



TABLE OF CONTENTS

06	INDIA
16	AHMEDABAD
26	BENGALURU
46	CHENNAI
66	HYDERABAD
84	KOLKATA
96	MUMBAI
114	NCR
132	PUNE



Shishir Baijal
Chairman and
Managing Director

From the Chairman's Desk

WEATHERING THE STORM AS REALTY REELS THROUGH DISRUPTIONS, LONG-TERM BUOYANCY STILL INTACT

■here is never a dull moment in real estate, 2016 began promisingly in comparison to 2015; however as things stand, the year isn't expected to end on a healthy note. A major factor for this could be attributed to the policy developments by the government which in the short term have led to an unpredictable disruption but in the long run are projected to augur well for the industry as a whole. On the global front, developments like Brexit and the US President elect are expected to have their bearing on the Indian real estate sector. The writing's clearly on the wall - 2016 will go down as a watershed year in the history of Indian real estate.

2016 - WHERE WE STAND

The residential property market witnessed improved sales in the first six months of 2016. Barring Delhi-NCR, other markets did well in the first half of this year as compared to previous years. Mumbai and Bengaluru led the way and the manner in which markets responded in the initial phase of 2016 gave us the feeling that the year would end on a high note for the residential property sector. The overall positive sentiment was attributed to a host of factors including political stability, regulatory environment, enhanced infrastructure, strong investments. approval to the GST bill, and amendments to REITs.

Just when the industry was gearing up to meet the deadlines set by the government for Real Estate Regulation & Development Act 2016 (RERA) and Goods and Services Tax (GST), it received a jolt in the form of demonetisation of the ₹ 500 and 1000 currency notes with immediate effect. While the broad motive of the Government of India behind this announcement was to curb the menace of fake currency notes and abolishing unaccounted money, the impact of this move could be felt across economy and sectors including real estate. This move created a real dent in the residential real estate sector, pulling back the last guarter trend of residential sales substantially across the cities; consequently sales are at a historical low and we expect 2016 to be worse than 2015, which was one of the worst vears itself.

Interestingly, the office market continues to do well in 2016 and the overall transaction volume by the year end will be at par with the 2015.

THE GAME CHANGERS

While most of us awaited the results of the US presidential elections on 8th November 2016, the Prime Minister of India brought about the most sweeping change in recent history by demonetising the ₹ 500 and 1000 notes which was a rude awakening for the

Indian economy with the real estate sector being at the receiving end due to this move.

Another imminent change that will impact the sector is the partial implementation of RERA. The Act lays down the broad parameters for functioning of the real estate sector and since land is a State subject, the Act required States and Union Territories to come up with governing rules by 31st October 2016. RERA, once implemented, will increase transparency, which in turn will bring back buver confidence. The real benefits would be that the buyer will be ensured of a dedicated governing body, timely project completion, complete information on the project and amenities promised. Developers as well as intermediaries will have to recalibrate the way they do business to be RERA compliant. However, as of date, only Maharashtra and Delhi have come up with and notified the draft rules for their respective States.

The enforcement of the Benami Transactions (Prohibition) Amendment Act, 2016 will also prove to be yet another disruption in 2017.

The above factors may have briefly halted the march, especially of the residential property market but in the long run they will help the sector grow in a much more evolved manner.

For the office segment, further clarification on REITs is a positive step and is likely to give a greater impetus to the commercial market.

GLOBAL DISRUPTIONS

On the global front, some uncertainty will prevail till the US President elect formalises his policies. There will be a fundamental impact on the commercial realty market as it is heavily dependent on US outsourcing especially by the technology companies.

Traditionally, the United States has been one of the biggest investors in India with several manufacturing, technology and outsourcing hubs here. The technology sector has an undeviating connection with the country's residential demand and any change in the US outsourcing policy could have similar appalling effects on India's real estate domain. We need to wait until the new government formalises its policies on various issues including outsourcing, to understand which way the wind blows particularly for India.

Earlier this year the UK voted in favour of Brexit, the unexpected outcome left the industry perplexed –a vote that translates into a complete shift of business policies to be adopted by the industry. The EU is a rather protectionist market and several Indian business entities choose to invest in the UK, with a view to get unrestricted access to the European markets. The scale of this effect, especially in the medium to long-term, will depend on the outcome of negotiations on the UK's exit.

OUTLOOK 2017

All of the above mentioned factors put together point towards a subdued beginning for 2017. With enquiries, walk-ins and sales drying up as a fall-out of demonetisation, the first two quarters of the coming year will result in a substantial slow-down in sales.

In the first half of 2017, the sector is expected to be largely muted and there would be pressure on prices. With consumers in a wait and watch mode, demand could be subdued due to a mind-set that property prices could undergo reduction along with a substantial lowering of home loan interest rates. Likewise, tax benefits in the forthcoming budget will be another factor that could hold back demand for property in the initial quarters of 2017. Since buying a house is a discretionary need -a need that can be postponed, it is anybody's guess that the real estate sector will be the slowest to recover from the impact of demonetisation visà-vis other sectors.

The office market is expected to face challenges to maintain the prevailing pace in the following year. This could be due to shortage of 'A' Grade office space, the geo-political risk of a probable reduction in outsourcing from the US, structural changes in domestic economy and top technology companies reducing their growth targets. However, with the advent of GST, the warehousing sector will see a consolidation thereby bringing efficiency in the entire system.

By May 2017, RERA will be implemented in the country. The after effects of demonetisation coupled with legislations like the GST bill and Benami Transactions (Prohibition) Amendment Act, 2016, will further increase transparency and reliability within the sector. Furthermore, this will also see a boost in institutional funds flowing into the sector at competitive rates which will enable the sector to come out of the woods.

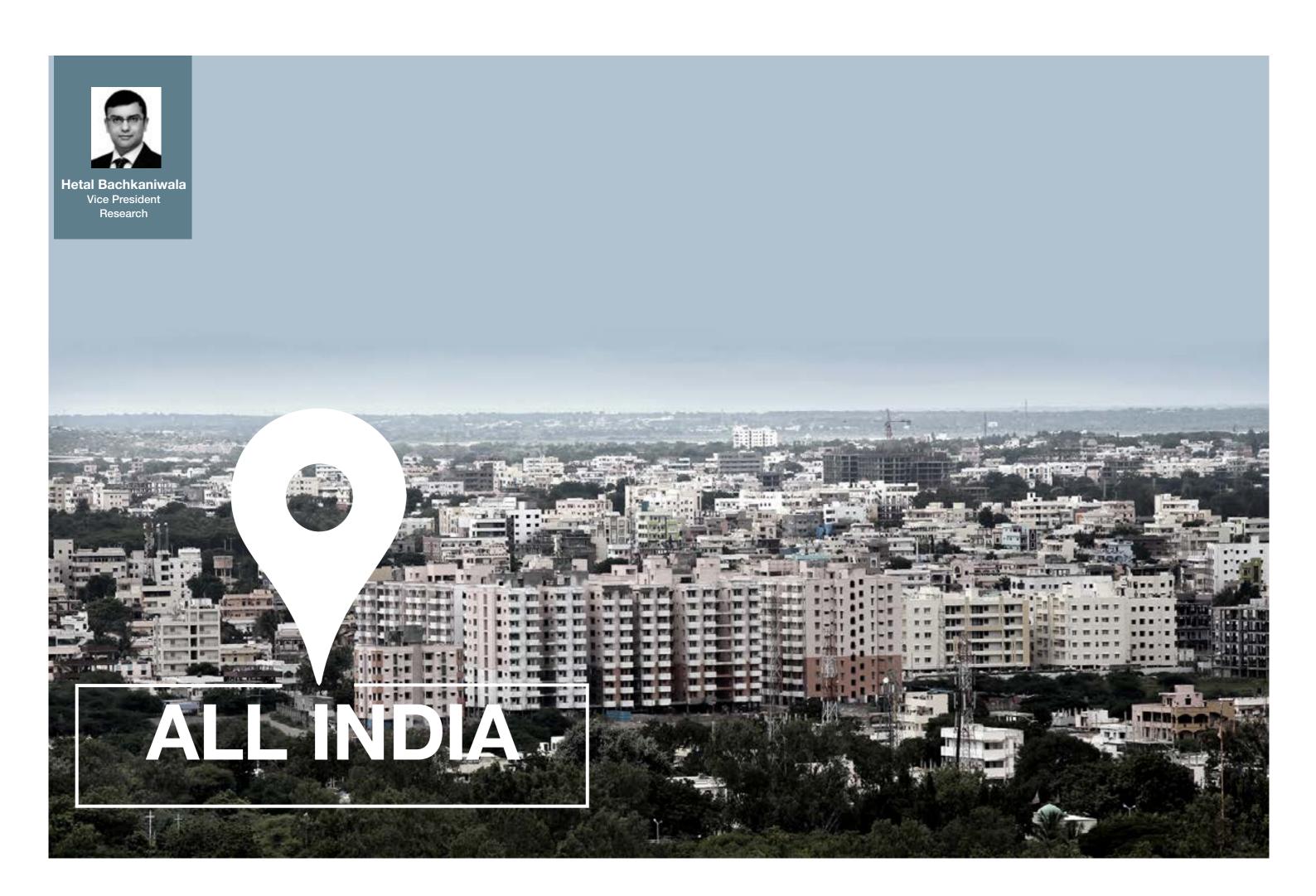
IN A NUTSHELL

To conclude, the impact of demonetisation is a transient one and the economy will undergo structural changes for the first three quarters of 2017. The industry awaits the implementation of policy reforms like

RERA & GST, medium term impact of demonetisation and listing of REIT. During this phase, enterprises are expected to streamline their business processes and implement international best practices to adhere to the upcoming changed business environment. There will be a greater influence of FDI (Foreign Direct Investment) that will help create jobs and revitalise growth within the sector. Overall, institutional participation—both domestic and global markets—will help the sector in getting high quantum of funds at competitive rates. In view of the various procedural changes adopted by the government, it is also expected to be an important facilitator in bringing back stability within the real estate sector.

Going by the turn of events, it is difficult to crystal gaze into 2017. However, implementations of RERA & GST, lower home loan interest rate regime and fiscal benefits for taxpayers in the Union Budget will infuse the "feel good factor" which is extremely important for the revival of the industry. The Prime Minister has already announced a New Year's gift to home buyers in the budget segment (both in rural and urban areas) in the form of interest subvention for home loans which will go a long way to realise the government's dream of 'Housing for All by 2022'. A lot of churning will happen in 2017 because of the implementation of various policy changes and it is important to see how developers recalibrate their businesses to the changing environment and whether buyers capitalise the opportunity of the various reforms and change their status quo position of "wait and watch".

The end of 2017 is most likely to see the initiation of a robust and sustainable growth trajectory for India's real estate industry and will be recognised as the base for the future growth of this sector.







RESIDENTIAL MARKET

- The residential market of the top eight cities in India started off on a positive note in 2016 with H1 2016 witnessing a 7% jump in sales volume compared to the same period of the previous year. More than 135,000 units were sold in H1 2016 as compared to 126,620 units in H1 2015.
- The second half of 2016 started with the same pace, with Q3 2016 sales volume showing a positive growth on the back of the start of the festive season. Sales volume across the top eight cities were holding steady at 67,000 68,000 units per quarter since Q1 2016 and we expected Q4 2016 numbers to be marginally better than the first three quarters. As a result, we projected sales volume of 2016 to be marginally higher than 2015 and had estimated an 8% growth during the year.
- However, the Indian Government's demonetisation move on 8 November brought the market to a complete standstill. Against this backdrop, developers refrained from announcing

- any new launches and buyers turned extremely cautious before committing on purchases.
- The fourth quarter numbers are
 a testament to the effect that the
 demonetisation move has had
 on the real estate market of the
 country that was barely recovering
 from its earlier sloth. Sales volume
 dropped by 44% YoY in Q4 2016
 and new launches fell by a massive
 61% YoY during the same period.
- At 40,940 units, the Q4 2016 sales volume is at its lowest quarterly level since 2010. The average quarterly sales used to be in excess of 90,000 units in 2010. The new launches number is much worse at just 24,300 units in Q4 2016, which is not even one-fifth of its peak quarterly level observed during 2010.
- The fall in sales volume and new launches were so severe during Q4 2016, that it brought down the entire H2 2016 numbers, down by 23% and 46% respectively, compared to H2 2015. H2 2016 reported sales volume and new launches of 109,160 units and

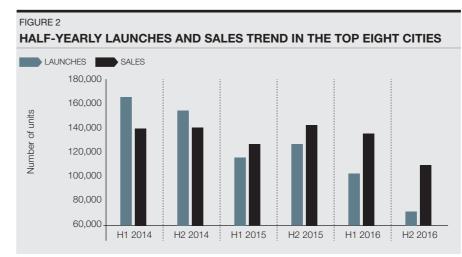
- 68,700 units, respectively. The same numbers for H2 2015 were 141,340 units and 126,860 units.
- All cities have witnessed a crash, including the usually resilient
 Bengaluru, during the fourth quarter of this year. As a result of this, 2016 has replaced 2015 in terms of the worst performing year in terms of sales volume in the recent history. Sales volume in the top eight cities has dropped by 9% in 2016 to 244,680 units from 267,960 units in 2015.
- The drop in sales volume during Q4 2016 due to the demonetisation move has resulted in a massive notional revenue loss of more than ₹226 bn to the real estate industry across the top eight cities. In other words, if the Government of India had not taken the demonetisation move, the residential segment would not have suffered a revenue loss of ₹226 bn. Similarly, the notional loss to the various state governments on stamp duty collection has been in excess of ₹12 bn during the last quarter of 2016.

ANNUAL LAUNCHES AND SALES TREND IN THE TOP EIGHT CITIES LAUNCHES SALES 500,000 400,000 100,000 100,000

Source: Knight Frank Research

FIGURE 1

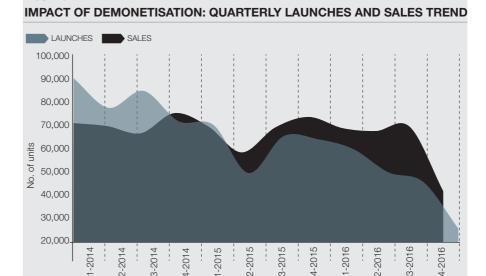
Note: The top eight cities are Mumbai, NCR, Bengaluru, Pune, Chennai, Hyderabad, Kolkata and Ahmedabad



Source: Knight Frank Research

FIGURE 3

Note: The top eight cities are Mumbai, NCR, Bengaluru, Pune, Chennai, Hyderabad, Kolkata and Ahmedabad



Source: Knight Frank Research

to the effect that the demonetisation move has had on the real estate market of the country that was barely recovering from its earlier sloth. Sales volume dropped by 44% YoY in Q4 2016 and new launches fell by a massive 61% YoY during the same period

The fourth quarter

numbers are a testament

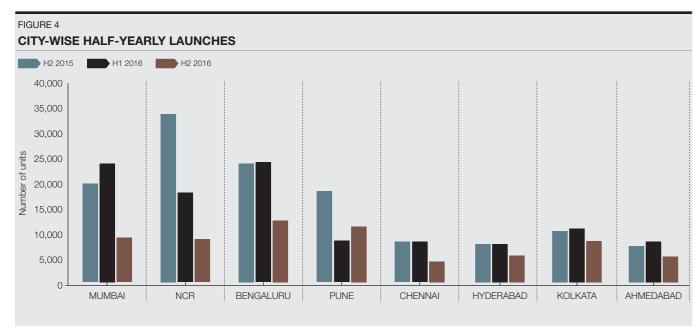
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NOTIONAL REVENUE LOSS DUE TO THE DEMONETISATION MOVE IN Q4 2016

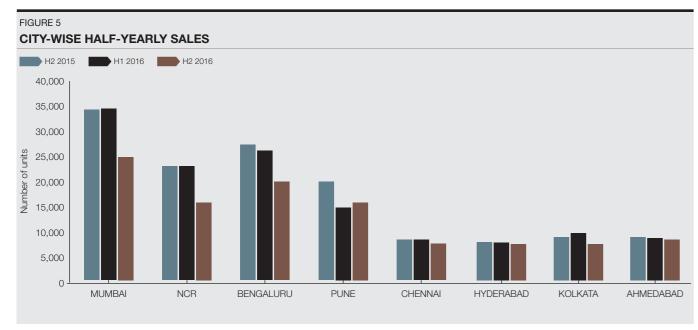
	Notional revenue loss to the real estate industry (₹ bn)	State government notional loss on stamp duty (₹ bn)
Mumbai	91	4.6
NCR	37	2.6
Bengaluru	48	2.4
Pune	20	1.0
Chennai	11	0.5
Hyderabad	8	0.4
Kolkata	5	0.3
Ahmedabad	5	0.2
Total	226	12.0

Source: Knight Frank Research





Source: Knight Frank Research



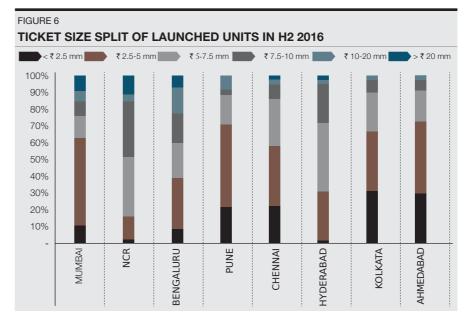
Source: Knight Frank Research

- With this backdrop, the biggest question in the mind of the stakeholders of the industry is

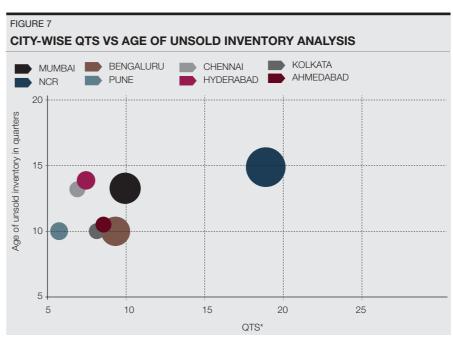
 what next? Sales need to be revived and the following points discuss various measures that we believe will help to revive the demand for homes in the coming quarters.
- The first and foremost step that the

industry needs to take is to make houses more affordable. Currently, the biggest factor affecting sales is the unaffordability of the homebuyers. House prices till 2012 have increased significantly faster than the income level of homebuyers. 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 – a clear reflection of time correction. But still this is not enough to make housing affordable to majority of the homebuyers in the top cities of India. Developers need to give a relook at the pricing, size and configuration of residential units in their planned developments



Source: Knight Frank Research



Source: Knight Frank Research

Note: The size of the bubble indicates the quantum of unsold inventory. QTS is the quarter to sell unsold inventory

- and the government should take a proactive initiative to develop peripheral locations with required connectivity and infrastructure.
- Another factor that will help to stimulate the demand for house purchase is the reduction in home loan interest rates by banks. RBI has already reduced its policy rate by 175 bps in the last two
- years and is likely to lower the policy rates by another 25-50 bps in the next three to six months. Given the liquidity situation and reduced policy rates, banks will have sufficient elbow room to lower the home loan interest rate in the coming months.
- Fiscal incentives on home purchase could go a long way in reviving the

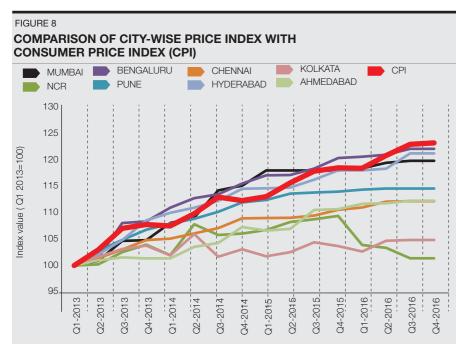
The first and foremost step that the industry needs to take is to make houses more affordable. Currently, the biggest factor affecting sales is the unaffordability of the homebuyers



demand and any move towards addressing this in the upcoming budget will give a huge boost to the industry. Any move by the Government of India to increase the limit on tax exemption on home loan interest and principal amount payment in the upcoming budget could provide the much needed fillip to the ailing sector.

 Finally, strict implementation of the Real Estate (Regulation and Development) Act, 2016 within the stipulated timeframe could be a major factor in bringing back the confidence of homebuyers in the real estate sector. The timely implementation of this Act across the country will not only make the sector more transparent but will also help in attracting institutional participation.

 We believe that by the end of 2017, when most of these factors would have started showing a positive impact on the residential segment, we will see the emergence of a new base that will be used to analyse the future growth of this sector.

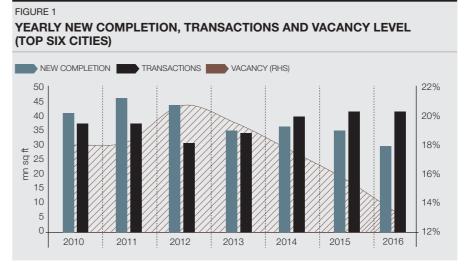


Source: Knight Frank Research

OFFICE MARKET

- The office market across the top six cities of India has performed exceedingly well in 2016 despite major challenges such as uncertainty due to Brexit, US elections and slowdown in IT/ ITeS spending by Europe and USA. The year 2016 closed with total transactions of 40.6 mn sq ft, which is marginally lower than 41.1 mn sq ft of space transacted in 2015.
- The potential demand for office space was much higher in 2016, but due to shortage of good quality office space in prime locations of cities such as Bengaluru, Pune and Chennai, many occupiers had to either delay or curtail their leasable area. Additionally, the new supply that entered these six cities during the year was just 29 mn sq ft, down from 35 mn sq ft in 2015.
- The shortage of office space can be further explained by studying the vacancy trend over the last six years. The vacancy level, which peaked at 20% in 2012, has been

- falling gradually with each passing year and is currently at one of its lowest levels in recent history at 13%. For cities like Bengaluru and Pune, this number is in single digits at 6% and 8% respectively.
- During H2 2016, transactions have fallen by 12% to 20.4 mn sq ft from 23.2 mn sq ft in H2 2015. Such a drop in transaction can be largely attributed to the shortage of good quality office space rather than a slowdown in demand. New supply has reduced by 46% in H2 2016 to 10.1 mn sq ft from more than 18.7 mn sq ft in H2 2015.
- The IT/ITeS sector continues to be the largest driver of office space in India with the sector accounting for nearly half of the transactions during H2 2016. This was followed by other services, which includes sectors such as consulting, media, telecom and infrastructure, at 21%. However, in Mumbai, it was the BFSI sector that accounted for a lion's share at 31% during this period.



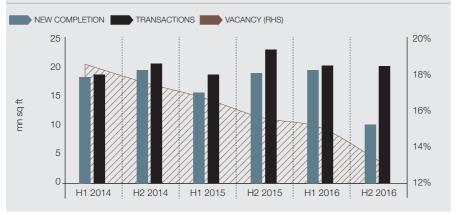
Source: Knight Frank Research

Note: The top six cities are Mumbai, NCR, Bengaluru, Pune, Chennai and Hyderabad

The vacancy level, which peaked at 20% in 2012, has been falling gradually with each passing year and is currently at one of its lowest levels in recent history at 13%

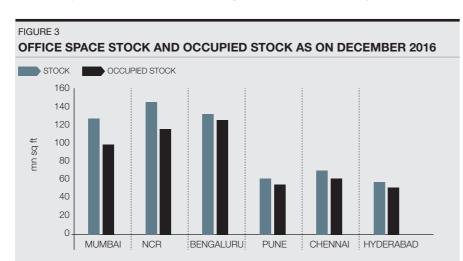






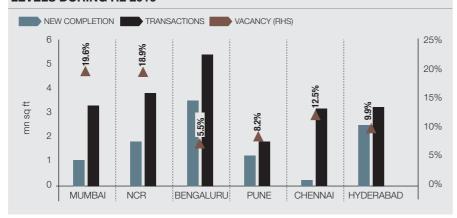
Source: Knight Frank Research

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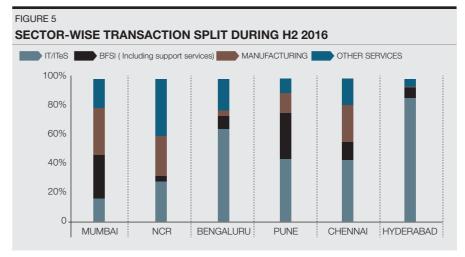


Source: Knight Frank Research

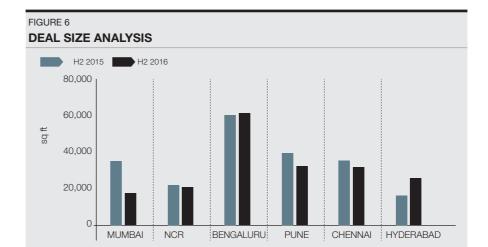
FIGURE 4 CITY-WISE NEW COMPLETION, TRANSACTIONS AND VACANCY LEVELS DURING H2 2016



Source: Knight Frank Research



Source: Knight Frank Research



Source: Knight Frank Research

- In terms of deal size, Bengaluru recorded the largest deals with the average deal size in the city amounting to more than 62,400 sq ft in H2 2016. NCR and Mumbai witnessed the smallest average deal sizes at 20,000 sq ft and 18,450 sq ft, respectively.
- Average rental values across
 these six cities have risen at
 their sharpest level since 2013 at
 11% YOY during H2 2016. While
 Mumbai led this upsurge in rental
 values with a 16% YOY jump,
 cities such as NCR and Bengaluru
 followed closely at 14% and 12%,
 respectively

The IT/ITeS sector continues to be the largest driver of office space in India with the sector accounting for nearly half of the transactions during H2 2016

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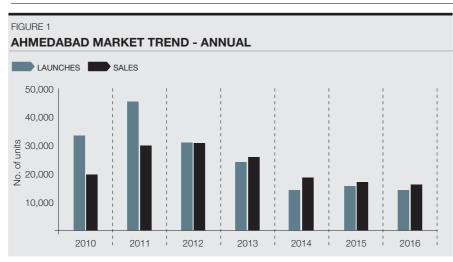






RESIDENTIAL MARKET

AHMEDABAD RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS



Source: Knight Frank Research

- The Ahmedabad residential market has been on a continuous downslide over the last five years after peaking in 2011. While the city observed more than 45,000 units in new launches and 30,000 units in sales during 2011, these numbers have fallen by 69% and 46% respectively since then.
- Taking cues from the market in terms of falling sales volume, developers truncated their new launches with each passing year and this helped in rebalancing the market to a great extent as the unsold inventory level dropped to its lowest in the last six years to 37,800 units in H2 2016, which was at its peak of 48,200 units in 2012.
- Since H2 2015, the city witnessed a considerable recovery in sales volume at 13% YoY and this trend continued in the first half of 2016 as well with a 10% YoY growth. Although these numbers weren't very encouraging when compared to the peak of 2011, it did indicate

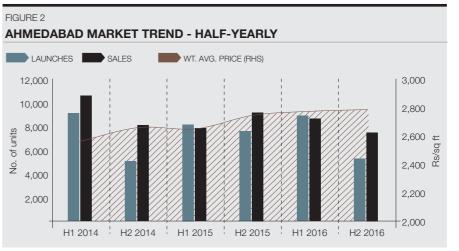
an onset of a positive trend in the market.

- Subsequently, the Indian
 Government's demonetization
 move on 8th November brought
 the market to a complete standstill.
 Developers refrained from
 announcing any new launches and
 buyers turned extremely cautious
 before committing on purchases.
- The fourth quarter numbers are
 a testament to the effect that the
 demonetization move has had
 on the real estate market of the
 city that was barely recovering
 from its earlier indolence. Sales
 volume dropped by 43% YoY in Q4
 2016 and new launched fell by a
 massive 69% YoY during the same
 period.
- At 2,800 units, the Q4 2016 sales volume are at their lowest quarterly level since 2010 and down by more than two-third since the quarterly peak of 8,300 units in Q1 2011. The new launches number are much

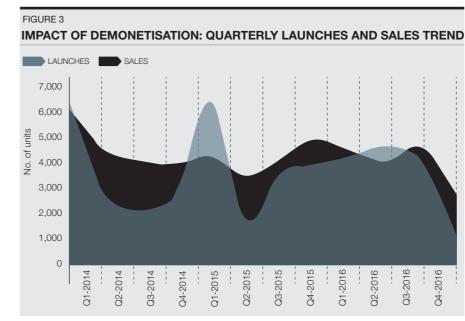
worse at just 1,200 units in Q4 2016, which is not even one-tenth of its peak level of 14,000 units achieved in Q1 2011.

 The only solace in the Q4 2016 number was from the month of October, which was just before the demonetization move, when the sales volume were showing some positive traction due to the start of the festive season.

We believe that the year 2016
would have been marginally better
than 2015 had it not been for the
demonetization move, as the sales
number for the first nine months
were showing positive trend.



Source: Knight Frank Research



Source: Knight Frank Research

The fourth quarter numbers are a testament to the effect that the demonetization move has had on the real estate market of the city that was barely recovering from its earlier indolence. Sales volume dropped by 43% YoY in Q4 2016 and new launches fell by a massive 69% YoY during the same period

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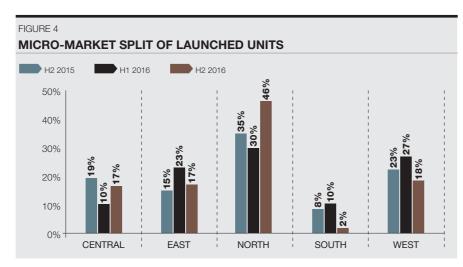
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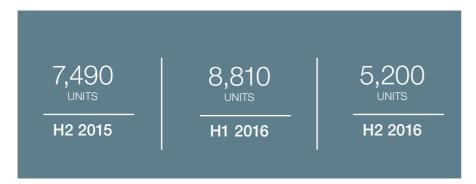
the demonetization



MICRO-MARKET SPLIT OF RESIDENTIAL LAUNCHES

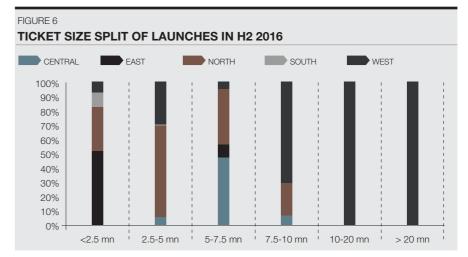


Source: Knight Frank Research



- The fourth quarter numbers are a testament to the effect that the demonetization move has had on the real estate market of the city that was barely recovering from its earlier indolence. Sales volume dropped by 43% YoY in Q4 2016 and new launches fell by a massive 69% YoY during the same period
- North Ahmedabad has taken the lead in terms of new launches with locations such as Chandkheda,
 Ognaj and Gota witnessing a slew of new project launches during the last six months. With prices in West and Central Ahmedabad breaching the homebuyers' affordability level,
 North Ahmedabad has emerged as the most preferred destination for mid-segment housing. During H2 2016, more than 80% of the new launches in this market were below the ticket size of ₹5 mn.
- However, the new launches in South Ahmedabad have fallen drastically in H2 2016, as developers are still trying to offload apartments in their existing projects. While more than 80% of

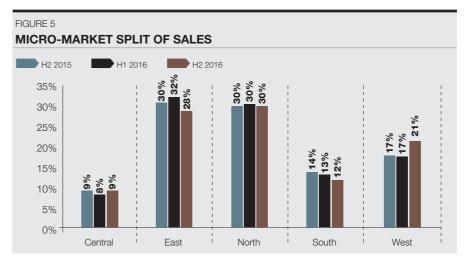
the total unsold inventory available here is below the ticket size of ₹2.5 mn, homebuyers seem to be staying away from this market. Factors like poor connectivity to the city centre, the presence of multiple manufacturing units and the lack of social infrastructure have limited this market's attractiveness.



Source: Knight Frank Research

MICRO-MARKET-WISE RESIDENTIAL SALES

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	S. G. Highway, Prahlad Nagar, Bopal, Thaltej, Science City Road	



Source: Knight Frank Research

9,075
UNITS
H2 2015

8,550
UNITS
H1 2016

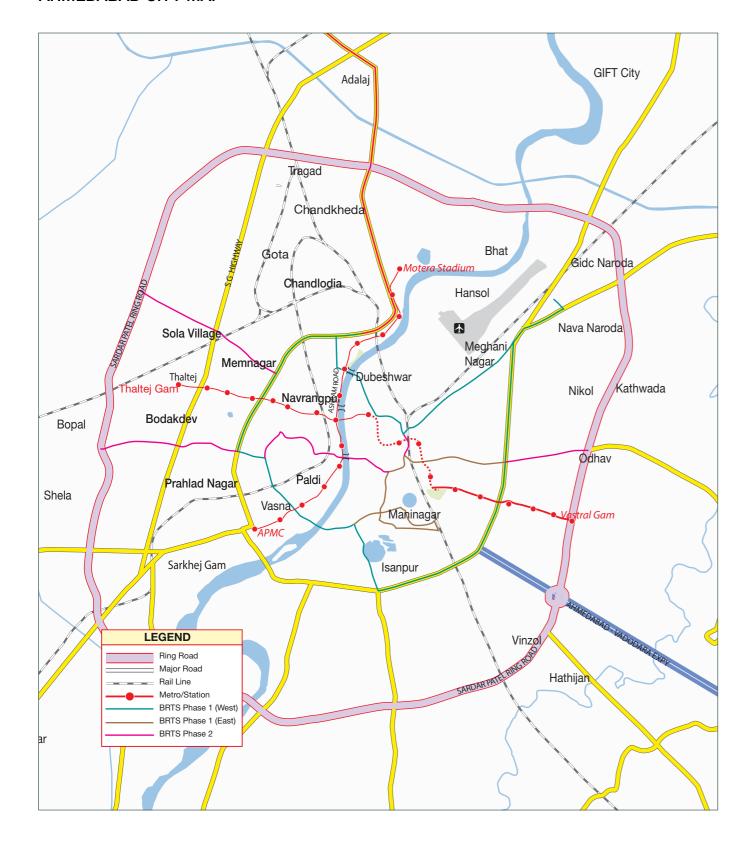
7,400
UNITS
H2 2016

- The micro-market split of sales
 has not witnessed any significant
 change in the last six months.
 While the shares of west and
 central Ahmedabad have increased
 marginally, the shares of the
 remaining micro-markets have
 reduced slightly.
- Central Ahmedabad's share has been steady over the last 12 months. Better connectivity with the city centre, proximity to the central business district (CBD) and the presence of a well-developed retail market continues to attract homebuyers to this micro-market despite its higher pricing

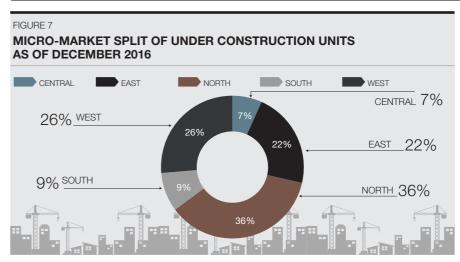




AHMEDABAD CITY MAP



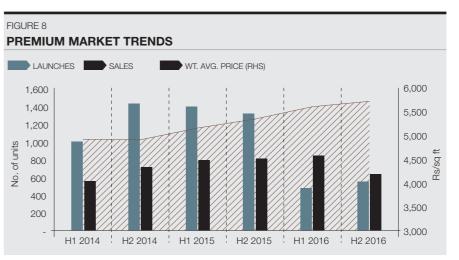
MICRO-MARKET SPLIT OF UNDER-CONSTRUCTION UNITS AS OF DECEMBER 2016



Source: Knight Frank Research

PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS	
Central	Ambawadi, Navrangpura, Shahibaug, Nehru Nagar	
West	Ambli, Bodakdev, Jodhpur, Prahlad Nagar, Satellite, Thaltej, Vastrapur	



Source: Knight Frank Research

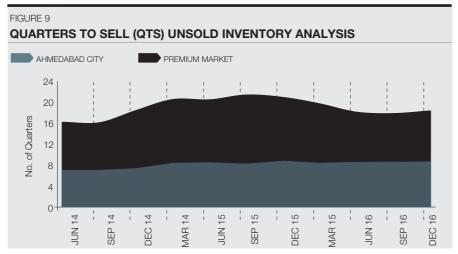
Note: Premium markets include locations where the average ticket size of a residential unit is above ₹15 mn, are in proximity to the central business district of the city and have witnessed new project launches in the preceding three years

- New launches in the premium markets, which are close to the city centre and costs in excess of ₹ 15 mn, have dropped significantly in the last one year. With an unsold inventory of nearly four years, developers have been wary of pushing new projects.
- The premium market includes locations such as Ambawadi, Bodakdev, Navrangpur, Prahlad Nagar, Satellite and Vastrapur, among others
- In terms of sales volume, this segment continues to witness a steady traction and has performed relatively better than the rest of the city in the past one year, despite a slowdown in the overall sales volume of the city.

