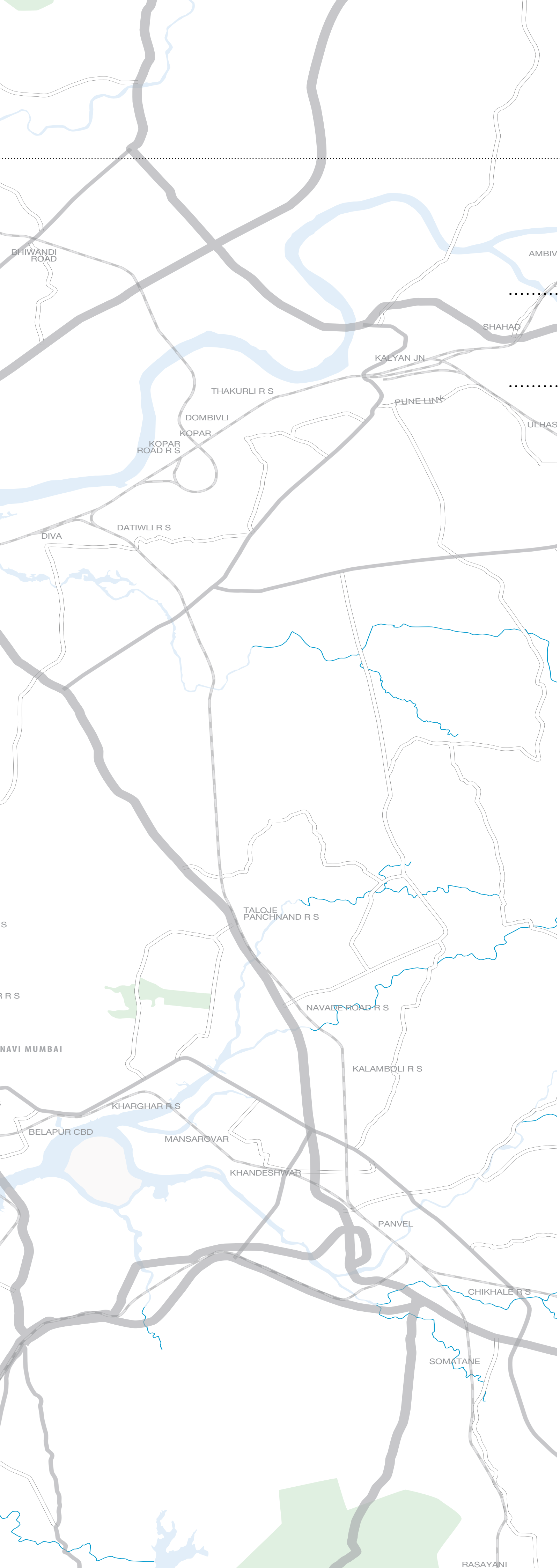


Office Rentals

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

12-month change

6-month change

Central Mumbai witnessed the highest rental growth of 9% YoY during 2018, followed by BKC at 5% YoY

9%

YoY growth in rentals in Central Mumbai in 2018

NCR

RESIDENTIAL MARKET

35%

Increase in launches compared to 2017

NCR Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	6,696	-3%	11,726	15,819	35%
Sales (housing units)	22,599	10%	37,653	40,646	8%
Price (weighted average)	₹ 45,640/ sq m (₹ 4,240/ sq ft)	2%	₹44,832/sq m (₹ 4,165/sq ft)	₹ 45,640/sq m (₹ 4,240/sq ft)	2%
Unsold inventory (housing units)	142,007	-15%	166,831	142007	-15%
Quarters to sell	15	-	17	15	-
Age of unsold inventory (in quarters)	22	-	19	22	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)

Source: Knight Frank Research

- The year 2018 has brought about a welcome change to the staggering NCR residential market. On one hand the market witnessed cautious and strategic new launches under the watchful eye of the Real Estate (Regulation and Development) Act, 2016, while on the other green shoots of recovery were seen on the demand side with sales numbers faring well in 2018, indicating a slight revival of confidence in the market.

- The largest urban agglomeration of the country has been under immense pressure due to infrastructure delays and litigations that has translated into a lack of confidence amongst residential buyers, and as a result of this, the NCR market today has the highest unsold inventory across eight cities.

- Further, the implementation of the Real Estate (Regulation and Development) Act, 2016 in the first half of 2016 and the Goods and Services Tax Act also adversely affected the already slow market and put business on the back foot. However, current market analysis shows that the sector is slowly adjusting to the policy restructuring and green shoots of recovery can be seen on both the supply and demand side.

- New launches in NCR registered a 35% growth in the number of units launched in 2018, with approximately 75% of the new launched units falling in Gurugram and Greater Noida. The market saw approximately 15,819 units launched in 2018 compared to 11,726 units in 2017. On a half yearly comparison, the new launches in NCR stand at 6,696 units in

H2 2018, which is in the same range of H2 2017.

- Gurugram contributed significantly to the new launches in NCR in H2 2018, taking up 52% of the overall pie, followed by Greater Noida and Ghaziabad. While previously, Gurugram saw new launches in the affordable housing category, the period of H2 2018 had notable developers launching new projects in the above ₹ 7.5 mn price bracket. New launches in Noida and Greater Noida have also registered a slight revival in 2018 with developers launching new projects majorly in sector 150 in Noida and Sectors 1, 10, Pari Chowk and Zeta 1 in Greater Noida. Accumulating inventory, debt laden prominent developers and delayed projects in locations such Greater Noida west, and Noida Greater Noida Expressway has put pressure on the developers to complete projects in hand than launch new ones.

- Weighted average prices in the NCR residential market have registered a marginal 2% increase over H2 2017, which effectively translates into a stagnant market. The market has seen a slowdown in prices since 2013 and the scenario has not changed ever since. Low investor interest and an inventory overhang of more than one lakh units has kept the developers cautious of increasing the prices.

- On the demand side, sales have started to look up in 2018. On a yearly comparison approximately 40,646 units were sold in NCR in 2018, registering a growth of 8% over the 2017 sales numbers. The second half of 2018 registered a 10% growth over the same period in 2017 and helped propel the uptick in sales. Our survey suggests that properties that are ready-to-move or are nearing completion are garnering more enquiries from buyers. This can be attributed factors such as policy intervention in the form of Real Estate (Regulation and Development) Act, 2016, which has renewed the developer interest to finish projects at hand rather than launch new ones. Another factor is that the buyer is still not out of the woods and does not want to risk buying an under-construction project.

- Greater Noida yet again takes the lion's share of the demand in 2018 with 50% of the overall sales coming from this affordable micro-market, which is distantly followed by Ghaziabad and Gurugram at 19% and 17%, respectively. Majority of the projects in Greater Noida are in the less than ₹ 5 mn price bracket and are driving demand in this market. Regardless of having no major employment pull, the micro-market is not only attractive to buyers of Noida and Greater Noida but also adjacent tier II cities of Uttar Pradesh such as Mathura, Agra and Aligarh due to its affordability. The second half of 2018 fared well for the Greater Noida market with a more than 100% growth in sales in H2 2018 as compared to the same period in 2017.

- Demand in Gurugram has somewhat remained tepid in 2018. Our survey findings suggest that even though there are increased enquires, certain infrastructure delays such as the Dwarka Expressway is holding back interested buyers who are majorly end users. Another factor contributing to this sluggish demand is that the fresh inventory with builders is in direct competition with the inventory lying with investors who are ready to take a hit and exit the property.

- Demand in Noida has also failed to impress in H2 2018. The market registers a YoY 26% decrease in sales compared to H2 2017, market sentiments remain lukewarm.

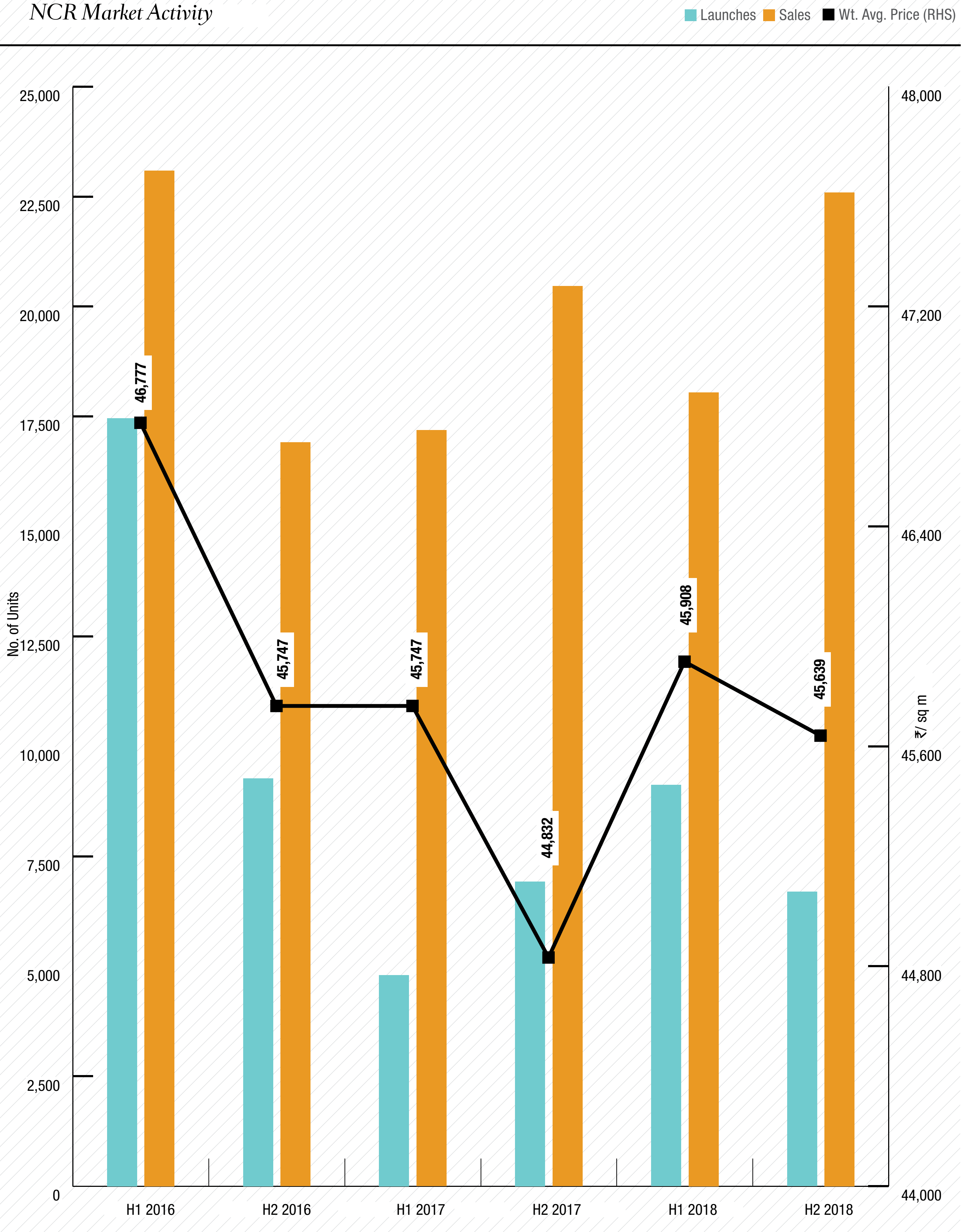
- The quarters to sell unsold inventory (QTS) is the number of quarters required to exhaust the existing unsold inventory in the market. The existing unsold inventory is divided by the average sales velocity of the preceding eight quarters to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market.

- The QTS of NCR has moved within close ranges in the past eight quarters but lean new launches and steady sales have nudged the QTS to 15 quarters at the end of 2018 from 17 quarters in 2017. This means that with the current sales velocity the market will take close to 4 years to offload the current inventory which is extremely high.

