RESEARCH

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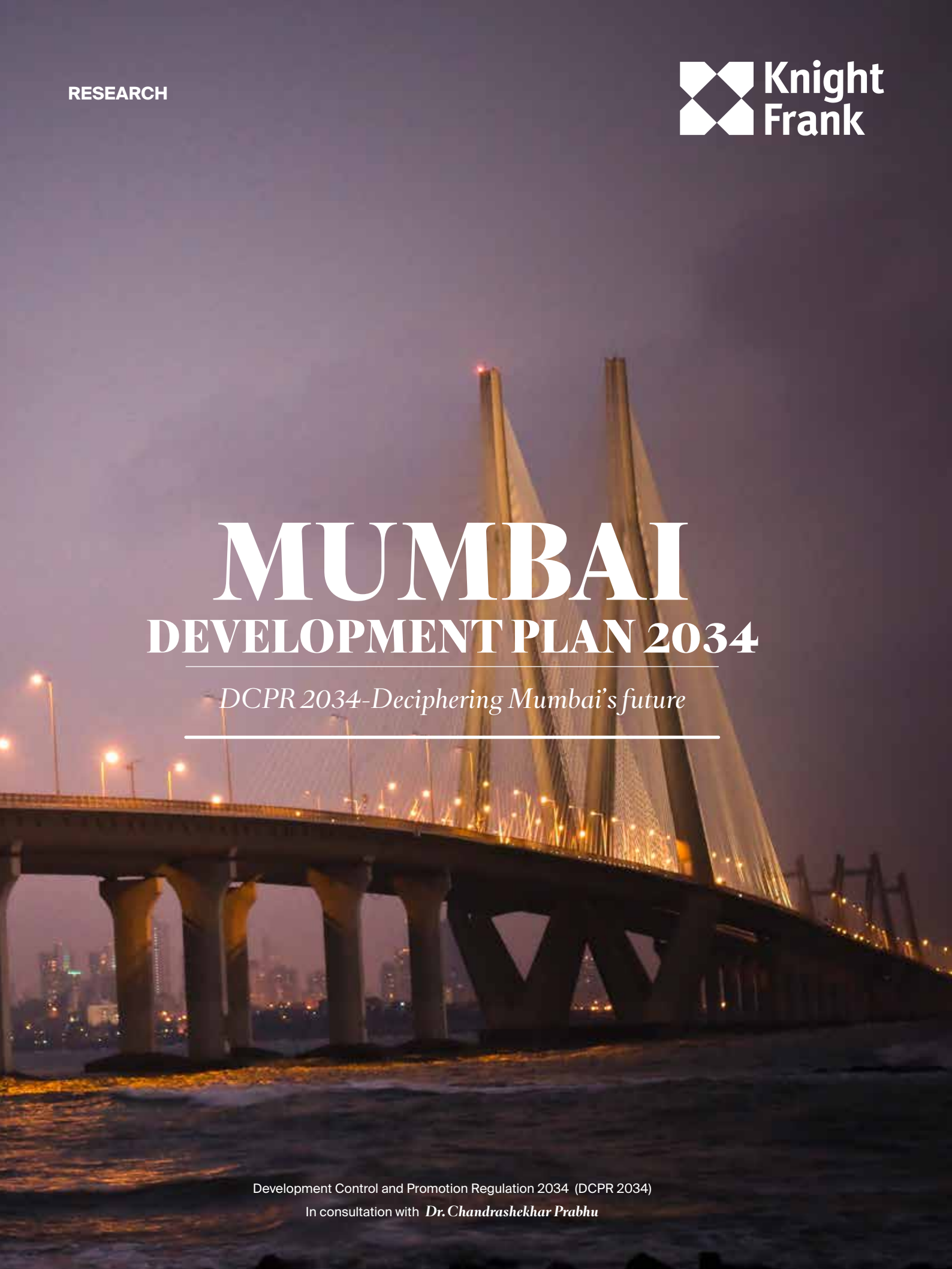
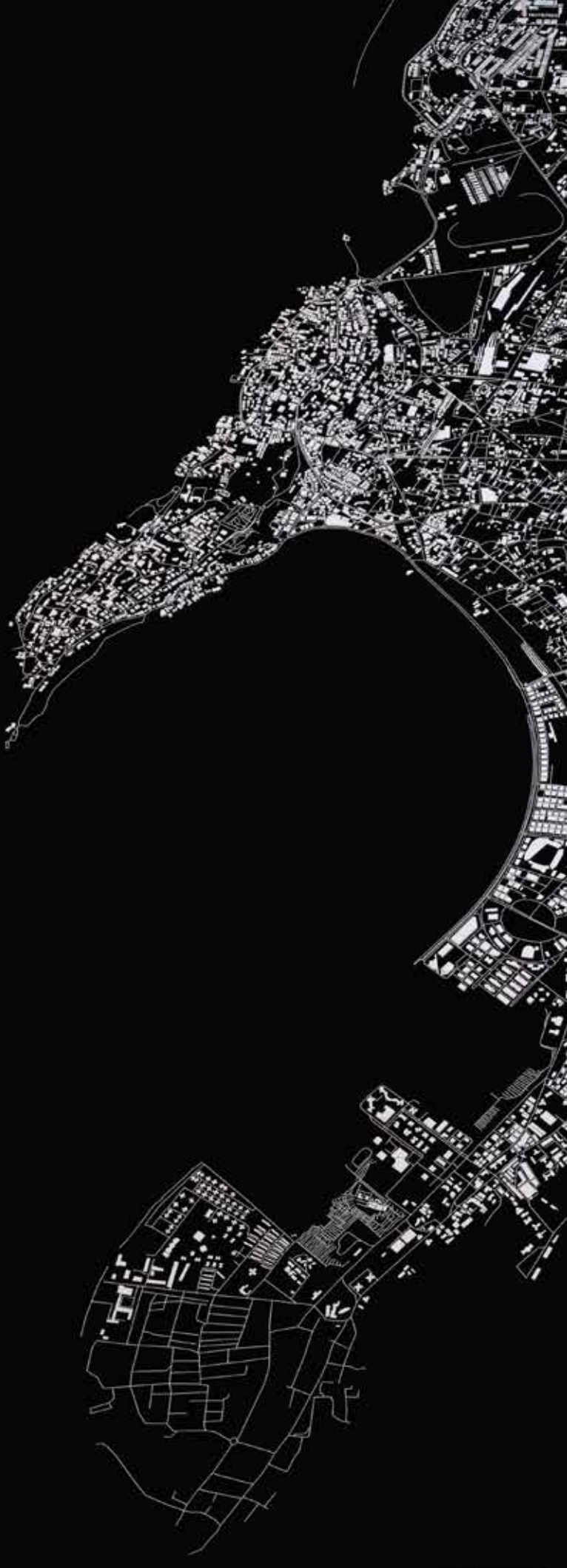