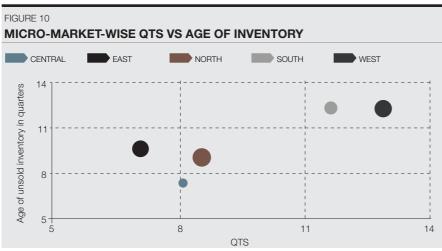


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AHMEDABAD MARKET HEALTH



Source: Knight Frank Research



Source: Knight Frank Research

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number for the first nine

months were showing

Note: The size of the bubble indicates the quantum of unsold inventory

- The number of quarters to sell the existing unsold inventory currently stands at 8.6, which has remained range bound in the last three years. At present, the city has more than 37,800 units in various stages of construction that remain unsold.
- East Ahmedabad remains the best performing market in the city with the lowest level of quarters to sell unsold inventory and this is closely followed by North Ahmedabad.
 Affordable pricing, easy access
- to the major employment hubs and integrated development have helped these markets in attracting homebuyers over the last few years.
- The performance of south Ahmedabad continues to worsen with each passing quarter. From less than 8.5 quarters of unsold inventory at beginning of 2015, it has worsened to more than 11.5 quarters in H2 2016.

PRICE MOVEMENT IN H2 2016

- The price growth in the premium segment outperformed the city's average price growth. While the weighted average price in the city grew by 1.5% YOY in H2 2016, it grew by 7% in the premium segment
- Since 2010, premium segment prices have gone up by more than 57%, whereas the city's average price has moved up by only 28%. Steady demand and a limited supply have helped prices in the premium segment to move in this manner.

WEIGHTED AVERAGE PRICE MOVEMENT IN AHMEDABAD

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Ahmedabad	2,770	1.5%	0%
Premium markets	5,700	7%	2%

PRICE MOVEMENT IN SELECT LOCATIONS

LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Ambawadi	Central	5,500 - 7,500	0%	0%
Navrangpura	Central	5,500 - 7,500	1%	0%
Mani Nagar	Central	3,500 - 6,000	3%	1%
Paldi	Central	4,500 - 6,200	3%	1%
Naroda	East	2,000 - 3,000	2%	0%
Vastral	East	1,800 - 2,500	1%	0%
Nikol	East	1,800 - 2,500	0%	0%
Prahlad Nagar	West	5,000 - 6,500	1%	1%
Satellite	West	5,500 - 7,200	0%	0%
Thaltej	West	5,000 - 6,000	0%	0%
Vastrapur	West	5,000 - 6,200	0%	0%
Bopal	West	3,500 - 4,800	0%	0%
Chandkheda	North	2,500 - 3,200	1%	0%
Motera	North	2,800 - 3,600	0%	0%
Gota	North	2,800 - 3,600	0%	0%

Source: Knight Frank Research

IS HYDERABAD STEALING THE MARCH OVER BENGALURU?

- contributed by Sangeeta Sharma Dutta

engaluru, before it became the undisputed leader in IT/ITeS office space, had to fend off several contenders for the crown. One of the toughest challenges had come from its neighbor in the south – Hyderabad, the capital of Andhra Pradesh then. Driven by the IT/ITeS boom in the country, Hyderabad attracted several prominent occupiers. At the peak of its IT revolution, the city witnessed the advent of companies such as Microsoft, Facebook and Google. Gradually, other companies like Accenture, HP, GE, IBM, JP Morgan Chase and Convergys also set up offices in the city. Thus, while the spotlight was still on Bengaluru, Hyderabad was quietly building a strong foundation for an efficient IT/ITeS ecosystem and hub in India.

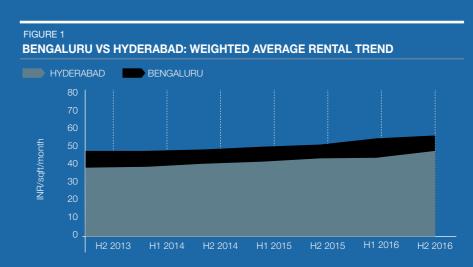
However, things did not turn out the way it was intended and political issues like the Telangana movement put a halt to Hyderabad's endeavour towards contesting Bengaluru's dominance over the IT/ITeS sector and becoming a key alternative hub in the southern region. This situation of deadlock remained over the fate of the city's real estate sector until the political issue was resolved by awarding a separate statehood to Telengana on 2 June 2014. In accordance with the Andhra Pradesh Reorganisation Act, 2014, Hyderabad was to remain the de jure capital of both Andhra Pradesh and Telangana states for a period of time not exceeding 10 years.

By the time the political uncertainty was set right, Hyderabad had almost lost its place on the occupiers' radar. Thus, it attempted aggressively to make up for lost time and regain its position as a preferred destination among the top office space occupiers. With the new government at the helm, Hyderabad witnessed a fast paced revival and attracted a number of top global firms to set up/expand their operations. The results are already evident today. Hyderabad was chosen by global

e-commerce major Amazon as the home for its largest warehouse, with the capacity of storing about two million products. Uber, too, is setting up a state-of-the art facility in Hyderabad, which will eventually be its largest international office. In another recent development, Swedish major in retail furniture IKEA purchased 13 acres of land parcel to build a 400,000 sq ft store that would be operational in 2017.

Despite the momentum in the past two years, Hyderabad has much to catch up with Bengaluru. Bengaluru, by dint of its stronghold over the IT/ITeS sector, has an occupied stock of 124.7 mn sq ft – a behemoth when compared with Hyderabad's occupied stock of just 51.6 mn sq ft. Nevertheless, the office sector in Hyderabad observed good occupier activity and during the period 2014 to 2016, the city witnessed the transaction of 15.3 mn sq ft of office space, out of which 2016 alone accounted for 6 mn sq ft. On a Year-Over-Year (YOY) basis, the increase in transaction in 2016 was a whopping 31% over the transaction figure in 2015. By sharp contrast, Bengaluru saw a staid rise of 3% in transaction activity in 2016 over 2015. Furthermore, the compounded annual growth rate for office space transactions for the period 2013-2016 in Hyderabad was much higher at 17.1% vis-à-vis 6.1% observed in Bengaluru.

Another prime factor that made Hyderabad office sector compete closely with Bengaluru is its relatively lower rentals for office space. While the current weighted average rental value for Bengaluru is recorded at ₹ 57.8 per sq ft, the rental value for Hyderabad stands at ₹ 47 per sq ft – at a difference of 19% lower than Bengaluru. Significantly, the lower rental value notwithstanding, both the cities have the same rate of rental growth at 12% in 2016 on a YOY basis, depicting the rather competitive nature of both the markets.



Source: Knight Frank Research

One of the key drivers for this resurgence of Hyderabad in last two years has been the business friendly policies adopted by the government, besides other factors such as improved high class infrastructure and lower real estate costs, with the objective of making Hyderabad one of the top cities not just in India but globally as well. Also, similar to Bengaluru, Hyderabad has a thriving talent pool across different sectors. The city has thus seen growth and development across different verticals, ensuring the employment of talent.

Hyderabad is also striving hard to become the start-up hub of the country, an epithet enjoyed by Bengaluru. However, while most of the systems are in place - such as technical skill, right infrastructure and talent, the Hyderabad startup ecosystem still lacks the depth of funding that Bengaluru has.

Thus, Bengaluru is being faced with a tough proposition against Hyderabad in the occupier-based spheres. While it continues to retain the top slot for the highest office space transactions in the country YOY, on the other hand, the city is riddled with challenges to retain its existing occupiers and attract new ones - it is struggling with dwindling vacancy rates

in key office markets as well as a crumbling infrastructure. Moreover, the civil unrest owing to the Cauvery water issue also blemished the image of the IT hub to some extent. At the same time, Hyderabad is working on offering to its potential occupiers a seamless ease of doing business, great infrastructure, competitive office rentals, a rich and diverse talent pool and pro-active government policies. Today, the city has not only secured a place of interest on the occupiers' radar but has also attracted several out-of-town developers who are ready to launch their projects in the city to gain more

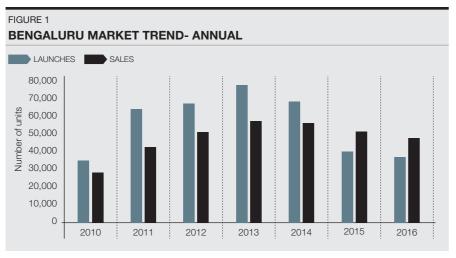
Thus, the two southern cities – Bengaluru and Hyderabad, are fascinatingly poised against each other. It would be interesting to observe Bengaluru's stance now, whether it would calibrate itself to rise to Hyderabad's challenge, or would it allow Hyderabad to steal the march over it.





RESIDENTIAL MARKET

BENGALURU RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS



Source: Knight Frank Research

Bengaluru, till recently

touted to be one of

the most resilient real

estate markets of the

considerable pressure

in the last two years.

country, has come under

While the number of new

launches dipped by 17%

in 2016 on a YOY basis,

the city's sales volume

saw a more restrained

decline, at 7%

- Bengaluru, till recently touted to be one of the most resilient real estate markets of the country, has come under considerable pressure in the last two years, after observing a peak in 2013.
- The residential market has observed significant tightening of new launches, particularly in 2015 when it had witnessed a decline of 33% over the new launches in 2014. In early 2016, it recovered sufficiently and was expected to perform well when the announcement of demonetisation impacted the market and the year ended with the number of launches declining by 17% over the launches number in 2015.
- Thus, this state of market constriction, which was expected to be a temporary blip on the radar, has manifested itself as a longer phase owing to several factors and will take some time to pass.

- On the other hand, the decline in sales has been gradual, primarily due to the fact that Bengaluru is an end-user driven market. In 2016, the dip in sales has been 7% compared to the sales figure in 2015.
- Presently, the implementation of RERA and the recent demonetisation drive has put an interesting spin to the city's real estate market.

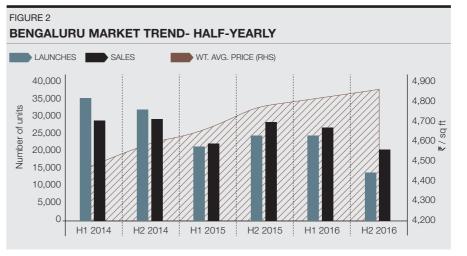
- The second half of the year 2015
 (H2 2015) had seen the new
 launches improve reasonably from
 the setback that it had suffered in
 H1 2015, and the trend continued
 on to H1 2016 as well. However,
 the momentum in new launches
 could not be sustained in H2 2016
 and the period witnessed a drastic
 decline of 45% on a Year-Over-Year
 (YOY) basis.
- While this is partly attributable to the quantum of unsold inventory build-up in the market, hence

accounting for a natural slowdown in launches, other factors that played key roles in bringing down new launches include - the RERA policy, demonetisation, as well as the Bruhat Bengaluru Mahanagara Palike (BBMP) initiative to free lakes beds and storm water drains of encroachment. This initiative by BBMP also resulted in delays in getting necessary approvals from government departments for project construction.

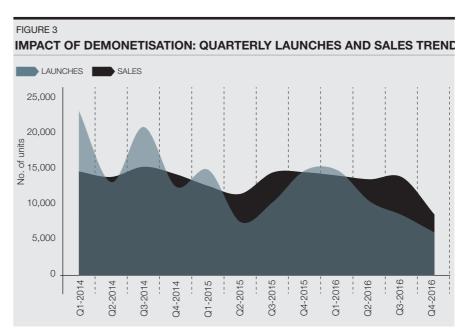
The city's sales volume, which in

the past had risen to a stronger position than the new launches, struggled to maintain its resilience against the recent economic and policy developments and fell by a considerable 27% in H2 2016 as compared to its corresponding period in 2015.

 Meanwhile, weighted average prices held on steadfast and remained stagnant, witnessing a nominal increase of 1% in H2 2016 compared to H2 2015.



Source: Knight Frank Research



Source: Knight Frank Research

While launches were already on a decline, owing to factors such as the increasing unsold inventory in the city, BBMP's drive to confront the encroachment of lake beds and other issues like the momentary civil turbulence over the Cauvery water dispute, the announcement of demonetization in Q4 2016 further led to curbing of new launches



- Demonetisation impacted the city's real estate market quite substantially in the fourth quarter (Q4 2016). While launches were already on a decline, owing to aforementioned factors such as the increasing unsold inventory in the city, BBMP's drive to confront the encroachment of lake beds and other issues like the momentary civil turbulence over the Cauvery water dispute, the announcement of demonetization in Q4 2016 further led to curbing of new launches.
- Consequently, the new launches in Q4 2016 saw a remarkable decline of 65% over the number of launches in Q4 2015, the lowest number of launches during the period in recent years. In Q3 2016, the drop was 28% over the figure in Q3 2015.
- Meanwhile, sales had a good run in Q3 2016. It was almost on par with the sales figure in Q3 2015.
 However, with demonetisation coming into effect in Q4 2016, sales dropped by 45% when compared to the corresponding

period in 2015.

 Significantly, the number of enquiries during the period Q4 2016 increased by 10%-12% on a YOY basis, though conversions have been low. This signifies that most buyers are keeping their buying decisions on hold until clarity emerges on demonetisation.

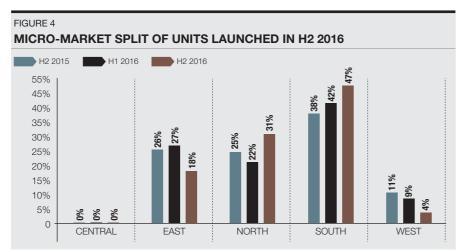
- The southern zone of the city accounted for a whopping 47% share in the total number of new launches in H2 2016. This could be attributed to the number of residential projects that were launched in the peripheral locations, such as Electronics City, Jigani, Mylasandra and off-Sarjapur Road.
- North Bengaluru, which has been characterised by factors such as high land cost, low social infrastructure and relatively expensive property prices, saw its share of new launches increase in H2 2016. It increased from 25% in H2 2015 to a sizable 31% in H2 2016. Major new launches were observed in Hebbal, Jakkur and Devanahalli. With office projects becoming operational along the international airport road, creating new employment hubs, the region is striving to bounce back on the prospective buyers' radar.
- East Bengaluru's share in the total number of new launches, which has been observed to rise steadily in the past year, saw a setback with its share declining from 27%

in H2 2015 to 18% in H2 2016. Locations such as Kannamangala and KR Puram witnessed a number of new launches.

- West Bengaluru, too, saw its share
 of new launches reduce in H2
 2016. The region accounted for just
 4% share of the total new launches
 in H2 2016, witnessing a dip from
 its share of 11% in H2 2015.
- The southern zone of the city had the majority of the new launches below the ₹5 mn ticket size in H2 2016, accounting for almost 50% of its total number of launches during the period, while, in contrast, North Bengaluru witnessed the launch of the most number of residential units priced above the ticket size of ₹10 mn - to the tune of around 40% of its new launches. Notably, northern locations such as Kogilu and Hebbal saw a number of residential units in the premium housing segment whereas Jigani, Kammasandra, Mylasandra, Hosa Road and Electronics City had a number of budget housing units.

South Bengaluru accounted for a whopping 47% share in the total number of new launches in H2 2016. North Bengaluru, which has been characterised by factors such as high land cost, low social infrastructure and relatively expensive property prices, saw its share of new launches increase from 25% in H2 2015 to a sizable 31% in H₂ 2016

MICRO-MARKET SPLIT OF RESIDENTIAL LAUNCHES



Source: Knight Frank Research

such as pain rate ement of per in the ear and $\frac{24,190}{H2\ 2015}$ $\frac{24,281}{H1\ 2016}$ $\frac{13,395}{H2\ 2016}$

Expectations such as further home loan rate cuts, announcement of income tax sops in the budget next year and further correction in real estate prices are keeping the buyers in a 'wait and watch' mode

FIGURE 5 **TICKET SIZE SPLIT OF LAUNCHES IN H2 2016** FAST NORT 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% ₹2.5 - 5 MN ₹5 - 7.5 MN ₹7.5 - 10 MN ₹10-20 MN >-20 MN

Source: Knight Frank Research

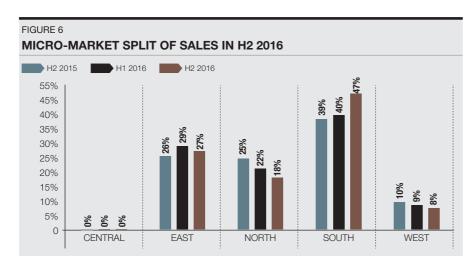




MICRO-MARKET-WISE RESIDENTIAL SALES

MICRO-MARKET	LOCATIONS
Central	M.G. Road, Lavelle Road, Langford Town, Vittal Mallya Road, Richmond Road
East	Whitefield, Old Airport Road, Old Madras Road, K.R. Puram, Marathahalli
West	Malleswaram, Rajajinagar, Yeshwanthpur, Tumkur Road, Vijayanagar
North	Hebbal, Bellary Road, Hennur, Jakkur, Yelahanka, Banaswadi
South	Koramangala, Sarjapur Road, Jayanagar, J.P. Nagar, HSR Layout, Kanakapura Road, Bannerghatta Road

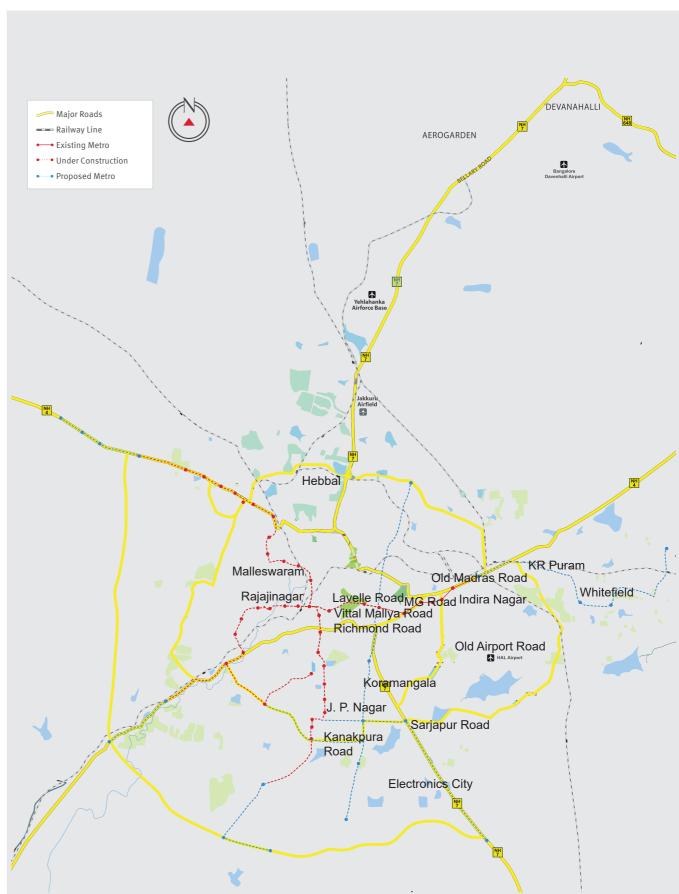
- Similar to new launches scenario, the southern zone accounted for the major share on the sales front as well. South Bengaluru saw its share increase from 39% in H2 2015 to 47% of the total sales in H2 2016. This can be attributed to the large quantum of IT projects in the region as well as the slew of affordable projects available in its peripheral markets that would soon be connected to the other parts of the city through various infrastructure projects, the foremost of them being the metro
- On the other hand, most other regions of the city saw a decline in their share of sales in H2 2016. Although East Bengaluru witnessed a slight increase from 26% in H2 2015 to 27% in H2 2016, the north and the west saw their shares reduce.
- North Bengaluru, in particular, observed its share of sales decrease from 25% in H2 2015 to 18% in H2 2016. This decline is primarily on account of the dearth of adequate social infrastructure in place in the region, as well as the increasing property increasing property price, amongst other factors.



Source: Knight Frank Research



BENGALURU METROPOLITAN REGION MAP





BENGALURU METRO PHASE 2 – A SHOT IN THE ARM FOR CITY'S REALTY

ome April 2017 and if
Bangalore Metro Rail
Corporation (BMRC) is
to be believed, we might just have
Bengaluru Metro phase 1 up and
running – completely. There have
been a host of missed deadlines but
finally the end of the first phase of
this colossal infrastructure project
seems to be near. This impending
completion leads us to sit up and take
notice of the next most important
development – the second phase of
the metro.

Bengaluru Metro is India's second largest metro system in terms of both length and number of stations, after the Delhi Metro. Its phase 2 spans a length of 72 km and is expected to add 61 stations to the network. It includes the extension of the two phase 1 corridors, as well as the construction of two new lines. Further, a new 18 km long line connecting Silk Board with K.R. Puram has been included, categorized as phase 2A. The line will be called the Outer Ring Road Metro and is proposed to have 13 stations encompassing major stations such as Silk Board, HSR Layout, Bellandur, Kadubeesanahalli, Marathahalli,

Mahadevapura and K.R. Puram. As per timeline set by BMRCL, phase 2 of metro is likely to be completed by December 2020.

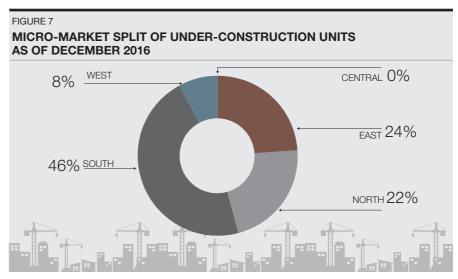
The completion of the phase 2 metro lines would have a vast effect on the city's dynamics. While transportation and connectivity is set to become easier, the impact on the realty market would be even more prominent, leading to an increased demand for both residential and commercial property in the region. On the commercial front, micro-markets such as Whitefield in the east, Nagwara in the north, and Electronics City in the south are expected to witness the maximum impact. Meanwhile, phase 2A is expected to sort out the issues faced by office occupiers on the ORR. Improved public transportation in the form of metro line will help reduce traffic density and travelling hours along this route, thereby aiding in retaining existing tenants as well as attracting potential occupiers.

On the residential front, clusters with scheduled metro stations are likely to record increased demand due to improved connectivity to employment hubs. Presently, metro route extensions such as Puttenahalli-

Anjanapura, Mysore Road-Kengeri and Byappanahalli-Whitefield have made these real estate markets attractive for home buyers and investors. While the greater aim of phase 2 is to allow metro connectivity towards the peripheral locations of the city and unlock their potential, phase 2A along the ORR is expected to help ease the unsold inventory build-up situation in locations such as Mahadevapura, Bellandur, Sarjapur Road and Marathahalli, by reviving sales in the regions.

At present, work along the Bengaluru metro phase 2 has been rather tepid. However, with the infrastructure project harbouring enormous advantages, both for the real estate fraternity and the buyer, the wait is expected to be worth the pain.

MICRO-MARKET SPLIT OF UNDER-CONSTRUCTION UNITS AS OF DECEMBER 2016



Source: Knight Frank Research

 South Bengaluru accounts for the major share of the total number of units under construction, to the tune of 46%, given that it has been witnessing large-scale residential development in the past years.
 The region is preferred by potential buyers due to its good social infrastructure and the presence of employment hubs, leading developers to launch their projects there. Additionally, property prices are relatively cheaper in the peripheral locations in the south,

compared to the other micromarkets.

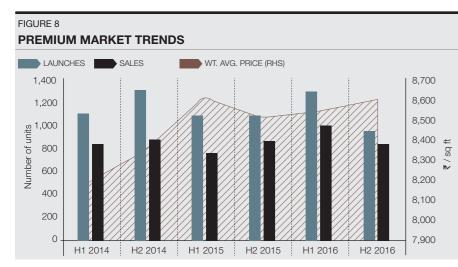
 The northern and eastern markets have fairly uniform shares of units under construction, with West Bengaluru gradually emerging on the residential market scene.

PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS
Central	M.G. Road, Lavelle Road, Langford Town, Vittal Mallya Road, Richmond Road
East	Whitefield, Indiranagar
West	Malleswaram, Rajajinagar, Yeshwanthpur
North	Hebbal, Bellary Road
South	Koramangala, Jayanagar, J.P. Nagar

- The premium market of Bengaluru, which constitutes locations such as Lavelle Road, Richmond Road, Indiranagar and Malleswaram, among others, was affected by the overall slowdown in new launches, too.
- It observed a substantial decrease of 12% in new launches during
- H2 2016 as compared to H2 2015, with developers refraining from launching premium projects in the face of a subdued market.
- Meanwhile, the sales situation strove to remain afloat. H2 2016 witnessed a dip of 3% in demand for such properties, as against the same period last year.
- The weighted average price growth YOY in the premium segment remained relatively steady and saw a marginal increase in H2 2016, as compared to H2 2015.

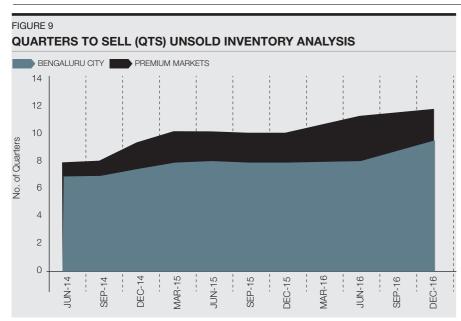




Source: Knight Frank Research

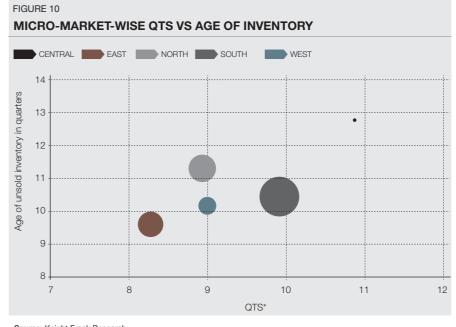
Note: Premium markets include locations where the average ticket size of a residential unit is above ₹ 20 mn, are in close proximity to the central business district of the city and have witnessed new project launches in the preceding three years

BENGALURU MARKET HEALTH



Source: Knight Frank Research

- 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 in order to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market. Also, size of
- the bubble indicates relative size of unsold inventory in terms of number of units.
- The QTS for Bengaluru has been increasing gradually since September 2013, and currently stands at nine quarters. The unsold inventory of the city is recorded at around 121,000 units. However, the QTS for the premium markets in the city is much higher
- at 12 quarters currently. This is mainly due to the relatively slow rate of sales observed in the premium housing segment in the past.
- East Bengaluru is currently the best performing market of the city, with the lowest QTS and the lowest age of inventory, signifying that the market has been witnessing a substantial traction in recent



Source: Knight Frank Research

times. The presence of several large employment hubs, good social infrastructure, substantial availability of housing in various budget sizes and the recently operational metro connectivity with the central and western parts of the city are some of the prime factors that facilitated this development.

- On the other hand, South Bengaluru is accountable for the highest QTS after Central Bengaluru, with the largest quantum of unsold inventory in the city. However, the sales velocity of the region has improved in the past few quarters and with infrastructure development in the offing, the situation is expected to amend in the forthcoming periods.
- North Bengaluru has a lower QTS but a higher age of inventory than the South. We expect this market to gain momentum once the office sector gains prominence in the near future.

- Meanwhile, West Bengaluru still does not have a sufficient inventory and sales volume compared to the other zones of the city. It has a higher QTS than East and North Bengaluru but holds a lower QTS and age of inventory than its southern counterpart. Despite its smaller size at present, the region holds promise and the metro rail, operational since last year, is expected to be one of the prime factors for this potential.
- · The premium residential market of Central Bengaluru does not have a key role to play due to its minimal unsold inventory size.

The presence of several large employment hubs, good social infrastructure, substantial availability of housing in various budget sizes and the recently operational metro connectivity with the central and western parts of the city are some of the prime factors that facilitated the development of East Bengaluru



PRICE MOVEMENT IN H2 2016

- Price appreciation across most locations in Bengaluru has been sluggish during the last 12 months, ranging between 1–5%. The growth in price slowed down further in the last six months, primarily due to the huge unsold inventory present in the market as
- well as the demonetisation factor. The range of price appreciation during the period has been within 1–3% in select markets.
- The premium housing segment observed a slightly slower rate of growth in its weighted average

price in the last 12 months, compared to the growth in the city's overall price. While the city's overall price growth was pegged at 1.5%, the premium housing segment saw an increase of 1.1%.

WEIGHTED AVERAGE PRICE MOVEMENT IN BENGALURU

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Bengaluru	4,850	1.5%	0.9%
Premium markets	8,609	1.1%	0.7%

PRICE MOVEMENT IN SELECT LOCATIONS

LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Langford Town	Central	15,000–21,000	0%	0%
Lavelle Road	Central	22,000–30,000	0%	0%
K.R. Puram	East	4,000–6,750	2%	0%
Whitefield	East	4,500–8,500	1%	0%
Marathahalli	East	4,500–7,100	3%	1%
Indiranagar	East	9,000–12,500	0%	0%
Yeshwanthpur	West	6,500–10,800	2%	0%
Malleshwaram	West	9,000–13,300	0%	0%
Rajajinagar	West	8,500–14,000	0%	0%
Tumkur Road	West	4,000–5,100	2%	0%
Yelahanka	North	4,500–7,500	4%	1%
Hebbal	North	5,000–9,800	1%	0%
Hennur	North	4,500–7,500	2%	0%
Thanisandra	North	4,100–7,500	3%	0%
Sarjapur Road	South	4,500–7,500	1%	0%
Electronics City	South	4,000–6,500	2%	1%
Kanakapura Road	South	4,300–6,000	2%	1%
Bannerghatta Road	South	4,200–7,500	1%	0%

Source: Knight Frank Research

OFFICE MARKET

BENGALURU OFFICE MARKET STOCK, NEW COMPLETIONS, TRANSACTION AND VACANCY TRENDS



Source: Knight Frank Research

- The Bengaluru office market continued to go from strength to strength in 2016, recording a transaction of 11.4 mn.sq.ft of office space – the highest in five years, standing at par with its peak level in 2011.
- The transactions in 2016 reflected a growth of 3% over the total transactions in 2015. While the growth appears to be tapering, at the same time it should also be noted that the IT/ITeS sector, which is the key demand driver of the office market in Bengaluru, has matured and stands on a bigger base today, thereby limiting the scope for outstanding growth proportion.
- Moreover, stiff competition from other cities, primarily Hyderabad, has led the growth trend to remain relatively constrained.
- This growth in office sector is in contrast to the city's residential real estate where demand has declined substantially due to demonetisation,

- Meanwhile, new completion of office space has been striving to catch up with the transactions and 2016 observed an increase of 12% over the new completion figure in 2015.
- Thus, with the office market staying positive in Bengaluru despite the recent demonetization drive, adroitly reflected by the steady growth in demand for prime office space, the city continues to be a key office destination among global and domestic corporates.

The Bengaluru office market continued to lead the way, with the highest office space transactions in the country. With a total of 11.4 mn sq ft transacted in 2016, which excludes precommitted deals, the period witnessed the highest transactions in five years

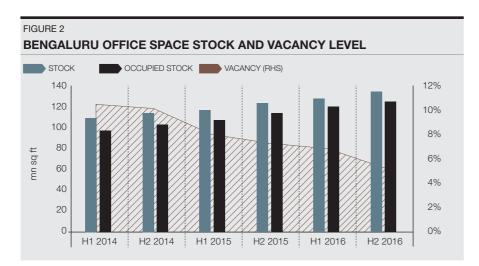
MANUFACTURING

OTHER

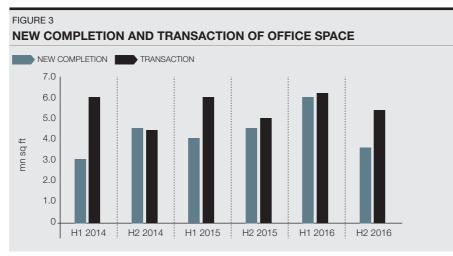
SERVICE SECTORS



- On a half yearly basis, the city's office market recorded transactions of 5.3 mn sq ft during the period July-December 2016 (H2 2016).
- Additionally, H2 2016 also observed pre-committed deals of 3 mn sq ft. Thus, altogether, including the pre-committed deals, 2016 saw total office space transactions of 14.3 mn sq ft
- In contrast, the city witnessed the infusion of 3.5 mn.sq.ft in H2 2016, which is considerably lesser in proportion to the demand observed, thereby leading potential occupiers to turn to precommitted deals for large space requirements.
- The dearth of ready to occupy space also resulted in lending a downward pressure on vacancies and an upward pressure on office rents in key office markets of the city in H2 2016.
- Vacancy rates, which had been declining steadily over the years owing to consistent transactions and restrained new completions, continued on its downward movement and are presently at 6%.



Source: Knight Frank Research



Source: Knight Frank Research

5.0 MN SQ FT H2 2015 6.1 MN SQ FT H1 2016 5.3 MN SQ FT H2 2016

BFSI

a multinational consulting firm took up around 134,000 sq ft on Intermediate Ring Road.