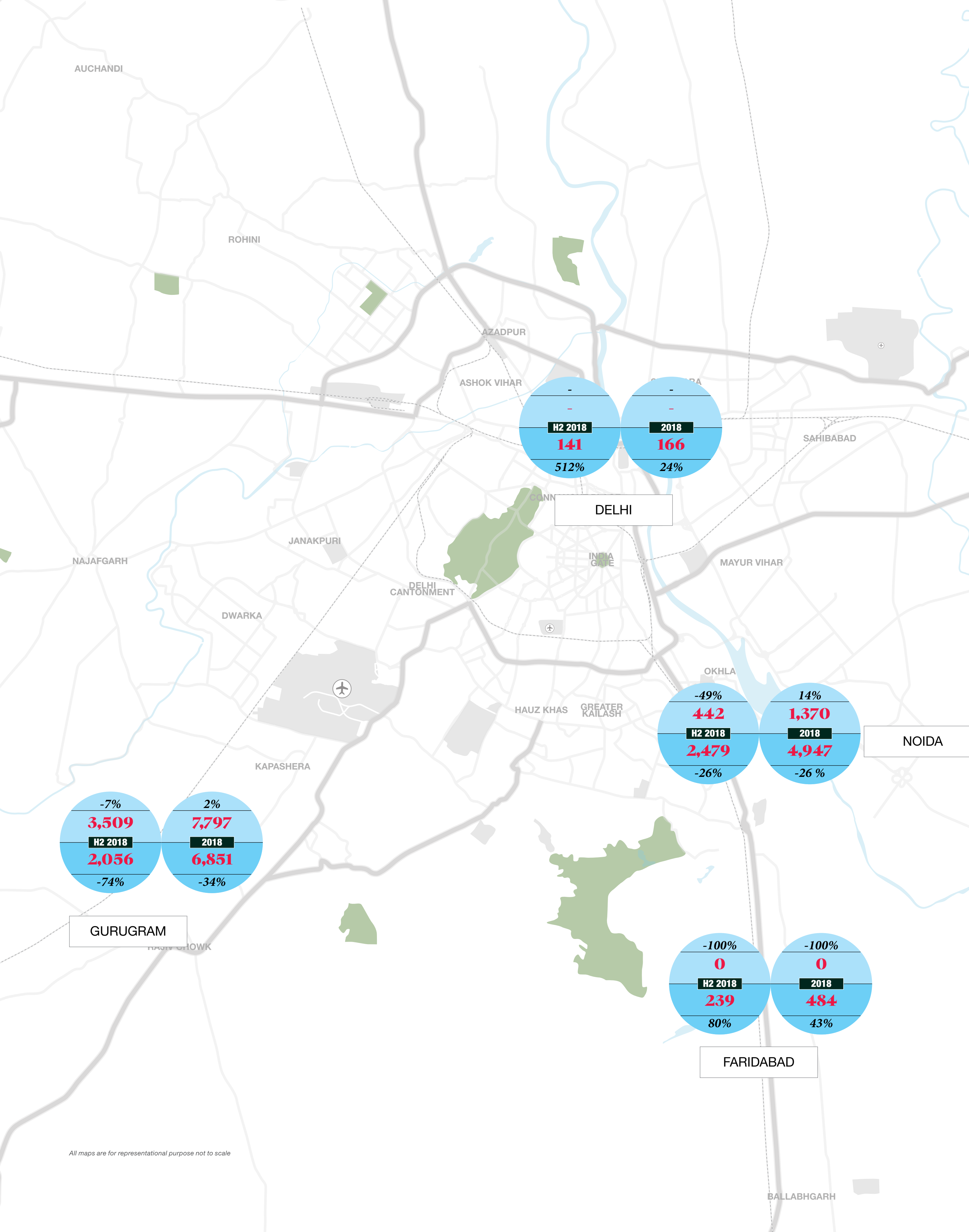
- Yet again Ghaziabad and Greater Noida emerge as NCR's better performing markets, with a QTS of 13 quarters, closely followed by Noida at 14 and Gurugram at 18 quarters.

- The steady pace of sales and cautious new launches have consequently brought down the unsold inventory by 15% in H2 2018 compared to the same period in 2017. The unsold inventory stands at approximately 142,007 units as of December 2018. Greater Noida and Gurugram account for approximately 65% of the unsold inventory in NCR followed by Ghaziabad and Noida.

NCR Market Activity



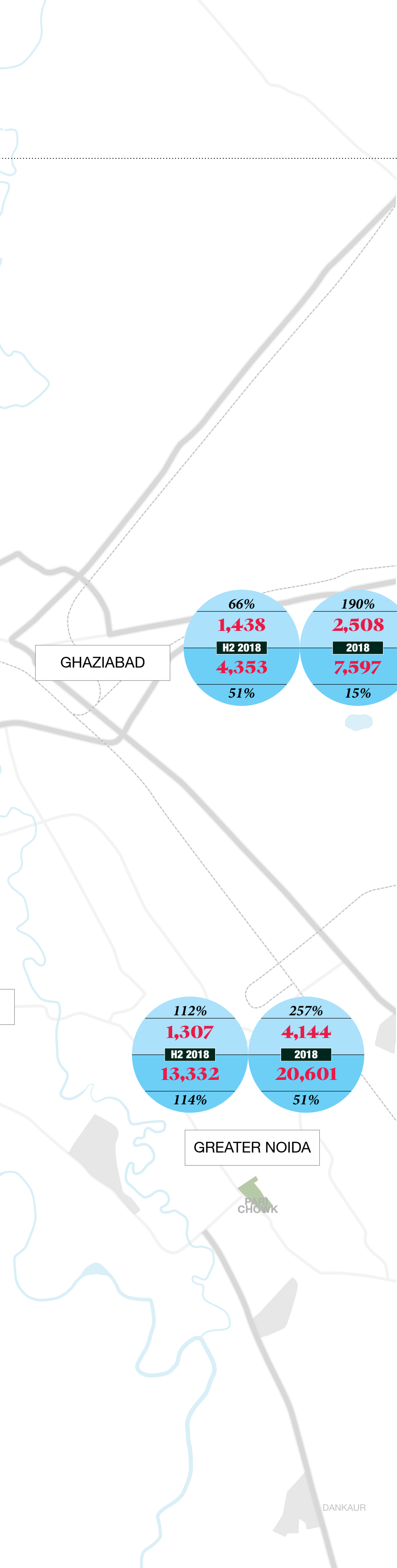
Source: Knight Frank Research



All maps are for representational purpose not to scale

Residential Launches and Sales

Launches (housing units) | Sales (housing units) | % Change (YoY)



8%

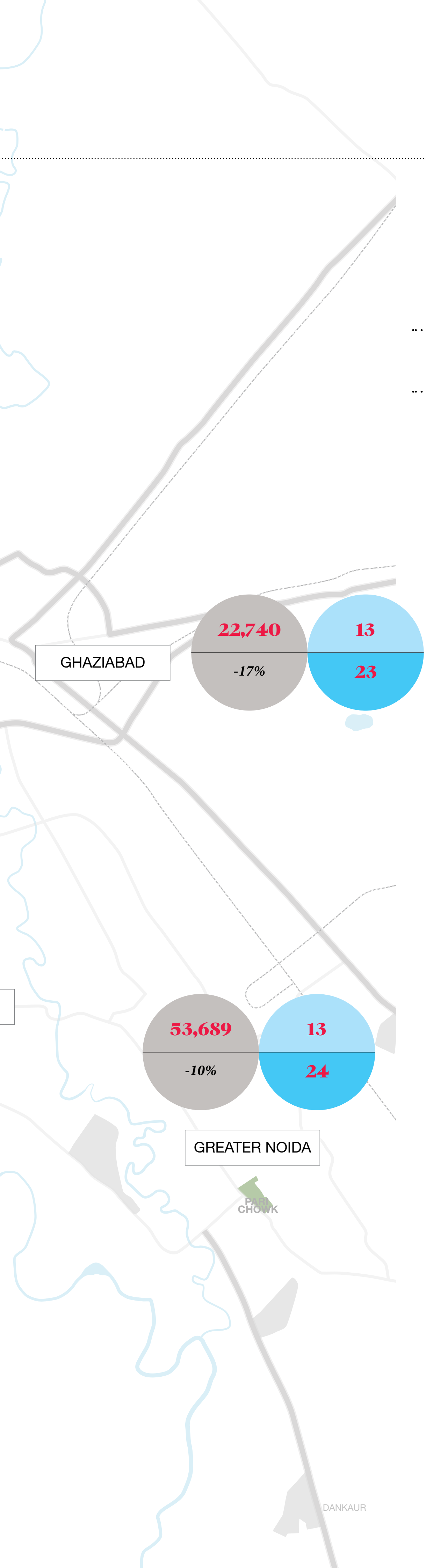
YoY increase in sales

Greater Noida led sales in 2018. 50% of the total sales in NCR came from this affordable micro-market. The market is not only attractive to buyers of Noida and Greater Noida but also adjacent tier II cities of Uttar Pradesh such as Mathura, Agra and Aligarh due to its affordability

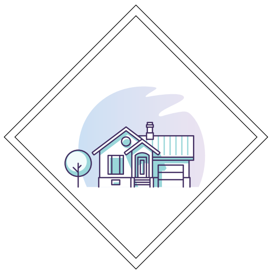
All maps are for representational purpose not to scale

Residential Unsold Inventory

Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)

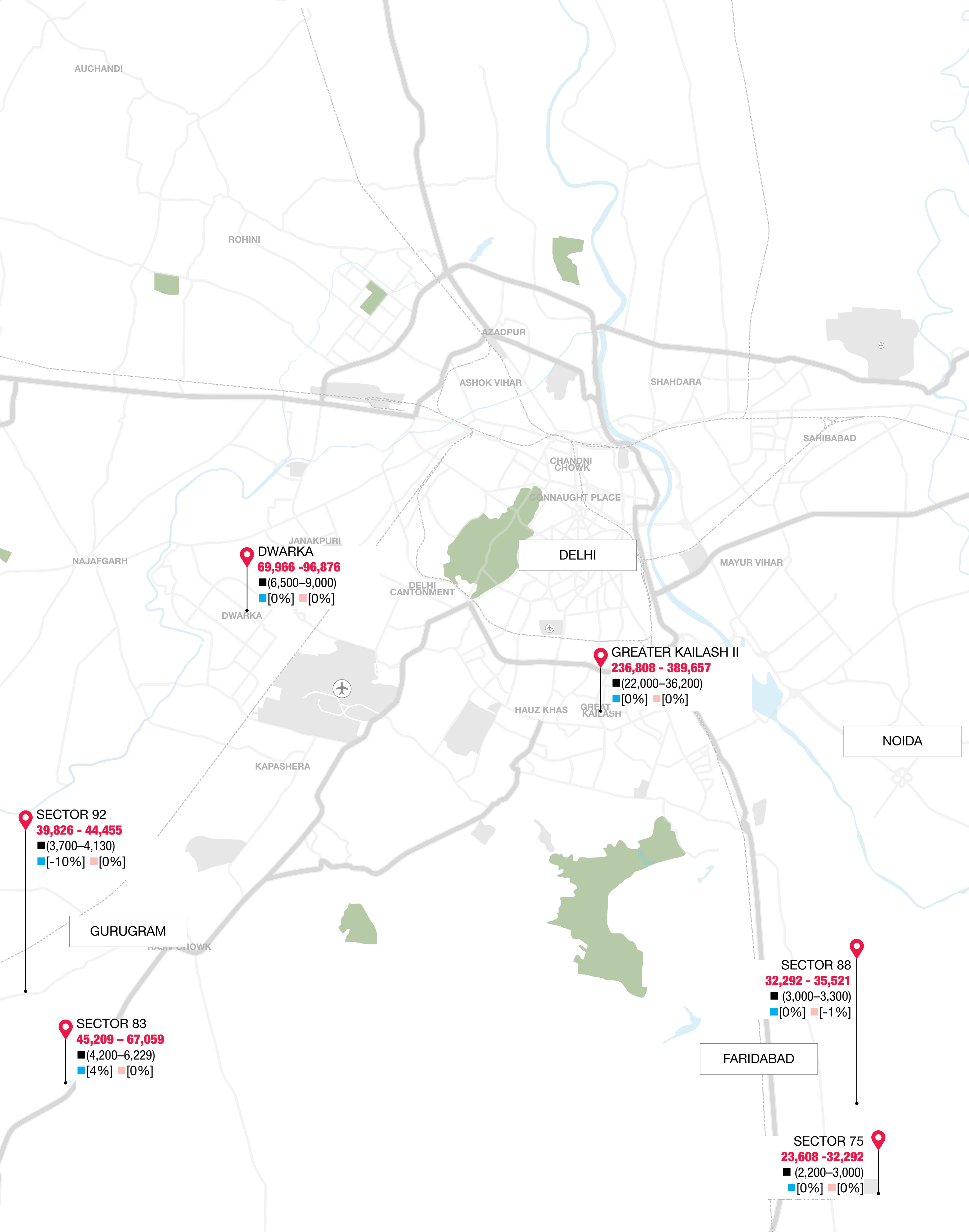


Steady pace of sales and cautious new launches have brought down the unsold inventory in H2 2018