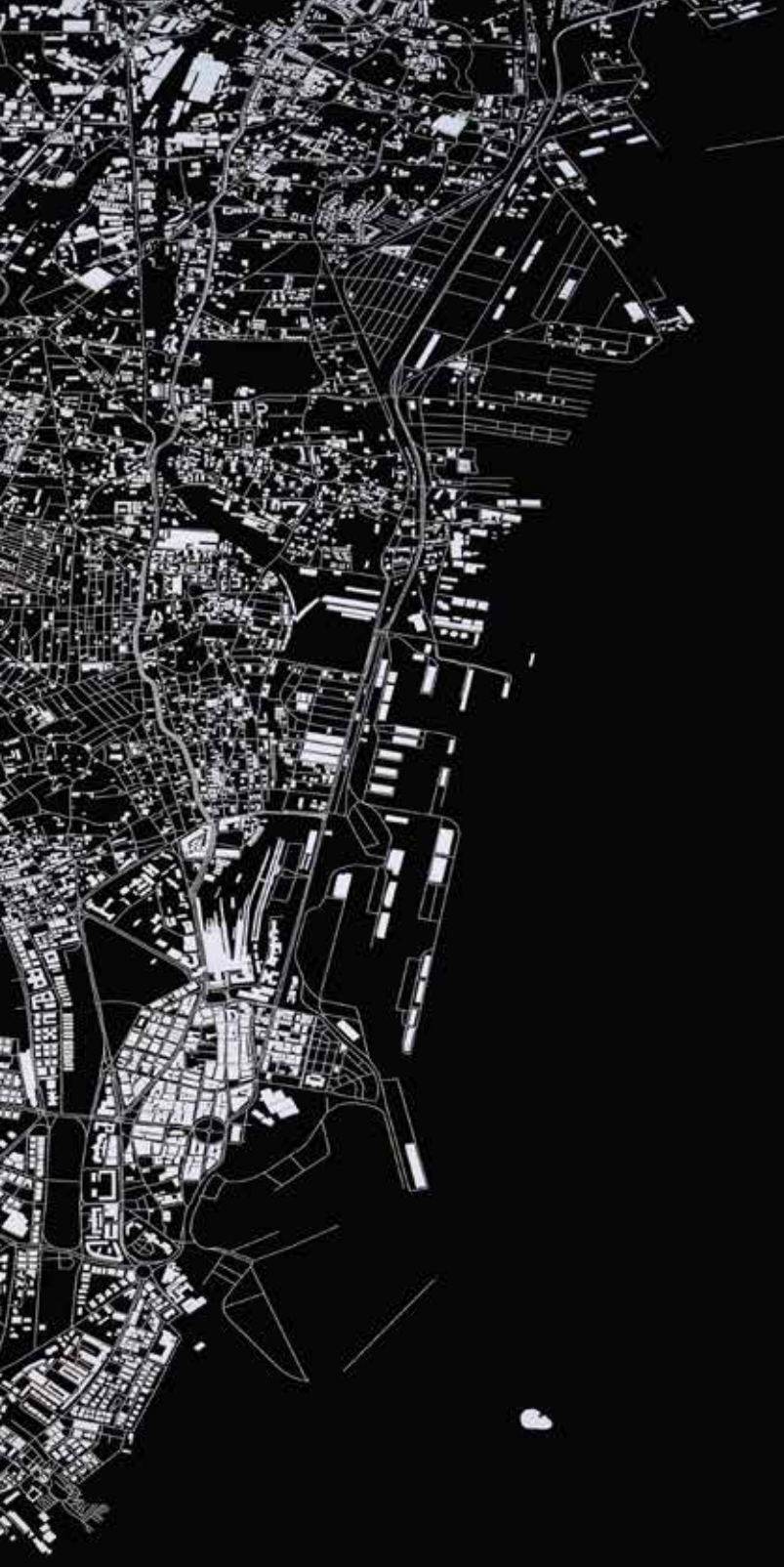
MUMBAI
DEVELOPMENT PLAN 2034

DCPR 2034-Deciphering Mumbai's future

Development Control and Promotion Regulation 2034 (DCPR 2034)

In consultation with ***Dr. Chandrashekhar Prabhu***





About Dr. Chandrashekhar Prabhu:

He is an Architect, Town Planner, ex-MLA (Member of Legislative Assembly) and former MHADA president. He is the initiator of Mumbai housing society self-redevelopment movement.