FIGURE 4

80%

70%

60%

50%

40%

30%

20%

10%

Source: Knight Frank Research

SECTOR-WISE SPLIT OF TRANSACTIONS

H1 2016 H2 2016

- Meanwhile, a few major transactions were recorded in the manufacturing sector in H2 2016. The sector accounted for a minimal share of 4% of the total office space transactions, showing a decline over its share of 10% in H2 2015.
- The BFSI sector accounted for a 9% share of the transactions in H2 2016, reflecting an increase over the share in H2 2015. Notable transactions in the sector include Swiss Re taking up space at Embassy Golf Links Business Park on Intermediate Ring Road.

The IT/ITeS sector accounted for 62% of the total transactions in H2 2016, as compared to H2 2015, which had seen a whopping 70% share. The decline in the sector's share can be attributed to the lack of ready large office space in the market, consequently leading them to opt for precommitted space

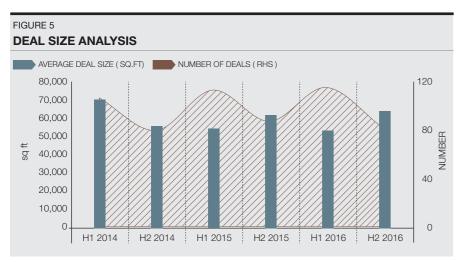
SECTOR ANALYSIS

- Bengaluru continued to attract substantial occupier interest in H2 2016, the demand being driven primarily by the IT/ITeS sector, its growth and consolidation leading to transactions for large office spaces. The sector accounted for 62% of the total transactions in H2 2016, as compared to H2 2015, which had seen a whopping 70% share. The decline in the sector's share can be attributed to the
- lack of ready large office space in the market, consequently leading them to opt for pre-committed space that would be ready in 18-24 months' time.
- The share of the other services sector, of which the e-commerce sector is a part, has increased from 16% in H2 2015 to 25% in H2 2016. While e-commerce still holds potential, there were

fewer e-commerce transactions in H2 2016 and other services sector companies like media houses, telecommunications and consulting firms accounted for substantial office demand during the period. Some of the prominent transactions in the other services sector include a key telecommunications company inking an office space deal on Residency Road, while



DEAL SIZE ANALYSIS



The average deal size remained somewhat consistent in H2 2016, coming close to 62,424 sq ft, compared to 60,172 sq ft in H2 2015. The number of deals, however, reduced slightly in H2 2106 as compared to the corresponding period in the previous year.

Source: Knight Frank Research

SELECT TRANSACTIONS

OCCUPIER	BUILDING	LOCATION	APPROX. AREA (SQ FT)
Apple	RMZ Galleria	Airport Road	46,000
Infosys	Bhartiya City - Block I	Thanisandra Road	200,000
Swiss Re	Embassy Golf Links Business Park	Intermediate Ring Road	303,000
Broad Ridge	DivyaSree NR Enclave (Block A)	Whitefield	157,000
Snapdeal	Salarpuria Adonis	Old Madras Road	35,000

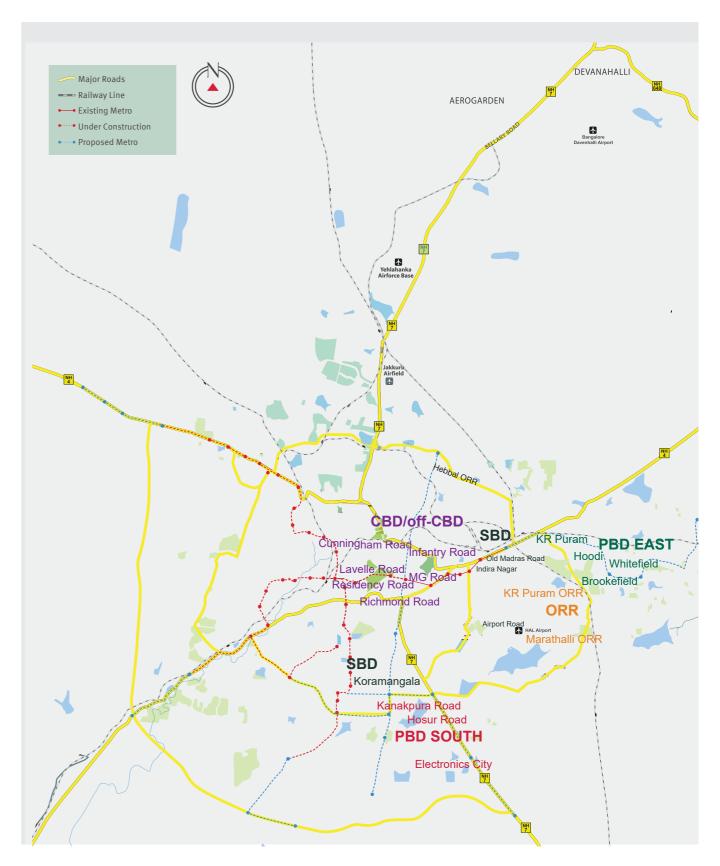
Source: Knight Frank Research

BUSINESS DISTRICT ANALYSIS

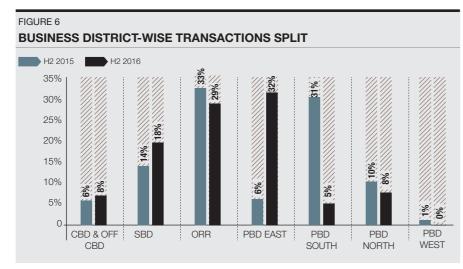
BUSINESS DISTRICT CLASSIFICATION

BUSINESS DISTRICTS	MICRO-MARKETS
Central business district (CBD) and off-CBD	M. G. 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

BUSINESS DISTRICTS OF BENGALURU







Source: Knight Frank Research

The Outer Ring Road

(ORR) office market.

struggling in the past

of dearth of ready to

share further reduce

in H2 2016 compared

to H2 2015. This has

resulted in the PBD

East market, mainly

step up to cater to

potential occupiers

comprising Whitefield,

occupy space, saw its

few quarters on account

which has been

5.0 MN SQ FT H2 2015 5.3 MN SQ FT H2 2016

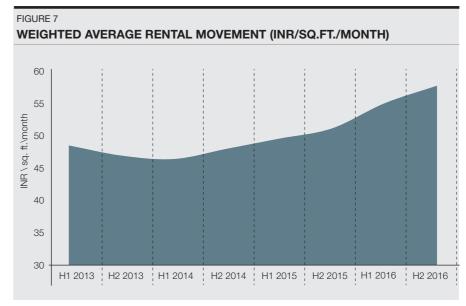
• The Outer Ring Road (ORR) office market, which has been struggling in the past few quarters on account of dearth of ready to occupy space, saw its share further reduce in H2 2016 compared to H2 2015. Its share in the total transactions in H2 2016 was 29%, compared to 33% in H2 2015. The ORR has been progressively preferred by corporates due to factors such as its proximity to the CBD and the major residential markets, access to large talent pools, the availability of contiguous land parcels, connectivity to the airport and the presence of hotel and retail projects. This has led the ready-to-occupy office space in the region to shrink significantly, leading vacancy to be in the range of 2-5%, thereby resulting in a decline in its transactions share in H2 2016. However, the ORR still accounts for a large quantum of pre-committed space, which is

scheduled to become operational

in the forthcoming months.

- · With limited supply of vacant and ready-to-occupy office space in the preferred markets, H2 2016 saw the peripheral market in the east, mainly comprising Whitefield, step up to cater to potential occupiers. The PBD East market observed its share in the total number of transactions increase to a significant 32% in H2 2016 from a mere 6% in H2 2015. Factors such as a few office projects becoming operational and relatively lower rentals as compared to the suburban and ORR office markets have led the PBD East market to dominate the transactions scenario in H2 2016.
- The share of the SBD markets, too, increased in H2 2016 over the share in H2 2015. However, the northern peripheral office markets observed a slight decrease in its share during H2 2016 as compared to its corresponding period in 2015.

RENTAL TREND



Source: Knight Frank Research

- While the steady increase in transactions YOY in the city is good news for office space developers, it poses a challenge for the office occupiers as in many cases they are faced with the prospect of higher rentals and fewer options to choose from in terms of ready space.
- The SBD and ORR office markets witnessed the maximum rise in rentals in H2 2016, primarily due to the strong corporate demand for

office space in the region, coupled with declining new completions and vacancies, particularly in the ORR.

The weighted average rental values witnessed a significant increase of 12%, from ₹51.5 per sq ft per month in H2 2015 to ₹57.8 per sq ft per month in H2 2016. This appreciation in rentals is particularly remarkable given the fact that the average rental increase the city has been

observing in the past years is just 5% per annum.

Understandably, this rise in rentals could be accredited to the anticipated demand for large spaces as well as the lack of vacant office stock in the preferred office markets, thereby pushing the weighted average rentals upwards in the Bengaluru office space market.

BUSINESS DISTRICT-WISE RENTAL MOVEMENT

BUSINESS DISTRICT	RENTAL VALUE RANGE IN H2 2016 (₹/SQ FT/MONTH)	12 MONTH CHANGE	6 MONTH CHANGE
CBD & off-CBD	75–110	8%	4%
SBD	51–100	12%	8%
PBD East	32–50	6%	4%
PBD South	32–48	2%	2%
ORR	45–90	15%	10%

Source: Knight Frank Research

REITS TO BE A REALITY SOON

- contributed by Vivek Rathi

THE NEED FOR REITS

As an investment vehicle for the general public and a financing tool for the property developers, REIT is expected to be a game changer for the Indian real estate industry. Currently, developers incur huge capital expenditure especially in Commercial Real Estate (CRE), on land, construction, interior fit-outs, etc. which remains locked, even after the asset is complete, until the asset generates returns to break-even. Through REIT, the developers can exit from the completed asset, and focus alone on development activity, which has a different risk-return profile. This is possible as REIT helps attract investment from local and global investors, who prefer a recurring, safe and moderate-yield income.

It is needless to say that REIT will help improve liquidity in the real estate sector as it will help owners of completed assets to raise capital from investors. For investors, the REIT can provide a new investment option with ongoing returns, elevated transparency and governance standards.

MOVING CLOSER TO THE REALITY

Initially proposed in December 2008 by the Securities and Exchange Board of India (SEBI), the SEBI (Real Estate Investment Trusts) Regulations, 2014 was finally notified in 2014. However, even after two years of the regulations in place we haven't seen a single REIT offering in the market. However, progressive changes on taxation and REIT structuring to make REITs more palatable and par with global REITS have been undertaken by the government after the notification in 2014.

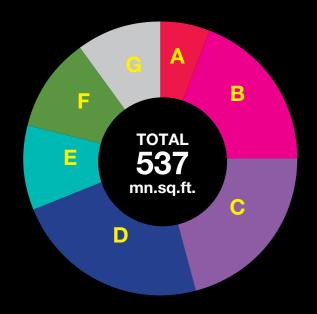
REIT-ABLE UNIVERSE

Table: Select eligible REIT property segments

Property type	REIT-able space Value (US	
	(million sq. ft)	billion)
Office	537	70
Retail	75	19
Warehouse	1,127	31
Total	1,739	121

Source: Knight Frank Research

DISTRIBUTION OF OCCUPIED OFFICE SPACE IN INDIA



А коцката	6%
В мимваі	19%
C _{NCR}	21%
D BENGALURU	23%
E _{PUNE}	10%
F CHENNAI	11%
G HYDERABAD	10%

Source: Knight Frank Research

The REIT-able arena may cover completed and rent-generating real estate assets. It is estimated that approximately USD 121 billion or 1.73 billion sq ft occupied CRE across office, retail and warehouse segments could potentially benefit from the REIT opportunity. In the case of office and retail, the top seven cities, namely Mumbai, NCR, Bengaluru, Chennai, Hyderabad, Kolkata and Pune, have been considered. The all-India estimate has been considered for the warehouse market. The ambit of the REIT-able universe extends to almost all rent-generating real estate. As a result, rented residential property can also be considered for the purpose of REITs. However, on account of the absence of an institutional rental market in the residential segment, it has not been considered in our REIT-able space estimates.

DEMONETISATION GAINS

The move on demonetisation of high value currency notes has led to a deluge of bank deposits, thereby significantly pushing up the liquidity in the banking sector. In effect, this has led to a considerable fall in government bond yields.

From the REIT perspective, the decline in government bond yields and the overall interest rate regime has increased the spread with prime office properties. This has also led to the compression of capitalisation rate for prime office assets that are perfect candidates for REITs. This compression in the capitalisation rate has led to the upward revaluation of office property in prime markets like BKC in Mumbai, thereby making REIT listing more attractive.

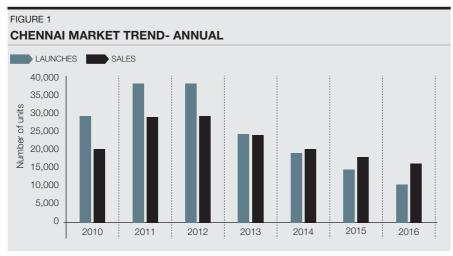




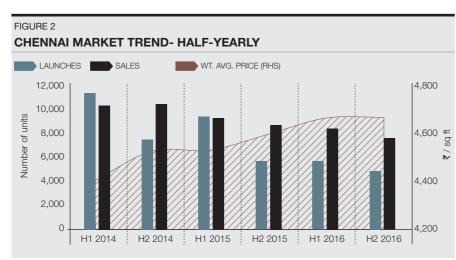


RESIDENTIAL MARKET

CHENNAI RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS



Source: Knight Frank Research



Source: Knight Frank Research

The announcement of the demonetisation drive by the Central Government on 8 November proved particularly damaging to home buyer sentiments as demand plummeted 31% YoY in Q4 2016 to its lowest quarterly level since 2010

has been reeling from a series of events ranging from political uncertainty due to changes in leadership, extreme weather conditions to the recent demonetisation drive that haven't allowed market volumes to improve, with the annual supply numbers now fallen below those of the Hyderabad residential market. Significantly, the residential

launches and sales have dropped

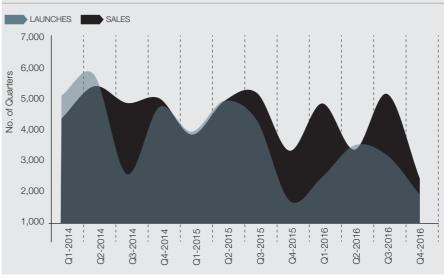
• The Chennai residential market

29% and 9% respectively, YoY during 2016.

 Sales levels that averaged close to 13,500 units every half-yearly period before H1 2014 now average approximately 9,100 units. The drop in sales shows some signs of stemming, with H2 2016 seeing a 12% drop YoY compared to the more pronounced 15% drop seen in the previous period.

• This receding homebuyer





Source: Knight Frank Research

interest has forced developers, in turn, to ease the pace of their launches in a bid to reduce unsold inventory pressure. Market players did expect a stabilisation in supply numbers during 2016 but the supply scenario has only deteriorated, as this analysis period saw an 18% drop in supply to 4.800 units.

- However, this excessive reduction in supply, compared to the sales levels that have exceeded supply over the past three periods, has also caused the unsold inventory level to fall to a six-year low, at 30,926 units.
- The weighted average prices have been growing, but at a steadily declining rate since H2 2012, when they grew at 10.4%, and now stand at 1.5% YoY at the end of H2 2016.
- The announcement of the demonetisation drive by the Central Government on 8 November proved particularly damaging to home buyer sentiments as demand plummeted 31% YoY in Q4 2016 to its lowest

quarterly level since 2010. The YoY decline in demand during H2 2016 would not have been as pronounced, had this event not taken place.

 Similarly, the month of October experienced a healthy number of apartment launches that pushed the fourth quarter supply numbers over the previous year's level. However, fewer launches were observed in the last two months of the Q4 2106 post the announcement of demonetisation.

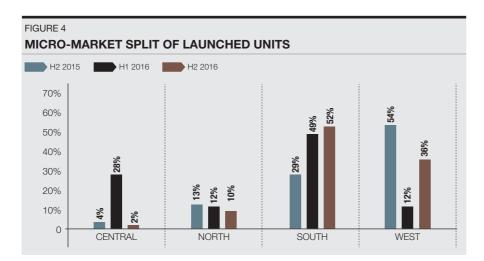
The supply scenario has deteriorated further as H2 2016 saw only 4,800 units launched in the current period, an 18% drop YoY



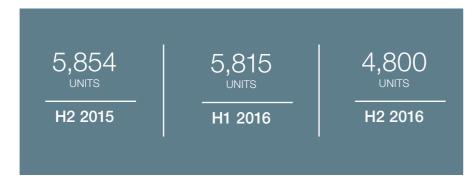


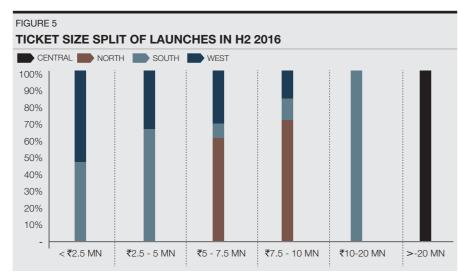
MICRO-MARKET SPLIT OF RESIDENTIAL LAUNCHES

- The south and west micro-markets saw the maximum residential development interest during H2 2016. Western locations saw a healthy recovery from the preceding period as developers such as Casa Grande and Urbantree launched the largest projects of the period in Korattur and Vanagaram respectively.
- The south Chennai micro-market that was the hardest hit during the 2015 November torrential rains has seen a healthy recovery in the number of units launched in the subsequent periods. South Chennai accounted for over half of the units launched during the period and saw the bulk of these launches take place in locations such as Kelambakkam, Mahindra World City, Ottiambakkam and Seruseri.
- Premium central Chennai locations such as Anna Nagar, Gopalapuram and MRC Nagar that witnessed a large number of units launched during the preceding period saw little residential development interest in H2 2016 as developers took cues from the deteriorating health of the premium segment.



Source: Knight Frank Research

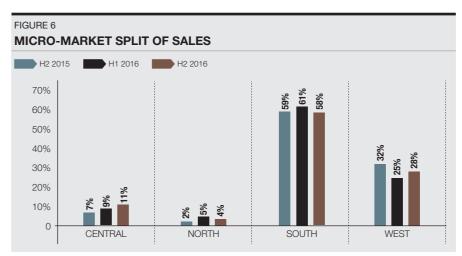




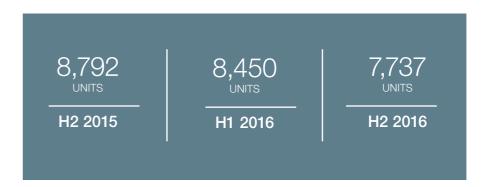
Source: Knight Frank Research

MICRO-MARKET WISE RESIDENTIAL SALES

MICRO-MARKET	LOCATIONS
Central Chennai	T. Nagar, Alandur, Nungambakkam, Kodambakkam, Adyar, 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



- The buyer behaviour has been largely consistent across the last three periods with a steady increase in buyer interest in central Chennai locations as the latent demand responded to the spike in supply of premium offerings during H1 2016.
- The western micro-markets such as Kolapakkam and Maduravoyal continue to see traction due to an increased uptake of the
- comparatively lower-priced inventory and good connectivity with SBD locations such as Mount-Poonamallee High Road and Valasaravakkam. The recent revival of the Maduravoyal-Chennai port elevated corridor will further boost the residential market in this micro-market.
- The south micro-market contains over half of the unsold inventory in the Chennai residential

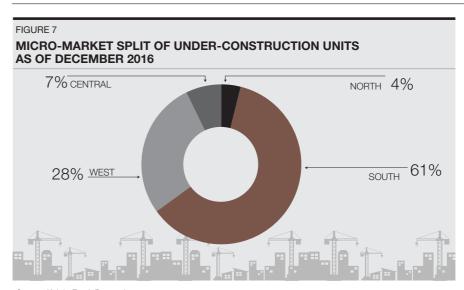
market and remains the biggest draw for the Chennai home buyer as both employment and social infrastructure drivers in conjunction with reasonably priced residential inventory keep improving its residential ethos.



CHENNAI METROPOLITAN REGION MAP



MICRO-MARKET SPLIT OF UNDER-CONSTRUCTION UNITS AS OF DECEMBER 2016



Source: Knight Frank Research

- Nearly 90% of the underconstruction units in Chennai are concentrated in the South and West micro-markets of the city.
- Comparatively poor connectivity
 to office market locations and the
 lack of social infrastructure has left
 very little incentive for the average
 Chennai homebuyer to look north
 for new homes. It does continue
 to cater to a relatively select group
 of buyers that are employed in
- industrial and port related activities in the north. This has caused developers to focus their energy on more viable locations in west and south Chennai.
- The shortage of developable land and high prices prevent sizeable residential development activity in central Chennai, but it remains the most sought-after residential micro-market of the city.

PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS
Central Chennai	Nungambakkam, R. A. Puram, Alwarpet, T. Nagar, Mylapore, Royapettah, Kilpauk, Anna Nagar, Teynampet, Adyar
West Chennai	K. K. Nagar, Valasaravakkam
South Chennai	Injambakkam, Palavakkam, Uthandi, Thiruvanmiyur



FIGURE 8 **PREMIUM MARKET TRENDS** LAUNCHES SALES WT. AVG. PRICE (RHS) 13,000 1200 1,000 12,000 800 600 P 400 1,000 200 0,000 H1 2014 H2 2014 H1 2015 H2 2015 H1 2016 H2 2016

Source: Knight Frank Research

Note: Premium markets include locations where the average ticket size of a residential unit is above ₹15 mn, are in proximity to the central business district of the city and have witnessed new project launches in the preceding three years

- The premium locations of the city are concentrated largely in the central Chennai areas such as Nungambakkam, Adyar and R. A. Puram, and in some locations with a high aspirational value in south and west Chennai such as Palavakkam, Injambakkam, Uthandi, Thiruvanmiyur and K. K. Nagar.
- The premium market in Chennai
 has historically been better
 insulated against market vagaries
 compared to the city's residential
 market, as there was relatively little
 supply in the early years of this
 decade compared to the situation
 today.

The premium segment

that experienced a slew of

launches in the beginning

of 2016 and pushed the

QTS level over that of

the Chennai residential

market, is now carrying

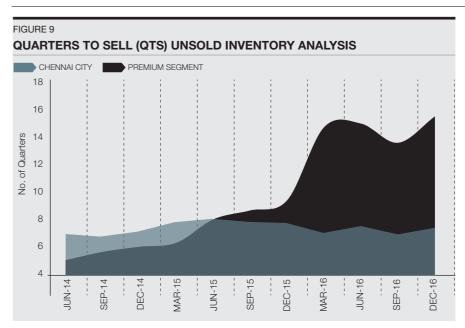
inventory

nearly four years of unsold

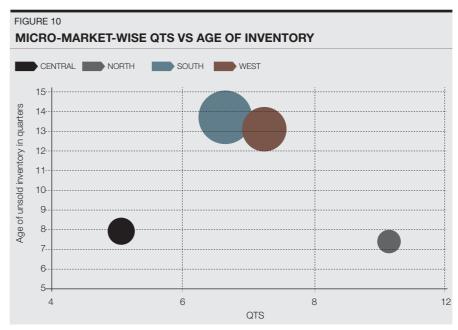
The Chennai market had a significantly higher appetite for premium residential products compared to the supply on offer. The increasing redevelopment of bungalows in central locations, the breakdown of joint families among the affluent and the dearth of lifestyle residential products have been strong drivers of the premium segment.

- However, this segment
 experienced a slew of launches in
 the beginning of 2016 and pushed
 the QTS level over that of the
 Chennai residential market, and is
 now carrying nearly four years of
 inventory.
- Prices in this segment have increased 32% since the beginning of 2014, compared to the overall residential market where prices have only grown by 7% during the same period. The strong price growth and low inventory levels encouraged developers to increase the supply in the market during the first half of 2016 but price growth in this segment also slowed down to 3% during H2 2106.

CHENNAI MARKET HEALTH



Source: Knight Frank Research



Source: Knight Frank Research

Note: The size of the bubble indicates the quantum of unsold inventory

- 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 in order to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market.
- The Chennai residential market currently has a QTS of 7.3, with an average age of inventory of 12.9 quarters. The concerted focus of developers to reduce the unsold inventory load before ramping up supply has paid dividends as the inventory load of the Chennai residential market has not exceeded eight quarters since the past two years in spite of falling demand.
- Moreover, south and west Chennai contain the largest chunks of unsold inventory in the Chennai market and have a QTS of 7 and 8 quarters, respectively. Relatively affordable residential prices, proximity to the employment hubs and improving social infrastructure continue to drive both these micromarkets.
- North Chennai has seen a significant reduction in the age of its unsold inventory that has fallen from 11 quarters in H2 2015 to 7 quarters in H2 2016 due to a sustained decrease in supply, although it continues to have the highest QTS levels among all micro-markets.



CHENNAI METRO PHASE II, A BOON FOR THE OMR

hennai originated as a port city and expanded its geographical footprint towards its southern and western boundaries along the OMR and GST roads and the Bengaluru highway. The OMR especially has been the focus of development as the state government established an IT corridor along the six lane highway to promote a progressive and IT friendly image of Tamil Nadu. The OMR stretch, consequently, has seen prodigious growth over the past decade, as quality office spaces tailor-made for the IT/ITeS and other services sectors have come up, and this stretch currently houses over half of the office stock in the city.

Residential development also followed growing employment opportunities on the OMR as corporates progressively set up shop there. The fact that 2016 saw vacancy levels in the PBD OMR and GST business district halve since a year ago from 50% to 26% currently bears testament to its growing popularity among corporate occupiers. As the government continues to promote the OMR as an IT corridor, an estimated 80% of the IT/ITeS and other services sectors'

workforce across the city will continue to commute to these office hubs in future as well. However, an already stretched road infrastructure scenario will be further aggravated as this length of road is bereft of MRTS or metro connectivity the way things stand now.

There is a pressing need to provide an alternate means of efficiently commuting to and from the entire length of this IT corridor. The OMR is perpetually in a state of congestion especially during peak hours when commuter traffic is at its height. To address this, a detailed plan of Phase II of the metro has been drawn up by the Chennai Metro Rail Ltd. and recently submitted to the state government. Currently, the suburban rail network extends only till Perungudi on the OMR but the Phase Il plan of the metro has envisaged a route that will start at Madhavaram Milk Colony in the north and pass through dense residential catchments of Perambur, Luz, Adyar and the East Coast Road to end at Shollinganallur on the OMR. While this metro line will run along the OMR and connect it to central locations, the Phase II of the metro also has plans of a metro

corridor that will start at Madhavaram Milk Colony and traverse through Padi, Valasaravakkam, Medavakkam and end at SIPCOT to the west of the OMR line.

These two lines will provide comprehensive connectivity to the OMR from the central and western locations of Chennai. In tandem with the suburban railway line and the six lane highway, the metro will be instrumental in further boosting the residential and commercial attractiveness of the OMR.

PRICE MOVEMENT IN H2 2016

 The sharp decline in launches and reducing unsold inventories in tandem with comparatively steady sales levels have stemmed the decline in price growth. H2 2016 saw prices grow at a modest 1.5% YoY, approximately the same growth rate achieved in H2 2015.

 Price growth in the premium segment has always been much stronger than that of the residential market overall. However, the premium segment also came under pressure during the current period due to the spike in supply during H1 2106 rendering the current period's price growth at a nominal 3% compared to 9% in H2 2015.

WEIGHTED AVERAGE PRICE MOVEMENT IN CHENNAL

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Chennai	4,665	1.5%	0.5%
Premium markets	14,900	3.0%	2.0%

PRICE MOVEMENT IN SELECT LOCATIONS

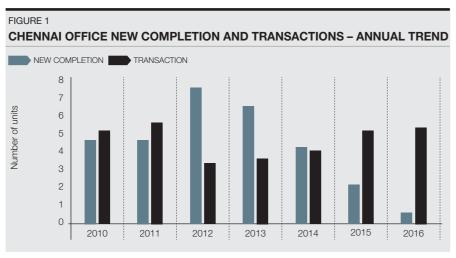
LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Anna Nagar	Central Chennai	10,700–11,900	2%	1%
Adyar	Central Chennai	16,650–17,800	1%	1%
Kilpauk	Central Chennai	14,800–16,000	3%	0%
T. Nagar	Central Chennai	18,250–19,350	3%	1%
Alandur	Central Chennai	7,000–7,500	2%	2%
Porur	West Chennai	5,200–5,500	2%	2%
Ambattur	West Chennai	4,100–4,600	2%	1%
Mogappair	West Chennai	6,200–6,700	2%	2%
lyyappanthangal	West Chennai	4,000–4,500	2%	2%
Sriperumbudur	South Chennai	2,700–3,200	2%	1%
Perumbakkam	South Chennai	4,100–4,500	1%	0%
Chrompet	South Chennai	4,200–4,700	1%	0%
Sholinganallur	South Chennai	4,500–5,500	2%	1%
Guduvancheri	South Chennai	3,200–3,700	1%	0%
Kelambakkam	South Chennai	3,500–3,900	0%	0%
Tondiarpet	North Chennai	4,500–4,800	1%	0%
Kolathur	North Chennai	4,800-5,500	2%	1%
Madhavaram	North Chennai	4,500-5,000	2%	0%
Perambur	North Chennai	6,200-6,500	2%	1%
Guduvancheri Kelambakkam Tondiarpet Kolathur Madhavaram	South Chennai South Chennai North Chennai North Chennai North Chennai	3,200–3,700 3,500–3,900 4,500–4,800 4,800–5,500 4,500–5,000	1% 0% 1% 2% 2%	0% 0% 0% 1% 0%

Source: Knight Frank Research

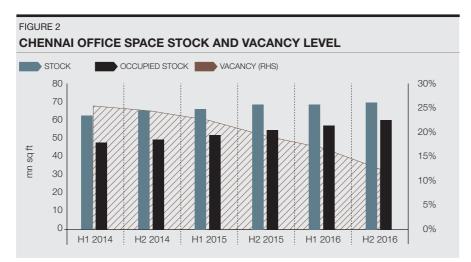


OFFICE MARKET

CHENNAI OFFICE MARKET STOCK, NEW COMPLETIONS, TRANSACTIONS AND VACANCY TRENDS



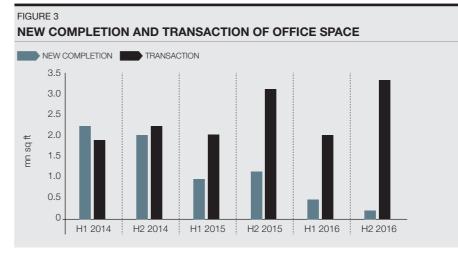
Source: Knight Frank Research



Source: Knight Frank Research

- The Chennai office space market moved from strength to strength as demand rose for the fourth consecutive year despite the acute space crunch afflicting the market.
- Retaining the momentum gained last year when the office market achieved record transaction levels, 2016 has exceeded the previous year's heights by 4% and ended the year at 5.3 mn sq ft
- H2 2016 experienced the highest transaction levels of any half-yearly

- period in the history of the Chennai office space market on the back of big-ticket transactions by TCS, Accenture, General Electric and IVTL Infoview among others.
- Conversely, supply numbers
 hit historical lows as the supply
 crunch continues to hamstring
 the market. 2016 witnessed just
 0.5 mn sq ft of office space come
 online, compared to 2.1 mn sq ft in
 the previous year.
- Spiralling transaction numbers,



Source: Knight Frank Research

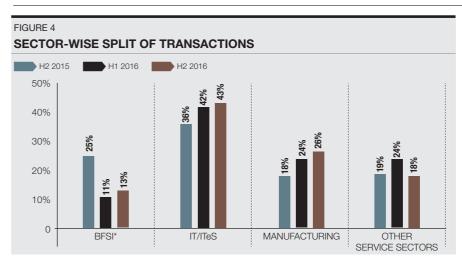
coupled with the drastic fall in supply, have pushed down vacancy levels. The fact that the city saw just 2.7 mn sq ft of supply coming online since H1 2015, compared to the 10.3 mn sq ft of office space taken up, has caused vacancy levels to plummet from 22.5% in H1 2015 to 12.2% H2 2016.

The SBD and PBD OMR and

GST business districts have seen the most drastic fall in vacancy levels during 2016. While the SBD vacancy levels are now under 5%, the latter has seen vacancy levels nearly halve during 2016.

 The total office space transaction volume in H2 2016 was 3.3 mn sq ft, while only 0.2 mn sq ft of new office space came online. The SBD and PBD OMR and GST business districts have seen the most drastic fall in vacancy levels during 2016. While the SBD vacancy levels are now under 5%, the latter has seen vacancy levels nearly halve during 2016

SECTOR ANALYSIS



Source: Knight Frank Research

Note: BFSI includes BFSI Support Services

Electric and IVTL Infoview among others

H2 2016 experienced

the highest transaction

levels of any half-yearly

period in the history of

market on the back of

the Chennai office space

big-ticket transactions by

TCS, Accenture, General





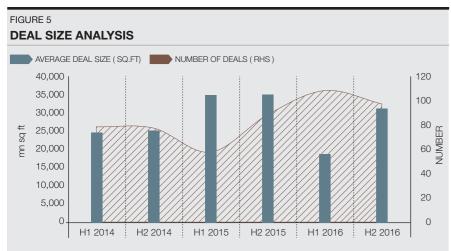
Over half of the space taken up by the manufacturing sector was accounted for by Ramanujan IT City in Taramani on the SBD OMR

- The Chennai office market has traditionally been anchored by the IT/ITeS sector and recent periods—especially the last 18 months—have seen the manufacturing sector also gaining in market share.
- The BFSI sector, that had built up some momentum in 2015, saw its share fall to 13%, as BFSI majors could not expand or set up new back office operations due to the lack of large format office spaces.
- The IT/ITeS sector continues to be the largest consumer in the Chennai office space market despite the manufacturing and other service sectors gaining

- share in recent times. The sector accounted for 1.3 mn sq ft of office space transactions in H2 2016.

 Accenture, TCS and IVTL Infoview were among the most active IT/
 ITeS companies during this period.
- The share of the manufacturing sector has been on the rise, as the bulk of the quality office spaces available in recent times, particularly in the SBD, conformed to their requirements compared to those of IT/ITeS companies and BFSI back office operations. Companies from this sector such as General Electric, Astra Zeneca and Philips took up significantly large office spaces in the city.

DEAL SIZE ANALYSIS



supply failed to deter occupier interest as H2 2016 saw the number transactions as well as the average deal size come close to H2 2015 levels. This bodes well for the market and depicts its underlying strength.