15%

Decrease in unsold inventory compared to H2 2017


AUCHANDI
ROHINI
AZADPUR
ASHOK VIHAR
SHAHDARA
SAHIBABAD
CHANDNI CHOWK
CONNAUGHT PLACE
DELHI
MAYUR VIHAR
JANAKPURI
NAJAFGARH
DWARKA
69,966 -96,876
■(6,500–9,000)
■[0%] ■[0%]
DWARKA
DELHI CANTONMENT
GREATER KAILASH II
236,808 - 389,657
■(22,000–36,200)
■[0%] ■[0%]
HAUZ KHAS
GREAT KAILASH
NOIDA
KAPASHERA
SECTOR 92
39,826 - 44,455
■(3,700–4,130)
■[-10%] ■[0%]
GURUGRAM
SECTOR 83
45,209 – 67,059
■(4,200–6,229)
■[4%] ■[0%]
SECTOR 88
32,292 - 35,521
■ (3,000–3,300)
■[0%] ■[-1%]
FARIDABAD
SECTOR 75
23,608 -32,292
■ (2,200–3,000)
■[0%] ■[0%]

Knight Frank

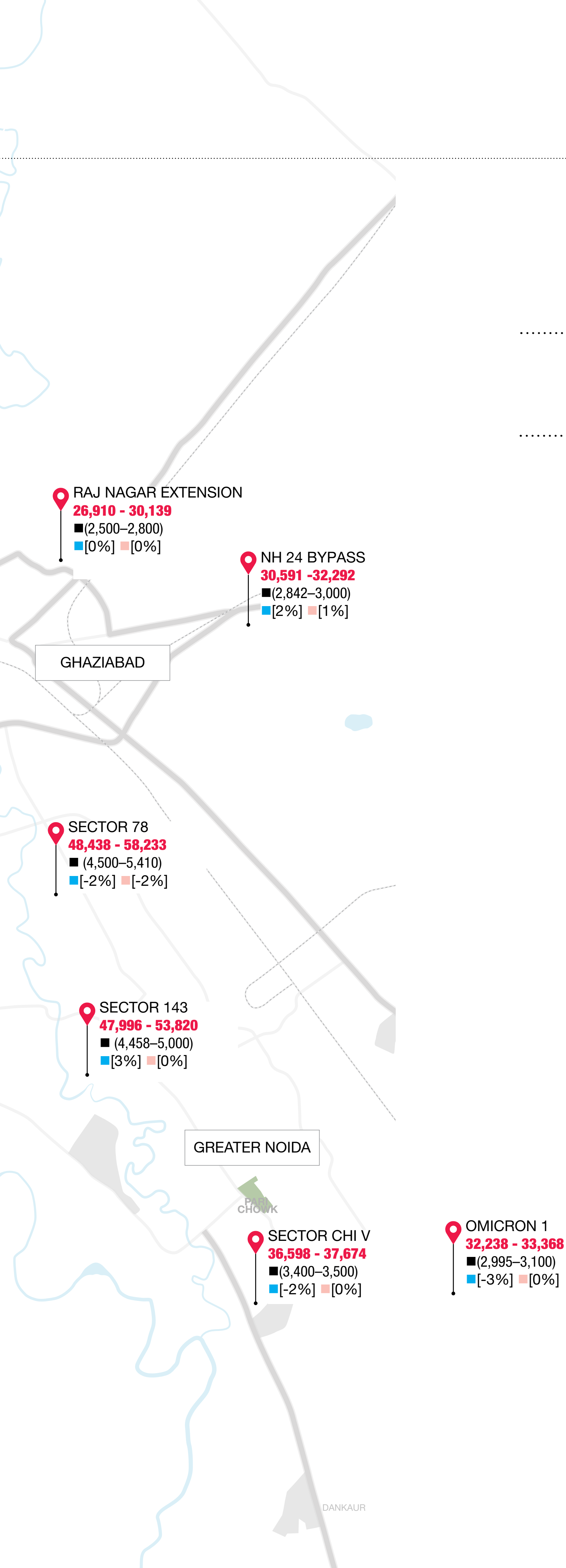
Residential Pricing

Price range in H2 2018 in ₹/sq m

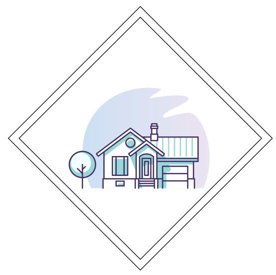
Price range in H2 2018 in (₹/sq ft)

12 month change

6 month change



Low investor interest and an inventory overhang of more than one lakh units has made the developers cautious of increasing the prices.



2%

Marginal increase in weighted average price compared to H2 2017.

OFFICE MARKET

14%

Increase in leasing activity compared to 2017.

NCR Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
New completions mn sq m (mn sq ft)	0.37 (4.0)	74%	0.38 (4.1)	0.71 (7.6)	86%
Transactions mn sq m (mn sq ft)	0.37 (3.9)	21%	0.60 (6.5)	0.68 (7.4)	14%
Weighted average rental in ₹/sq m/month(₹/sq ft/month)	893 (83)	11%	807 (75)	893 (83)	11%
Stock mn sq m (mn sq ft)	-	-	13.6 (146)	14.3 (154)	5%
Vacancy (%)			16.80%	16%	

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

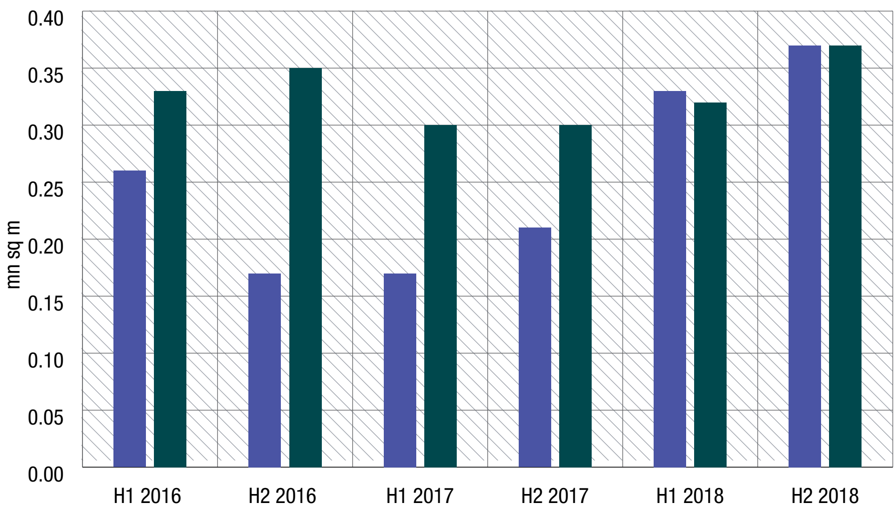
- The NCR office market has bounced back in 2018 after a lackluster performance in 2017. The market clocked a total of 0.68 mn sq m (7.4 mn sq ft) registering a growth of 14% compared to 2017. Steering through the structural adjustments in the real estate sector, the market saw new completions to the tune of 0.71 mn sq m (7.6 mn sq ft) entering the market registering a whopping 86% growth as compared to 2017.

- In terms of half-yearly trends, the NCR market transacted a total of 0.37 mn sq m (4 mn sq ft) of office space in H2 2018 registering 21% growth compared to the same period in 2017. Pent up supply of approximately 0.37 mn sq m (4 mn sq ft) entered the market in the second half of 2018 which marks a growth of 74% compared to a low base in the same period in 2017. However, quality supply in key locations still eludes the market which has put an upward pressure on rentals.

- Though the year 2018 saw robust office leasing across micro markets, growth in the

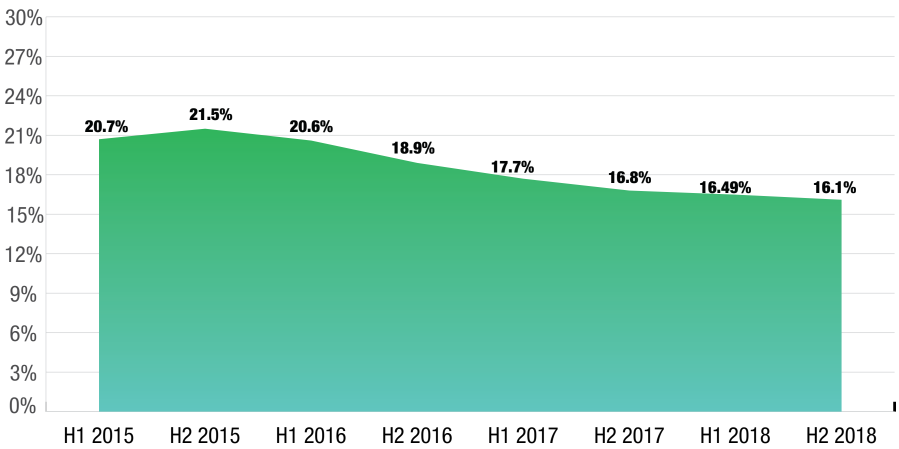
NCR office market activity

New Completions   Transactions



Note- 1 square meter (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

NCR office market vacancy



Source: Knight Frank Research

86%

Increase in new completions in 2018 due to pent up supply.

pent-up supply has kept the vacancy levels from going down further and have been halted at 16% in H2 2018 compared to 16.8% in H2 2017. However, vacancies in the micro-markets of Gurugram, such as DLF CyberCity and Golf Course Road and Aerocity in the secondary business district of Delhi have reached single digit.

- Gurugram yet again led the market activity in 2018 and was the most sought-after office address for occupiers followed by Noida and the secondary business district of Delhi. The dominance of the commercial capital of NCR is evident from the fact that 66% of the total office space taken up in 2018 comes from this business district.

- On a half-yearly comparison, leasing activity in Gurugram in the second half of 2018 saw transactions to the tune of 0.24 mn sq m (2.6 mn sq ft) registering a 26% growth from the same period in 2017. Some of the locations that witnessed major traction in Gurugram in H2 2018 are National Highway – 8, Golf Course Extension Road and DLF Cyber City. Approximately 75% of the total transacted space of 0.24 mn sqm (2.6 mn sq ft) was in these locations. Some of the prominent occupiers who leased space in Gurugram in H2 2018 are Sun Life Financial, United Health Group, WeWork, CoWrks, Sterlite Technologies and Gartner.

- The year 2018 proved to be a good year for the micro-market of Noida. It recorded approximately 0.19 mn sq m (2.1 mn sq ft) of leasing activity in 2018 registering a growth of 26% from

Fueled by demand from co-working occupiers, the Other Services sector increased its percentage share from 49% in 2017 to 62% in 2018 thus registering a growth of 45% in the space take up from 2017.

11%

Increase in weighted average rents compared to H2 2017.

2017. It was the second half of 2018 that helped nudge the leasing activity in Noida with some large size deals in sector 62, 63 and sector 16. The market registered a significant 54% growth in leasing in H2 2018 compared to the same period in 2017. Occupiers such as Tech Mahindra, Regus, Spaces, Hipad India, and WeWork were among the prominent occupiers in the second half of 2018.

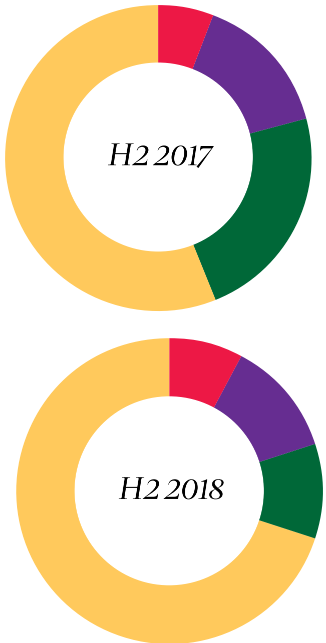
- Primarily NCR has been an IT/ITeS driven market, but the trend has been changing since the past ten quarters. The share of IT/ITeS has come down to 17% in 2018 from an already low 18% in 2017. On a half yearly comparison, IT/ITeS witnessed abysmally low transaction activity with approximately 0.04 mn sq m (0.47 mn sq ft) of space taken up in H2 2018 which is in the same range of H2 2017 leasing activity. The overall macroeconomic slowdown and restructuring of IT/ITeS companies are some of the major factors contributing to the dip in IT/ITeS percentage share in recent times. Some of the prominent occupiers that have taken up space in H2 2018 are Tech Mahindra, Hipad India, Chetu and Accenture.