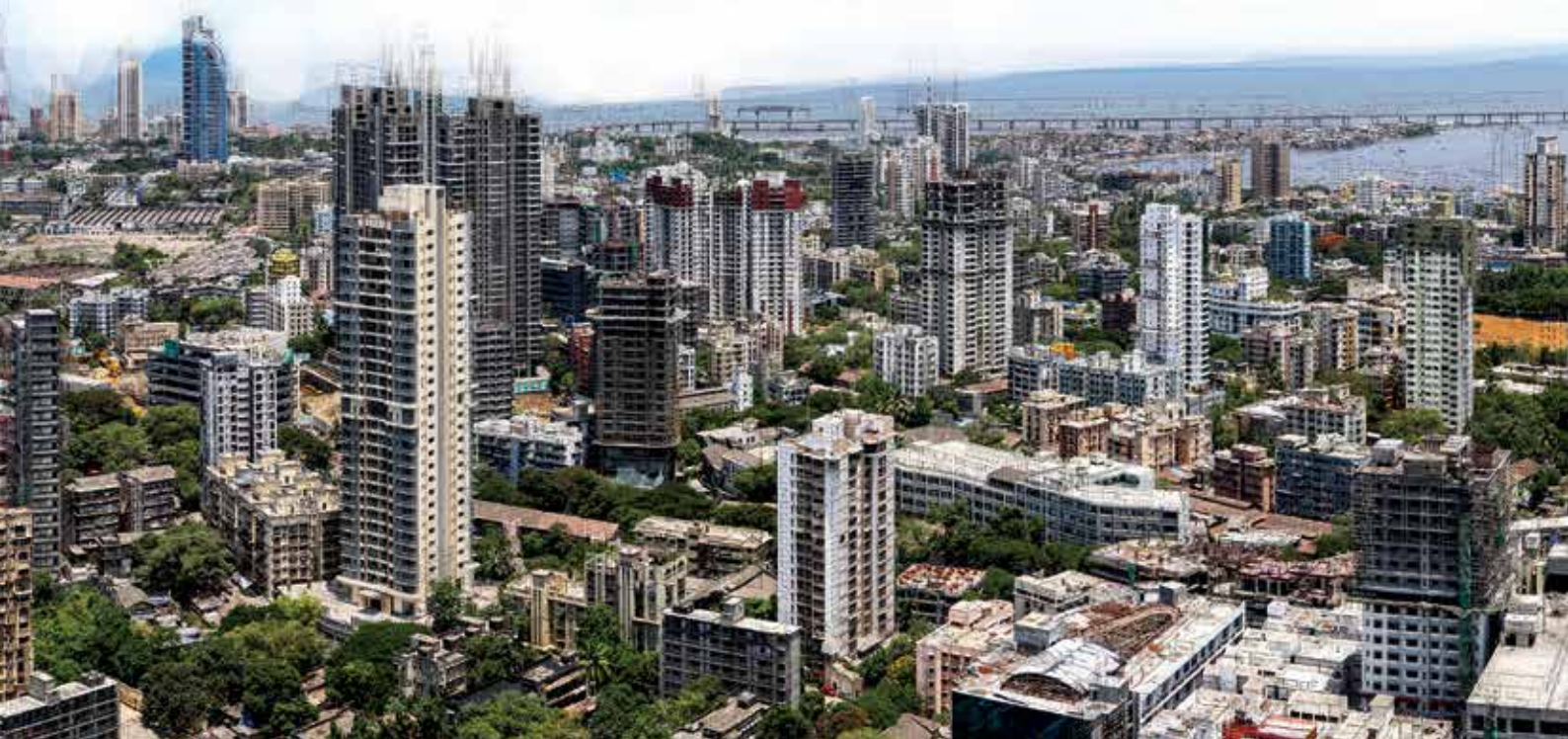
Introduction

The much-awaited Development Plan (DP) 2034 of Mumbai was unveiled by the state government in May 2018 as

"Development Control and Promotion Regulation 2034 (DCPR 2034)"

and was put up for public suggestions. The current version of the development plan took everyone by surprise as it was significantly different from the Development Plan 2034 (DP 2034) that was passed in February 2018 by the Brihanmumbai Municipal Corporation (BMC). There were many changes/modifications and numerous new additions to the development plan passed by BMC. The DCPR 2034 came into effect from September 1, 2018 but some set of provisions were to be notified on November 13, 2018.

As DCPR 2034 would govern and regulate all constructions in the city for the next decade and half, and now that the plan is come into force, it is imperative that we do a in-depth analysis of the policies. The DCPR 2034 encompasses a vast universe and in this report we have analysed and thrown light upon some of the important aspects of the plan.



During the enforcement of the previous development plan – the 1991 DP, the objective was to address the then problems of the city such as redevelopment of - slums, cessed buildings and Maharashtra Housing and Development Authority (MHADA) colonies as well as promote/guide the new development of buildings on private land.