• The dearth of fresh office space

Source: Knight Frank Research

SELECT TRANSACTIONS

OCCUPIER	BUILDING	LOCATION	APPROX. AREA (SQ FT)
Divya Sree Point	Accenture	Sholinganallur	300,000
Chennai One	TCS	Thoraipakkam	330,000
Prince Technopark	IVTL Infoview	Thoraipakkam	180,000
Ramanujan IT City	GE Electric	Taramani	174,000
Ramanujan IT City	Astra Zenca	Taramani	157,000
Chennai One	Icon Clinic	Thoraipakkam	126,000
SP Infocity	Fresh Desk	Kandanchavadi	78,000
Ramanujan IT City	Society General	Taramani	69,000
Ramanujan IT City	Philips	Taramani	69,000

Source: Knight Frank Research

BUSINESS DISTRICT ANALYSIS

BUSINESS DISTRICT CLASSIFICATION

BUSINESS DISTRICTS	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

- The OMR attracted over 75%
 of the demand during H2 2016
 as occupiers took up space in
 the relatively lower priced SBD
 OMR and the PBD OMR and GST
 business districts.
- The PBD OMR and GST business district that had vacancy levels as high as 50% at the end of 2015,

has seen this number almost halve in H2 2016. Occupiers, especially from the IT/ITeS industry took up space in Thoraipakkam, Sholinaganallur, and Navallur in projects such as Chennai One, Prince Technopark and ETA Technopark.

Over half of the space taken up

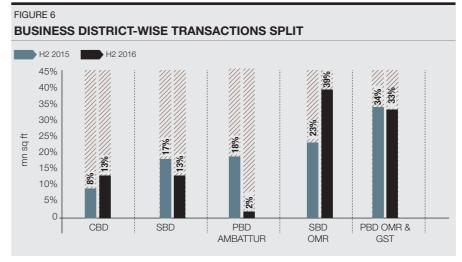
by the manufacturing sector was accounted for by Ramanujan IT City in Taramani on the SBD OMR.

Just three locations—
 Thoraipakkam, Taramani and
 Kandanchavadi—accounted for over half of the total transacted volume in H2 2016.



CHENNAI BUSINESS DISTRICT MAP



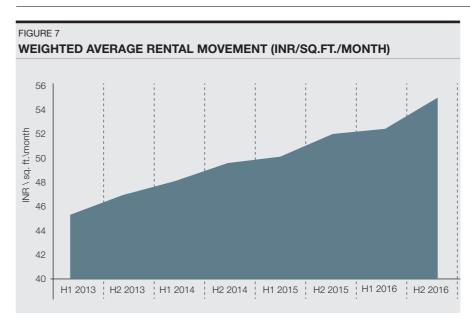


Source: Knight Frank Research



The IT/ITeS sector continues to be the largest consumer in the Chennai office space market despite the manufacturing and other service sectors gaining share in recent times. The sector accounted for 1.3 mn sq ft of office space transactions in H2 2016

RENTAL TREND



Source: Knight Frank Research



Rental growth was
healthy across micromarkets, and SBD
locations such as
Perungudi, Guindy and
Taramani continued to
witness above-average
rental growth, particularly
as vacancy levels
dropped to as low as 4%
in the SBD and 12% on
the SBD OMR

BUSINESS DISTRICT-WISE RENTAL MOVEMENT

BUSINESS DISTRICT	RENTAL VALUE RANGE IN H2 2016 (₹/SQ FT/MONTH)	12 MONTH CHANGE	6 MONTH CHANGE
CBD and off-CBD	60–95	4%	2%
PBD OMR and GST Road	25–35	6%	4%
SBD OMR	45–80	6%	3%
PBD Ambattur	28–35	3%	1%
SBD	50–65	4%	2%

Source: Knight Frank Research

- Rental values have seen a sustained rise since 2013 on the back of steady demand and a much more drastic reduction in office space inventory coming online during successive years.
- The lack of vacant office stock, coupled with steady demand, has pushed weighted average rentals in the Chennai office space market to ₹55 per sq ft per month at the end of H2 2016 – a significant 5.4% growth YOY.
- Rental growth was healthy across micro-markets, and SBD locations such as Perungudi, Guindy and Taramani continued to witness above-average rental growth, particularly as vacancy levels dropped to as low as 4% in the SBD and 12% on the SBD OMR.



UNDERSTANDING THE IMPACT OF GST ON THE ECONOMY

- contributed by Hetal Bachkaniwala

roduction of all goods involves a number of tages before it is ready for consumption. These stages may include processing of various raw materials, assembling, transportation and storage among others. Each stage of this process is carried out either by the same organisation or different ones. Thus, it is possible that the output of one manufacturer becomes input for the other and so on. Since the incidence of tax arises every time goods are produced or sold, the cost of the final product increases not only on account of the cost of inputs, but also on account of the duty paid for them. In other words, the tax burden goes on increasing as raw material and final product go from one stage to the other because, each subsequent purchaser has to pay tax on the material that has already suffered tax. This is called the cascading effect or double taxation.

Before the implementation of the Value Added Tax (VAT) system in India, consumers had to bear the burden of such a double taxation system resulting in higher value of the final product. With the introduction of the VAT system during 2003-2006, the inefficiencies of the erstwhile taxation system were eliminated to a large extent. Taxes were levied only on the value added by a manufacturer and not the entire value of the product. A manufacturer gets credit for the amount of tax he pays on the raw materials purchased that can be set-off against the tax liable on his final product. Hence, his effective tax outflow is limited to the value addition he has done and not on the final price of sale. Similarly, a distributor is levied tax only on the value

that he adds and not the final sale price.

The implementation of the VAT structure in India could not be done in its entirety, as there was stiff opposition from certain state governments with respect to modalities of revenue sharing with the central government. The dual governance structure of central and state bodies resulted in a two-fold system of tax collection with excise duty, service tax and customs duty being collected by the Central Government and VAT and sales tax by the respective state governments. VAT is liable on sales that are carried out within the same state where the product is manufactured. However, for inter-state sales the erstwhile Central Sales Tax (CST) is applicable and charged at 4% (most cases) of the sale value. Hence, from the perspective of a manufacturer whose plant is located in Maharashtra, the Maharashtra VAT will be applicable if the sale happens within the state. However, if the sale happens outside Maharashtra, like Gujarat, then CST will be applicable. The flipside of CST is that unlike VAT, where the taxpayer gets input VAT credit, which can be adjusted against other outgoing taxes, there is no input credit available for CST. This increases the final price of the product, as there is a cascading impact of taxes. However, in order to avoid this, the same manufacturer can open a warehouse in Gujarat and transfer his goods through the stock transfer method instead of selling directly to the distributor. This way the manufacturer is selling through his warehouse in Gujarat and hence liable to pay Gujarat VAT instead of CST.

Table: Taxes subsumed under GST

Subsumed under Central GST	Subsumed under State GST
Central Excise Duty	VAT / Sales Tax
Service Tax	Entertainment Tax
Additional Customs Duty	Luxury Tax
Surcharges	State Cesses and Surcharges
Cesses	

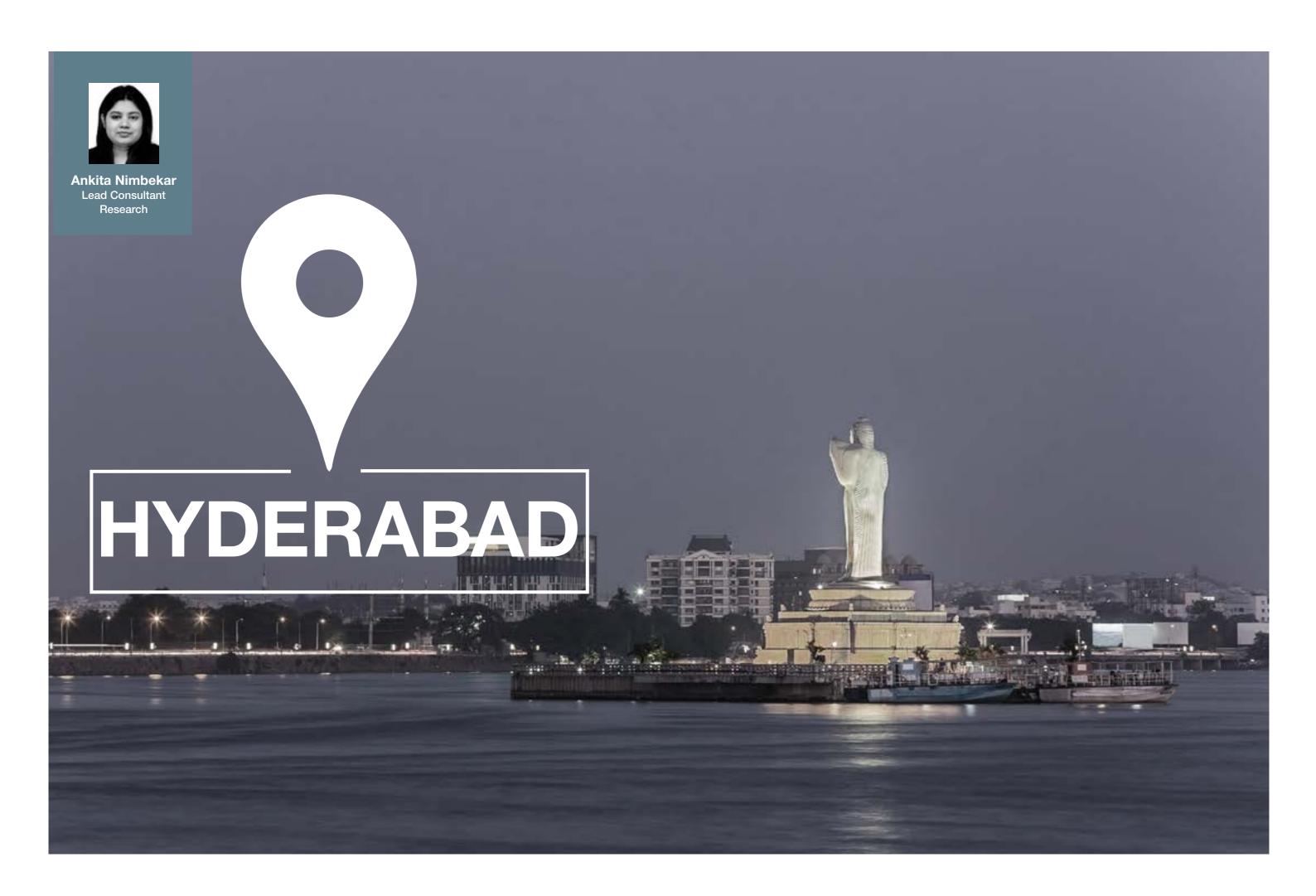
Source: Knight Frank Research

The above two scenarios clearly show that distributors will avoid buying directly from the manufacturer in another state and prefer buying from a warehouse in the same state. Such a tax structure in India has forced companies to locate warehouses in all the states where they operate resulting in an inefficient supply chain. Hence, instead of creating an effective supply chain by strategically locating warehouses, the focus remains on tax efficiencies. This has shaped the need for bringing in an efficient tax structure that eliminates the state boundaries by creating a common market place for India.

The concept of Goods and Services Tax (GST) is a move in this direction. GST is the natural progression from the existing complex and cascading tax structure into a unified value added system of taxation. In most

ways it is an extension of the current VAT system without the inefficiencies of double taxation on inter-state sales. Keeping in line with the governance structure of the country, GST would be levied simultaneously by the Centre and state through Central GST and State GST, respectively. The system will allow the set-off of GST paid on the procurement of goods and services against the GST that is payable on the sale of goods or services. However, the end consumer bears this tax as he is the last person in the supply chain.

GST will ensure the abolition of CST, thereby making the country a single market that will no longer be divided by state boundaries. This will eliminate the need to have warehouses in each state to avoid CST, thereby ensuring the removal of a redundant level of warehousing in the supply chain. This will enable a reduction in the number of warehouses and allow companies to focus on building fewer, larger and more strategically located warehouses. Larger warehouses can benefit from sophisticated Information Technology (IT) systems like Warehousing Management Systems (WMS) that are not feasible in smaller, scattered warehouses. This will also help in bringing down the cost and improve service levels through economies of scale. Supply chains will become leaner and efficient in terms of warehousing, transport routes, distribution and sourcing wherein the decisions taken will be based on operational efficiency rather than tax avoidance mechanism.





RESIDENTIAL MARKET

Hyderabad residential

substantial recovery in Q3

2016, where in launches

and sales witnessed a

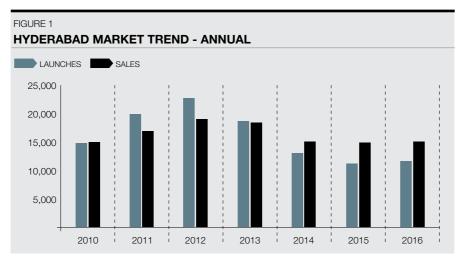
37% and 56% increase

compared to the same

quarter last year

market observed

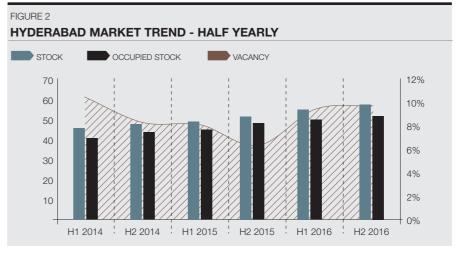
HYDERABAD RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS



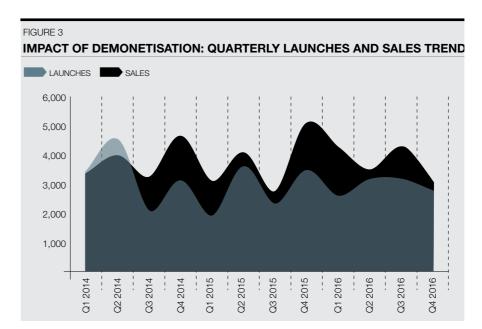
Source: Knight Frank Research

- The Hyderabad residential market withered over the last five years after peaking in 2012. While the city observed more than 22,700 units in new launches and 19,000 units in sales during 2012, these numbers have fallen by 49% and 21% respectively since then.
- Steady sales volume from 2010
 to 2012 led to aggressive new
 launches by developers during that
 period. However, developers soon
 acknowledged piling-up of unsold
 inventory in the city and lowered
 the number of new launches from
 2013 onwards. Although there is a
 substantial drop in the number of
 new launches, sales volume have
 remained more or less stable.
- The reduction in new launches with each passing year and stable sales volume helped in rebalancing the market to a great extent as the unsold inventory level dropped to its lowest level in the last six years to 28,088 units in H2 2016.

- The buoyancy observed in the Hyderabad office market has had a positive impact on the residential launches and sales. New launches witnessed a growth of 3% in H2 2016 compared to H2 2015. On the other hand sales have dropped by 6% during H2 2016 compared to same period previous year.
- Hyderabad residential market observed substantial recovery in Q3 2016, where in launches and sales witnessed a 37% and 56% increase compared to the same quarter last year.
- Move to demonetise high value currency notes on 8 November 2016 disrupted market sentiment and accordingly created a major dent on the residential market in Q4 2016 which saw sales plunge by 40% to 3,034 units.
 We reckon that had not been the demonetisation move, the H2 2016 sales number would have been much higher in comparison to H2 2015.



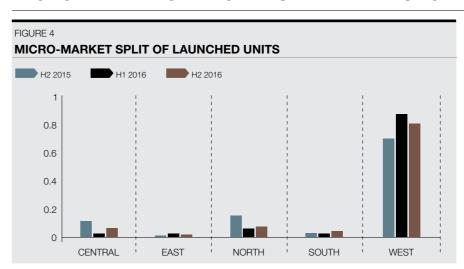
Source: Knight Frank Research



Move to demonetise
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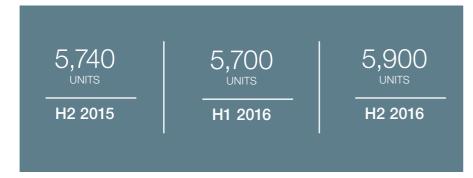
Source: Knight Frank Research

MICRO-MARKET SPLIT OF RESIDENTIAL LAUNCHES



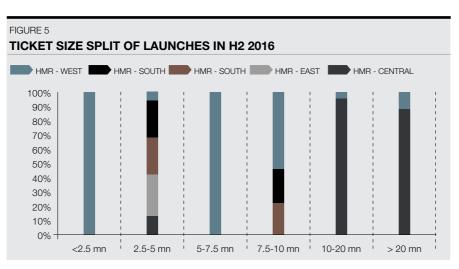
Source: Knight Frank Research





- All the residential micro-markets witnessed project launches in the ₹2.5–5mn ticket size range, with basic amenities that are preferred by mid-segment buyers.
- The ₹5-7.5mn ticket sizes saw
 the most launches concentrated
 largely in the West zone. The
 demand for homes with good
 amenities is quite high in this zone,
 as most of the buyers work for IT/
 ITeS companies and have certain
 lifestyle expectations from the
 projects.
- West Hyderabad attracts most of the development interest in the city, as its residential ethos and proximity to IT/ITeS and BFSI

- sector hubs such as HITEC City and Gachibowli continue to attract young IT employees that form the bulk of the city's workforce. Nearly 73% of the new launches occurred in mid to high end segment in West Hyderabad during H2 2016.
- Hitech city Manikonda and Narsingi in West Hyderabad saw maximum project launches during H2 2016 from prominent developers such as Aditya, Antriksh and Janpriya.
- Projects with average ticket sizes above ₹10 mn were launched largely in the western and central locations in H2 2016.



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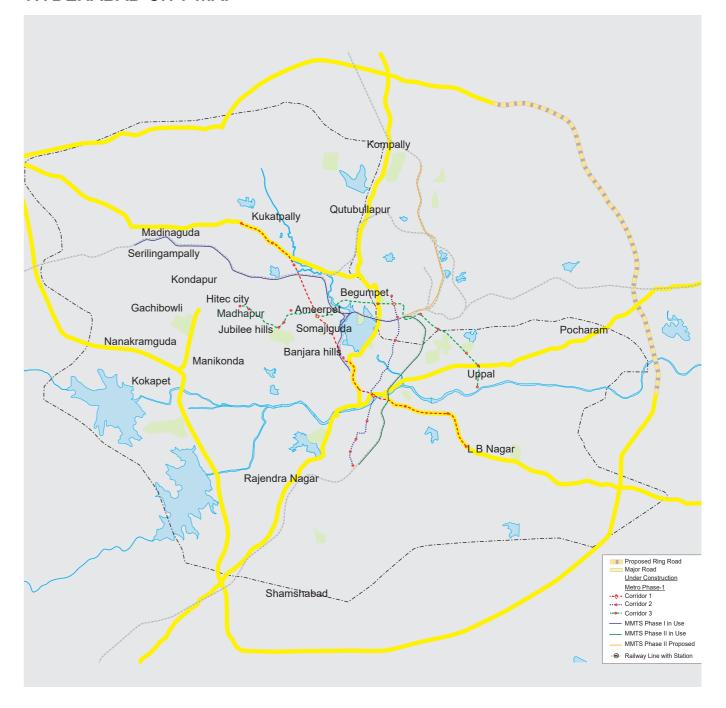
saw the most launches

Source: Knight Frank Research

MICRO-MARKET-WISE RESIDENTIAL SALES

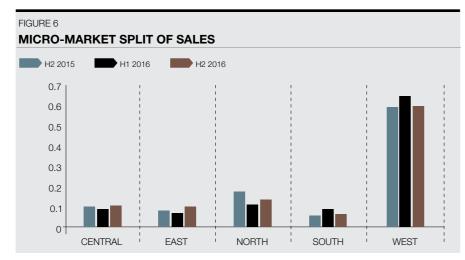
MICRO-MARKET	LOCATIONS		
HMR - Central	Begumpet, Banjara Hills, Jubilee Hills, Panjagutta, Somajiguda		
HMR – West	Kukatpally, Madhapur, Kondapur, Gachibowli, Raidurgam		
HMR – East	Uppal, Malkajgiri, L.B. Nagar		
HMR – North	Kompally, Medchal, Alwal, Quthbullapur		
HMR – South	Rajendra Nagar, Shamshabad		

HYDERABAD CITY MAP





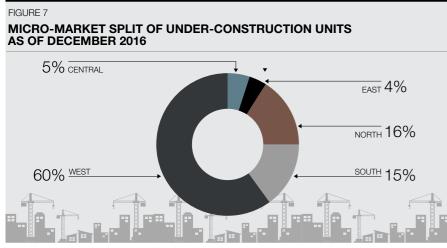
- West Hyderabad remains the preferred market, largely because buyers have a preference for ready to move in properties closer to the office hubs. Nearly 60% of the home sales took place in this zone.
- While the relative shares of the various residential zones in Hyderabad have not deviated much, the Central and North zones witnessed an increase in their shares of sales in H2 2016 due to a proportional increase in the number of launches during the same period.



Source: Knight Frank Research



MICRO-MARKET SPLIT OF UNDER-CONSTRUCTION UNITS AS OF DECEMBER 2016



Source: Knight Frank Research

- The growth of the IT corridor and financial district together with the growth of an organised retail market, has enhanced the residential appeal of West Hyderabad. This zone accounts for the largest share of the underconstruction inventory, followed by the North, South, Central and East markets respectively.
- The buyers' preference for locations in the West zone is also reinforced by the fact that it has the lowest proportion of unsold inventory in relation to underconstruction units.
- Conversely, the East and South zones have the highest proportion of unsold inventory of underconstruction units.

NARSINGI-PUPPALGUDA: AN UPCOMING RESIDENTIAL DESTINATION

lie just south of HITEC city and Gachiwbowli, which have seen the bulk of the office space development in Hyderabad during the last 15 years. During this period, both, HITEC City and Gachibowli have also evolved as residential destinations, commanding prices in the range of ₹4,200-5,800 per sq ft. Proximity to employment hubs and higher-priced residential locations, along with infrastructure development, will be the primary drivers for price growth in the Puppalguda-Narsingi cluster.

Close to 50 mn sq ft (approximately 625,000 employees) or nearly 80% of the existing office stock in Hyderabad situated in locations such as HITEC City, Gachibowli, Nanakramguda, Raidurgam, Kondapur and Kothaguda can be accessed within 30 minutes from the Puppalguda-Narsingi cluster via road. Additionally, approximately 10 mn sq ft of office space is expected to attain completion within this catchment over the next five years. This translates into incremental employment for an additional 125,000 employees.

Currently, a large portion of Puppalguda that lies east of the ORR

is connected to HITEC City via the Lanco Hills road and HITEC City main road. An alternative route exists via the ORR through the Narsingi-Puppalguda main road, which is highly congested and in a state of disrepair, thus taking much more time to traverse. However, this location will be connected directly to the ORR via the radial road no.5 which is a four lane road currently under construction and will cut the current road commute to HITEC City from 25-30 minutes to approximately 15 minutes. These locations are also well supported by adequate social infrastructure, such as major malls, hospitals and educational institutions - all within a 30-minute drive. The international airport is also just a 30-minute drive away. Also under construction is a flyover that will connect the cluster to the Old Mumbai Highway close to Toli Chowki, further improving its connectivity to the city centre. We believe that all these factors will prove to be strong demand drivers for the Puppalguda-Narsingi cluster, going

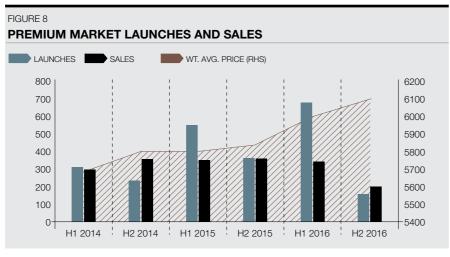
Currently, average prices in this cluster are at ₹2,900 per sq ft and trade at a significant 40% discount,

compared to Kondapur which has similar connectivity characteristics. We expect that, as the demandsupply equation tightens further due to the reasons discussed earlier, prices in the Puppalguda-Narsingi cluster will grow by 41% and reach approximately ₹4,100 per sq ft by 2020. Prices in this cluster will continue to lag behind those in Kondapur but the discount will reduce from the existing 40% to 33% by 2020. The Puppalguda- Narsingi cluster, however, is expected to see far greater traction in average prices on the back of increased demand due to improved connectivity, supply constraints and the fact that this will be arguably the only location within a 20-minute commute from HITEC City and Gachibowli at such a low price base.



PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS
HMR - Central	Banjara Hills, Begumpet, Jubilee Hills, Srinagar Colony, Somajiguda
HMR – West	Madhapur

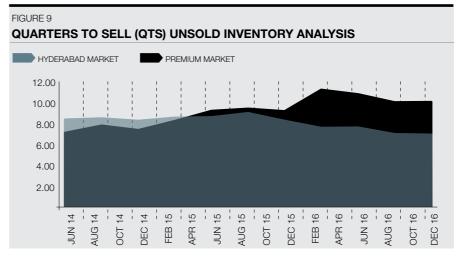


Source: Knight Frank Research

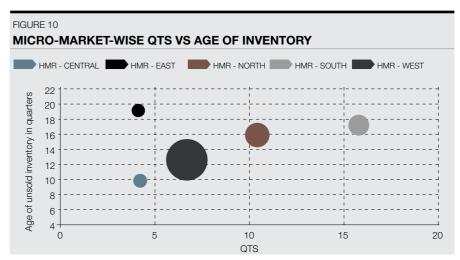
Note: Premium markets include locations where the average ticket size of a residential unit is above ₹15 mn, are in proximity to the central business district of the city and have witnessed new project launches in the preceding three years

- Hyderabad's premium market constituting locations such as Banjara Hills, Jubilee Hills, Madhapur, Somajiguda and Srinagar Colony, among others, has experienced a substantial 56% YoY de-growth in launches in H2 2016.
- Sales volume also witnessed a significant decline of 45% in H2 2016 compared to the same period last year. Increased new launches and constricted demand have led to an inventory pile-up in this segment, where the quarters to sell (QTS) has gone up to 10.
- Despite unsold inventory pressures, developers continue to be bullish about the premium segment. The weighted average price moved up 4% in H2 2016 YoY and stands at ₹6,085 per sq ft.

HYDERABAD MARKET HEALTH



Source: Knight Frank Research



We believe that the year 2016 would have been marginally better than 2015 had it not been for the demonetization move. as the sales number for the first nine months were showing positive trend

Source: Knight Frank Research

- 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 eight preceding quarters in order to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market.
- The Hyderabad market QTS has been range-bound between 8-9 quarters. Now at 8 quarters, the QTS is at a very healthy level and is at its lowest in the last four years.
- The steady fall in launches has

- helped the QTS level stay rangebound; improving sales volume has helped in unwinding the unsold inventory levels. The consistentlydeclining unsold inventory levels and strong demand should help the market health further, going forward.
- Moving from a QTS level of just 9.3 in H2 2015 to 10.21 in H2 2016, the premium segment has deteriorated much more rapidly compared to the overall Hyderabad residential market, as the supply of projects with average ticket sizes over ₹15 mn increased dramatically, especially in the second half of

- 2016, while demand remained constricted.
- It is clear from the market health chart that the central zone is the healthiest market today, as it has the lowest QTS, and comparatively, the youngest unsold inventory among all the residential markets of Hyderabad. This could be attributed to the limited inventory and inherent supply constraints in this zone.
- West Hyderabad follows closely on the same parameters. Its relative health can be gauged quite clearly from the fact that it has a lower QTS (6.7) and that its inventory

The Hyderabad market QTS has been rangebound between 8-9 quarters. Now at 8 quarters, the QTS is at a very healthy level and is at its lowest in the last four years

74



also gets liquidated much quicker than the other markets despite it having the largest block of unsold inventory. Incidentally, its

proportion of unsold inventory to under-construction stock is also the lowest among all the zones.

inventory, while South Hyderabad will take the most time to liquidate its existing unsold inventory.

· East Hyderabad holds the oldest

PRICE MOVEMENT IN H2 2016

• The weighted average asking prices for the Hyderabad residential market grew marginally by 3.0% YoY to ₹3,710 psf during H2 2016. A six monthly

comparison shows a 2% growth in prices for the market owing to stable demand.

• Prices continued to firm up

across locations in central and west Hyderabad due to a limited inventory and launches at higher price ranges respectively.

WEIGHTED AVERAGE PRICE MOVEMENT IN HYDERABAD

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Hyderabad	3,710	3.0%	2.0%
Premium markets	6,085	4.0%	2.0%

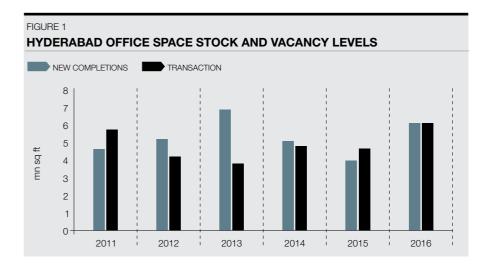
PRICE MOVEMENT IN SELECT LOCATIONS

LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Begumpet	Central	4,500–6,000	2%	1%
Banjara Hills	Central	7,000–9,000	3%	0%
Jubilee Hills	Central	4,500–6,200	2%	0%
Madhapur	Central	5,800-7,800	3%	1%
Uppal	East	2,600–2,800	4%	0%
L. B. Nagar	East	2,500–2,900	3%	2%
Nacharam	East	2,200–2,800	3%	1%
Kompally	North	2,200–3,100	2%	1%
Quthbullapur	North	2,100–2,600	1%	0%
Shamirpet	North	2,000–2,400	1%	0%
Shamshabad	South	2,300–3,000	0%	0%
Bandlaguda	South	2,200–3,100	0%	0%
Rajendranagar	South	2,100–3,100	2%	0%
Kondapur	West	4,000-5,200	2%	1%
Gachibowli	West	3,800–4,750	4%	1%
Manikonda	West	3,400–4,500	3%	1%
Kukatpally	West	2,800–4,000	4%	1%
Madinaguda	West	2,600–3,350	3%	1%

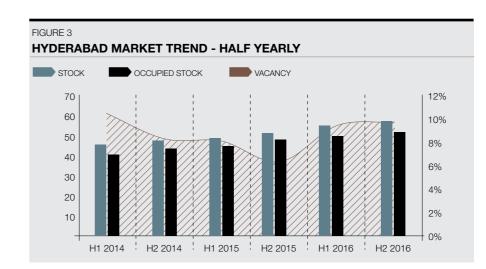
Source: Knight Frank Research

OFFICE MARKET

HYDERABAD OFFICE MARKET STOCK, NEW COMPLETIONS, TRANSACTION AND VACANCY TRENDS



Source: Knight Frank Research



Source: Knight Frank Research

- The Hyderabad office market witnessed its highest yearly office space transaction in 2016. Nearly 6 mn sq ft of office space was transacted during the year, which was 31% higher than the 4.6 mn sq ft mark achieved in 2015.
- In terms of new completions, approximately 6 mn sq ft of office space was delivered during the year, mostly in SBD and PBD West. This was higher by 54% from the 3.9 mn sq ft delivered during 2015.
- The vacancy ranges between 9-10% on a stock of 57.3 mn sq ft in the Hyderabad market. This implies that a meager 5.6 mn sq ft of office space is available in the market across all business districts. Such low vacancy is one of the biggest challenges for the Hyderabad market as occupier interest continues and quality office space is not available. It also includes office stock in locations that are not much preferred by occupiers. Moreover, vacancy

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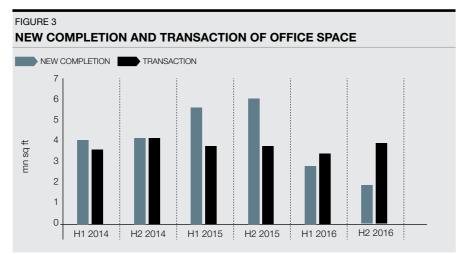
H2 2016 recorded one of the highest transaction volumes at 3.2 mn sq ft. This was 3% higher than H2 2015, when 3.1 mn sq ft of space was absorbed, which was the highest ever half-yearly transactions for the

Hyderabad office market

levels in the most sought-after locations like HITECH City, Gachibowli and Nanakramguda are as low is 2–4%.

 H2 2016 recorded one of the highest transaction volumes at 3.2 mn sq ft. This was 3% higher than H2 2015, when 3.1 mn sq ft of space was absorbed, which was the highest ever half-yearly transactions for the Hyderabad office market.

 On the other hand, new completions have remained tepid at 2.2 mn sq ft in H2 2016; a large share of this was already pre-committed in the previous quarters.



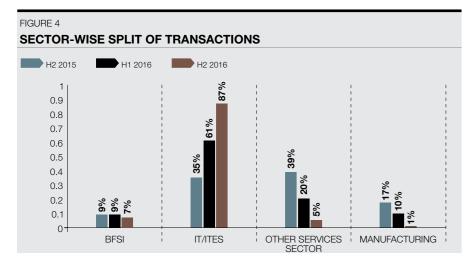
Source: Knight Frank Research

3.1 MN SQ FT H2 2015 2.8 MN SQ FT H1 2016 3.2 MN SQ FT H2 2016

Although the IT/ITeS sector
has traditionally dominated the
transaction pie in the Hyderabad
office space market, its share
soared further to 87% during
H2 2016. Nearly 2.7 mn sq ft
of office space, including precommitments, was transacted by
IT/ITeS companies in H2 2016.
Google, FactSet and Genpact were
some of the prominent occupiers
in the IT/ITeS category, taking
up large office spaces during H2
2016.

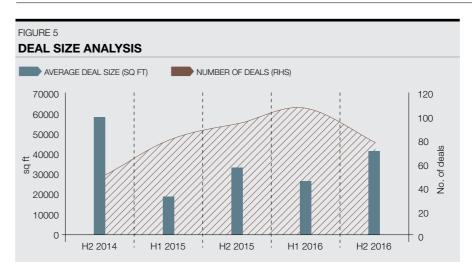
 The share of the other services sector dropped drastically, to as low as 3%, in H2 2016 compared to 39% during the same period in 2015. Approximately 130,000 sq ft of space taken up by Red Bricks in Nanakramguda is the biggest transaction in this sector. Nearly 2.7 mn sq ft of office space, including pre-commitments, was transacted by IT/ITeS companies in H2 2016.
Google, FactSet and Genpact were some of the prominent occupiers in the IT/ITeS category, taking up large office spaces during H2 2016

SECTOR ANALYSIS



Source: Knight Frank Research

DEAL SIZE ANALYSIS



Source: Knight Frank Research

The average deal size in H2 2016
was reported to be 40,600 sq ft,
which is 24% more than the H2
2015 level. The IT/ITeS sector led
in terms of big-ticket transactions,
majority of them being in the range
of 100,000 sq ft and above.

 The sequential increase in the number of deals, coupled with decent transaction size, also indicates greater confidence among occupiers to take up office space in the market.