- Fueled by demand from Co-working occupiers, the other services sector has outperformed its average space taken up in 2018. The sector took a massive leap and increased its percentage share from 49% in 2017 to 62% in 2018 thus registering a growth of 45% in thespace take up from 2017. The clout of the sector is dominant from the fact that 70% of the leasing activity in H2 2018 has been from the other services sector that comprises of occupiers like co-working spaces, media and consulting companies, Ecommerce and legal firms. The major occupiers in this sector that have taken up sizable office spaces are Paytm, WeWork, Regus in Noida and Zomato, Gartner, CoWrks and KPMG in Gurugram. It is worth noting that led by Gurugram, co-working occupiers have transacted approximately 0.12 mn sq m (1.3 mn sq ft) in 2018 which is 29% of the overall space taken up by the other services sector in 2018. The second half of the year 2018 saw 0.06 mn sq m (0.7 mn sq ft) in the co-working segment registering a more than 100% growth (158%) from the same year in 2017.

- Though the number of office deals in NCR market came down from 127 deals in H2 2017 to 113 deals in H2 2018, there was an increase in average space transacted in H2 2018. Characterised by some large size deals, the average transacted space in H2 2018 increased to 3,241 sq m (34,895 sq ft) form 2,370 sq m (25,520 sq ft) in H2 2017.

- The dearth of quality office supply in key locations has put an upward pressure on rentals in H2 2018. The weighted average rents in H2 2018 have inched up from ₹ 807 per sq m per month (₹ 75 per sq ft per month) to ₹ 893 per sq m per month (₹ 83 per sq ft per month), respectively. However, it is observed that rental in some of the key office buildings in micro-markets of Gurugram and Noida have witnessed an increased pressure on rentals in 2018. Some of the major office buildings that have made headline rents in H2 2018 are Worldmark 2 in Aerocity and DLF Cyberpark in Gurugram and Max Tower in Sector 16 in Noida.

Sector-wise split of transactions



Industry	*H2 2017*	*H2 2018*
BFSI	6%	8%
IT/ITeS	15%	12%
Manufacturing	23%	10%
Other Services	56%	70%

Note: BFSI includes BFSI support services

Average deal size and number of deals

2,371 (25,520)
Average Deal Size in sq m (sq ft)

H2 2017

127
Number of Deals

3,241 (34,895)
Average Deal Size in sq m (sq ft)

H2 2018

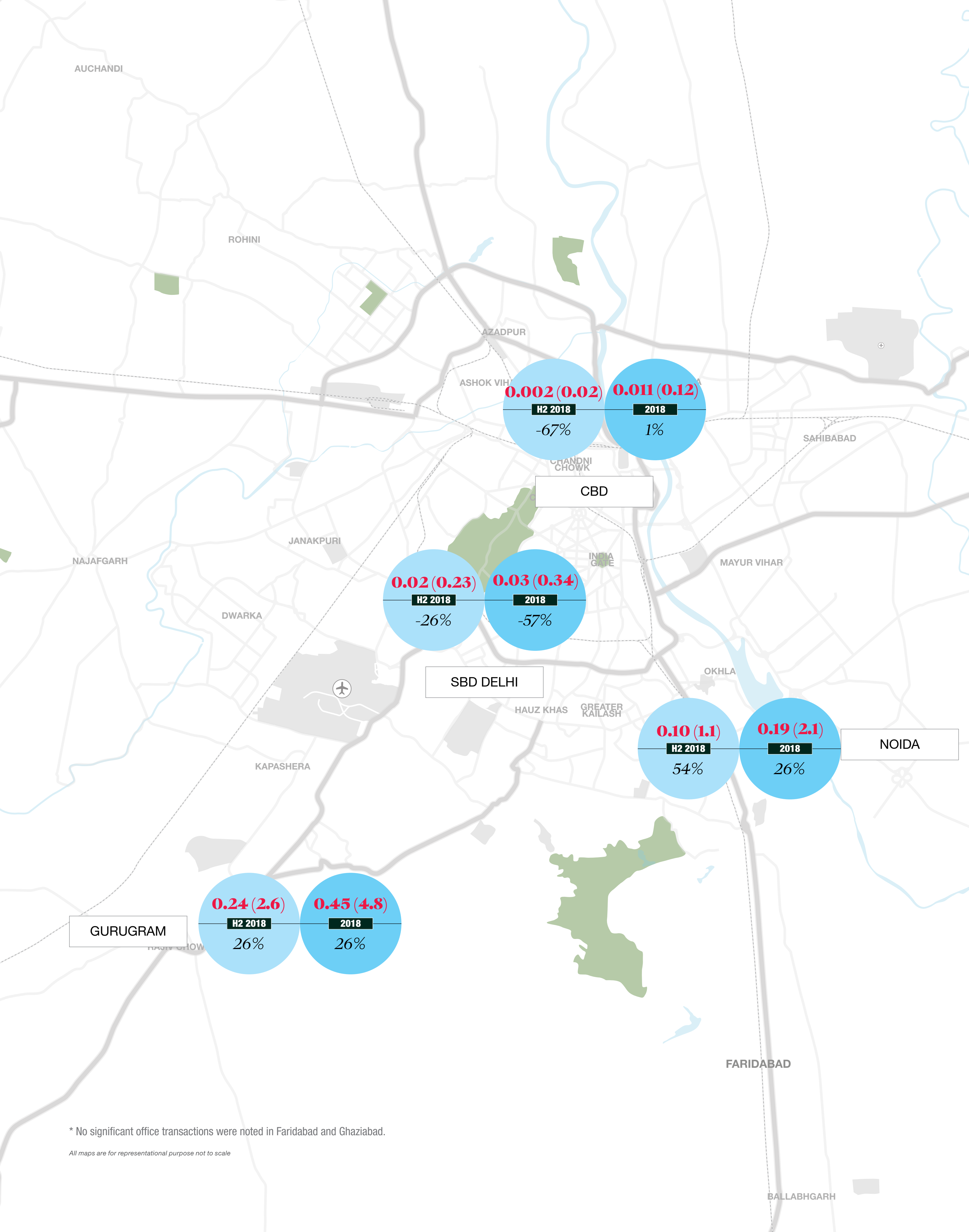
113
Number of Deals

Note - 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Business district classification

Business district	*Micro-markets*
CBD Delhi	Connaught Place, Barakhamba Road, Kasturba Gandhi Marg and Minto Road
SBD Delhi	Nehru Place, Saket, Jasola, Bhikaji Cama Place, Mohan Cooperative and Aerocity
Gurugram Zone A	M.G. Road, NH-8, Golf Course Road and Golf Course Extension Road
Gurugram Zone B	DLF CyberCity, Sohna Road, Udyog Vihar and Gwal Pahari
Gurugram Zone C	Manesar
Noida	Sectors 16, 18, 62, 63 and the Noida–Greater Noida Expressway
Greater Noida	Sector Alpha, Beta, Gamma and Tech Zone

Source: Knight Frank Research



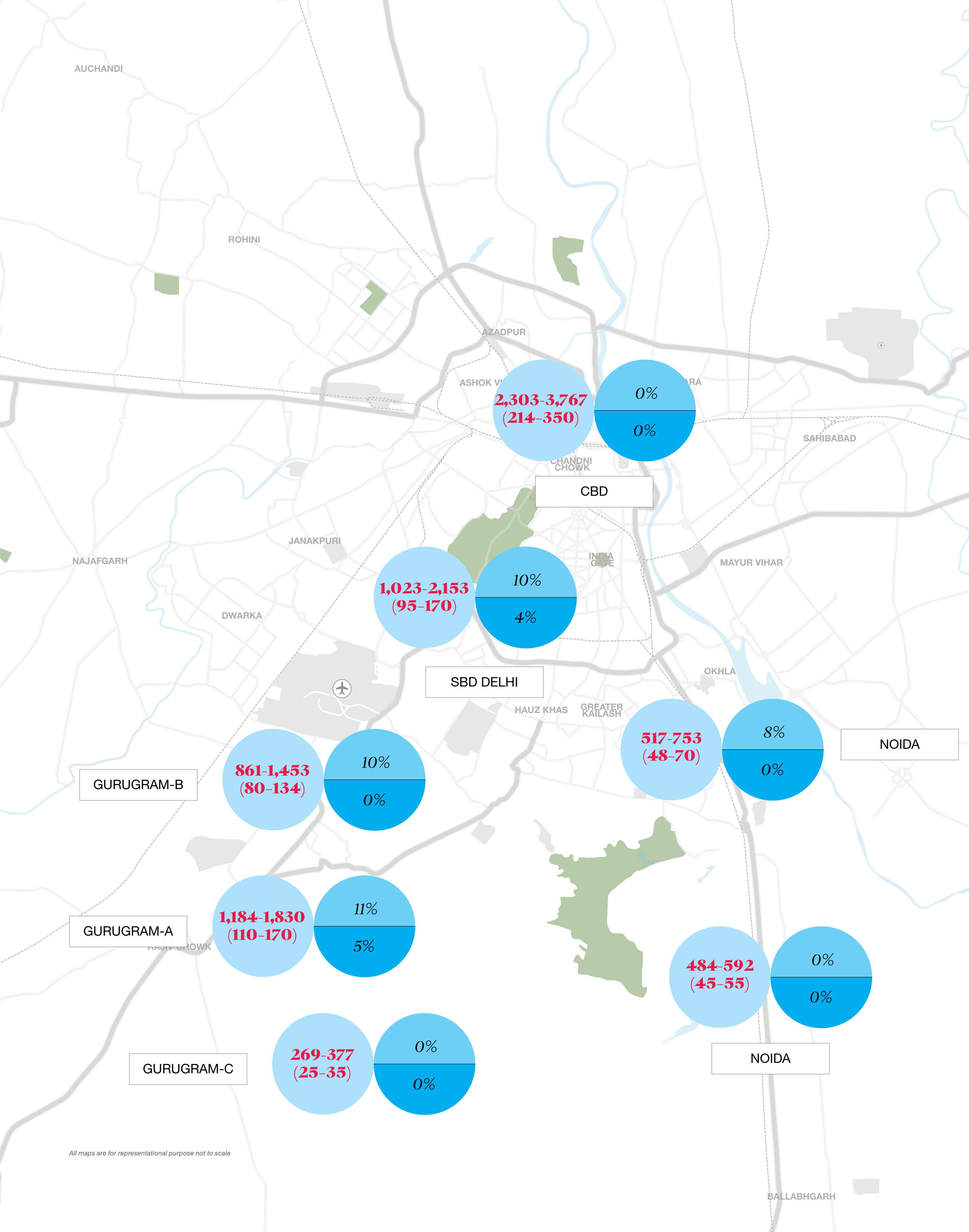
* No significant office transactions were noted in Faridabad and Ghaziabad.

All maps are for representational purpose not to scale

Office Transactions

Transactions mn sq m (mn sq ft) % Change (YoY)

66% of the total office space taken up in 2018 comes from Gurugram. Noida registered a 26% growth in leasing activity from 2017.



All maps are for representational purpose not to scale

Office Rentals

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

12-month change

6-month change

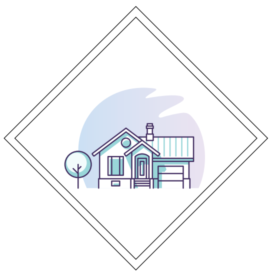
Dearth of quality office supply in key locations has put an upward pressure on rentals in H2 2018. Key office buildings in micro-markets of Gurugram and Noida have have seen increased occupier interest.

11%

Increase in weighted average rentals over H2 2017.

Pune

RESIDENTIAL MARKET



4%

YoY growth in sales in H2 2018

Pune Market Snapshot

Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
Launches (housing units)	18,584	287%	12,705	32,684	157%
Sales (housing units)	17,070	4%	33,966	33,521	-1%
Price (weighted average)	₹ 47,068/sq m (₹ 4,373/sq ft)	-3%	₹ 48,523 / sq m (₹ 4,508/sq ft)	₹ 47,068/sq m (₹ 4,373/sq ft)	-3%
Unsold inventory (housing units)	27,618	-	28,455	27,618	-3%
Quarters to sell	3.3	-	3.4	3.3	-
Age of unsold inventory (in quarters)	10.8	-	12.6	10.8	-

Note- 1 square metre (sq m) = 10.764 square feet (sq ft)

Source: Knight Frank Research

- The Pune residential market witnessed strong growth in launches in 2018 after many years of subdued launches. The launches grew 287% year-on-year (YoY) during H2 2018 and by 157% YoY in 2018. However, a point of caution on the strong growth in launches is that this growth comes on the back of a low base of H2 2017 and 2017, which had witnessed the lowest launches in the current decade of 4,800 units and 12,705 units respectively.