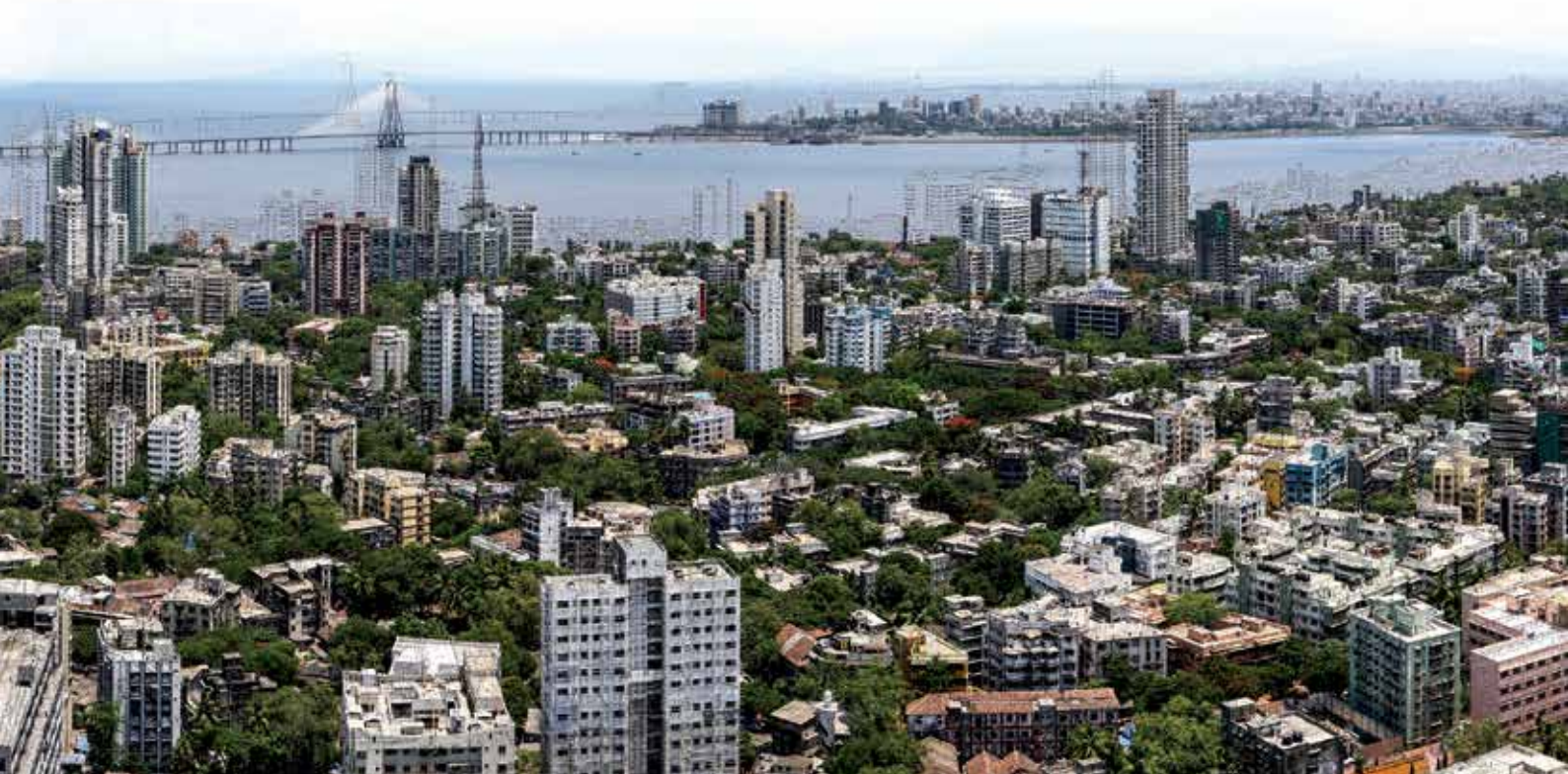
The 1991 DP has been in force for nearly 3 decades now; the policies were revised several times to address the housing problems of people living in slums, cessed buildings and MHADA societies through redevelopment. If we look at the progress achieved on the redevelopment front, the record has not been very impressive:

- Out of the 1.5–1.6 million slum households in Mumbai, approximately only 100,000 (or 1 lakh) houses have been built for the slum dwellers.
- There are 19,800 cessed buildings in Mumbai, out of which only around 1,800 have been redeveloped.
- Not much has been achieved on the redevelopment of MHADA societies either.