SELECT TRANSACTIONS

OCCUPIER	BUILDING	LOCATION	APPROX. AREA (SQ FT)
Google	Meenakshi Technova	Nanakramguda	500,000
FactSet	DivyaSree Orion	Raidurg	430,000
Genpact	Phoenix	Hafeezpet	350,000
Synchrony Financial	Knowledge City	Madhapur	220,000
CTS	Avance (H3)	Madhapur	200,000
Red Bricks	Phoenix	Nanakramguda	130,000
ZF Group	Palanadu Aster	Nanakramguda	112,000
Cigniti	Ascendas	Nanakramguda	108,000

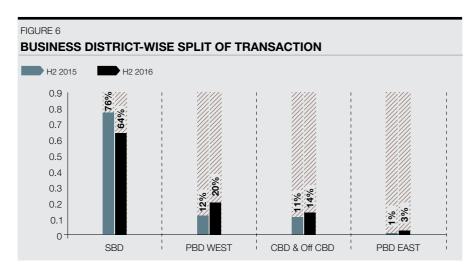
Source: Knight Frank Research

BUSINESS DISTRICT ANALYSIS

BUSINESS DISTRICT CLASSIFICATION

BUSINESS DISTRICTS	MICRO-MARKETS
CBD and off-CBD	Banjara Hills, Jubilee Hills, Begumpet, Ameerpet, Somajiguda, Himayat Nagar, Raj Bhavan Road, Punjagutta
SBD	Madhapur, Manikonda, Kukatpally, Raidurg
PBD West	Gachibowli, Kokapet, Madinaguda, Nanakramguda, Serilingampally
PBD East	Uppal, Pocharam

The spill-over demand from the SBD's IT/
ITeS hotspots, such as Madhapur and Kondapur, which have almost no viable large-format office spaces left, pushed occupiers to take up spaces in PBD West



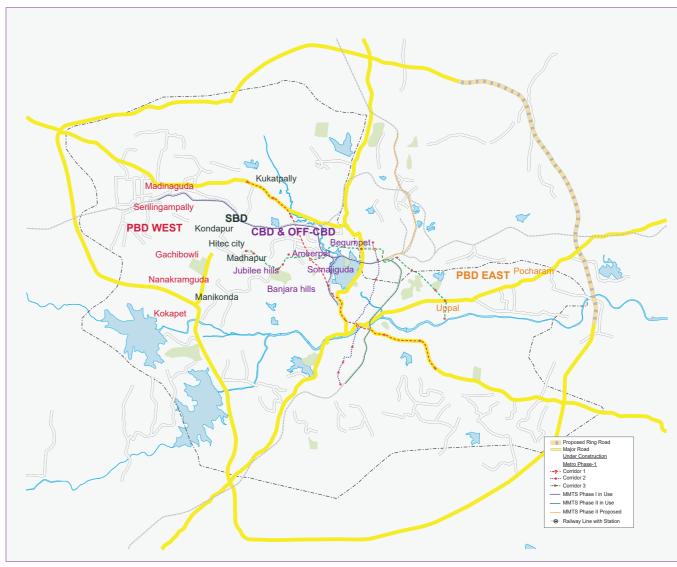
Source: Knight Frank Research

3.1 MN SQ FT H2 2015

3.2 MN SQ FT H2 2016

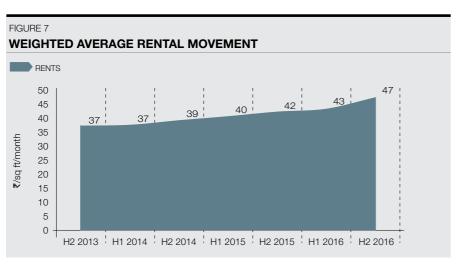
- The business district that experienced the maximum increase in market share during H2 2016 was SBD, due to the comparatively greater availability of good quality office spaces in locations such as Gachibowli and Nanakramguda.
- The PBD West is second only
- to the SBD in terms of quality of office development for the IT/ITeS sector, and contributed nearly 20% of the transacted space during H2 2016.
- The spill-over demand from the SBD's IT/ITeS hotspots, such as Madhapur and Kondapur, which have almost no viable large-
- format office spaces left, pushed occupiers to take up spaces in PBD West.
- Just three locations—Gachibowli, Madhapur and Nanakramguda accounted for almost 75% of the space transacted during H2 2016.

HYDERABAD BUSINESS DISTRICT MAP





RENTAL TREND

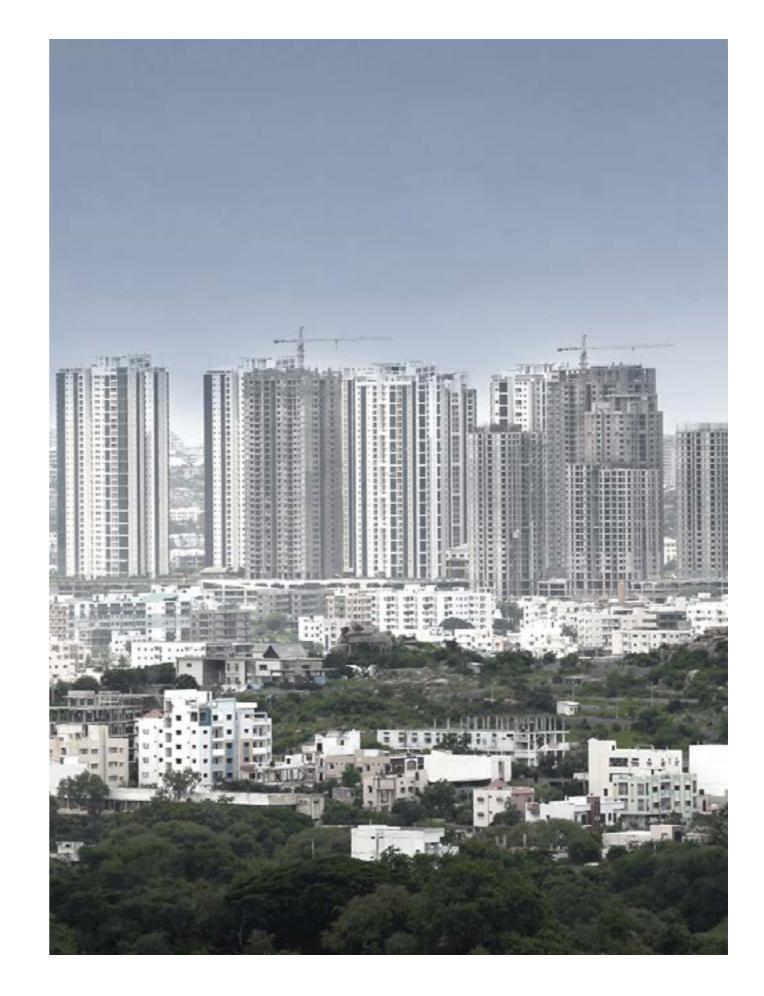


Source: Knight Frank Research

BUSINESS DISTRICT	RENTAL VALUE RANGE IN H2 2016 (₹/SQ FT/MONTH)	12 MONTH CHANGE	6 MONTH CHANGE
CBD and off-CBD	42–48	3%	2%
SBD	43–55	16%	7%
PBD West	35–40	6%	4%
PBD East	27–32	1.5%	1%
SBD	50–65	4%	2%

Source: Knight Frank Research

- Rentals in the Hyderabad office market, which had stagnated till 2013, have seen a sustained growth since 2014 due to an improvement in business sentiments, leading to strong transaction volumes.
- The lack of vacant office stock, coupled with steady demand, has pushed the weighted average rentals in the Hyderabad office space market to just over ₹47 per sq ft per month at the end of H2 2016, a 12% growth YoY.
- H2 2016 saw rental levels grow across locations, compared to the same period in the previous year. The SBD locations, such as HITEC City and Kondapur, have witnessed the strongest rent growth in the market, particularly due to the absence of preferred space in this business district.
- The PBD West experienced the next highest growth in rentals on the back of big-ticket deals by the IT/ITeS and other services sectors.



demand, has pushed the weighted average rentals in the Hyderabad office space market to just over ₹47 per sq ft per month at the end of H2 2016, a 12% growth YoY

The lack of vacant office

stock, coupled with steady

THE NEW RULES OF THE GAME

Rules framed by most states, to ensure implementation of RERA, are broadly in line with the rules framed by the Central Government, except on certain modifications brought in by Maharashtra.

- contributed by Pankaj Toppo

he year 2016 will go down as one of the most defining years in Indian real estate history. The year gone by sowed the seeds of change that will forever change the way the real estate sector will function in India. This year saw the partial implementation of the Real Estate (Regulation and Development) Act, 2016 (RERA). This required the incumbent state governments to come up with rules by 31st October 2016, which would ensure proper implementation of the Real Estate Act in their respective states. Few states and union territories did come up with their respective rules but in most cases these are draft rules and are open for discussion. Among the major states that have come with their rules include Delhi, Maharashtra, Karnataka, Uttar Pradesh and Gujarat. Of the states that house major real estate markets in the country, only Maharashtra and Delhi have notified these rules. What these rules framed by states do is give a glimpse of how the real estate sector will function in the near future and how the relevant stakeholders will be impacted by the new rules of the game. The Real Estate Act will be implemented in full letter and spirit by 1 May 2017. Thus, the day is not far when there will be systems and processes in place to help the sector function in an efficient manner. The rules framed by the Central Government were supposed to act as a beacon for the states to frame their rules. This is a look at some of the defining features of the rules framed by the respective

HIGH ENTRY BARRIERS

Rules framed by all the states are very clear about

creating high entry barriers, especially for players from the supply side. What this means that once the Act is implemented, only the serious players will remain in the sector. A glimpse into how this will be done. A promoter of a real estate project cannot market or sell his real estate project without getting it registered with the relevant real estate authority. To get the project registered, the real estate promoter will have to submit all details about the project, himself and the company that he runs to the relevant real estate regulatory authority. Only if the promoter provides all information as per the Act, will the authority grant registration for the project. To market the project, the promoter can only engage registered real estate agents. The real estate agents too will need to get themselves registered with the relevant authority. When applying for registration, the real estate agent will be required to submit all his credentials as required by the Act. The registration so granted to a real estate agent will be valid for a specific period. After the expiry of registration, the real estate agent will be required to apply for renewal of registration. What such processes will do is weed out the not-so-serious players from the sector. Among other things, it will instill a sense of discipline in the real estate sector.

MORE DISCIPLINE

The rules framed by states are in line with the rules framed by the Central Act. The registration granted to a project and to a real estate agent can be revoked if the promoter and the real estate do not comply with the provisions of the Act. In cases where the registration is revoked, then the real estate agent and

the promoter can no longer operate in the particular project. In simple words the promoter can no longer be involved with the implementation of the project. On the other hand, the real estate agent will no longer be able to provide his services with regards to marketing or facilitating in selling of a housing unit or plot of land, as the case may be. One of the benefits of the discipline in the sector could be lesser instances of project delays.

EASE PROJECT DELAYS

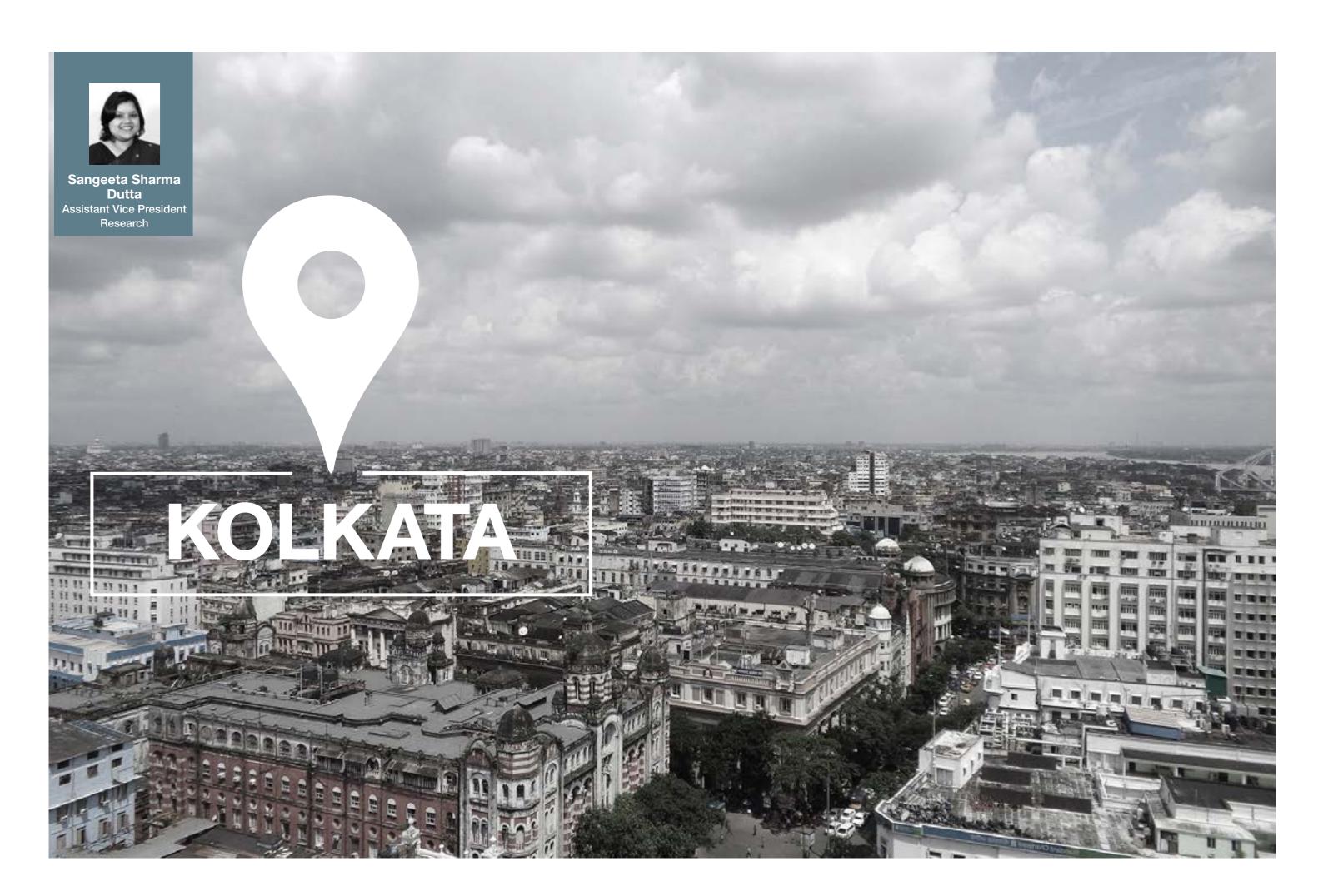
The major ill that has plagued the sector, till now, is project delays. This single factor has dented the confidence of homebuyers to take a plunge in the market. The systems and processes as mentioned above will to a great extent ensure that the promoter completes the project within the time given, by the authority, at the time of registration for implementation of the project. If the project is not completed within the time provided at the time of registration, then the promoter needs to apply for extension of registration of the project. The rules framed by the Central Government are however very clear on the fact that registration for a project can only be extended due to force majeure. In other cases, the authority can extend the registration under reasonable circumstances where there has been no default by the promoter and based on facts of each case shall not exceed more than a year. In this case, the reasons for delay will have to be recorded in writing. The fee for getting the registration extended will be double the fee of what the promoter paid at the time of getting the project registered in the first instance, in states like Delhi, Karnataka and Uttar Pradesh. In Maharashtra, the fee for getting an extension of the registration of a project is the same as it was at the time of getting the project registered. The authority will however, have the power to waive off the fee for extension of registration if extension is sought on grounds of force majeure.

HIGHER TRANSPARENCY

This is at the core of the rules framed by states. To get the project registered with the authority, the promoters need to furnish a wealth of information. The case is similar for real estate agents as well to get themselves registered. This leaves the authority with loads of information. Rules framed by states like Delhi, Karnataka and Uttar Pradesh stipulate that the authority will make available this information through its website. On the other hand rules framed by Maharashtra curtail access to select information about the promoters and project details. This to an extent dilutes the prime motive for which the Act was formulated in the first place. Most importantly, it will deprive homebuyers from taking an informed decision. On the other hand, homebuyers in states like Delhi and Karnataka will be much more empowered than those in Maharashtra to make an informed decision.

CONCLUSION

Broadly speaking, the rules framed by the states are in line with the basic aim of providing an environment wherein there are enabling factors that will help the sector. The only hitch in the rules framed by the states is that of Maharashtra debarring homebuyers to have full access to important details of the project. We believe that going forward the state government should take the necessary action to bring this aspect of the rule at par with the rules framed by states like Delhi and Karnataka. For homebuyers, it will however be good news. The wealth of information that a homebuyer will be exposed to will be humongous. It is important that the homebuyer sifts through the sea of data to make an informed decision else, the main purpose of ensuring greater transparency will be lost. For promoters, it may take a while to adjust to the new laws of the game. There will be teething problems, like a slowdown in new launches. In the long run however, the rules will give confidence to all stakeholders to participate in the market, which will ultimately lead to the growth of the sector.





RESIDENTIAL MARKET

The decline in sales

volume was primarily

brought about in the

(H2 2016) post the

announcement of the

demonetisation initiative.

On a half yearly basis, the

decline in new launches in

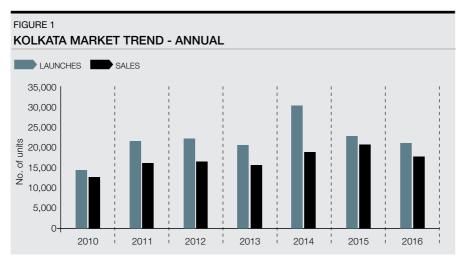
sales saw a dip of 20%, as

H2 2016 was 15% while

compared to H2 2015

second half of the year

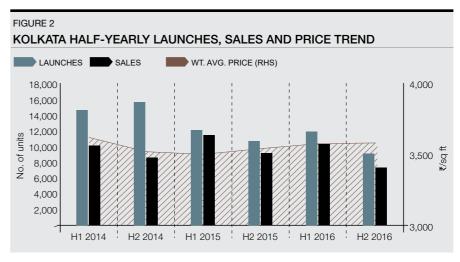
KOLKATA RESIDENTIAL MARKET LAUNCHES, ABSORPTION AND PRICE TRENDS



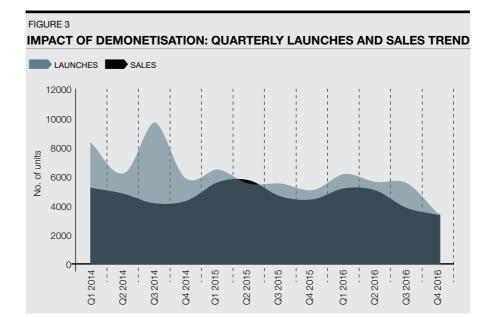
Source: Knight Frank Research

- The Kolkata residential market, which had seen a peak in new launches in 2014, has been on a continuous decline since then.
 While the city observed almost 30,000 units in new launches during 2014, the numbers have fallen by 30% in 2016. However, on a Year-Over-Year (YOY) comparison between 2015 and 2016, the city's residential market observed a more restrained decline in new launches, to the tune of 8% in 2016, over the launches in 2015.
- On the other hand, the end-user driven sentiments of the city led the annual sales volume to remain mostly steady, from 2011 to 2013, before reaching its peak last year in 2015.
- However, in 2016 on a YOY basis, the city's residential market saw sales undergo a steeper fall, to the tune of 14%, as compared to 2015.

- The decline in sales volume was primarily brought about in the second half of the year (H2 2016) by the uncertainty and lack of clarity in the market post the announcement of demonetisation of high value currency notes.
- With most buyers preoccupied in settling down their own financial matters, purchasing of properties in the short term has taken a backseat, thereby reflecting in the reduced sales volume in H2 2016.
- Kolkata residential market had remained relatively stable in H1 2016 on YOY basis, with expectations of improvement in H2 2016. However, the announcement of the demonetisation initiative on 8th November changed the market scenario in the last quarter of the year (Q4 2016) and led developers and buyers alike to refrain from making any property related decisions.
- · Consequently, new launches fell



Source: Knight Frank Research



Source: Knight Frank Research

by 15% in H2 2016 vis-à-vis the corresponding period in 2015 (H2 2015). In Q4 2016, the decline in launches was more pronounced at 25%, as compared to the number of launches in Q4 2015.

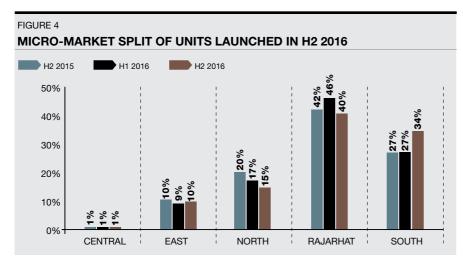
- Similarly, the city's sales volume, driven largely by end users, saw a decline of 20% in H2 2016 as compared to the sales in H2 2015. The period Q4 2016, that was instrumental in bringing down the sales volume, also observed a dip of 20%, as compared to the sales number in Q4 2015.
- The weighted average price remained stagnant in H2 2016, depicting the fact that the market is almost at a standstill, despite the decrease in new launches and sales, waiting for clarity on factors such as RERA compliance, GST and demonetisation.

MICRO-MARKET SPLIT OF RESIDENTIAL LAUNCHES

- In the last few years, Rajarhat has accounted for the largest share in the total number of new launches in the city owing to persistent interest from the developer community. It emerged as the region with the highest number of residential units launched in Kolkata in H2 2016 as well, accounting for a 40% share of the total number of new launches, although there was a decrease in the share compared to H2 2015. Nevertheless, Rajarhat is
- expected to maintain positivity regarding the housing demand in the forthcoming years, considering the quantum of office-sector development and infrastructure underway in the region. The road infrastructure is well-planned in the region with upcoming metro rail connectivity.
- South Kolkata observed a substantial increase its share of new launches in H2 2016. It accounted for 34% of the total new

launches in H2 2016, as compared to 27% share in H2 2015. The region has been a conventionally-preferred residential destination of the city, and in recent years a number of southern peripheral locations such as Narendrapur, Sonarpur Road and Diamond Harbour Road have come up on the developers' radar as having growth potential for residential development, particularly for budget housing.





Source: Knight Frank Research

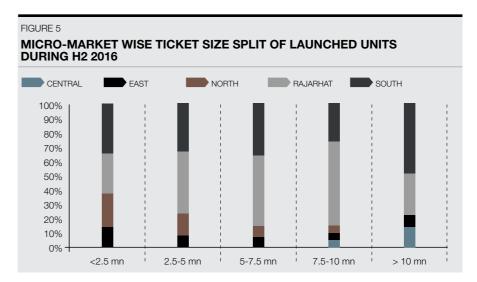


had seen a significant number of new launches in 2015, has been reducing gradually in the recent months, primarily owing to the dearth of large, contiguous land parcels in preferred residential markets close to the city centre. While its share of residential launches was at 20% in H2 2015, it reduced to 15% in H2 2016. However, North Kolkata still holds potential in the forthcoming periods, owing to the existing and upcoming phases of the metro rail, impending infrastructure in and around VIP Road and Jessore Road, and its proximity to Rajarhat as well as the international airport.

North Kolkata's share, which

 The East zone, comprising locations such as Salt Lake and Kankurgachi, also observed a limited number of new launches due to land constraints. Its share

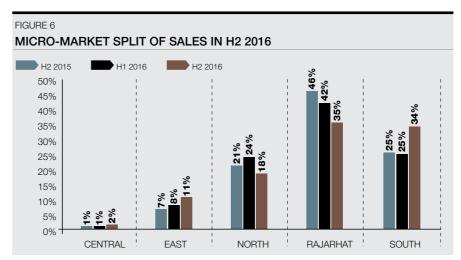
- has remained almost constant over the past months, at 10% during both H2 2015 and H2 2016.
- · On the ticket size front, both Rajarhat and South Kolkata were responsible for a number of affordable and mid-end projects in H2 2016. South Kolkata observed around 65% of its total launches below the ticket size of ₹5 mn while Rajarhat saw almost 60% of its launches in the same category. Although both the regions dominated the number of launches in the high-end segment as well, the total number of units launched in the ticket size of over ₹10 mn were limited and accounted for a much smaller share in their total launches in H2 2016.



Source: Knight Frank Research

MICRO-MARKET-WISE RESIDENTIAL SALES

MICRO-MARKET	LOCATIONS
Central	Park Street, Rawdon Street, A.J.C. Bose Road, Minto Park, Elgin Road
East	Kankurgachi, Beliaghata, Salt Lake, Narkeldanga, Keshtopur, E.M. Bypass (eastern parts)
North	Baguiati, Ultadanga, Jessore Road, Shyambazar, Lake Town, B.T. Road, VIP Road
Rajarhat	Rajarhat New Town
South	Ballygunge, Alipore, Tollygunge, Narendrapur, Behala, Garia, Maheshtala, E.M. Bypass (southern parts)



Source: Knight Frank Research

9,170	10,339	7,308
UNITS	UNITS	units
H2 2015	H1 2016	H2 2016

Rajarhat is expected to maintain positivity regarding the housing demand in the forthcoming years, considering the quantum of office-sector development and infrastructure underway in the region

to the city centre

North Kolkata's share,

launches in 2015, has

in the recent months,

primarily owing to the

dearth of large, contiguous

land parcels in preferred

residential markets close

been reducing gradually

significant number of new

which had seen a





KOLKATA CITY MAP

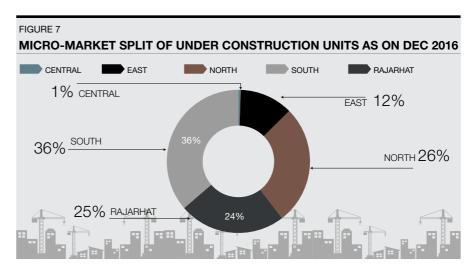


- Rajarhat witnessed the largest share of the absorption in H2 2016, accounting for 35% share of the total sales volume during the period. However, this was a considerable decrease, compared to a higher share of 46% in H2 2015.
- On the other hand, South Kolkata observed a substantial improvement in its share of total sales. It followed Rajarhat closely and accounted for a 34% share of the sales volume in H2 2016, which increased significantly from its 25% share of the total sales volume in H2 2015. The increase in sales is attributable to the host of affordable and mid-end housing that has come up in the southern peripheral locations such as Baruipur, Narendrapur and Garia, attracting the price conscious buyer.
- Meanwhile, North Kolkata saw its

- share reduce to 18% in H2 2016, from 21% in H2 2015. However, we expect this region to perform better in the forthcoming periods due to the abundance of mid-end and affordable housing here.
- East Kolkata accounted for 11% of the total number of sales in H2 2016, an improvement from H2 2015 when it had secured a mere 7% share. The eastern region is a much preferred domicile, especially of the affluent class. It boasts of key commercial areas, such as Salt Lake Sector V, and the road infrastructure is well-planned. Various flyovers provide easy connectivity with the CBD, thereby making it a sought-after residential destination.
- Central Kolkata accounted for marginal shares in the total sales volume in the primary market of the city, owing to a relatively smaller inventory size.

The increase in sales in South Kolkata is attributable to the host of affordable and midend housing that has come up in the peripheral locations such as Baruipur, Narendrapur and Garia, attracting the price conscious buyer

MICRO-MARKET SPLIT OF UNDER-CONSTRUCTION UNITS AS OF DECEMBER 2016



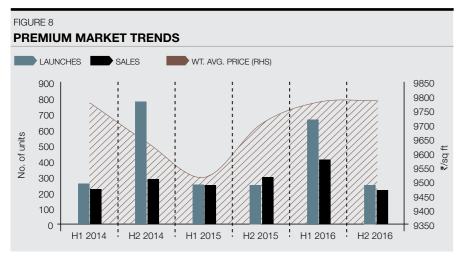
Source: Knight Frank Research



- South Kolkata accounts for a major share of the total number of units under construction, to the tune of 36%, given the fact that the region has been witnessing large-scale residential development in the last few years. This region is preferred by potential buyers, chiefly due to its good social infrastructure, causing developers to launch their projects here.
- · South Kolkata is followed by North
- Kolkata, recognised primarily as an industrial area till recently. With a share of 26% of the total number of units under construction, North Kolkata observed the launch of a number of large scale residential projects in the past two years in areas such as Sodepur, B.T. Road, Madhyamgram and Jessore Road, led by reputed developers.
- Rajarhat has a 25% share of the total number of residential units
- under construction. This zone, comprising several Action Areas, has witnessed frenetic residential activity in the last decade and boasts the presence of most key real estate developers.
- The central market has fairly marginal share of units under construction, to the tune of approximately 1%, while the eastern region accounted for 12% share.

PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS
Central	Park Street, Rawdon Street, Shakespeare Sarani, Chowringhee Road
East	Kankurgachi, Topsia
Rajarhat	New Town
South	Ballygunge, Alipore, Tollygunge, Bhowanipore, Jodhpur Park



Note: Premium markets include locations where the average ticket size of a residential unit is above ₹15 mn, are in close proximity to the central business district of the city and have witnessed new project launches in the preceding three years

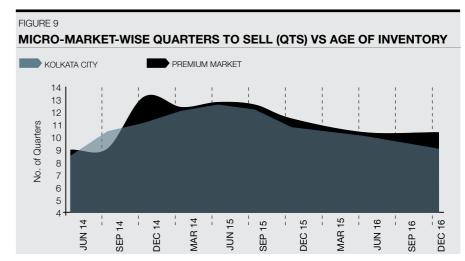
Source: Knight Frank Research

 Kolkata's premium market, comprising locations such as Chowringhee, Rawdon Street, Ballygunge and Jodhpur Park, among others, witnessed the launch of a limited number of residential units in the segment in H2 2016. While the premium housing segment observed a similar number of launches in H2 2016 as in H2 2015, the figure is considerably lesser than the number of launches six months previously in H1 2016. This is largely owing to the curbing of premium projects in the wake of the demonetisation drive.

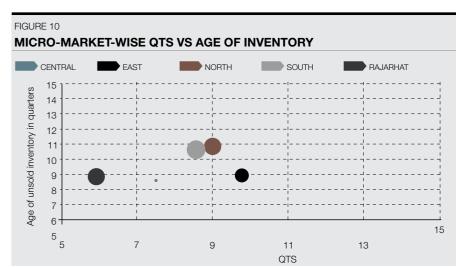
- On a similar vein, H2 2016 saw a decline of 28% in sales compared to the corresponding period in 2015.
- Meanwhile, the weighted average price growth has remained stagnant in the premium segment in H2 2016.

KOLKATA MARKET HEALTH

- 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 in order to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market. Also, size of the bubble indicates relative size of unsold inventory in terms of number of units.
- The QTS for Kolkata currently stands at a little over eight quarters. The unsold inventory of the city is recorded at 37,400 units. Significantly, the QTS for the city's premium markets, is currently at 10.5 quarters. This is largely attributable to the relatively slow rate of sales observed in the premium housing segment in the past.
- Among the various zones, Rajarhat
 has the lowest QTS in H2 2016.
 Factors such as presence of office
 projects, well-planned existing
 and upcoming road networks, the
 proposed metro connectivity within
 Rajarhat and with other locations
 of the city, and proximity to the
 international airport as well as the
 employment hub of Sector V have
 helped this micro-market perform
 well in recent months.
- We infer South Kolkata as the second best performing market in H2 2016, after Rajarhat, owing to its low QTS. This is on account of the steady rate of sales in the past quarters. However, the region still accounts for the largest unsold inventory, having evolved much



Source: Knight Frank Research



Source: Knight Frank Research

earlier as a residential destination, and it remains to be seen if the region will be able to hold on to the low QTS level in the forthcoming periods.

- With a QTS of 9.2, North Kolkata succeeded South Kolkata in the QTS category. We expect this market to pick up momentum once the infrastructure projects are completed.
- East Kolkata emerged as the region with the highest QTS in the city, but with a lower age of inventory.



CAN RAJARHAT HOLD ON TO ITS POTENTIAL?

sweeping drive across the north-eastern part of Kolkata takes one through a veritable panorama of swank condominiums, glitzy shopping mall and glass façade-clad tech parks. These would come under Rajarhat, a vast area located in North 24 Parganas district in the neighbourhood of Kolkata, that was carved out of farmlands in the late 1990s and marked for new age commercial and residential development. Ambitiously planned out, the master plan envisioned a township within the region, called New Town, which was at least three times bigger than the adjacent planned micro-market of Salt Lake

With the advent of several large national level developers into the Rajarhat market in the mid-2000s, expectations rose exponentially regarding the potential of the region. IT SEZs and tech parks dotted the landscape, turning the region to an impending second IT hub after Salt Lake Sector V. Residential projects were launched at prices that were considered premium for such peripheral locations. However, the development of this region took more time than was anticipated. The journey was met by snags, primarily accounted for by lack of physical and social infrastructure, amongst others. Another setback came with the Global Financial Crisis bringing about an overall real estate slowdown. Soon, the residential and commercial projects that were ready for operation could not find adequate occupancy and Rajarhat, for a time, appeared to have been losing its promised luster.

Circa 2016, things have changed in Rajarhat. From being known largely as a mid-segment and premium market, Rajarhat has emerged as a destination that caters to the need of affordable housing as well. This has attracted a large number of buyers into the region. In the last few years, Rajarhat has consistently been accounting for the largest share of new launches in the city. It has also witnessed the largest share of sales on a Year-Over-Year basis. This demand-supply dynamics has been catalyzed by improved infrastructure, such as the well-planned existing and upcoming road network, the proposed metro connectivity within Rajarhat and with other locations of the city and its proximity to the international airport as well as Salt Lake Sector V. Rajarhat also enjoys good road connectivity with Eastern Metropolitan Bypass and Belgharia Expressway, each connecting it to the southern and northern parts of the city respectively. Currently, work

on metro railway is in progress that would connect Rajarhat to the airport as well as to the southern part of city. Further, the region was enabled with 10.5 km of Wi-Fi Zone connecting the Main Arterial Road to the airport and to Salt lake Sector V, making it India's first Wi-Fi road connectivity.

Thus, while Rajarhat is gradually observing a good momentum on the residential front, it is imperative to note that a sustained growth requires the contribution of the office sector as well. Kolkata needs a demand driver in the form of the productive IT/ ITeS sector that has been responsible for creating a paradigm shift in the economy and lead the growth story of several other cities such as Hyderabad and Pune. These growth stories have been backed by strong, proactive policies of the respective state governments, enabling the industry to set up and expand with ease. At present, the infrastructure in Rajarhat is substantial enough to support the IT/ITeS sector and is capable of offering equal opportunity to the sector as has been offered by cities like Hyderabad. It remains to be seen if adequate government policies are formulated that would improve the employment scenario in the region and lead Rajarhat to fulfil the purpose for which it was created.