- Overall, 2017 was a bad year for residential launches, as there were several policy level changes in the country which hindered the flow of new supply. The first half of 2017 witnessed a major lull, as Q1 2017 was reeling under the hangover of the demonetisation policy of November 2016 and in Q2 2017, as the market was recovering slowly, the Real Estate (Regulation and Development) Act, 2016 (RERA) fears gripped the market around mid-April 2017. As a result, post May, the market took a downturn again and launches took a hit. The RERA effect carried on till July end, as developers were looking to complete the paperwork and register on RERA without which they could not launch any new projects. Post that, the Goods and Services Tax (GST) came into effect in Q3 2017. During that period, for the initial few months, there was confusion on the exact rate of GST applicable on the real estate industry and on availability of input tax credit. The impact of GST lingered on till November 2017, as businesses across the board were focusing their efforts on complying with the new GST rules. Further, even the rules and tax slabs applicable under the GST regime was being revised regularly in the initial months which added to the confusion. On account of these policy-level interventions and lack of clarity regarding the changes, the developers could not launch new projects for most of 2017 and preferred to defer their launches. Thus, comparing the 2017 numbers, an aberration for residential launches, to 2018 numbers presents a very high 157% YoY growth.

- Affordability of apartments has been a cause of concern for buyers across the major cities of India and Pune is no different. As the residential market performance has been weak over the past few years, there has been a special focus by developers to make the purchase less strenuous on buyers. Apart from reducing prices, developers are constructing compact homes to mitigate the impact of high prices. These compact homes are smaller in size compared to a similar configuration apartment launched few years ago and thus, the overall ticket size or final price of the apartment is lower. 90% of the launches during H2 2018 were in the affordable sub-₹ 7.5 mn segment.

- During H2 2018, sales in Pune grew marginally by 4% YoY at 17,070 units driven by price cuts and sales of compact and OC ready homes. However, the annual sales were marginally lower by 1% YoY in 2018, as sales in H1 2018 was lower than H1 2017. Pune market has been witnessing subdued sales for several years now. While developers have cut prices, buyers are still finding the existing prices to be high. Pune market has a significant proportion of buyers employed in the information technology/information technology enabled services (IT/ITeS) industry and the wage growth/hikes in the IT/ITeS sector over the past few years has been low to moderate; hence, despite the reduction in apartment prices by developers, affordability is still an issue.

- In the Pune market, almost the entire demand is driven by end users. Real estate investors are shying away from investing in residential properties, as they are not expecting any appreciation in prices in the coming years.

- A significant proportion of the sales in Pune are happening in the Occupation Certificate (OC) ready projects as buyers are reluctant to pay the 12% Goods and Services Tax (GST) applicable only on under-construction projects.

- As the GST has been a major factor keeping buyers away from under-construction apartments, many developers are now willing to absorb majority of the GST impact on buyers in under-construction projects, particularly in the low-ticket size apartments and in the affordable segment.

- Compact homes have gained acceptance amongst buyers in Pune as the overall ticket size is low and affordable for the masses. Thus, a notable contribution to overall sales during H2 2018 came from this segment. Developers have noted this trend of acceptance of compact homes in Pune and as indicated above, majority of the launches are coming in that segment. Houses launched in this segment are expected to drive sales in coming years.

- While the compact apartments and houses in the affordable segments are doing relatively well, it is the high-end luxury segment which has been languishing. This is reflected in the quarters-to-sell (QTS) of the premium markets in central Pune, which is the highest in the city at 5.9 quarters and the sales in this micro-market declined the most by 14% YoY during H2 2018. Developers today are offering higher discount in the luxury segments than in the lower-priced segments.

- The markets in the West region of Pune have witnessed the highest growth in sales at 7% YoY during H2 2018. This western region of Pune also had 59% share of apartments that were priced below ₹ 7.5 mn and were launched during H2 2018. The new launches in the relatively affordable (less than 7.5 mn) category has helped drive sales in this region.

- The western residential markets of Pune are also gaining traction due to supply of new office space and occupiers taking up space in these regions. The rise in number of office occupiers is driving up demand for residential real estate in that area, as employees prefer to purchase homes closer to office.

- The apartment prices in the Pune market continue to decline. Weighted average price for Pune was down 3% YoY during H2 2018. Apart from reduction in base prices, several freebies such as: block price for the entire flat irrespective of floor, which also includes maintenance and clubhouse charges, various subvention plans, free appliances, assured two-year rentals, GST waivers and a host of other indirect discounts continue to remain in the market. Pre-EMI schemes are in vogue and are being used to lure homebuyers to make a site visit.

- The actual discount offered and reduction in prices in the market would be higher, as when the buyer sits at the table for negotiation, the developer is more than happy to negotiate on the pricing to ensure that the deal is closed.

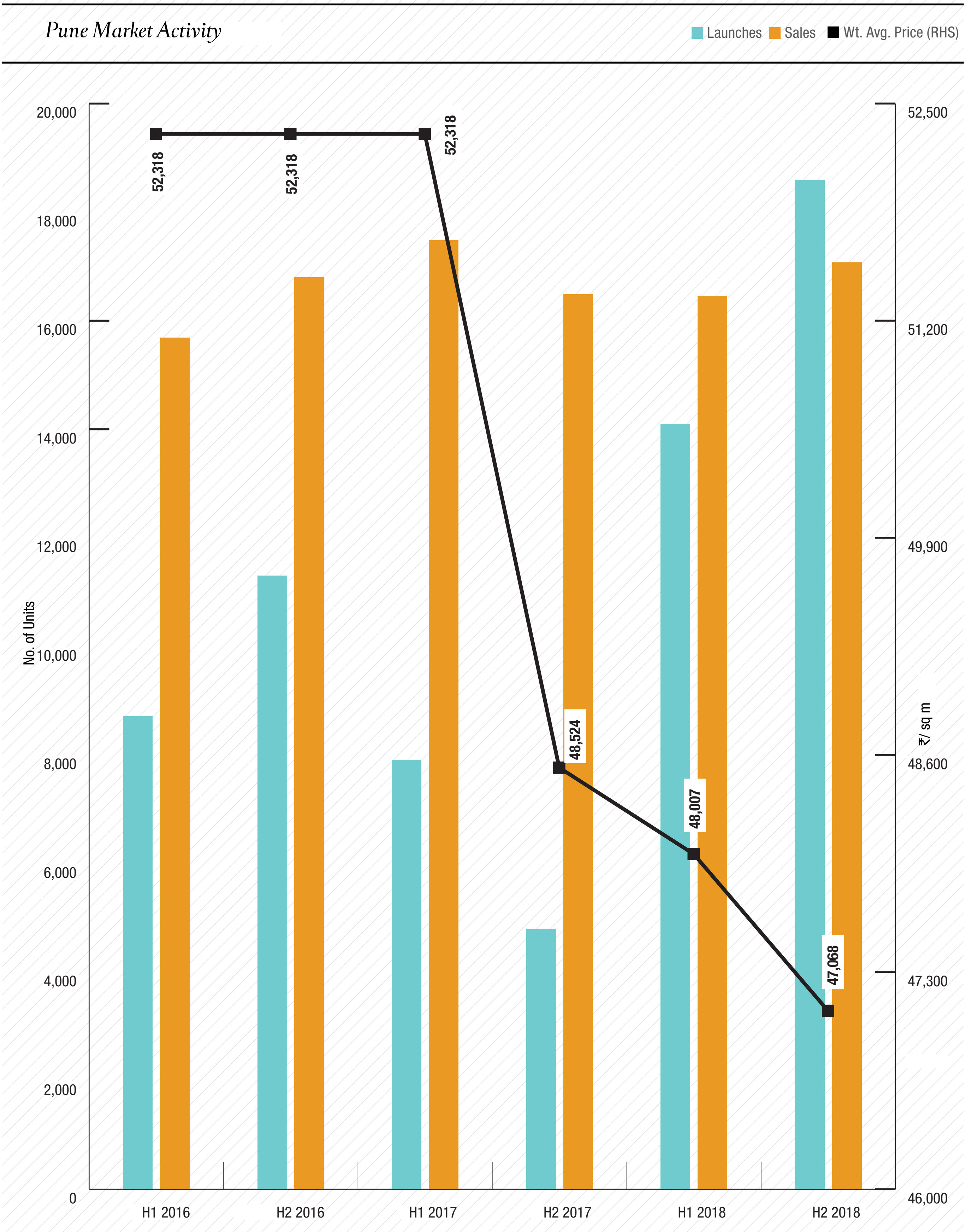
- Unsold inventory levels in the Pune market were steady and declined marginally to 27,618 units. Over the past few years, unsold inventory levels have come down significantly in Pune, as new launches have lagged sales by a significant margin from H2 2014 to H1 2018.

- The QTS for the Pune market was 3.3 quarters in H2 2018. However, a QTS of 3.3 should not be interpreted as a sign of a healthy market. The Pune residential market has arrived at this QTS number on account of significant contraction in launches over the past few years. The launches have constantly lagged the sales since H2 2014 till H1 2018. This led to decline in QTS. If we look at the QTS in conjunction with the age of inventory of 10.8 quarters, then the sum of the age of inventory and QTS results in 14.1 quarters or 3.5 years. This implies that the existing unsold inventory has been languishing in the market for more than two and half years and it will take almost another nine months to sell.

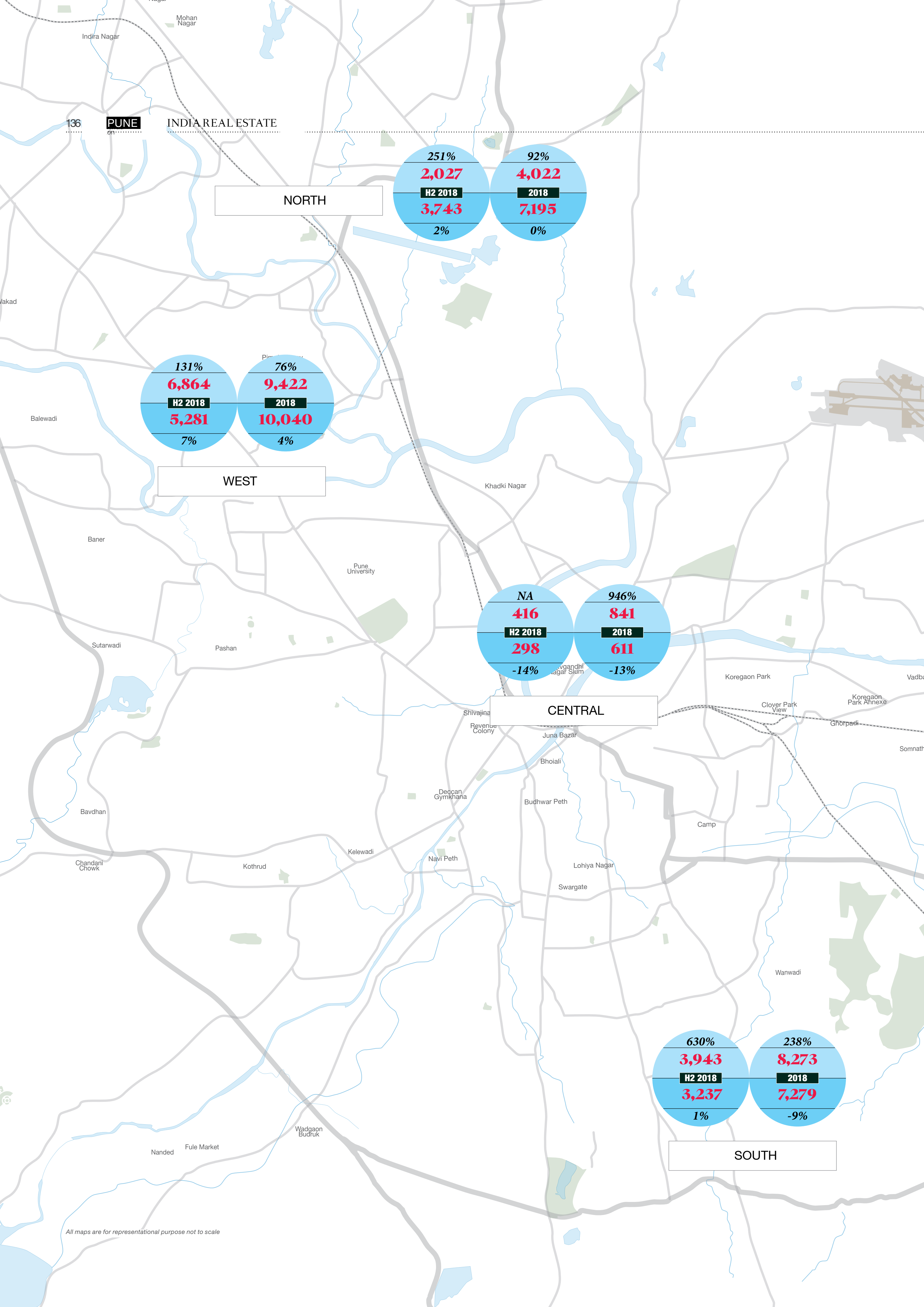
- While new launches are back in the Pune market, the spurt in launches has not translated into a significant growth in sales yet. Buyers are still in the 'wait and watch' mode and are waiting for prices to come down further. Several sales support measures offered during the period along with reduction in apartment prices and sale of compact homes have supported the current level of sales.