In Mumbai, around 7 million people live in slums, around 2.5 million people live in cessed buildings and around 1.2–1.5 million people live in MHADA colonies. The policies of the 1991 DP were intended to improve the living standards and housing conditions of these people, but it has not had any meaningful impact on the lives of the intended beneficiaries. There should be learnings from the short-comings of the past DP, the mistakes must be rectified and the approach to tackle these problems must be changed.

Moreover, today the situation is quite different from that during the enforcement of the 1991 DP. It is not just slums or MHADA colonies or cessed building that are in desperate need for redevelopment, but private housing societies/buildings need redevelopment as well. In Mumbai, within the BMC region, i.e. Dahisar to Churchgate and Mulund to Colaba, there are not many land parcels left and the only way for the city to progress forward is through redevelopment of existing buildings. Hence, the policies need to be framed accordingly so as to promote redevelopment of all stakeholders in a sustainable way as well as to witness meaningful on ground changes.

The current DP has several positives and in a way is a step in the right direction, but implementation of some of the objectives may be a challenge. From our analysis of DCPR 2034, we came across a few interesting aspects as well as few short-comings. The development plan is a crucial policy document that can either promote or stifle the growth of a city; hence, it should be given paramount importance. As this plan is expected to govern and regulate all constructions till 2034, we strongly believe that these gaps should be filled through subsequent notification/updates at the earliest.



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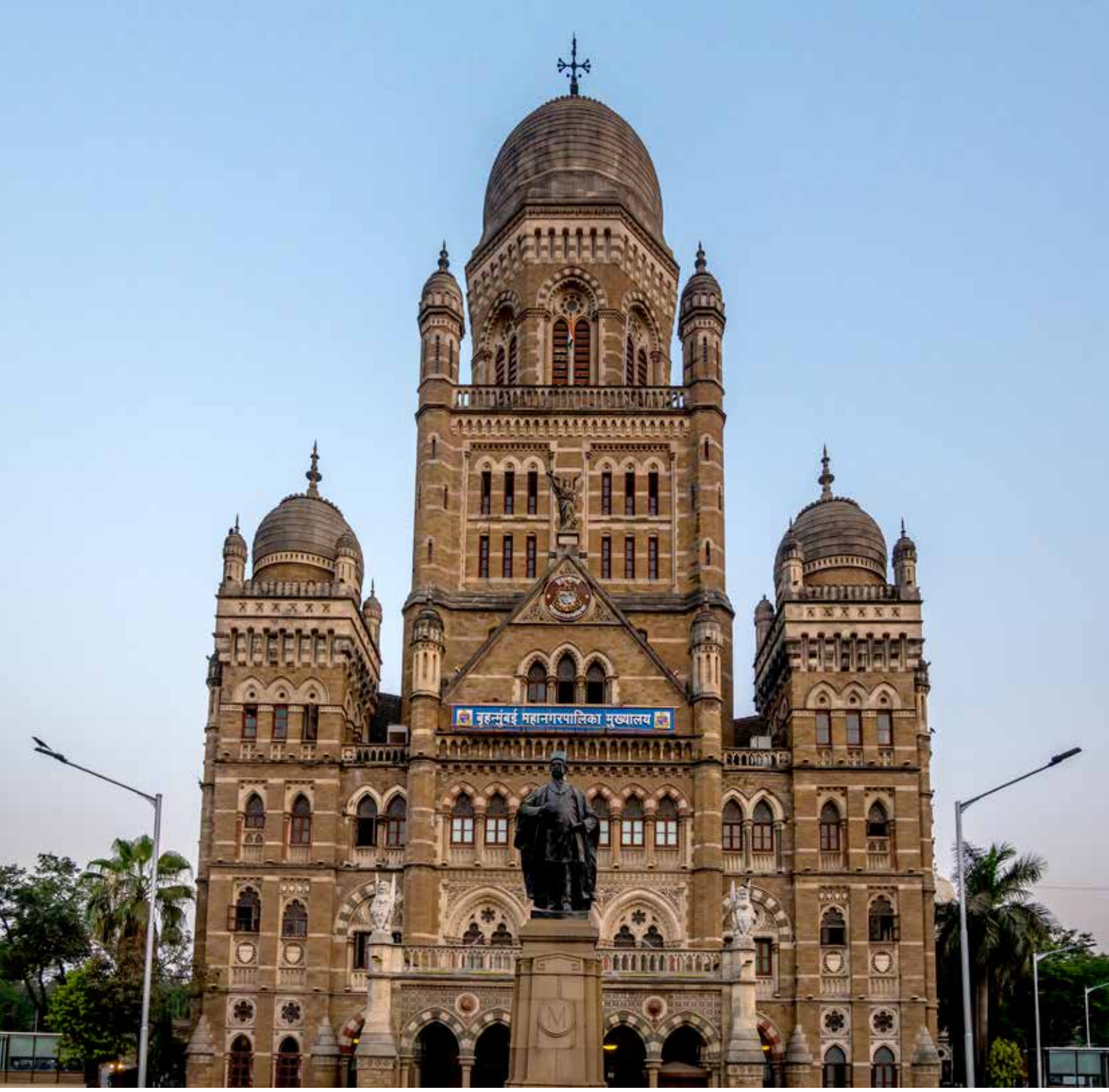
Evaluating some aspects of the proposed DCPR 2034