PRICE MOVEMENT IN H2 2016

Price appreciation across most locations in Kolkata during the last 12 months remained almost constant. Slight movement in prices was observed in select micro-markets in H2 2016, leading the weighted average prices to increase nominally by 1.1%. This movement in prices can be attributed to better sales in these locations. On the other hand, premium markets remained almost stagnant.

WEIGHTED AVERAGE PRICE MOVEMENT IN KOLKATA

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Kolkata	3,575	1.1%	0.1%
Premium markets	9,780	0.8%	0.1%

PRICE MOVEMENT IN SELECT LOCATIONS

LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Park Street	Central	12,000–20,000	0%	0%
Rowdon Street	Central	10,000–19,500	0%	0%
Ballygunge	South	8,500–18,000	0%	0%
Tollygunge	South	6,500–16,500	0%	0%
Behala	South	3,300–4,800	0%	0%
Narendrapur	South	2,600–4,350	1%	0%
Kankurgachi	East	6,000–9,150	0%	0%
Salt Lake	East	5,000-8,000	0%	0%
New Town Rajarhat	Rajarhat	4,300–7,000	0%	0%
Madhyamgram	North	2,550–3,300	1%	0%
BT Road	North	3,200–4,500	1%	0%
Jessore Road	North	4,320–5,600	1%	0%

Source: Knight Frank Research

MUMBAI'S REVISED DRAFT DEVELOPMENT PLAN (RDDP) 2034 - **SETTING EXPECTATIONS FOR** THE CITY'S FUTURE

- contributed by Vivek Rathi

umbai, India's financial capital, is the most populous city in the country – surpassing the national capital, Delhi, by approximately four per cent. In terms of area, Mumbai stands fourth, after Delhi, Kolkata and Bengaluru, with Delhi being more than three times its geographic size. This accounts for Mumbai's high population density to a large extent. The city has a population density of 20,482 persons per square kilometre - the highest among the cities in India. Considering that this megacity is not geographically spread out like Delhi or Bengaluru, the pressure on its resources to house its burgeoning population is immense. This explains the premium real estate prices in Mumbai, as well as the intense scrutiny of the city development plans by most stakeholders.

The municipal corporation has heard citizen objections on the Revised Draft Development Plan (RDDP) 2034 and is likely to submit the final DP in March 2017, post the municipal elections. We take a close look at some of the important provisions of RDDP 2034.

IMPROVED DEVELOPMENT POTENTIAL

Among the most important points in the proposed RDDP is the improved development potential that will be made possible in the city. According to the proposed RDDP 2034, the FSI will be available on the gross developable plot, not the net developable plot, as is the case today. As per the current policy, the FSI permissibility depends on the net plot area after the deduction of the road/

reservation. For example, if the total plot area is 5,000 sq m and is affected by road/reservation, then the FSI will be available on net plot area after the deduction of the road/reservation, and 15% recreational open space if the plot measures more than 2,125 sq m. This means that the effective FSI on the net plot area will be 1.85 if the plot measures more than 2,125 sq m and is located in the suburbs. Now, the net availability will be based on the gross plot; hence, the development potential will be increased. As per the proposed RDDP 2034, even after handing over the mandatory space for open spaces, the FSI will be applicable on the gross plot area, not the net plot area. Consequently, in the example above, the RDDP 2034 also mentions an increase in FSI. Does this mean that the increase in the development potential, coupled with the increased FSI, will boost real estate development in the city?

At first glance, an increase in FSI translates into more area that can be developed. The RDDP 2034 has proposed to increase the FSI of Mumbai from 1.33 to 2. This means that more area can be developed, leading to a further strain on the city's resources. However, while the FSI in the island city has been increased from 1.33 to 2. it remains the same in the suburbs.

The increased FSI will not have a major impact on the real estate of the island city. We anticipate that almost 80% of the development will take place at a much higher FSI

(up to four) under schemes such as the cluster redevelopment, cessed building redevelopment and slum rehabilitation, which implies that only one-fifth of the new projects are likely to undergo development with the enhanced FSI. Housing societies that are more than 30-years-old and plan to undergo redevelopment will be able to avail of the increased FSI. Further, the population in suburban Mumbai has increased by over eight per cent between 2001 and 2011, but has decreased by more than seven per cent in the island city. Thus, the increased FSI is not likely to create too much of pressure on the resources and infrastructure of the island city. Apart from increasing the development potential in the city and the increased FSI, the RDDP 2034 also speaks of incentivising the people whose land falls in the no development zone (NDZ) through affordable housing schemes. But is this incentive enough?

MORE LAND FOR DEVELOPMENT

The RDDP 2034 also proposes bringing more land under the purview of development. To this end, there are specific policies for developing NDZs such as eco-sensitive areas, water bodies, encroached land, forest land and private land. As per the current plan, the total area under NDZs is approximately 13,000 hectares. The NDZs are further divided into NDZs and natural areas. No development will be allowed in natural areas. Of the total land classified as NDZs, i.e. approximately 13,000 hectares, a little over 10,000 hectares are natural areas and the rest. NDZs (approximately 3,300 hectares). The policy with regards to developing these NDZs is that 25% of the land needs to be allocated for open spaces, eight per cent to be classified as institutional areas. 25% to be used for affordable housing, four per cent for educational purposes, three per cent for medical purposes and one per cent for social purposes. This means that only 34% of the land can be used for development according to the owner's preference.

encroached on. So, even if a landowner pledges his land for development, the danger is that the share of land that he can develop may fall in the land that has already been encroached upon. This will not give a landowner any incentive to pledge his/her land for development under this scheme. Offering assistance in reclaiming the land that has been encroached on will increase the landowners' confidence. Besides ensuring that more land is brought under development and more area is developed, the RDDP 2034 also speaks of ensuring that there are houses, especially for people at the bottom of the pyramid.

AFFORDABLE HOUSING

Providing housing to the people at the bottom of the pyramid is one of the major thrust areas of the RDDP 2034. Each residential development project with a gross plot area of 4,000 sq m or more will have to provide for affordable housing on a minimum of 20% of the plot area to the municipal corporation. The size of such affordable housing tenements will be a carpet area of 300-452 sq ft. While it will help to fulfil the affordable housing cause, it will also mean dense development and vertically stuffed amenities for private projects, which will now have a lower ground area. Further, in the development of land under NDZs, 25% of the land needs to be used for affordable housing. The emphasis on providing affordable housing is a positive step. However, it remains to be seen if stakeholders from the real estate sector will also be allowed to develop these projects. Apart from ensuring that there is more land for development in Mumbai and that more area is developed, the RDDP also plans to bring jobs back to the city from areas like Thane and Navi Mumbai.

BRING BACK JOBS TO MUMBAI

The RDDP 2034 makes a conscious effort to ensure that the jobs that were going to Thane and Navi Mumbai stay within Mumbai. An FSI of five has been proposed for the CBD. This move is expected to encourage commercial development within the city to a great extent. Further, up to 30% of this FSI can be used for residential development. The areas that are likely to be considered as a CBD are the high-traffic zones of the public transport nodes in Dadar, Andheri and Ghatkopar. Further, an additional FSI, based on the area of the plot, will be allowed for the development of plots for commercial purposes. Any plot in commercial, residential or industrial zones, measuring more than 3,000 sq m can avail of the FSI of five, if it is developed independently for commercial purposes, excluding shopping. This will be a major boost to commercial development in predominately residential areas. It will However, in reality, most of the land under NDZs has been also divert the commercial development from crowded areas around railway stations.

> Additionally, IT/ITeS development projects will have an FSI of five, wherein IT/ITeS and IT-supported financial services can use 80% of the FSI, with the remaining 20% to be used for commercial services. The incremental FSI can be bought at a premium, which is at 25% of the ready reckoner (RR) rate in the case of IT/ITeS. It is 40% and 100% of the RR rate in the case of IT-supported financial services and commercial services, respectively. Such a move will augment the supply of affordable office space within the Mumbai city limits.



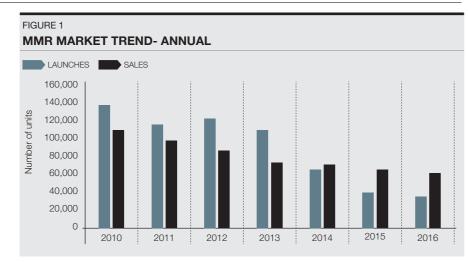




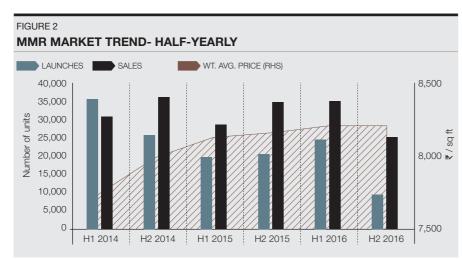
RESIDENTIAL MARKET

MMR RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

- Early last year in H1 2016, the Mumbai Metropolitan Region (MMR) residential market witnessed its best growth momentum after the 2008 global financial crisis. Residential launches and sales grew by 29% and 23%, respectively, over the same period last year. The signals were optimistic even for the remaining part of the year thereby raising hopes that the MMR residential market that has been on a downward spiral since 2010 would see a growth in sales in 2016.
- However, in H2 2016, market suffered a big blow with both launches and sales plummeting by 53% and 26% respectively. Housing sales of 25,403 units and launches of 9,740 units were recorded in H2 2016 – lowest in the post GFC period.
- The announcement of demonetisation of high value currency notes on 8 November 2016 disrupted market sentiment and accordingly a major dent on the residential market came in Q4 2016, which saw sales plunge by 50% to 8,617 units. The magnitude of decline in launches was larger at 77% to 2,617 units.
- The segments of the economy
 that thrived on illicit money have
 come under tremendous pressure.
 The investment premise of high
 returns from residential property,
 which had already weakened
 with stagnating property price
 over the last two years, is under
 stress with the changing market



Source: Knight Frank Research

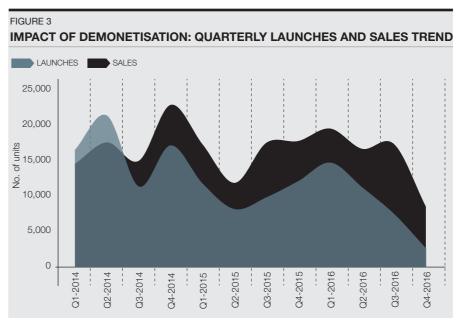


Source: Knight Frank Research

landscape. The new landscape of transparency, efficiency and governance brought collectively by the demonetisation scheme, benami property law and the real estate regulation will challenge the status quo of real estate investment and transactions.

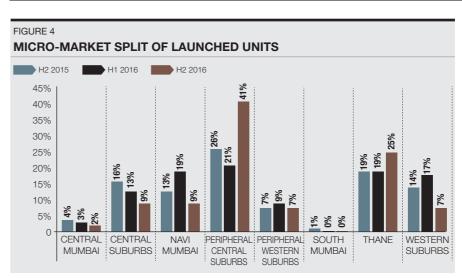
 On the other hand, from the perspective of end users, the cause of affordability is not served enough either by the decline in home loan rates brought by policy rate cut of 175 basis point in this interest rate cycle or the tax incentives for housing offered in the 2016 budget.

 All these factors translated in aweakest half yearly and annual performance of the MMR residential market in at least seven years.



Source: Knight Frank Research

MICRO-MARKET SPLIT OF RESIDENTIAL LAUNCHES



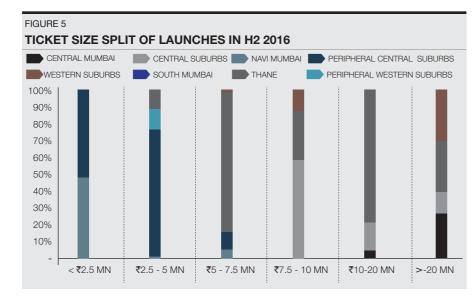
Source: Knight Frank Research



The new landscape of transparency, efficiency and governance brought collectively by the demonetisation scheme, benami property law and the real estate regulation will challenge the status quo of real estate investment and transactions



- With the backdrop of an uncomfortable unsold inventory level coupled with investor apartments that are also coming to the market, the drop in launches was more severe compared to the drop in sales during H2 2016.
- Amongst all the micro-markets, the premium markets of South Mumbai and Central Mumbai took the biggest hit whereas Thane and Peripheral Central Suburbs were relatively better off.

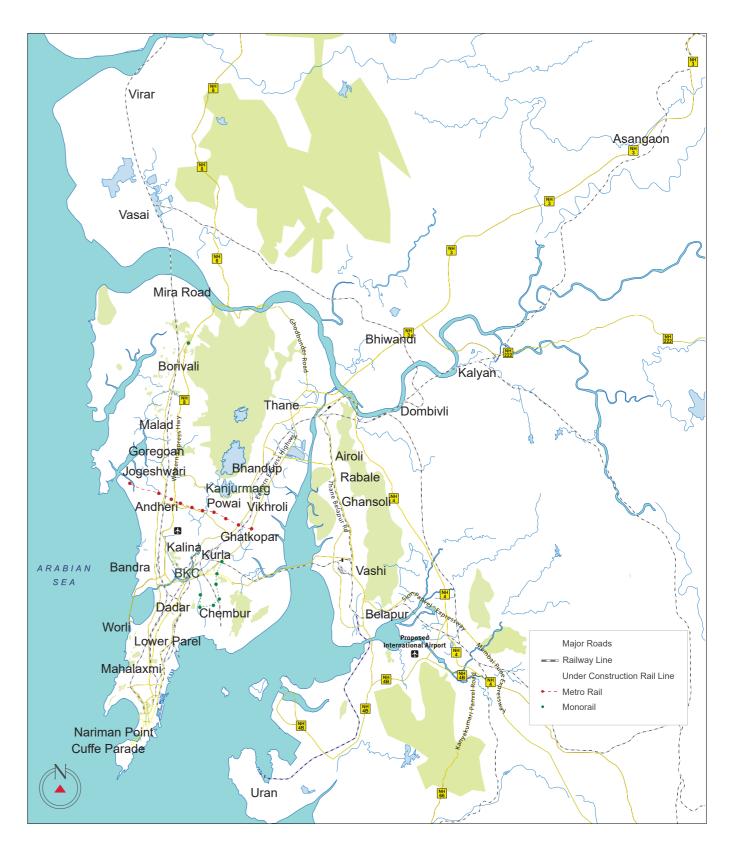


Source: Knight Frank Research

MICRO-MARKET-WISE RESIDENTIAL SALES

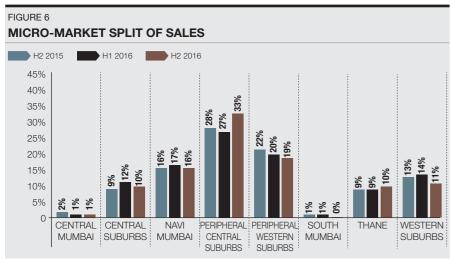
MICRO-MARKET	LOCATIONS
Central Mumbai	Dadar, Lower Parel, Mahalakshmi, Worli, Prabhadevi
Central Suburbs	Sion, Chembur, Wadala, Kurla, Ghatkopar, Vikhroli, Bhandup, Mulund
Navi Mumbai	Vashi, Nerul, Belapur, Kharghar, Airoli, Panvel, Ulwe, Sanpada
Peripheral Central Suburbs	Kalyan, Kalwa, Dombivli, Ambernath, 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

MUMBAI METROPOLITAN REGION MAP







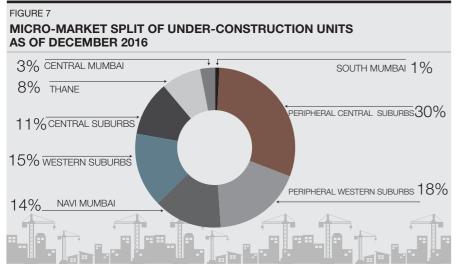


- While the incidences of cash transactions vary across micromarkets, demonetisation took a toll on sales in all the micro-markets.
- The premium markets of South Mumbai and Central Mumbai were the worst hit with sales recorded lower by 54% and 41% respectively in H2 2016 compared to H2 2015.

Source: Knight Frank Research



MICRO-MARKET SPLIT OF UNDER-CONSTRUCTION UNITS AS OF DECEMBER 2016



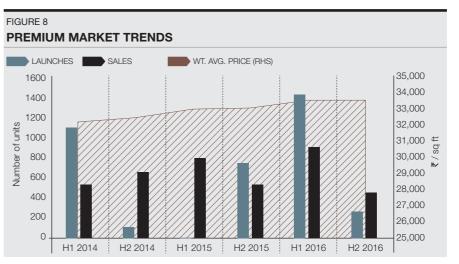
Source: Knight Frank Research

 With a 30% share, the Peripheral Central Suburbs is the largest market in the MMR in terms of the quantum of under-construction housing units. This lead has been maintained for a long period of time.

 The Peripheral Western Suburbs ranks second in terms of underconstruction housing units, with an 18% share.

PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS
South Mumbai	Malabar Hill, Tardeo, Mahalakshmi, Mumbai Central, Walkeshwar
Central Mumbai	Worli, Prabhadevi, Parel, Lower Parel, Dadar
Western Suburbs	Bandra West, Santacruz, Juhu

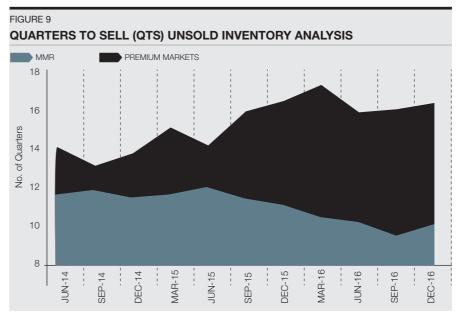


- With an average house price of ₹50 mn and above, the premium markets are select localities spread across the micro-markets of South Mumbai, Central Mumbai and the Western Suburbs.
- New launches in this segment saw a 69% decline even as sales were slow by 16% in H2 2016 compared to H2 2015.

Source: Knight Frank Research

Note: Premium markets include locations where the average ticket size of a residential unit is above ₹50 mn, are in proximity to the central business district of the city and have witnessed new project launches in the preceding three years

MMR MARKET HEALTH

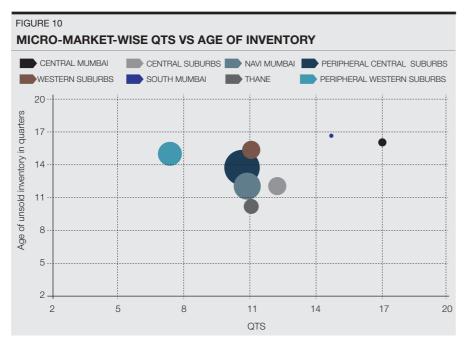


The unsold inventory level has come down steadily from a peak of 213,742 units in H1 2014 to 154,699 units in H2 2016

Source: Knight Frank Research



Instance of free gifts in the form of gold and consumer appliances or liberal financing plan, where a buyer pays only 5% upfront and remaining on possession, have become a widespread phenomenon



Source: Knight Frank Research

- 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 in order to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market.
- The unsold inventory level has come down steadily from a peak of 213,742 units in H1 2014 to 154,699 units in H2 2016. Consequently, the QTS has also come down from 11.7 quarter to a 10.1 quarter. However, this isn't a desirable phenomenon considering that the decline came on account of sharp

- reduction of launches and the market continues to shrink.
- In the latest period Q4 2016, albeit marginally, even the QTS inched up from 9.5 in Q3 2016 to 10.1 in Q4 2016. This deceleration came because of a sharp decline in sales in the latest period. If the sales slump prolongs, market would find no solace in the unwinding unsold inventory level and increase market stress.
- Even while the premium markets
 of South Mumbai and Central
 Mumbai contribute to just about
 4% of the unsold inventory, they
 face the worst QTS of 15 and 17
 respectively. Similarly, their age of
 inventory at around 16 quarters is
 also the highest across the city.

PRICE MOVEMENT IN H2 2016

WEIGHTED AVERAGE PRICE MOVEMENT IN MMR

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
MMR	8,120	1.6%	0.3%
Premium markets	33,600	1.5%	0.0%

PRICE MOVEMENT IN SELECT LOCATIONS

LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Lower Parel	Central Mumbai	25,000-36,000	1%	0%
Worli	Central Mumbai	31,000-55,000	2%	0%
Ghatkopar	Central Suburbs	12,000-22,000	2%	1%
Mulund	Central Suburbs	10,700-14,000	2%	2%
Powai	Central Suburbs	14,500-20,000	2%	2%
Panvel	Navi Mumbai	4,000-6,500	-2%	0%
Kharghar	Navi Mumbai	6,700-9,000	0%	3%
Vashi	Navi Mumbai	10,000-15,000	2%	1%
Badlapur	Peripheral Central Suburbs	2,700-3,500	-3%	0%
Dombivali	Peripheral Central Suburbs	4,500-6,000	3%	0%
Mira Road	Peripheral Western Suburbs	5,500-7,300	0%	-3%
Virar	Peripheral Western Suburbs	4,500-5,500	-2%	-2%
Tardeo	South Mumbai	40,000-60,000	2%	0%
Ghodbunder Road	Thane	6,000-10,000	-1%	-1%
Naupada	Thane	14,000-18,000	1%	0%
Andheri	Western Suburbs	15,000-22,000	3%	0%
Bandra(W)	Western Suburbs	40,000-60,000	0%	-1%
Borivali	Western Suburbs	11,000-15,000	1%	-1%
Dahisar	Western Suburbs	9,000-11,000	2%	1%
Goregaon	Western Suburbs	13,000-15,000	-1%	-1%

Source: Knight Frank Research

- Residential property prices in Mumbai are witnessing a time correction since the last two years.
 The demonetisation decision has further fuelled consumer expectation of price cuts. However, no across the board price cuts have been recorded in the market.
- In case of an under-construction project, price reduction disturbs

equation with existing buyers and investors. Hence, most cases have reported to offer indirect discounts by waiving stamp duties and registration charges. Instance of free gifts in the form of gold and consumer appliances or liberal financing plan, where a buyer pays only 5% upfront and remaining on possession, have become a

widespread phenomenon. Price protection plan is offered to prospective consumers to assuage concerns in the event of a price decline.





OFFICE MARKET

While H2 2016 remained

an eventful period from

economic perspective,

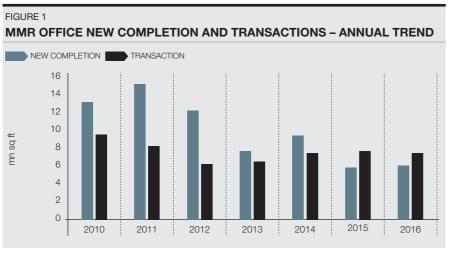
transactions is primarily on

account of the base effect

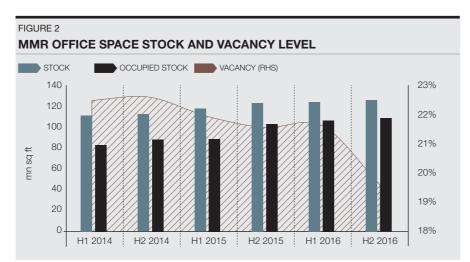
global and domestic

a 34% decline in

MMR OFFICE MARKET STOCK, NEW COMPLETIONS, TRANSACTIONS AND VACANCY TRENDS



Source: Knight Frank Research



Source: Knight Frank Research

- For the latest half year i.e. H2
 2016, Mumbai's office market
 saw a decline in both the critical
 indicators viz. new completion
 and transactions. While new
 completion at 1 mn sq ft was lower
 by 73%, transactions dipped by
 34% to 3.3 mn sq ft in H2 2016
 compared to same period last
 year.
- While H2 2016 remained an eventful period from global and domestic economic perspective,

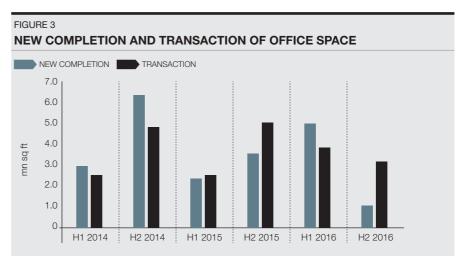
a 34% decline in transactions is primarily on account of the base effect. H2 2015 had witnessed a single 1.8 mn sq ft deal from the country's largest IT exporter. Such transactions are an exception rather than a rule in case of MMR which has a diversified set of occupiers unlike other top cities that thrive on the IT sector. Excluding this deal, the transactions would be marginally higher at 3%.

The second half of the year saw occupiers grappling with the uncertainty posed by Brexit, US Presidential election and Fed rate hike. In case of occupiers mainly from the IT sector that count US and Europe as their biggest markets, the developments posed business uncertainty and curtailment of expansion plans. Back home, the demonetisation decision rattled consumer facing businesses. However, it was too short a period to impact on-going

office transactions considering contracts are negotiated long before deals are signed. Hence, contracts were honoured even while the sentiments were disturbed.

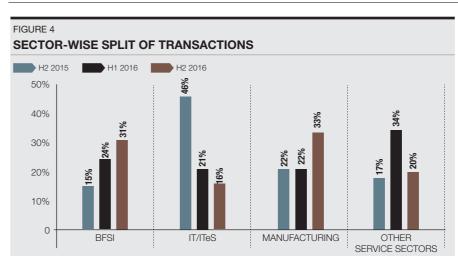
 Over the past few years, developers shunned office developments plans in favour of residential developments, which is now reflecting on the decline in new completion. Vacancy level has come down from 21.6% in H2 2015 to 19.6% in H2 2016. With quality office building for large requirements in short supply, occupiers are looking for built to suit options. Prime office markets like BKC and Central Mumbai have high occupier interest but embrace vacancy level of less than 2%.

 For 2016, new completions were marginally higher by 2% even as transactions dipped by 6%
 putting brakes on the growth momentum of last three years.



Source: Knight Frank Research

SECTOR ANALYSIS



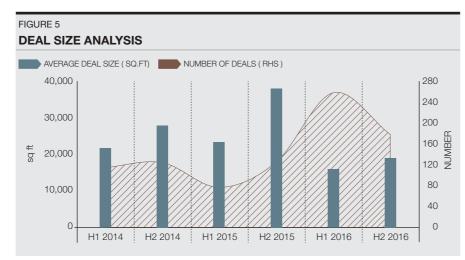
Source: Knight Frank Research





- While developments in India have a limited impact on the Indian IT industry, global developments particularly Americas and the Europe, have a wide ranging impact on the Indian IT industry. Coupled with absence of any large deals in this half yearly period, IT sector demand share dipped from 46% in H2 2015 to 16% in H2 2016.
- BFSI and the manufacturing sector led the office demand, taking up large office spaces in PBD and SBD West.
- Other services sector represented by media, consulting and infrastructure development firms improved its transaction share from 17% in H2 2015 to 20% in H2 2016 taking up office space in BKC and SBD Central markets.

DEAL SIZE ANALYSIS



year saw occupiers
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plans

The second half of the

Source: Knight Frank Research

- With absence of any comparable large deal in H2 2016 as was the case in H2 2015, average deal size has shrunk by 50% in H2 2016 even as the number of transactions jumped by 38%.
- The change in the deal scenario is driven by the industry representation – which is lower

from the IT sector and in favour of manufacturing and the BFSI sector.

THE CHANGING LANDSCAPE OF THE INDIAN IT/ITES INDUSTRY AND THE OFFICE MARKET

ndoubtedly, the Indian technology sector has been the crown jewel of the Indian growth story. The stupendous growth of the Indian technology sector has benefitted the Indian economy in general and real estate sector in particular. Considering demand for real estate is a derived demand, the rise of the technology sector translates in to direct demand for office space. Earning revenue of USD 143 bn in FY16, it has placed the country as the world's no. 1 outsourcing location with a 56% share in the global outsourcing arena. This sector, over the past decade, has propelled the fortunes of office markets in cities like Bengaluru, NCR, Pune, Chennai, Mumbai and Hyderabad.

The operating environment of the Indian IT/ITeS sector is undergoing rapid change. With a staggering 75% revenue coming from exports in FY16, rising protectionism and antiglobalisation trends in the developed part of the world adversely affects the Indian IT industry. The developments of Brexit and change in US President are expected to have a significant

long-term impact on the sector.

Further, the changing business landscape on account of automation and new technologies has made it rethink about its largest resource – manpower. Furthermore, even if there is an addition to manpower, there is a gap between the required skillset as compared to the present. A tectonic shift implies that even while revenue will grow, employee addition per unit of revenue will decline. Considering employee additions directly result into office space demand, real estate demand projections will suffer.

All these factors will have a varying degree of impact on IT office geographies in the country. The preferred geographies for the IT sector have been the National Capital Region (NCR), Bengaluru, Mumbai, Hyderabad, Chennai and Pune. These cities have become employment magnets predominantly driven by the IT sector. Of the 41 mn sq ft of office space demand in these cities in 2015, 44% came from the technology sector, excluding the e-commerce segment.

While cities like Bengaluru and NCR

see more than 50% office space demand coming from the IT/ITeS sector, in case of Mumbai it has been much lower at around 25%. Mumbai enjoys a well-diversified occupier base with a handsome presence of other occupier segments like BFSI, manufacturing, consulting, media and telecom. For instance, in 2016, BFSI and manufacturing sectors contributed to 27% of the demand each. Other services segment, which includes media, consulting, e-commerce, etc. contributed 28%. The share of the IT/ITeS industry was just 19%. This reduces the dependence on just one sector and provides a cushion against vagaries of just one sector in the uncertain future that the sector is embracing.



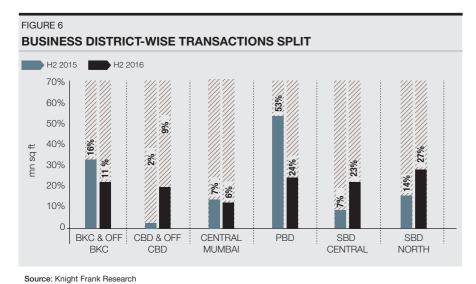


SELECT TRANSACTIONS

OCCUPIER	BUILDING	LOCATION	APPROX. AREA (SQ FT)
Hexaware Technologies	Loma IT Park	Navi Mumbai	250,000
UBS	Gigaplex	Navi Mumbai	200,000
Idea Cellular	Century Greenspan	Worli	160,000
Rising Star Foxconn	Raheja International Corporate City - I	Navi Mumbai	150,000
Teva Pharmaceutical	Commerz II	Goregaon East	125,000
Deloitte	Lotus Corporate Park	Jogeshwari East	100,000
Gilbarco Veeder Rood	Art Guild House	Kurla	100,000
TIAA Financial Services Company	Godrej One	Vikhroli	95,000
TCS	Tiffany & Lexington	Thane	88,500
ViaCom	Shiv Building	Andheri East	85,000

Source: Knight Frank Research

BUSINESS DISTRICT ANALYSIS



5.0 MN SQ FT H2 2015

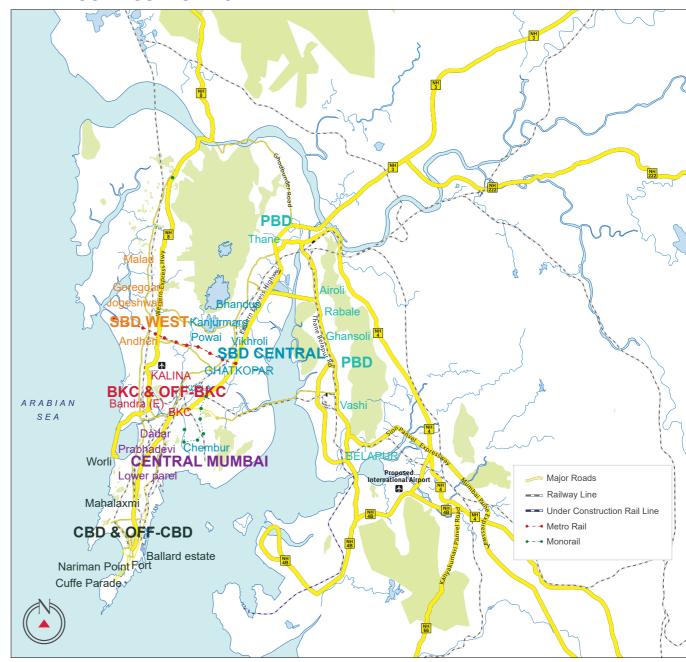
3.3 MN SQ FT H2 2016

- Office rent consciousness coupled with the changing profile of residential catchments across the metropolitan region is translating in to movement of office demand to the north of the city.
- SBD West, PBD and SBD Central saw the largest contribution to the office demand during H2 2016.
 Central Mumbai and BKC are facing a supply shortage leading to dip in their transaction share.

BUSINESS DISTRICT CLASSIFICATION

BUSINESS DISTRICTS	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 (E), Kalina and 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

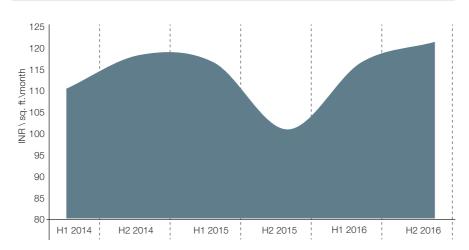
MMR BUSINESS DISTRICT MAP





RENTAL TREND

FIGURE 7 WEIGHTED AVERAGE RENTAL MOVEMENT (INR/SQ.FT./MONTH)



Source: Knight Frank Research

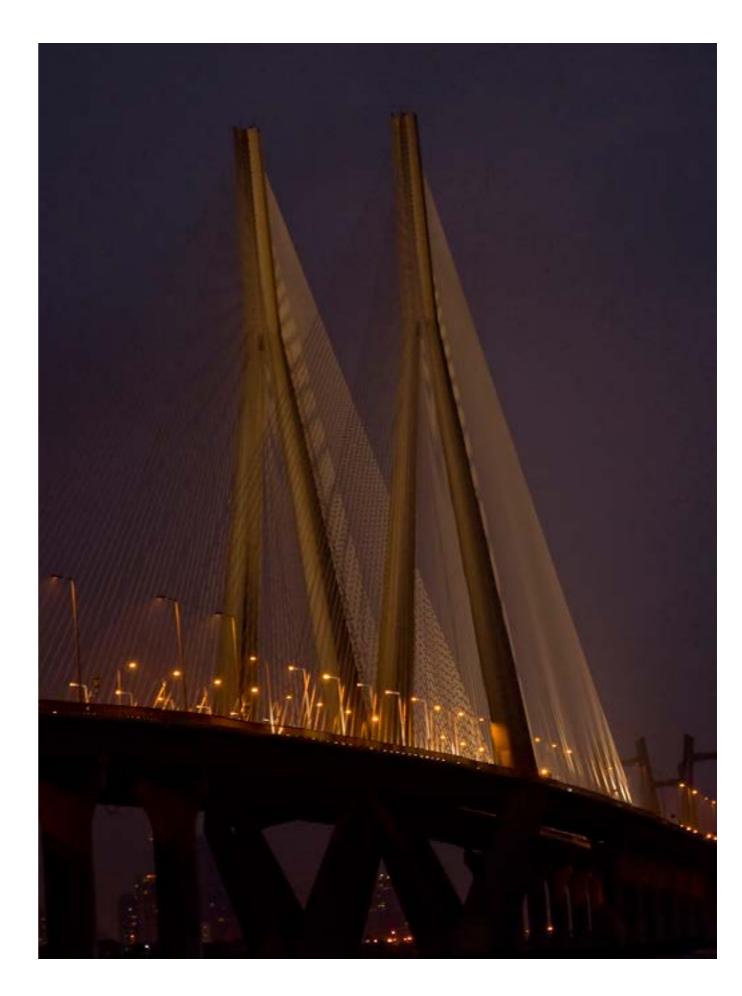
- In line with the city's transaction composition, where the share of the relatively cheaper PBD has come down, the weighted average rental has witnessed a jump of 16% from ₹104 per sq ft per month in H2 2015 to ₹121 per sq ft per month in H2 2016.
- Overall, taking cues from shrinking new completions and lower vacancy level, office rents are inching upwards. BKC and Central Mumbai have rental level higher by 6% in H2 2016 over H2 2015 followed by SBD West at 5%.