- Going forward, several developers have indicated that they will build smaller compact homes or have at least one or more phases of compact homes in their projects, as these homes, if priced right, are attracting buyers.

- In the Pune residential market, banks still command a lion's share of home loans and hence, the on-going Non-Banking Financial Companies' (NBFCs) crisis has not had any significant impact on sales. However, at the developer level, it has had an impact, the magnitude is severe on and smaller developers. Smaller developers were already having a tough time managing their cash flows post implementation of RERA, the NBFC crisis has exacerbated the problem for them. On the contrary, this crisis has been a boon for cash rich and large developers; they are finding a large number of opportunities to take over stuck projects at attractive prices.



Source: Knight Frank Research



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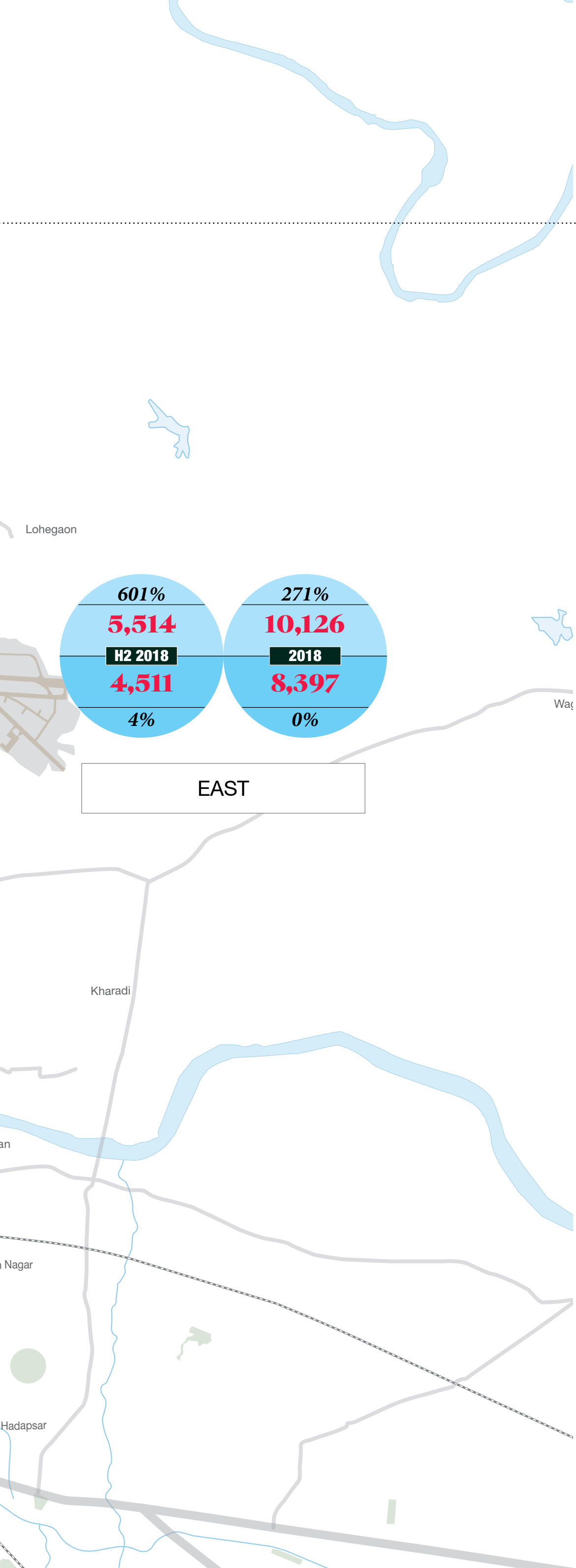
Residential Launches and Sales

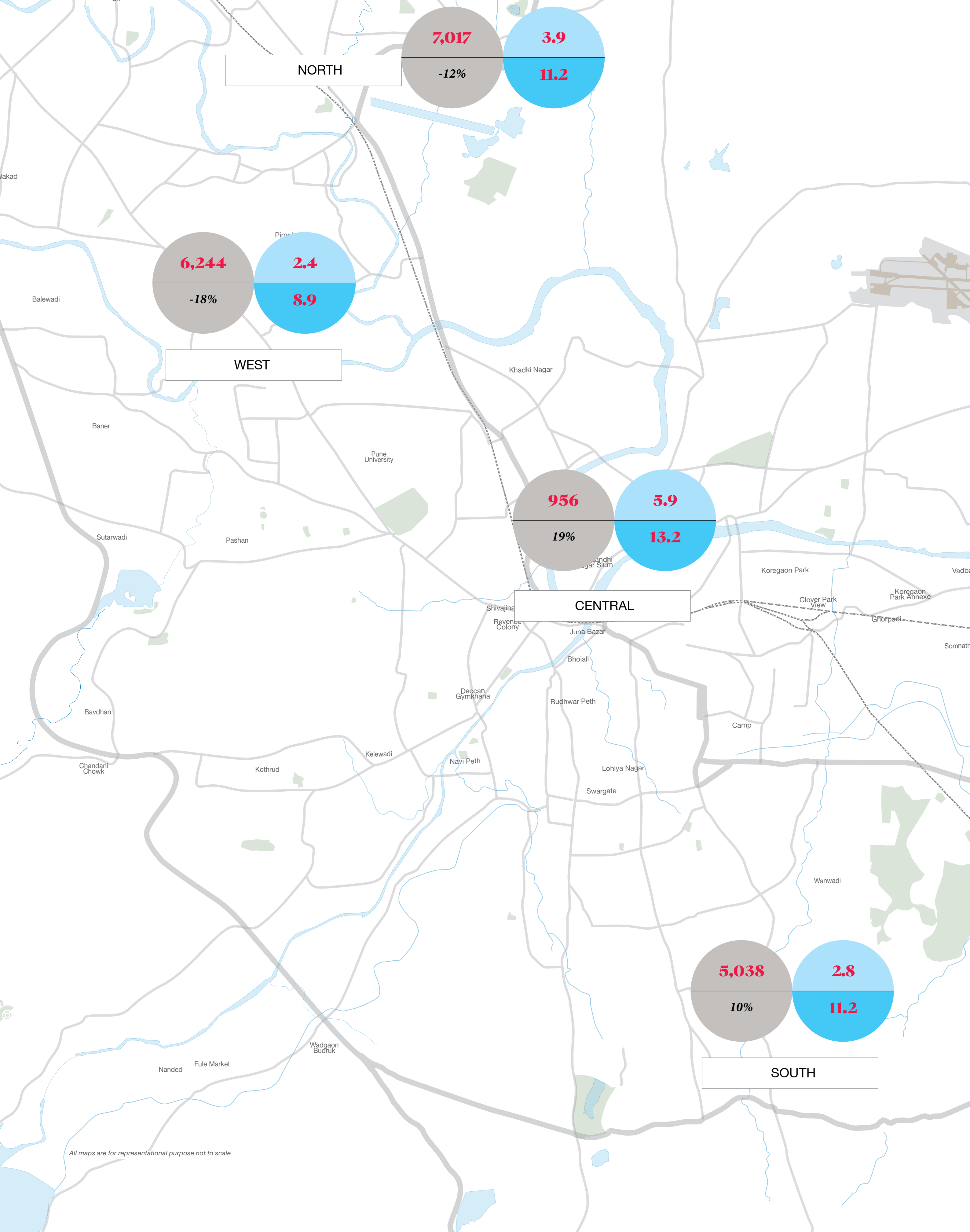
Launches (housing units) | Sales (housing units) | % Change (YoY)



2017 was an aberration for new launches due to the various policy level changes which hindered the flow of new launches. Hence comparing the launches in 2017 to the launches in 2018 presents a very high growth across micro-markets.

Micro-market Classification

Micro-market	*Locations*
CENTRAL	Koregaon Park, Boat Club Road, Erandwane, Deccan, Kothrud, Model Colony
EAST	Viman Nagar, Kharadi, Wagholi, Hadapsar, Dhanori,
WEST	Aundh, Baner, Wakad, Hinjewadi, Bavdhan, Pashan
NORTH	Pimpri, Chinchwad, Moshi, Chikhali, Chakan, Talegaon
SOUTH	Kondhwa, Ambegaon, Undri, Dhayari, Warje, Sinhgad Road



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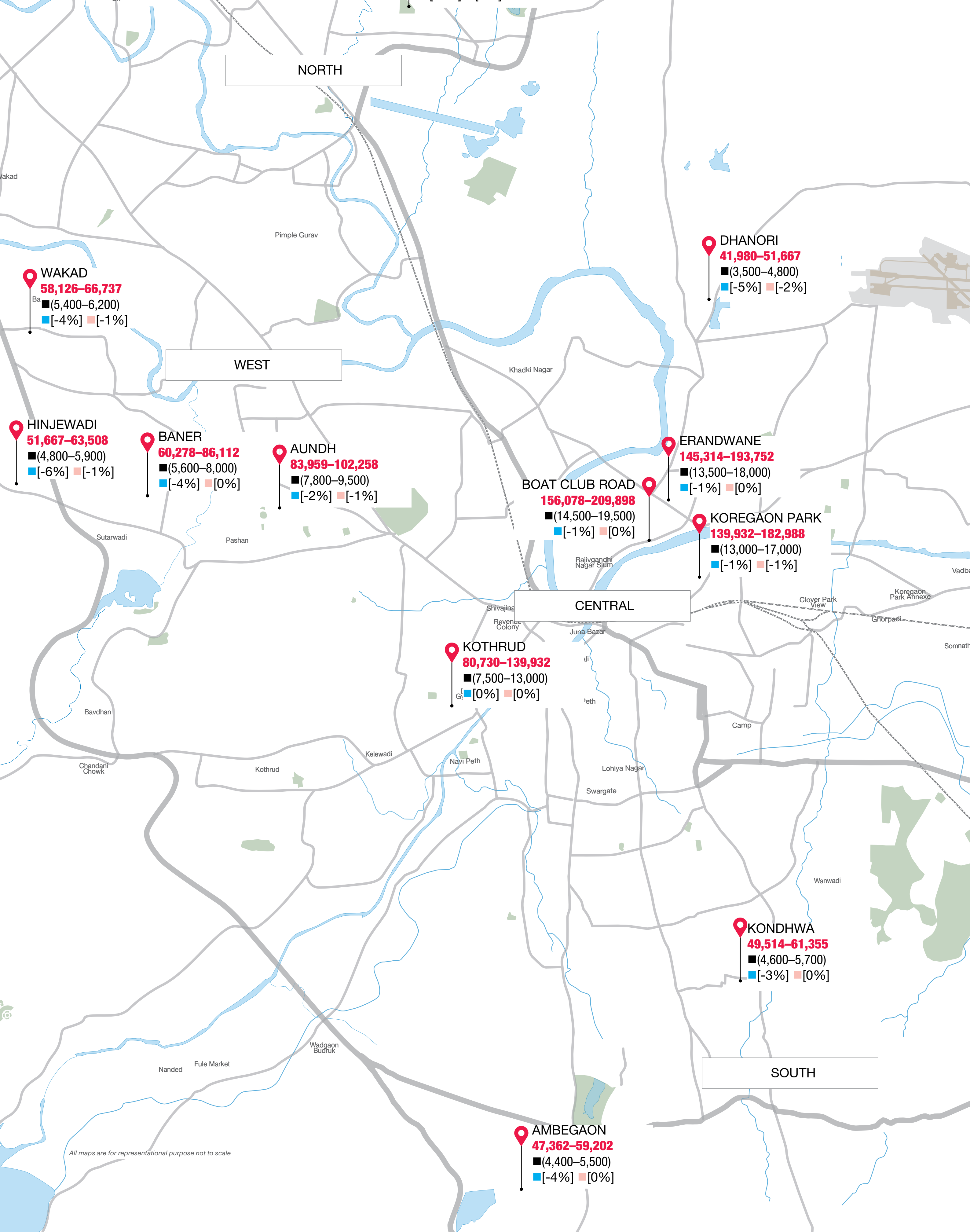
Residential Unsold Inventory