BUSINESS DISTRICT-WISE RENTAL MOVEMENT

BUSINESS DISTRICT	RENTAL VALUE RANGE IN H2 2016 (₹/SQ FT/MONTH)	12 MONTH CHANGE	6 MONTH CHANGE
BKC & Off-BKC	220-330	6%	5%
CBD & Off-CBD	160-250	0%	2%
Central Mumbai	170-200	6%	4%
PBD	50-90	3%	1%
SBD Central	80-150	4%	1%
SBD West	80-140	5%	2%

Source: Knight Frank Research

Office rent consciousness coupled with the changing profile of residential catchments across the metropolitan region is translating in to movement of office demand to the north of the city



LBZ TO RETAIN ITS EXCLUSIVITY

The costliest piece of real estate, in the country, may open its doors to many more buyers in the future, but it will still not be accessible to all.

- contributed by Pankaj Toppo

he Lutyens Bungalow Zone (LBZ) continues to make headlines even when the chips are down. This year, the most coveted piece of real estate in the heart of Delhi did not see as many transactions as it did in 2015 but a single transaction at the end of 2016 made it to the national news. The transaction, worth over ₹400 crore, was the only major transaction to have taken place in the LBZ. Such is the attractiveness of this piece of land in the national capital, that even a small piece of news in this zone is enough to have ramifications, especially across the real estate sector. Since 2015, most stakeholders in the real estate sector have been waiting with bated breath to hear about the re-organisation of the LBZ. The several developments over the past 18 months hint towards a re-organisation. Draft guidelines for the re-organisation of the LBZ was issued by the Ministry of Urban Development, followed by the Delhi Urban Art Commission (DUAC), a body that makes decisions regarding the development of Delhi, advocating for the exclusion of eight areas from the present day LBZ. If this re-organisation happens, then it will lead to the reduction in size of the LBZ. For the real estate sector. however, it will open up new avenues for development in the heart of the national capital.

DISSENTING VOICES

Initiatives may have been taken by the necessary government authorities for the re-organisation of the LBZ but dissenting voices from residents of some of the colonies in the LBZ has also gained strength over the years. These voices are, however, largely from the privately held addresses within the LBZ. The primary reason for this is that they cannot unlock

the value of their residences. In some locations, especially those that are on the periphery, there are not too many buyers for the said property largely because of strict rules regarding fresh construction and renovation within the LBZ. To be more clear. the rules that govern the LBZ do not permit fresh construction. Thus, in privately held colonies where families have grown up over the years, they are forced to live in crowded spaces. Moreover, in case they are left with no space to accommodate the extended family, they have no other option but to leave the LBZ and find accommodation elsewhere in the city. Had strict construction rules not been there, they could have constructed fresh space to accommodate the increasing family. In fact the Ministry of Urban Development had been receiving representations from various residents of the LBZ for relaxation of certain norms. As a result, the Ministry forwarded the representations to the DUAC for examination and the Commission was asked to provide the necessary recommendations on the matter. There is, however, no denying the fact that because of these strict rules the LBZ has managed to retain its character and image over the years. From a real estate development potential however, it is important to know the areas that could be removed from the LBZ in the near future. However, which areas are going to be delisted from the LBZ?

THE PROPOSED LBZ

The area of the LBZ has increased over the years. When the new capital of British India was designed, the LBZ was spread over 19.12 sq km. It remained like that for a long time. In independent India, the LBZ

was first demarcated in 1988 and during this time, the area of the LBZ was spread over 25.88 sq km. In 2003, new areas were added to the LBZ, thereby increasing its area to 28.73 sq km. After going through the representations, the DUAC was of the view that the colonies of Sunder Nagar, Golf Links, Jor Bagh, Bengali Market, Panchsheel Marg, Sardar Patel Marg, Mandir Marg, Chanakya Puri, Ashoka Road and Connaught Place will cease to be part of the revised LBZ. The primary reason for excluding these areas is that they were not part of the original LBZ, as envisaged by Sir Edward Lutyens. Colonies like Golf Links, Bengali Market and Sunder Nagar came into existence much after the original LBZ took shape. This means that if the recommendations of the DUAC are accepted then the size of LBZ will come down from 28.73 sg km to 23.60 sg km. This means that around 5.13 sq km of land will be available for real estate development.

EXPECTED NEW SUPPLY

As already stated, around 5.13 sq km of land will be available for real estate development; there is however, a caveat. The projects that will come up in the denotified LBZ will be re-development projects, wherein an existing structure will be razed to the ground, and a fresh one built in its place. Only those areas will come in for redevelopment where the owner of the house/plot opts for re-development. Further, building laws as applicable in other parts of Delhi will also apply here. The new supply that is expected to come in the de-notified areas will typically be 3–4 BHK apartments. The new supply that will come in will also ensure that the de-notified areas will certainly not retain the character of it being a part of the LBZ, as in the past. This however, does not mean the new supply coming

in this part of Delhi will be cheap. The capital values of new housing units coming up will certainly not run into hundreds of crores, as they do in the present day, but they will surely run into few crores. The new supply coming into these de-notified areas, will certainly be among the costliest new launches in Delhi. Housing units in these areas would be priced between ₹15-20 crore. The fact that they will be close to the heart of Delhi and a few launches would take place here, sale would most likely be done by invitation only. The following example will give an idea of the amount of supply that can come up on a one-acre plot of land that has been offered for re-development, in the future, in areas that cease to be part of the LBZ. On the said plot, a high rise of a maximum of 18-19 floors can come up subject to permission from the relevant authorities. The FAR in such areas will be 1.5.

CONCLUSION

For the various stakeholders in the real estate sector. 5.13 sq km will be free for development, provided the recommendations of the DUAC are accepted. The availability of new supply coming up in the heart of the city will certainly add to the supply in those areas. In a city like Delhi, the fresh supply coming up in those areas will certainly find many takers and it's very likely that the sale of such units will be through invitation only. This will largely be an attempt to ensure exclusivity, which is the very essence of this part of real estate in the country. Thus, the houses even in de-notified areas will be offered to a select few. Hence, the most costly part of real estate in the country is expected to remain in the hands of a select few, even after some of those areas cease to be a part of the LBZ.







RESIDENTIAL MARKET

In the present day,

developers want to

concentrate on project

completion to be able

some liquidity. Apart from

provisions of RERA have

also forced the developers

to complete their ongoing

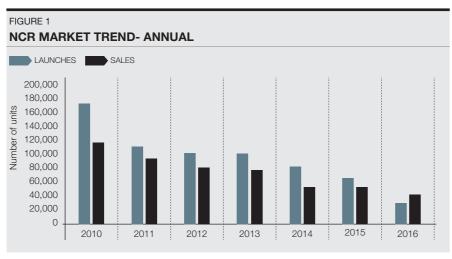
to sell a unit and get

the waning demand,

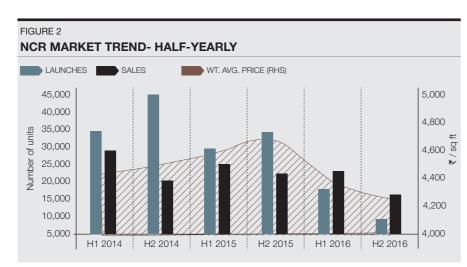
projects instead of

launching new ones

NCR RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS



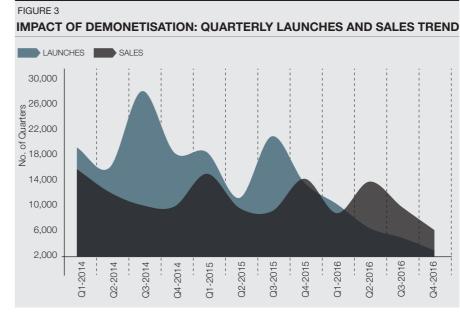
Source: Knight Frank Research



Source: Knight Frank Research

- The NCR residential market has been under pressure and 2016 was no different. The market has been in a downward slide, since 2010, with every passing year hitting a new low. In H1 2016, other major cities in the country fared well but NCR was the worst performing market. In H2 2016, the market witnessed a degrowth in demand and supply by 29% and 73%, respectively, compared to the same period in 2015.
- On a yearly comparison, new launches in NCR dwindled to

- 26,735 units in 2016 registering a YoY 58% drop from 2015, festive season failed to infuse any life in the dull market and sales further fell to 40,005 units in 2016 from 48,800 units in 2016, registering a YoY drop of 18%.
- Piling up inventory, lack of consumer confidence due to litigations and infrastructure delays were some of the major factors that have decelerated new launches in NCR. The market dynamics have become such that today only a ready-to-move-in



Source: Knight Frank Research

property attracts the buyer. The largest urban agglomeration of the country has the highest unsold inventory under different stages of construction, but is still struggling to find buyers. If this was not enough, the partial implementation of the Real Estate (Regulation and Development) Act, 2016 in the first half of 2016 set the sluggish market in a twirl again.

New launches came to a standstill

- with developers rushing to complete their pending projects. The rush stems from the fact that if a project is not completed before the full implementation of the Act, the promoter will need to get the project registered with the authority and then complete it within the stipulated time.
- However, as per our survey, the market did start giving indications of marginal recovery in Q3 2016 owing to developments like project deliveries, reduction in prices and improving infrastructure in places like Noida Extension and Noida–Greater Noida Expressway. Although the Q3 numbers for

NCR were not very encouraging when compared to the peak of 2012, some prominent developers, especially in Noida and Greater Noida, registered a slight increase in their sales in Q3 2016 as compared to the same period in 2015, thereby indicating improving market sentiments. Instances like sale of over ₹3 billion on the first day of the launch of a 100-acre township in Greater Noida was a testament to the improving sentiments.

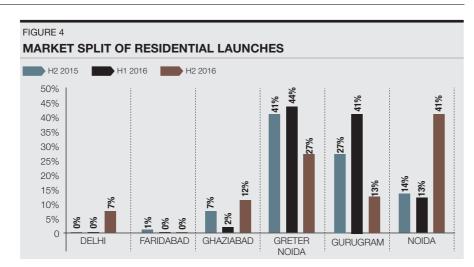
- However, the most recent move by the government on 8th November to clamp down on black money nipped this market sentiment in the bud and has brought the NCR real estate market on its knees.
- The fourth quarter numbers are evidence to the impact of the demonetisation. Sales volume dropped by 53% YoY in Q4
 2016 and new launches fell by a massive 73% during the same period. At only 6,765 units, the Q4
 2016 sales volume is at its lowest quarterly level since 2010, down by 79% since the quarterly peak of

- 31,990 units in Q4 2010. The new launches number is much worse at just 3,710 units in Q4 2016, which is 91% lower than the peak of 40,136 units witnessed in Q4 2010.
- As the sales number for the first nine months had shown an optimistic trend, we believe that 2016 would have been at par with 2015 had it not been for the demonetisation move.



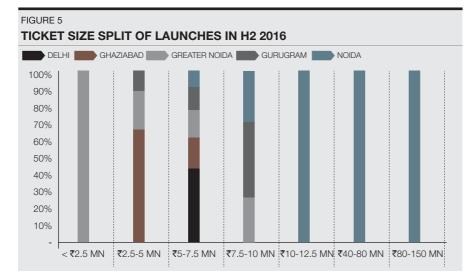
MARKET SPLIT OF RESIDENTIAL LAUNCHES

- The new launches in NCR have come down to a staggering 9,273 units in H2 2016 registering a
 YoY drop of 73%. Many factors have contributed to this drop like increase in the land allotment rates by 14.19% by the New
 Okhla Industrial Development
 Authority (NOIDA) and the looming uncertainty over RERA that pushed developers to complete projects in hand.
- However, NCR also saw the launch of some major projects by a select group of developers that were lapped up by homebuyers in Q3 2016. Where new launches on a YoY basis have declined considerably across all micromarkets, of the few launches that happened in H2 2016, Noida and Greater Noida garnered the lions share.
- More than half of the units launched in Noida in H2 2016 were priced between ₹7.5 mn – 12.5 mn. These new launches along the Noida–Greater Noida Expressway largely catered to the mid segment. The progress of infrastructure and movement of offices along this corridor has improved the buyer sentiments in the area. In contrast, there were few launches in Gurugram in the same price bracket.



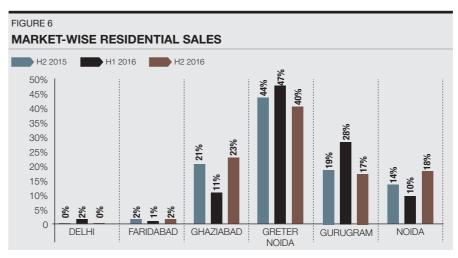
Source: Knight Frank Research





Source: Knight Frank Research

MARKET-WISE RESIDENTIAL SALES



Source: Knight Frank Research



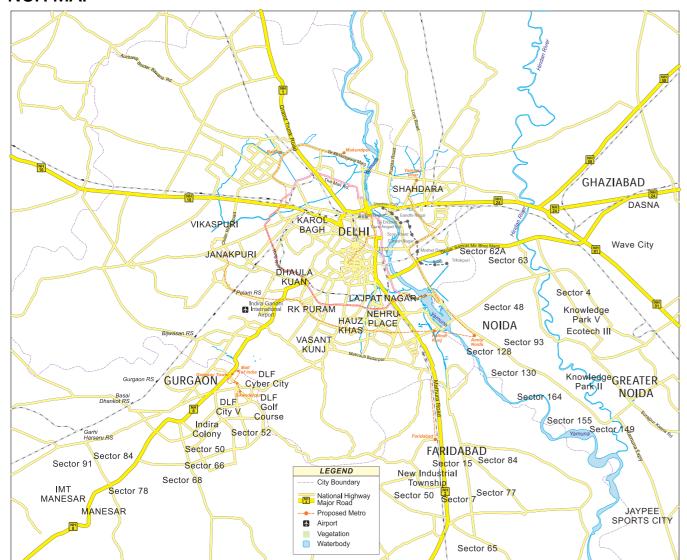
- Approximately 16,900 units were sold in the second half of 2016, compared to 23,800 units in H2 2015, thus registering a drop of 29%.
- Buyers eluded the market due to lack of confidence and ambiguity on the Real Estate (Regulation and Development) Act, 2016.
- Our survey suggests that ideally where a fall in prices should have kicked in sales, the buyers preferred to be in a wait-and-watch mode and were expecting prices to correct further.
- All micro-markets were seen to be in the same boat in terms of demand in H2 2016 and registered a YoY decline in share of sales.
 However, improving connectivity and well-laid infrastructure gave

- Noida an edge over the other markets and it witnessed an increased interest from buyers.
- Affordability drove sales in Ghaziabad as it registered a 47% increase in sales in H2 2016 over H1 2016. As a result, there was a marked increase in the percentage share of Ghaziabad, which moved from 11% in H1 2016 to 23% in H2 2016. However, keeping in line with the overall market sentiments, demand in this market has also witnessed a decline of 20% in H2 2016 compared to the same period in 2015.

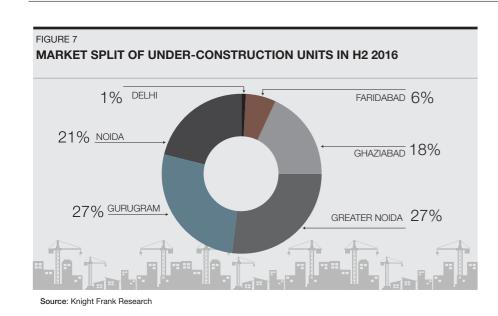
Even falling prices could also not cushion the absence of buyer confidence from the market in NCR and demand failed to pick up in 2016 with approximately 40,000 units being sold in 2016, registering an 18% drop from 2015



NCR MAP



MARKET SPLIT OF UNDER-CONSTRUCTION UNITS IN H1 2016



THE SETTLING DUST – GREATER NOIDA WEST

reater Noida West (formerly Noida Extension) is a part of Greater Noida - a planned town in the Gautam Budh Nagar district of Uttar Pradesh. Conceptualised as a self-sustaining micro-market in the master plan, the area was plagued by incidents such as the 2010-2011 land acquisition row that stalled construction and alarmed the buyers. However, all that is behind us and the issue was resolved in 2015, with the Supreme Court upholding the land acquisitions by the Greater Noida Industrial Development Authority (GNIDA) in Noida Extension between 2006 and 2009.

The master plan for the area had room for office, retail, IT spaces, entertainment hubs, educational institutions and other allied social and physical infrastructure. However litigations and delayed projects put a hook on the pace of development of this area, but things have slowly started to look up and the area is taking shape into a promising residential cluster. Off late, this area has been garnering interest from institutional investors. Some of the factors that are paving the way for the development of this area are a wide range of property options to

choose from, price attractiveness and its improving connectivity with job centres of Noida and Noida–Greater Noida Expressway.

Greater Noida West offers readyto-move-in properties of different
configurations. The bulk of the
apartments in this region range
from 700 − 1,500 sq ft, thus
complementing the established
market of Noida where apartments
are in the range of 1,200 − 2,500 sq
ft. The small size of the units reduces
the ticket size and therefore, has
made this micro-market attractive for
the buyers looking for options in the
under ₹5 mn price bracket.

On the connectivity front, the major drawback of this area was the absence of a wide metaled road and the non-existent social and physical infrastructure. Things are seen to be slowly changing and today, the area is drivable and connected with Noida, via the Noida–Greater Noida Expressway. A number of sector roads also connect the region with Dadri and the nearby residential hub of Crossings Republik in Ghaziabad. On the other side, the Yamuna Expressway further links Greater Noida West with Mathura and Agra.

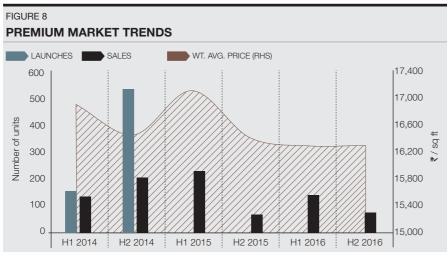
The upcoming Noida–Greater Noida metro link and the proposed 15-km metro that will connect Noida's Sector 71 with Greater Noida's Knowledge Park V will further add to the connectivity options of Greater Noida West.

Today the area today has come a long way from a corridor of dust, broken roads and under-construction projects to a promising residential hub for the middle income and affordable segment. The developers in the area are trying to send good vibes to the buyers by speeding up work on softer elements like landscaping and adding a fresh coat of paint to make the projects look livable. However, how much of this translates into actual sales is yet to be seen as the market absorbs the shock of the Real Estate (Regulation and Development) Act, 2016 and demonetisation.



PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS
Gurugram	Sectors 42, 53, 54, 58, 59, 65, Gurugram-Faridabad Road
Noida	Sectors 16 B, 100



Source: Knight Frank Research

Note: Premium markets include locations where the average ticket size of a residential unit is above ₹30 mn, are in close proximity to the central business district of the city and have witnessed new project launches in the preceding three years.

- The NCR agglomeration comprises five micro-markets, namely Delhi, Gurugram, Noida, Greater Noida, Faridabad and Ghaziabad, of which Gurugram and Noida are regarded as the premium markets.
- New launches in the premium segment have been giving NCR a pass since H1 2015.

The premium segment

NRIs from countries like

America, United Kingdom,

properties as investments

in NCR is attracting

the United States of

Singapore and Dubai,

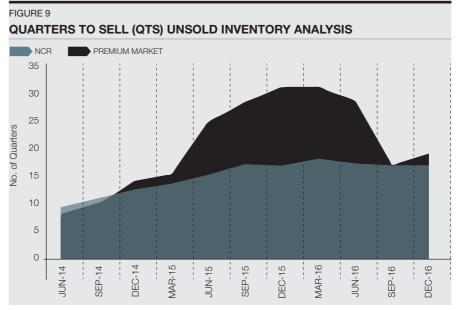
who are buying these

or second homes

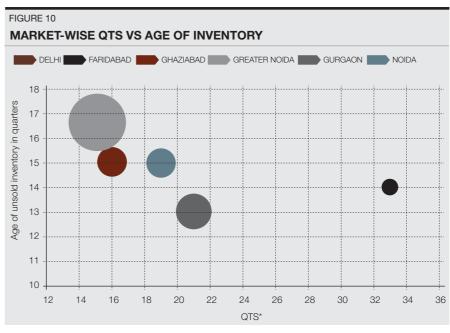
 On the other hand, sales in the premium market have trickled in, with approximately 70 units being sold in H2 2016. As per our survey, the premium segment in NCR is attracting NRIs from countries like United States of America, United Kingdom, Singapore and Dubai, who are buying these properties

- for investment or as a second home.
- Reflecting the overall market sentiment, the weighted average price growth in the premium segment remained muted in H2 2016, compared to the same period in 2015.

NCR MARKET HEALTH



Source: Knight Frank Research



Source: Knight Frank Research

- 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 in order to arrive at the QTS number for that particular quarter. A lower QTS indicates a healthier market.
- The QTS of NCR has remained unchanged since the past six quarters and stands at 17 quarters at the end of December 2016, which is extremely high. Ghaziabad and Greater Noida still remain NCR's comparatively better performing markets, with a QTS of 16 and 15, respectively. Affordability options add to the attractiveness of these markets, which has helped sales trickle in.
- Though the market saw its thinnest-ever new launches in H2 2016, it has had little impact on the unsold inventory due to the slow sales velocity, which has come down to 11,000 units in H2 2016. The unsold inventory stands at approximately 192,758 units as of December 2016.

PRICE MOVEMENT IN H2 2016

WEIGHTED AVERAGE PRICE MOVEMENT IN NCR

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
NCR	4,250	-7%	-2%
Premium markets	16,245	-1%	-0%

10,245 -170 -070





PRICE MOVEMENT IN SELECT LOCATIONS

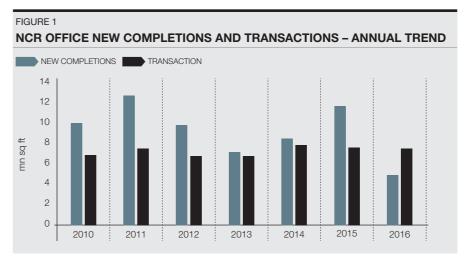
LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Yamuna Expressway	Greater Noida	3,295 – 3,557	0%	0%
Sector Chi V	Greater Noida	3,474 – 3,514	3%	3%
Sector 16 B	Greater Noida	3,100 – 3,400	-6%	-6%
Sector 16 C	Greater Noida	2,668 – 3,866	-3%	-3%
Sector 78	Noida	5,500 - 5,627	-1%	-5%
Sector 70	Noida	4,100 – 4,283	2%	2%
Sector 117	Noida	4,800 – 4,880	-1%	0%
Sector 143 B	Noida	3,970 – 5,200	-5%	-3%
Sector 37	Gurugram	4,200 – 5,600	-12%	-2%
Sector 49	Gurugram	7,700 – 10,200	-1%	0%
Sector 67	Gurugram	9,100 – 9,200	-1%	0%
Sector 79	Gurugram	4,200 – 6,300	-2%	0%
Sector 82	Gurugram	3,700 – 5,900	0%	0%
NH-24 Bypass	Ghaziabad	2,842 – 3,000	5%	2%
Raj Nagar Extension	Ghaziabad	2,884 – 2,900	-1%	2%
Crossings NH-24	Ghaziabad	3,200 – 3,300	2%	0%
Sector 37	Faridabad	4,904 – 7,642	-4%	0%
Sector 75	Faridabad	3,550 – 3,700	-1%	1%
Sector 76	Faridabad	2,720 – 2,890	-6%	0%
Goregaon	Western Suburbs	13,000-15,000	-1%	-1%

Source: Knight Frank Research

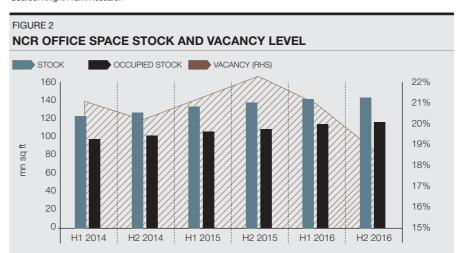
- Prices in the NCR residential market have dropped by 7% in 2016 compared to 2015. The prices corrected for the first time in H1 2016 and registered a 4% YOY drop.
- The primary reason for this dip is that prices in NCR shot up unrealistically from 2008 to 2012.
 Being a heavily investor-driven
- market, speculations fuelled the overnight increase in prices during that time.
- The spike in prices was such that some projects on the Dwarka
 Expressway in Gurugram saw a three times jump in prices from 2008 – 2012. Launched in 2008 at ₹2,350 per sq ft, the price spiked to ₹5,000 at the start of 2012 and
- by the end of 2012, the prices were up to ₹6,500 per sq
- The fact that there has been no price increase in NCR since 2013, clearly shows a time correction.

OFFICE MARKET

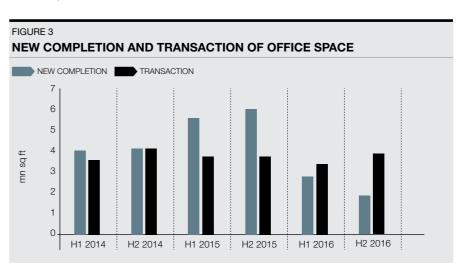
NCR OFFICE MARKET STOCK, NEW COMPLETIONS, TRANSACTION AND VACANCY TRENDS



Source: Knight Frank Research



Source: Knight Frank Research

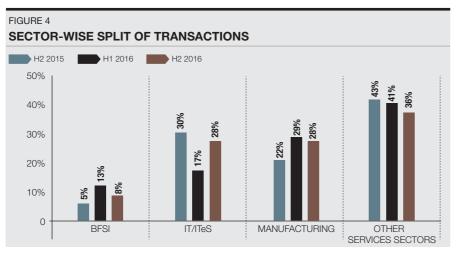


Source: Knight Frank Research

- The NCR office market maintains its annual appetite and clocks
 7.3 mn sq ft at the end of 2016, making it at par with 2015. The overall slump in the real estate sector plagued the office market as well and as a result of this, new completions in NCR have dropped to an all-time low. A mere of 4.6 mn sq ft of new completions entered the office market in 2016 as opposed to 11.5 mn sq ft in 2015.
- In terms of half-yearly trends, leasing saw a total of 3.8 mn sq ft of office space transactions in H2 2016, registering a marginal uptick compared to the same period in 2015. Only 1.8 mn sq ft of new completions hit the NCR market in H2 2016 registering a striking 70% decline from the same period in 2015.
- Steady leasing and negligible new completions have nudged the overall vacancy levels from 21.5% in H2 2015 to 19% in H2 2016. However, vacancy in the micromarkets of Gurugram, such as DLF Cyber City and Golf Course Road have reached single digit.



SECTOR ANALYSIS



Source: Knight Frank Research



- IT/ITeS makes a comeback in NCR in H2 2016. The share of IT/ ITeS was on a decline for the past one year but robust leasing from occupiers like IBM, Genpact and TCS in the second half of 2016 bucked the trend for the sector.
- Though the other services sector took up 36% of the total NCR office space demand in H2 2016, the sector registered a YoY degrowth of 13% in the transacted space. Some of the large transactions in this sector include Amazon, and MakeMyTrip.

The other services sector

yet again drove the office

space demand in H2 2016

and garnered a 36% share

of the total space take

up in NCR, with leasing

XL Catlin

from companies such as

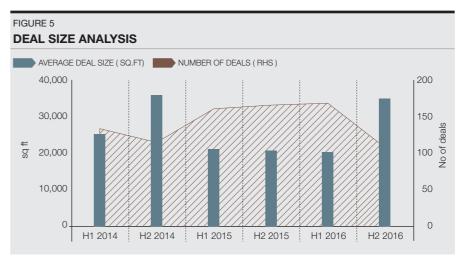
Amazon, MakeMyTrip and

 The manufacturing sector is seen to be making a steady run in H2 2016 as well, and takes up a share of 28% from the total transaction pie. The 29% uptick in space take up in H2 2016 helped the sector

- to increase its market share.

 Demand from the sector saw an increase post the Make in India campaign. Some of the prominent transactions in the manufacturing sector include Nokia in Gurugram and Dell in Noida.
- Though the BFSI sector accounted for a minimal share of 8% of the total office space demand in NCR, large-size transactions such as XL Catlin, Religare and City Bank led to a massive 61% increase in the transacted space in H2 2016 over the same period in 2015.

DEAL SIZE ANALYSIS



Source: Knight Frank Research

OCCUPIER	BUILDING	LOCATION	APPROX. AREA (SQ FT)
Genpact	Unitech SEZ	Sec-69, Gurugram	500,000
TCS	C-30/7A	Sector-62, Noida	278,192
Ciena	Plot No. 13	Sec-32, Gurugram	180,000
MakeMyTrip	Building 5	DLF - CyberCity, Gurugram	150,000
XL Catlin	DLF World Tech Park	Silokhera, Gurugram	150,000
Dell	Oxygen SEZ	Sector-144, Noida	100,000
Adidas	Independent building	Sector-32, Gurugram	93,000
Sony India	A-30	Mohan Co-operative, SBD Delhi	90,000
Amazon	Ambience Corporate Tower	NH-8, Gurugram	87,766
Data Telesis	Brookfield Infospace	Tikri SEZ, Gurugram	80,000
IBM	Infinity Towers	DLF - CyberCity, Gurugram	58,960
NSDC	Worldmark	Aerocity, SBD Delhi	50,000
Mott Macdonald	Logix Technopark	Sector-62, Noida	45,000
Indian Health Organisation	Plot No. 213	Okhla Phase-3, SBD Delhi	45,000
City Bank	Logix Cyber Park	Sector-127, Noida	30,000
Quikr	Espire	Mohan Co-operative, SBD Delhi	7,500

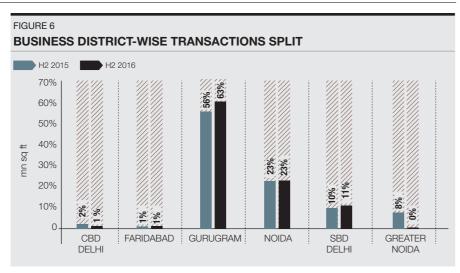
Source: Knight Frank Research



- Large-size transactions
 characterise the NCR market in
 H2 2016. The average transacted
 space, which had come down
 significantly to 19,850 sq ft in H1
 2016 has moved to 35,100 sq ft in
 H2 2016.
- Gurugram yet again led the tally of the number of deals, with 57% of the total 107 deals in H2 2016, followed by SBD Delhi and Noida with 21 and 20 deal conversions, respectively. Locations such as Noida Expressway and Sector-62

in Noida and Mohan Cooperative and Aerocity in SBD Delhi were among the most preferred locations for occupiers in this half.

BUSINESS DISTRICT ANALYSIS



Source: Knight Frank Research



- The increase in the leasing activity and improving sentiments around Noida stems from factors like good infrastructure and lower rentals as compared to Gurugram
- transaction pie of 3.8 mn sq ft in H2 2016 and yet again emerged as the most preferred business district. Some of the locations that witnessed major traction in Gurugram in H2 2016 are Golf Course Road and Sector-44.

 Approximately 46% of the total transacted space of 2.4 mn sq ft was in these micro-markets.

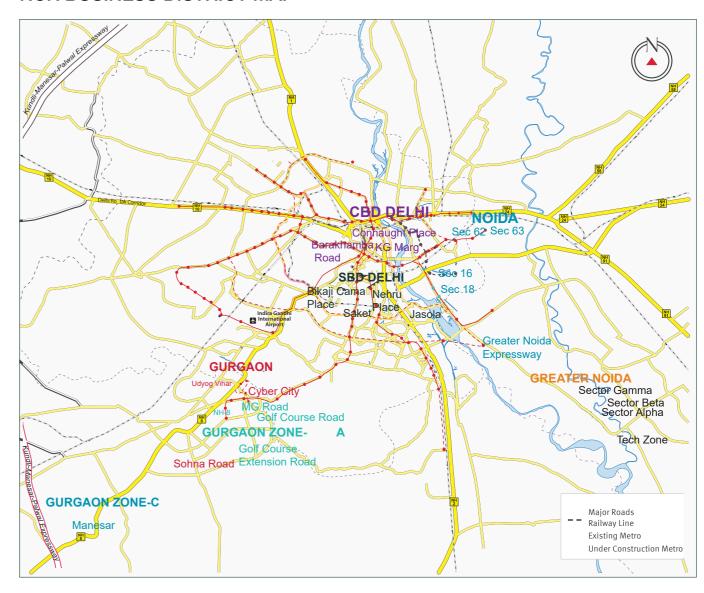
• Gurugram took up 63% of the total

- Now an established corporate hub, leasing in Gurugram was driven
- by consulting and e-commerce companies. Following the trend, 41% of the demand for office space in Gurugram came from the other services sector followed by 27% share from the IT/eS sector. Some of the prominent occupiers who leased space in Gurugram in H2 2016 are Genpact, XL Catlin, IBM, Amazon and Adidas.
- Noida registered a whopping 30% increase in the total transacted space in 2016 compared to 2015.