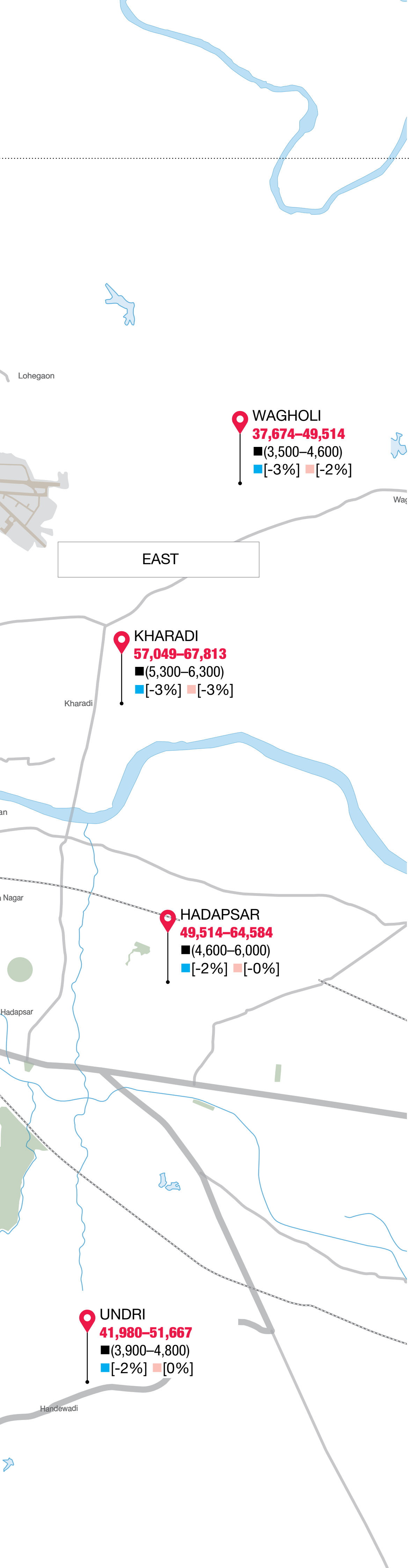
Unsold inventory (YoY growth) | QTS (in quarters) | Age of inventory (in quarters)

The Pune residential market has arrived at the current QTS number on account of significant contraction in launches over the past few years. The launches have constantly lagged the sales since H2 2014 till H1 2018.

3%

YoY decline in unsold inventory levels in Pune


CHAKAN
32,292–36,598
■(3,000–3,400)
■[-3%] ■[-1%]
CHIKHALI
37,674–44,132
■(3,500–4,100)
■[-4%] ■[-3%]
MOSHI
39,827–46,285
■(3,700–4,300)
■[-4%] ■[0%]
NORTH
DHANORI
41,980–51,667
■(3,500–4,800)
■[-5%] ■[-2%]
WAKAD
58,126–66,737
■(5,400–6,200)
■[-4%] ■[-1%]
WEST
HINJEWADI
51,667–63,508
■(4,800–5,900)
■[-6%] ■[-1%]
BANER
60,278–86,112
■(5,600–8,000)
■[-4%] ■[0%]
AUNDH
83,959–102,258
■(7,800–9,500)
■[-2%] ■[-1%]
ERANDWANE
145,314–193,752
■(13,500–18,000)
■[-1%] ■[0%]
BOAT CLUB ROAD
156,078–209,898
■(14,500–19,500)
■[-1%] ■[0%]
KOREGAON PARK
139,932–182,988
■(13,000–17,000)
■[-1%] ■[-1%]
CENTRAL
KOTHRUD
80,730–139,932
■(7,500–13,000)
■[0%] ■[0%]
KONDHWA
49,514–61,355
■(4,600–5,700)
■[-3%] ■[0%]
SOUTH
AMBEGAON
47,362–59,202
■(4,400–5,500)
■[-4%] ■[0%]
Mohan Nagar
Indira Nagar
Pimple Gurav
Khadki Nagar
Sutarwadi
Pashan
Rajivgandhi Nagar Slum
Clover Park View
Koregaon Park Annexe
Ghorpadi
Shivajinagar
Revenue Colony
Juna Bazar
Bavdhan
Camp
Kelewadi
Navi Peth
Chandani Chowk
Kothrud
Lohiya Nagar
Swargate
Wanwadi
Wadgaon Budruk
Fule Market
Nanded
All maps are for representational purpose not to scale



Residential Pricing

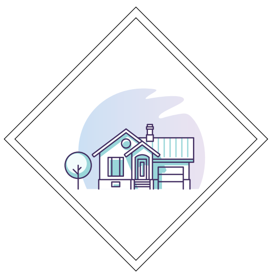
Price range in H2 2018 in ₹/sq m

Price range in H2 2018 in (₹/sq ft)

12 month change

6 month change

Apart from reduction in base prices, several freebies such as: block price for the entire flat irrespective of floor, which also includes maintenance and clubhouse charges, various subvention plans, free appliances, assured two-year rentals, GST waivers and a host of other indirect discounts continue to remain in the market.



-3%

YoY decline in weighted average prices across Pune

46%

YoY growth in transactions in 2018

OFFICE MARKET

Pune Market Snapshot

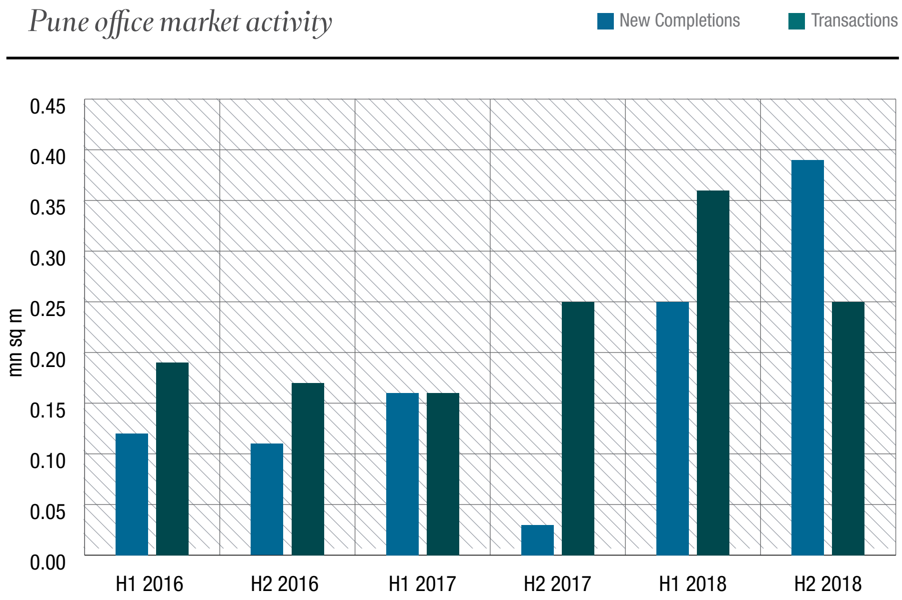
Parameter	*H2 2018*	*Change YoY*	*2017*	*2018*	*Change YoY*
New completions mn sq m (mn sq ft)	0.39 (4.2)	1093%	0.19 (2.1)	0.64 (6.9)	229%
Transactions mn sq m (mn sq ft)	0.25 (2.7)	-1%	0.42 (4.5)	0.61 (6.6)	46%
Weighted average rental in ₹/sq m/month (₹/sq ft/month)	763.3(71)	13%	676.3(63)	763.3(71)	13%
Stock mn sq m (mn sq ft)	6.4 (69)	-	5.8 (62.1)	6.4 (69)	-
Vacancy (%)	7.5%	-	5.8%	7.5%	-

Source: Knight Frank Research

- The Pune office market has been reeling under an acute supply crunch over the past three years, as supply was not keeping up with the demand. There were several transactions in this period that were put on hold due to lack of required supply. However, in H2 2018, the city witnessed the addition of a record 0.39 mn sq m (4.2 mn sq ft) of supply. This is the highest amount of supply added during any half-yearly period over the past six years. The entire year of 2018 witnessed an addition of a record 0.64 mn sq m (6.9 mn sq ft) of supply over the 12-month period, which is the highest in the current decade for Pune city.

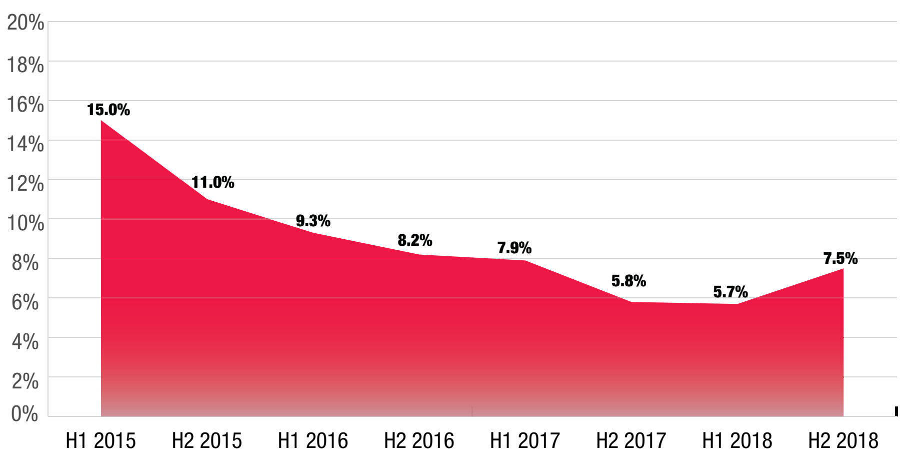
- Despite such record addition in supply, the problem of supply crunch in Pune market persists. Out of the 0.64 mn sq m (6.9 mn sq ft) of new completions in 2018, 0.29 mn sq m (3.1 mn sq ft), i.e. 45% of supply has come in from just two projects which were in Kharadi and Hinjewadi. Several occupiers are still not able to find the desired space and this supply crunch is forcing them to look out for build-to-suit options or enter into pre-

Pune office market activity



Note- 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research

Pune office market vacancy



Source: Knight Frank Research

7.5%

Vacancy levels in Pune office market

commitments.

- During H2 2018, the transactions were marginally lower by 1% year-on-year (YoY). However, the annual transaction volumes for 2018 were up 46% YoY at 0.61 mn sq m (6.6 mn sq ft). This phenomenal growth in transactions was primarily due to the presence of large pre-commitment deals and partially it can also be attributed to new supply that came in during the period. Around 0.18 mn sq m (2 mn sq ft) of the annual transactions in 2018 were pre-commitments. Such large pre-commitment transactions reflect the robust demand from occupiers and the problem of acute shortage of office space in Pune's office market.

- On account of addition of record supply in 2018, the overall city level vacancy inched up from 5.8% in 2017 to 7.5% in 2018.

- The information technology / information technology enabled services (IT/ITeS) sector has been the largest driver of office space in Pune. H2 2018 saw the IT/ITeS sector take up 0.13 mn sq m (1.4 mn sq ft), which translates to 53% of the total space transacted during H2 2018, a significant jump from the 36% during H2 2017. The Banking, Financial services and Insurance (BFSI) sector had the second highest share of the total space transacted during H2 2018, garnering 18% share of transactions during H2 2018.

- The sustained decline in vacancy levels

Despite such record addition in supply, the problem of supply crunch in Pune office market persists. Several occupiers are still not able to find the desired space and this supply crunch is forcing them to look out for build-to-suit options or enter into pre-commitments.

over the past few years coupled with a robust interest by occupiers looking to consolidate or expand their real estate footprint within the city and a significant volume of pre-commitment deals, has led to a strong rental growth at 13% YoY in H2 2018. Weighted average rentals now stand at 763.3/sq m/month (71/sq ft/month) for the Pune office market.