- However, the percentage share of Noida in the total office space take up remains unchanged at 23% in H2 2016 as compared to the same period in 2015.
- The increase in the leasing activity and improving sentiments around Noida, stems from factors like good infrastructure and lower rentals compared to Gurugram. The progress of work on the Noida–Greater Noida metro route is attracting occupiers and the workforce alike. So far, the Noida
- Metro Rail Corporation (NMRC) has already put into place 15 km of the viaduct out of the total 29.7 km of the corridor.
- Office space take up along the Noida–Greater Noida Expressway and Sector-62 have significantly improved over the last few quarters with companies such as Dell, City Bank, TCS, Canon and NEC Technologies taking up space in H2 2016. As per our survey, owing to the lower rentals and availability of large floor plates, firms looking
- to establish campuses are looking at Noida with a keen eye.
- SBD Delhi registered a YoY 21% jump in transacted space nudging it's share from 10% to 11% in H2 2016 compared to the same period in 2015. Some of the notable transactions in this business district involve Quikr, SBI, Sony India, Philip Morris and NSBC.

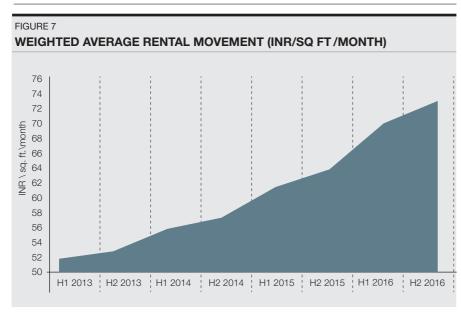
 Leasing activity in CBD Delhi was concentrated around Connaught Place with no major, while

NCR BUSINESS DISTRICT MAP





RENTAL TREND



Source: Knight Frank Research

BUSINESS DISTRICT-WISE RENTAL MOVEMENT

BUSINESS DISTRICT	RENTAL VALUE RANGE IN H2 2016 (₹/SQ FT/MONTH)	12 MONTH CHANGE	6 MONTH CHANGE
CBD Delhi	214 – 350	3%	0%
SBD Delhi	93 – 163	7%	0%
Gurugram Zone A	106 – 165	10%	6%
Gurugram Zone B	72 – 134	10%	6%
Gurugram Zone C	25 – 35	1%	0%
Noida	44 – 70	14%	3%
Faridabad	45 – 55	0%	0%

Source: Knight Frank Research

As mentioned earlier, the new completions in NCR have plummeted to 1.8 mn sq ft in H2 2016 and this has put a huge pressure on the weighted average rental values. The lack of quality office space has pushed the weighted average rental values from ₹64 per sq ft per month in H2 2015 to ₹73 per sq ft per month in H2 2016, registering a sharp YoY increase of 14%.

 Quality office space in the micromarkets of Gurugram, such as DLF Cyber City and Golf Course Road, and Noida, such as Noida–Greater Noida Expressway and Sector- 62, are expected to witness significant upward pressure on price.



such as Noida–Greater Noida Expressway and Sector-62, are expected to witness significant upward pressure on price

Course Road, and Noida,

Micro-markets of

Gurugram, such DLF

Cyber City and Golf

MUMBAI TRANSPORT INFRASTRUCTURE AND ITS IMPACT ON REAL ESTATE

- contributed by Vivek Rathi

RESIDENTIAL MARKET

As an extension of the 458 sq km of Mumbai city, the Mumbai Metropolitan Region (MMR) is spread over 4,355 sg km. In the last decade, the population growth rate of Mumbai was 3.9%, and 40.3% for the rest of the MMR. By contrast, around 80% of the 124 mn sq ft of the region's office space is in Mumbai. These dynamics make the long commute to work and back inevitable for a large section of the workforce in the MMR, and shape the real estate market as well. This is also reflected in the high price gradient of the residential properties in the region, which varies from ₹3,000-100,000 per sq ft. Such a huge price variation arises on account of multiple factors - commuting time to employment hubs and other places of importance, access to education, healthcare and entertainment avenues, location profile and gentry, etc. These factors vary across localities and so does the property price.

TRANSIT INFRASTRUCTURE

Considering the high price gradient of ₹3,000–100,000 per sq ft, the concentration of office space in Mumbai, whereas high population growth in the rest of MMR, the role of infrastructure development, specifically urban transport projects, is significant.

The suburban rail network has been the primary mode of commuting to work in the MMR. Spread over a

319-km route across the Central, Western and Harbour corridors, a total of 2,813 train services are operated daily. The city's suburban rail network ferries more than eight million passengers daily, which is likely the highest in any urban centre in the world. An astounding 0.60 mn passengers travel during the busiest morning rush hour from 9 to 10 a.m. Similarly, 0.59 mn passengers travel during the busiest evening peak hour from 6 to 7 p.m. Such a high traffic flow to employment centres places great importance on staying closer to the office markets. Accordingly, regions in the MMR that enjoy good connectivity (travel time and frequency) have witnessed flourishing property development.

The Mumbai Metro, considered to be an efficient and comfortable urban transport system, has now been integrated into the development plan for the Mass Rapid Transit System (MRTS). According to the 2004 Mumbai Metro Master Plan, 146 km of metro rail network has been envisaged for the city. Another 106 km is envisaged for the Navi Mumbai region. At present, an 11.40-km metro corridor has been operational since 2014.

METRO RAIL IMPACT

Mumbai Metro Line 1 [Versova–Andheri–Ghatkopar (VAG)] was the first metro route in Mumbai, with a

length of 11.4 km, which became ready for public use in 2014. Mumbai is a peninsular city, with the CBD at its southern tip and residential markets growing in the northern suburbs. The city saw its north–south connectivity develop as office markets such as Nariman Point and Fort got connected with the suburbs through the suburban rail network. However, the east–west connectivity lagged behind, and long detours through interchanges at locations such as Dadar and CST are required. The growing population in the suburbs led to the need for enhanced east–west connectivity. Hence, this VAG metro project addressed the need.

The impact of the metro development can be seen with reference to a residential market like Andheri East, which has been favourably impacted by the VAG metro corridor. The state government approved the project plan in 2004, and after several delays, the construction commenced four years later, in 2008. Till this time nothing changed on the ground as far as the desired benefits of this project were concerned. However, during this period, the Andheri East residential property appreciated by 185%, moving from ₹2,800 per sq ft to ₹8,000 per sq ft. A favourable property market cycle, coupled with the expectation of the benefits that would accrue to the residents, translated into a significant appreciation in the property prices in Andheri East.

The construction phase lasted six years, from 2008 to 2014. During this period, the ground situation remained the same as far as the project objective was concerned, and construction-related issues affected the quality of life for the residents. However, during this six-year period, residential property in Andheri East appreciated by 94%, from ₹8,000 per sq ft to ₹15,500 per sq ft.

At present, the VAG metro corridor aligns predominant ly with the office markets of Saki Naka, Marol, Chakala and the Andheri–Kurla Road. The 11.4-km metro route has enhanced the much-needed east–west connectivity through an MRTS, and reduced the journey time between Versova and Ghatkopar from 71 minutes to 21 minutes. The micro-market of Andheri East witnessed a price growth of 638% between 2000, when the feasibility study was undertaken, and 2014, when the VAG corridor was opened for public use.

Akin to the first metro corridor of the city, i.e. VAG, we believe that the upcoming corridors will accrue similar benefits for the residential pockets in their influence zones. However, the intensity of the impact will vary across the corridors and depend on a host of factors, such as residential pricing, social and physical infrastructure, and employment opportunities.

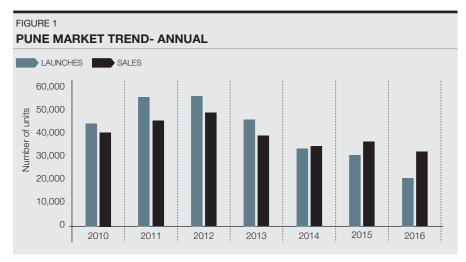






RESIDENTIAL MARKET

PUNE RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

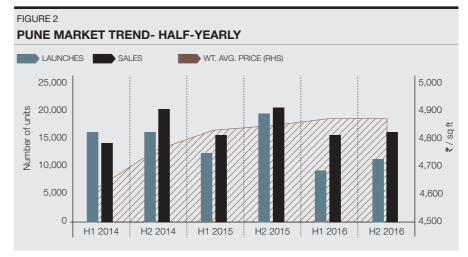


Source: Knight Frank Research

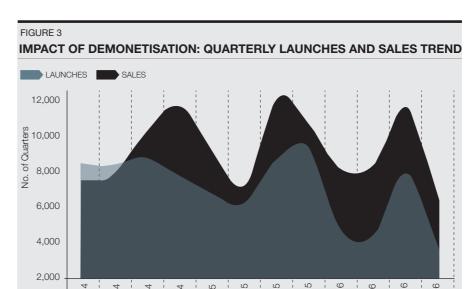
- The Pune residential market has been on a continuous downslide over the last five years after peaking in 2012. While the city observed more than 55,000 units in new launches and 48,000 units in sales during 2012, these numbers have fallen by 64% and 32% respectively since then.
- Steady sales volume from 2010–2012 led to aggressive new launches by developers during this period. However, with rising unaffordability and worsening of sentiment among homebuyers, sales volume started to decline post 2013. This caused a piling up of unsold inventory in the city, which peaked at 68,840 units in 2013.
- Taking cues from the market in terms of falling sales volume, developers truncated their new launches with each passing year and this helped in rebalancing the market to a great extent. While the unsold inventory level standing at 49,700 units in H2 2016 is at the

- lowest in comparison to the last six years.
- In 2015 the city witnessed a
 marginal recovery in sales volume
 at 4% and this trend continued
 in the first half of 2016 as well
 with a 1% YoY growth. Although
 these numbers were not very
 encouraging when compared to
 the peak of 2012, the falling trend
 had been captured to a certain
 extent.
- Subsequently, the Indian
 Government's demonetization
 move on 8 November brought the
 market to a complete standstill.
 Against this backdrop, developers
 refrained from announcing
 any new launches and buyers
 turned extremely cautious before
 committing on purchases.
- The fourth quarter numbers are a testament to the effect that the demonetization move has had on the real estate market of the city that was barely recovering from its earlier sloth. Sales volume dropped by 35% YoY in Q4 2016

- and new launches fell by a massive 64% YoY during the same period.
- At 6,300 units, the Q4 2016 sales volume are at their lowest quarterly level since 2010 and down by more than 54% since the quarterly peak of 13,660 units in Q3 2012. The new launches number is much worse at just 3,400 units in Q4 2016, which is not even one-fourth of its peak level of 16,000 units witnessed in Q4 2010.
- The only solace in the Q4 2016 number was from the month of October, which was just before the demonetization move, when the sales volume showed some positive traction due to the start of the festive season.
- We believe that 2016 would have been marginally better than 2015 had it not been for the demonetization move, as the sales number for the first nine months exhibited a positive trend.



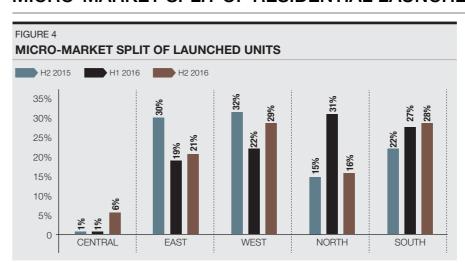
Source: Knight Frank Research



The fourth quarter numbers are a testament to the effect that the demonetization move has had on the real estate market of the city that was barely recovering from its earlier sloth with sales volume dropping by 35% YoY in Q4 2016

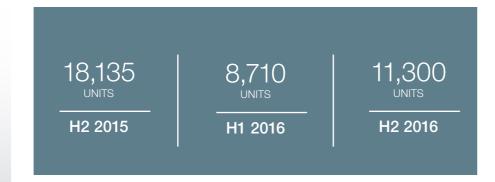
Source: Knight Frank Research

MICRO-MARKET SPLIT OF RESIDENTIAL LAUNCHES

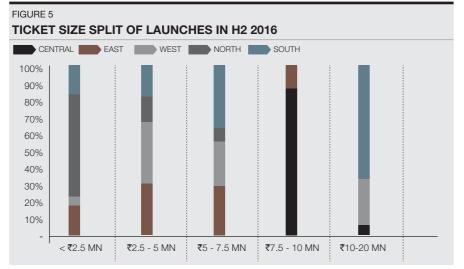


Source: Knight Frank Research





Slowing sales volume and poor response to premium projects in the past few years are some of the major reasons for developers staying away from high ticket-sized projects



Source: Knight Frank Research

- North Pune, which witnessed a slew of new launches during the first half of the year, has seen lesser projects being launched in H2 2016 as developers are trying to exhaust the current inventory before committing to investing in new projects.
- South Pune continues to lead in terms of new project launches

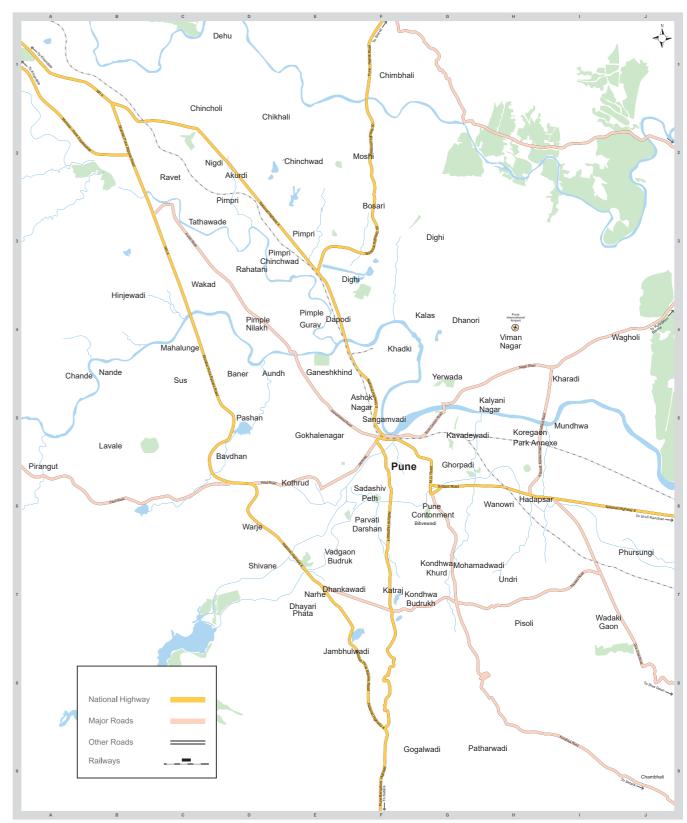
- with locations such as Sinhagad Road, Undri and Mohammadwadi observing strong traction.
- New project launches in Sopanbaug have helped in increasing the share of Central Pune in H2 2016 compared to the previous periods.
- The developer community seems to have responded to the changing

market trend since there have been no new launches above the ticket size of ₹ 20 mn in H2 2016. Slowing sales volume and poor response to premium projects in the past few years are some of the major reasons for developers staying away from high ticket-sized projects.

MICRO-MARKET WISE RESIDENTIAL SALES

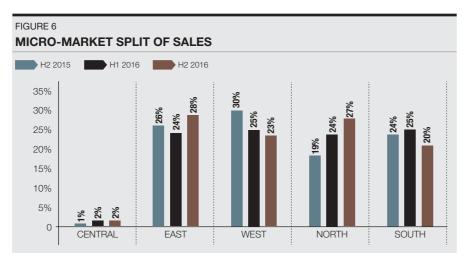
MICRO-MARKET	LOCATIONS
Central	Koregaon Park, Boat Club Road, Erandwane, Deccan, Kothrud, Model Colony
East	Viman Nagar, Kharadi, Wagholi, Hadapsar, Dhanori
West	Aundh, Baner, Wakad, Hinjewadi, Bavdhan, Pashan
North	Pimpri, Chinchwad, Moshi, Chikhali, Chakan, Talegaon
South	Kondhwa, Ambegaon, Undri, Dhayari, Warje, Sinhgad Road

PUNE METROPOLITAN REGION MAP





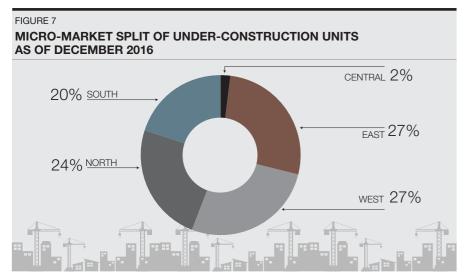
- North Pune has observed a steady rise of its share in total sales volume as homebuyers have shown a very strong preference for this zone when it comes to buying an affordable home. Close to 60% of the new launches in this zone over the past one year have been below the ticket size of ₹ 2.5 mn.
- The share of West Pune has been falling with each passing year as majority of the products available in this market are above the ticket size of ₹ 5 mn, which is marginally higher than the affordability of the workforce part of the vicinity.



Source: Knight Frank Research



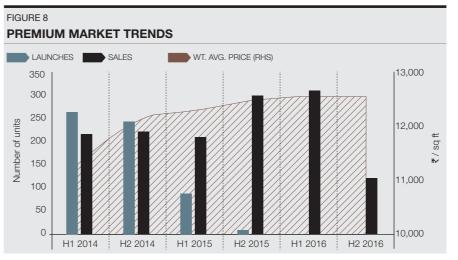
MICRO-MARKET SPLIT OF UNDER-CONSTRUCTION UNITS AS OF DECEMBER 2016



Source: Knight Frank Research

PREMIUM RESIDENTIAL MARKET LAUNCHES, SALES AND PRICE TRENDS

MICRO-MARKETS	PREMIUM LOCATIONS
Central	Bhosale Nagar, Boat Club Road, Erandwane, Koregaon Park, Model Colony, Prabhat Road, Uday Baug
East	Kalyani Nagar, Viman Nagar
South	Salisbury Park

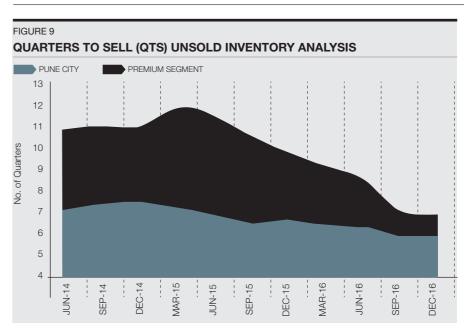


Source: Knight Frank Research

Note: Premium markets include locations where the average ticket size of a residential unit is above ₹20 mn, are in proximity to the central business district of the city and have witnessed new project launches in the preceding three years

- New launches in the premium markets that are close to the city centre and costs in excess of ₹ 20 mn have dropped to zero since January 2016. With an unsold inventory of nearly two years, developers have been wary of pushing new projects.
- In terms of sales volume, the premium segment held steady since 2015 but the demonetization move seems to have curtailed the momentum in the last quarter of 2016. Sales volume dropped by nearly 60% YoY in H2 2016.

PUNE MARKET HEALTH



Source: Knight Frank Research



We believe that 2016 would have been marginally better than 2015 had it not been for the demonetization move, as the sales number for the first nine months exhibited a positive trend

FIGURE 10 MICRO-MARKET-WISE QTS VS AGE OF INVENTORY 12 13 14 15 6 7 8 9 10 QTS*

Source: Knight Frank Research

Note: The size of the bubble indicates the quantum of unsold inventory

- South Pune has taken over West
 Pune as the best performing
 market in the city with lowest
 quarter to sell unsold inventory.
 While West Pune used to
 command the lowest quarter
 to sell unsold inventory in 2015,
 unaffordable prices and relatively
 large-sized apartments have
 slowed down the traction in the
 recent years.
- Among the various micromarkets of the city, Central Pune is the worst performing market registering the highest quarter to sell unsold inventory. The age of unsold inventory is also among the highest in the city, indicating that a large number of previously launched projects are still unsold in this micro-market.

PRICE MOVEMENT IN H2 2016

WEIGHTED AVERAGE PRICE MOVEMENT IN PUNE

LOCATION	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Pune	4,860	0.5%	0%
Premium markets	12,650	1.0%	0%

- The price growth across most locations in Pune during the last 12 months has been tepid. Moreover, there has been absolutely no price rise in the last six months and most of the new projects are being launched at the same rates that
- were prevailing at the beginning of 2016.
- The weighted average price growth has been marginally higher in the premium segment in the last 12 months in comparison to

the growth in the city's overall price. However, even here it has come down to zero in the last six months.

PRICE MOVEMENT IN SELECT LOCATIONS

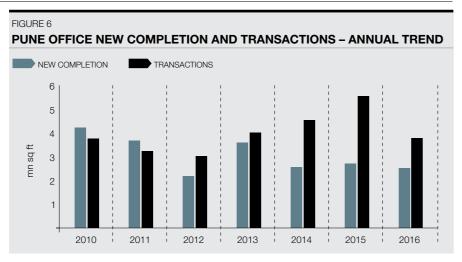
LOCATION	MICRO-MARKET	PRICE RANGE IN H2 2016 (₹/SQ FT)	12 MONTH CHANGE	6 MONTH CHANGE
Koregaon Park	Central	13,000 - 17,000	0%	0%
Kothrud	Central	7,500 - 13,000	0%	0%
Erandwane	Central	13,500 - 18,000	0%	0%
Boat Club Road	Central	14,500 - 19,500	0%	0%
Kharadi	East	5,300 - 6,300	0%	0%
Wagholi	East	3,500 - 4,600	1%	0%
Dhanori	East	3,900 - 4,800	2%	0%
Hadapsar	East	4,600 - 6,000	0%	0%
Aundh	West	7,800 - 9,500	2%	0%
Baner	West	5,600 - 8,000	0%	0%
Hinjewadi	West	4,800 - 5,900	3%	0%
Wakad	West	5,400 - 6,200	0%	0%
Moshi	North	3,700 - 4,300	0%	0%
Chikhali	North	3,500 - 4,100	0%	0%
Chakan	North	3,000 - 3,400	1%	0%
Ambegaon	South	4,400 - 5,500	0%	0%
Undri	South	3,900 - 4,800	0%	0%
Kondhwa	South	4,600 - 5,700	0%	0%

Source: Knight Frank Research



OFFICE MARKET

PUNE OFFICE MARKET STOCK, NEW COMPLETIONS, TRANSACTION AND VACANCY TRENDS

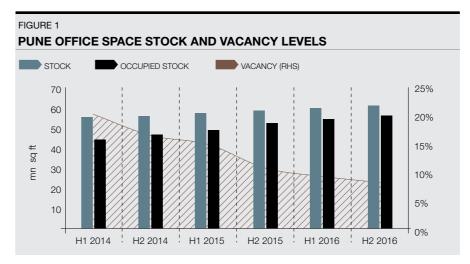


Source: Knight Frank Research

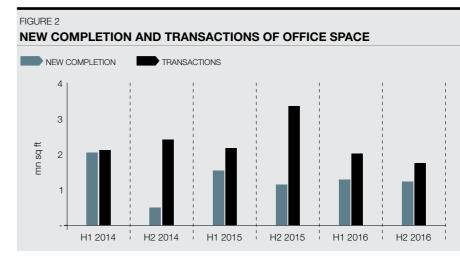
- The trend of double-digit growth in transactions since 2013 seems to have finally come to an end with 2016 reporting a 31% YoY fall in the volume of transactions at 3.8 mn sq ft. Such a drop in transaction can be largely attributed to the shortage of good quality office space in the city rather than a slowdown in demand.
- Currently, the vacancy levels stands at just 8.2%, which is at its historic low for the Pune office market. However, vacancy level in locations such as Kharadi, Viman Nagar, Yerwada and Nagar Road, which are highly preferred by occupiers, is even lower with absolutely no availability of good quality office space.
- Against the transacted volume of 3.8 mn sq ft in 2016, the new supply that entered the market was just 2.5 mn sq ft during the year. This was even worse in the previous year when only 2.7 mn sq ft of new supply entered the market against 5.5 mn sq ft that

was transacted during that period.

- Such a scenario of excess demand over supply has accentuated the problem of availability of leasable office space in the city. This trend has continued in H2 2016 too, with transaction volume reported at 1.8 mn sq ft against a new supply of 1.2 mn sq ft. The transaction volume is lower by 46% in H2 2016 as compared to the same period of the previous year.
- Going forward, we expect 2017
 to be in a similar situation as no
 major new supply has been lined
 up at present. Such a scenario
 could further push occupiers
 towards other office markets such
 as Mumbai, Noida and Hyderabad
 where the shortage of office space
 is not so severe.

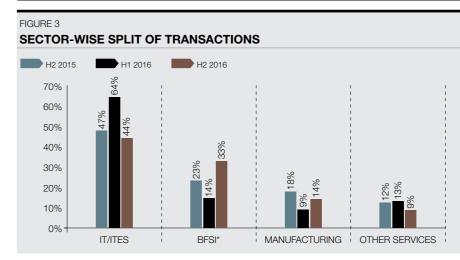


Source: Knight Frank Research



Source: Knight Frank Research

SECTOR ANALYSIS



Source: Knight Frank Research

Note: BFSI includes BFSI support services

Vacancy level in locations such as Kharadi, Viman Nagar, Yerwada and Nagar Road, which are highly preferred by occupiers, is even lower with absolutely no availability of good quality office space

volume of transactions at 3.8 mn sq ft

The trend of double-digit

since 2013 seems to have

growth in transactions

finally come to an end

with 2016 reporting

a 31% YoY fall in the

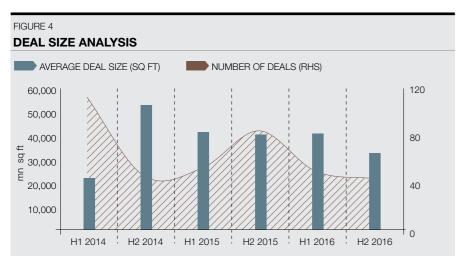




Currently, the vacancy levels stands at just 8.2%, which is at its historic low for the Pune office market

- The share of IT/ITeS sector in the total transaction has fallen significantly during H2 2016, largely due to the slowdown in new orders from the key export markets of Europe and the USA. However, the BFSI sector reported a strong comeback with its share jumping from 14% in H1 2016 to more than 33% in H2 2016.
- The demand for office space from the BFSI sector in Pune is largely from the Fintech companies and IT enabled support service from the BFSI sector. Banking majors such as HSBC and Deutsche Bank were some of the largest occupiers of office space during the last six months.

DEAL SIZE ANALYSIS



Source: Knight Frank Research

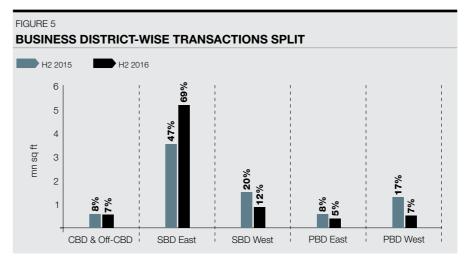
- The average deal size in H2 2016
 was reported to be 32,000 sq ft,
 which is lower than the H2 2015
 level. This is primarily due to the
 non-availability of large sized office
 space in the city.
- The BFSI back support services led in terms of big-ticket deals, with certain banks leasing more than 80,000 sq ft of space in East Pune during this period.

SELECT TRANSACTIONS

OCCUPIER	BUILDING	LOCATION	APPROX. AREA (SQ FT)
Xoriant	Amar Apex	Baner Road	23,200
Smartworks	Magarpatta SummerCourt	Magarpatta	36,000
Credence	E Park	Kharadi	22,000
Nitor Infotech	Embassy Techzone	Hinjewadi	44,000
AXA	Suzlon One Earth	Hadapsar	40,000
JCI	Commerzone	Yerwada	70,000
Schlumberger	Commerzone	Yerwada	56,000

Source: Knight Frank Research

BUSINESS DISTRICT ANALYSIS



Source: Knight Frank Research



- SBD East, which includes locations such as Kalyani Nagar, Yerwada, Nagar Road and Hadapsar, witnessed a sharp jump in its share of the total transaction volume, as most of the big-ticket deals took place in this micromarket in H2 2016
- The limited supply of vacant office space has restricted the transaction volume in the rest of the markets, with their share either falling from the previous year's level or remaining constant.

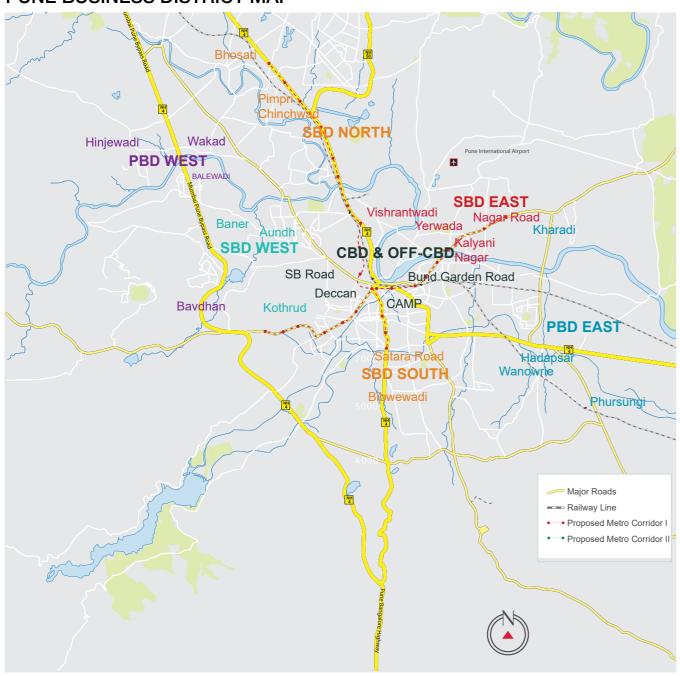
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BUSINESS DISTRICT CLASSIFICATION

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

PUNE BUSINESS DISTRICT MAP



OFFICE SPACE SHORTAGE-PUNE'S LOSS TO BE

MUMBAI'S GAIN

acancy levels in Pune have been falling consistently since 2012, from 23.4% to 8.3% currently. With demand outstripping new supply for the fifth consecutive year, the situation has only worsened for occupiers, who are unable to find leasable space in their preferred locations. The genesis of the current predicament lies in the heydays of the pre-2008 period, when strong demand from the IT/ ITeS sector encouraged developers to aggressively build new office space. However, the Global Financial Crisis (GFC) of 2008 resulted in an oversupply situation, with a huge amount of ready-to-occupy space remaining vacant from 2008 to 2010 due to a lack of occupier demand.

With developers unable to earn any income on such assets and the residential market witnessing a steady recovery post 2010, their focus shifted from the commercial to the residential segment.

Since 2012, 20.7 mn sq ft of space has been transacted in Pune, in contrast to the 13.5 mn sq ft of new space delivered. The shift in developers focus towards residential housing led to a limited number of new project launches in the office space segment post 2010, and the result is seen in the current situation, wherein there are no major completed projects available for lease. Even the existing 8.3% vacancy is largely in the peripheral business districts (PBD), with the prime areas having a near

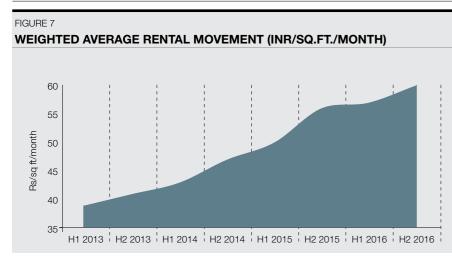
zero vacancy level. This undersupply situation is expected to worsen in 2017, as very few new projects are expected to be delivered.

We anticipate that the demand for space will far exceed the supply in 2017, and this will lead to a situation wherein occupiers will have to look for space in other cities. With Bengaluru, Hyderabad and Gurgaon in a similar state of affairs, we believe that occupiers will be pushed towards cities such as Chennai and Noida. Additionally, some occupiers may also prefer moving to Navi Mumbai, which offers a similar occupancy cost. While such a scenario would be a loss to the Pune market, it will give a significant boost to the already thriving office market of Mumbai.





RENTAL TREND



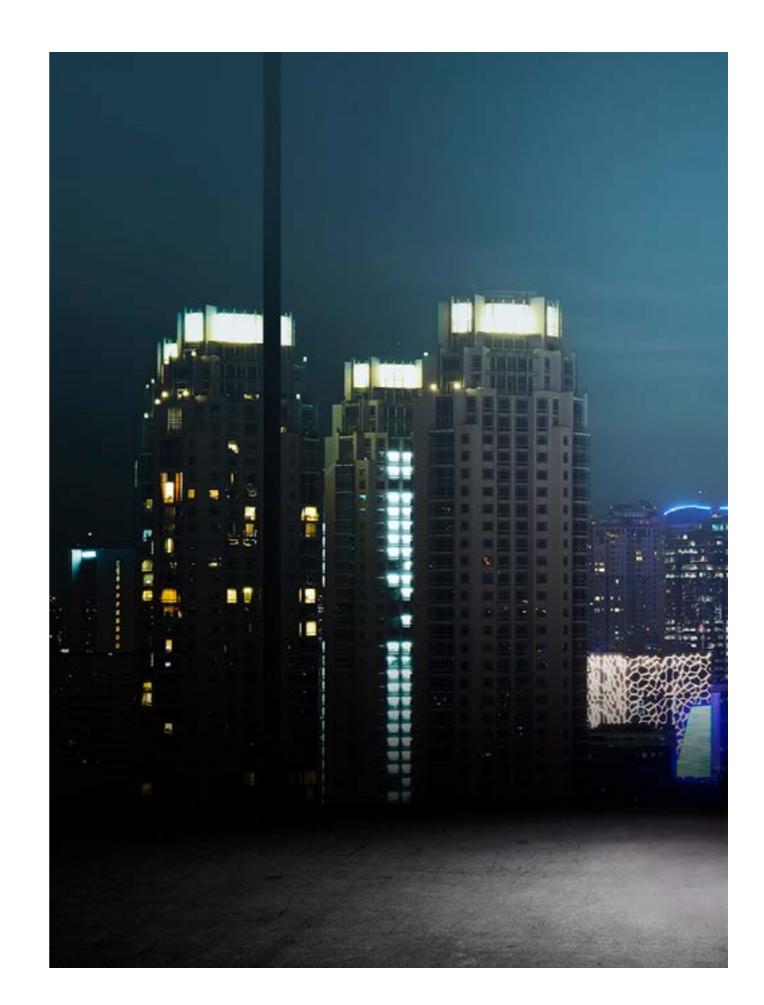
Source: Knight Frank Research

- Rental values have been rising steadily since 2013, as demand continues to surpass new supply.
 Currently, the weighted average rent in Pune is around ₹60 per sq ft per month – 7% higher than in H2 2015.
- The severe shortage of good quality office space in prime areas has rendered the market in favour of the landlords, who are asking for higher rents from tenants with each passing quarter

BUSINESS DISTRICT-WISE RENTAL MOVEMENT

BUSINESS DISTRICT	RENTAL VALUE RANGE IN H2 2016 (₹/SQ FT/MONTH)	12 MONTH CHANGE	6 MONTH CHANGE
CBD and Off-CBD	70 - 100	3%	1%
SBD East	50 - 85	13%	3%
SBD West	50 - 75	10%	2%
PBD East	45 - 75	11%	3%
PBD West	35 - 48	5%	1%

Source: Knight Frank Research



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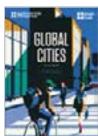
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CIN No. - U74140MH1995PTC093179