- The office markets of secondary business district (SBD) East, peripheral business district (PBD) East and SBD West have witnessed strong double-digit growth in rentals, with rents in these markets growing at 16% YoY, 16% YoY and 14% YoY, respectively. The acute shortage of space coupled with the presence of Grade A buildings by some of the top developers of the city and preference of occupiers to take up space in these buildings, has contributed to such strong growth in rentals in these markets. Further, SBD East and some markets in PBD East are emerging as preferred destination for BFSI occupiers; hence, the rents in these business districts are higher than the rents prevailing in typical IT business districts.

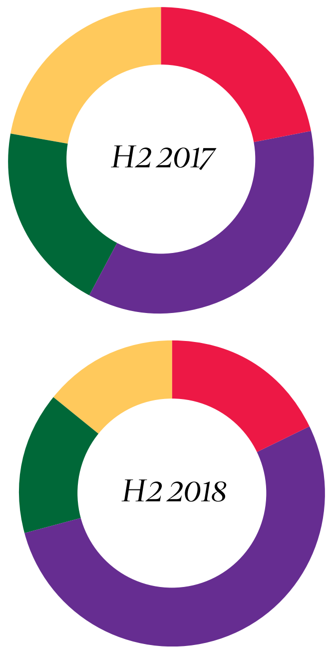
- Office space supply is not steady and generally hits the market in lumps. However, over the next 2–3 years, Pune is expected to add a significant amount of new office space supply, particularly in the eastern and western business districts. This will help the transaction activity in the city grow, but such huge incoming supply would act as headwinds to the strong rental growth we have been witnessing over the past few years.

Business district classification

BUSINESS DISTRICT	MICROMARKETS
CBD and off-CBD	Bund Garden Road, S B Road, Camp, Deccan, University Road, Shankar Sheth Road
SBD East	Kalyani Nagar, Yerwada, Nagar Road, Hadapsar
PBD East	Kharadi, Phursungi, Wanowrie
SBD West	Wakdewadi, Aundh, Baner, Kothrud, Balewadi
PBD West	Hinjewadi, Bavdhan, Wakad

Source: Knight Frank Research

Sector-wise split of transactions



Industry	H2 2017	H2 2018
BFSI	23%	18%
IT/ITeS	36%	53%
Manufacturing	20%	15%
Other Services	21%	14%

Note: BFSI includes BFSI support services

Average deal size and number of deals

3,910 (42,086)
Average Deal Size in sq m (sq ft)

H2 2017

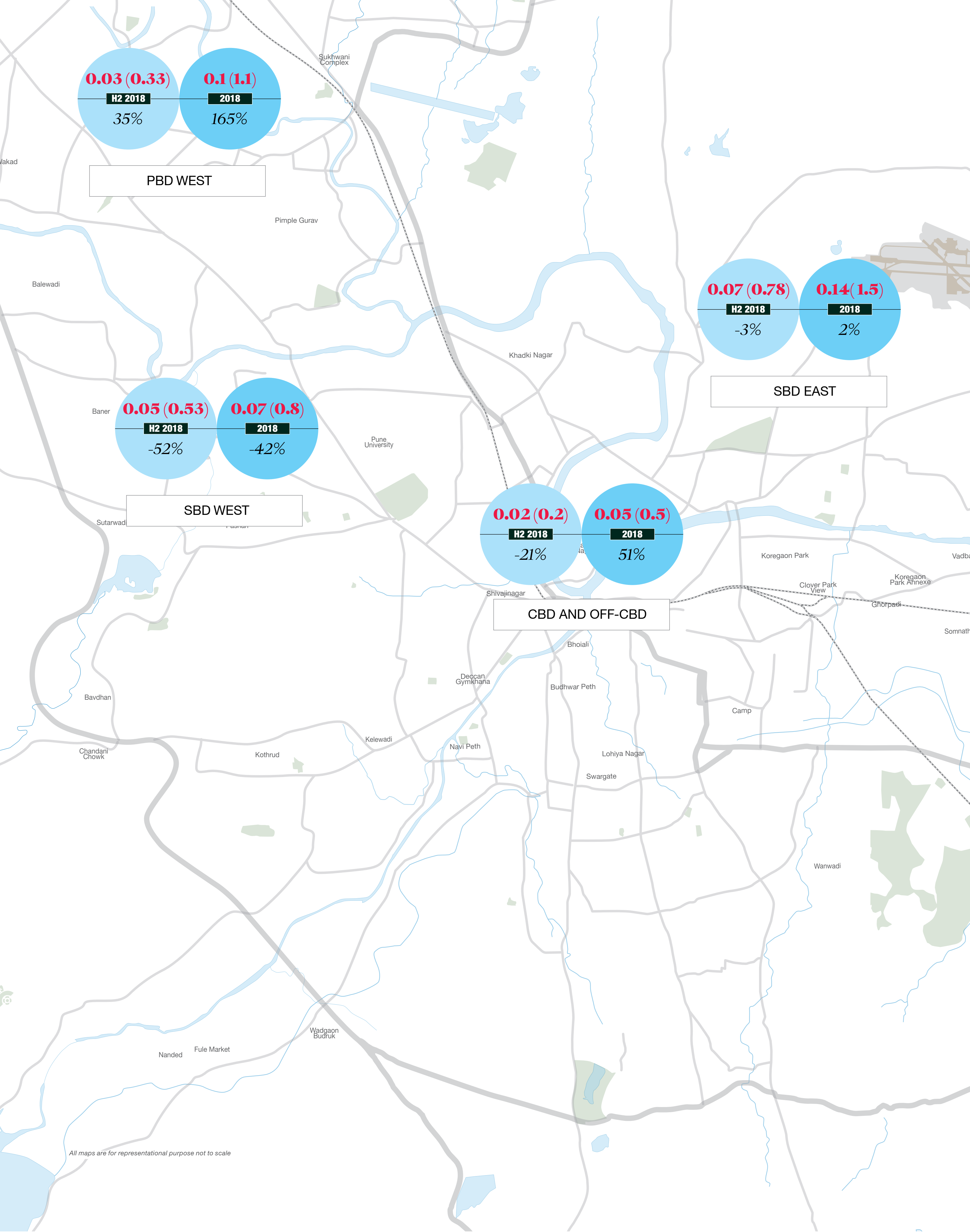
65
Number of Deals

4,327 (46,580)
Average Deal Size in sq m (sq ft)

H2 2018

58
Number of Deals

Note - 1 square metre (sq m) = 10.764 square feet (sq ft)
Source: Knight Frank Research



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Knight Frank

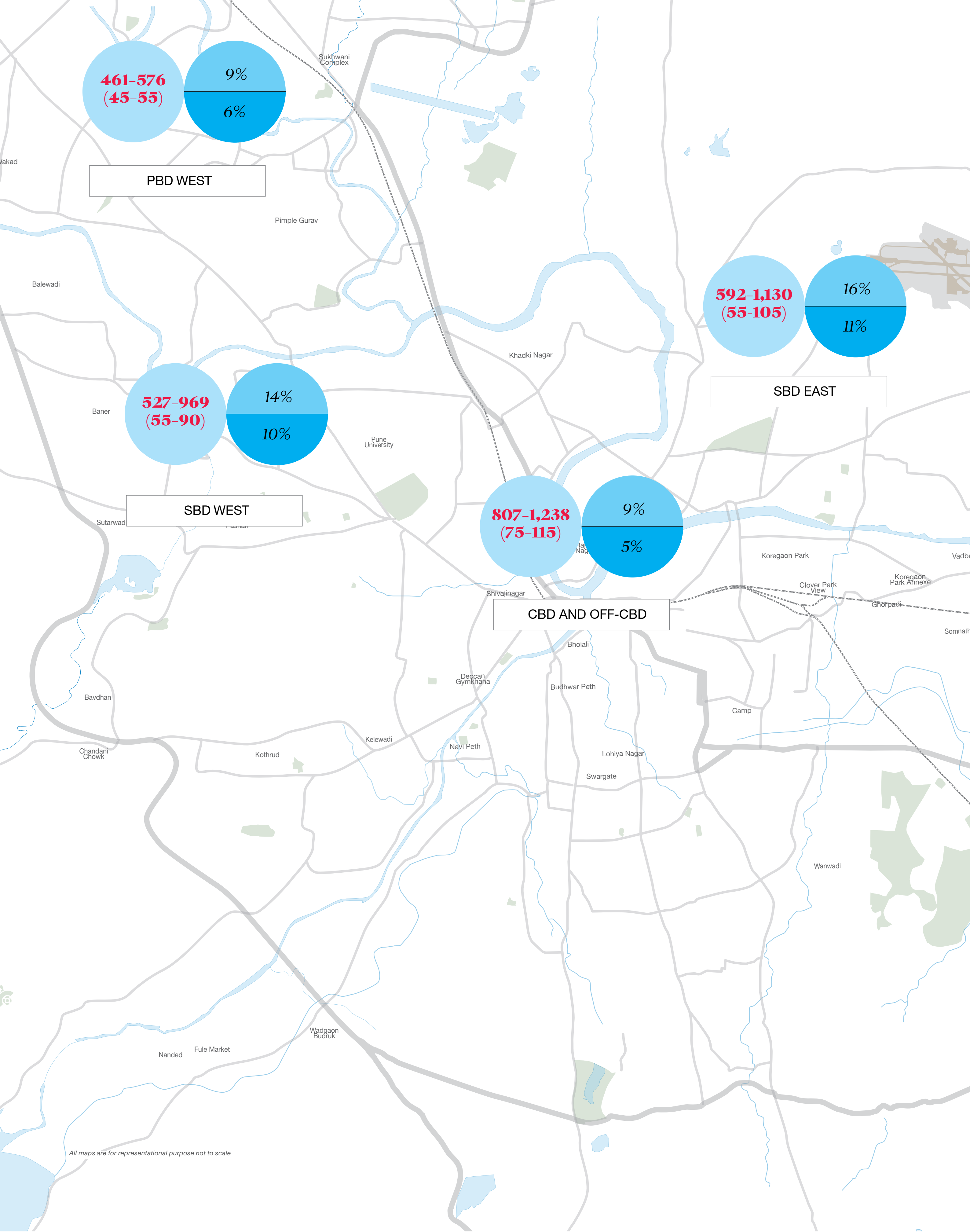
Office Transactions

Transactions mn sq m (mn sq ft) % Change (YoY)

The phenomenal growth in transactions was primarily due to the presence of large pre-commitment deals and partially it can also be attributed to new supply that came in during the period.

53%

share of IT/ITeS in total transactions during H2 2018



All maps are for representational purpose not to scale

Office Rental

Rental value range in H2 2018 in ₹/sq m/month (₹/sq ft/month)

12-month change

6-month change

The sustained decline in vacancy levels over the past few years coupled with a robust interest by occupiers looking to consolidate or expand their real estate footprint within the city and a significant volume of pre-commitment deals, has led to a strong rental growth in rentals across business districts.

13%

YoY growth in weighted average rentals in Pune office market

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- Land transactions
- Core Asset Sale

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Our team assists and advises tenants and landlords / property owners on leasing, acquisition or disposition of property. We assist corporates on location selection, sourcing, financial analysis, structuring transactions, due diligence and negotiations. For landlords, we source tenants, market the project, structure the transaction and manage all the documentation.

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- Industrial asset disposal
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- Built-to-suit facilities

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With a thorough knowledge of current market rentals and leasing trends, our team works with clients to build an entry strategy based on the brand's requirements, conducts location analysis and negotiates the best deal. From national chains to institutions and retailers of international luxury goods, our clients receive the widest range of transactional services for acquisition or disposition of property.

We offer the following services to retailers, high streets, developers and schools:

- Advisory
- Business Development
- Landlord Representation for Mall Owners

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Our residential team specialises in new homes, resale, leasing and international properties. Working with corporates, MNCs and high-net-worth individuals, we offer comprehensive services to the buyers, sellers, tenants and landlords.

We offer the following services to corporates, investors and individual buyers.

- Primary Sale
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- EPC – Design & Build
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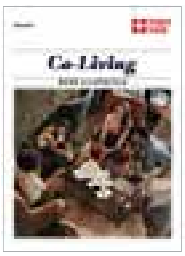

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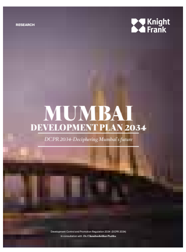

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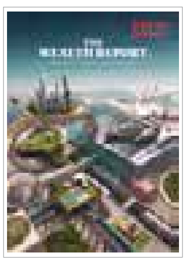

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