LINKING PERMISSIBLE FSI TO ROAD WIDTH:

This is one of the most important feature of the DCPR 2034, which is intended to reduce the population density of an area and disperse it based on the road width. In several areas of Mumbai, you would find large multi-storeyed towers having access only through a small narrow lane. The absence of road width restriction on FSI in the earlier plan has led to such a scenario. These multi-storeyed towers have added enormous pressure on the support infrastructure of that road/lane, as well as caused problems for residents residing in other buildings located in that lane. The sheer number of vehicles moving in and out of these towers during peak hours adds to the chaos every day. Moreover, due to inadequate parking inside the building compound, the cars of residents residing in these towers are parked in the lanes making it difficult for heavy vehicles (like garbage trucks, other logistics trucks, SUVs) to navigate.

By linking the Permissible FSI to road width, the DCPR intends to limit the number of flats/ apartments that can be constructed on plots with narrow access lanes, thereby limiting the population density on that plot and reducing the number of people using that particular road on a daily basis. This would ensure that taller buildings can only be constructed only if the road width can support it and eventually lead to reduction in congestion.



MINIMUM ROAD WIDTH OF 12 METRES FOR COMMERCIAL:

The DCPR 2034 proposes higher FSI for office developments compared to the earlier DP 1991. But this higher FSI is permitted only if the road width is greater than 12 metres, otherwise FSI is same as that applicable for residential. Compared to a residential building, the number of vehicles moving in and out of commercial buildings throughout the day is higher. Unplanned development of office markets has led to traffic jams throughout the day in the major business districts of Mumbai. In many cases, the roads leading to the office building are narrow and as vehicles are stopped at the entry gate for security checks, the other vehicles using that road are affected. The situation is worse during peak hours, as it takes as much as an hour to exit from the business districts and reach the main road. Lower Parel is a burning example.

By formulating a policy which requires a minimum road width of 12 metres for commercial buildings and providing higher FSI for commercial, only if the road width supports it, the incidents of traffic snarls can be addressed to some extent.

INCREASING FSI THROUGH INCREASE IN TDR AND PREMIUM FSI:

The tables below compare the permissible FSI of the new DP (DCPR 2034) to the earlier DP (DP 1991). We observe that while the 'Total FSI' has been increased for the island city and suburbs in the DCPR 2034, the basic (base) FSI has been left unchanged.

In November 2016, the Urban Development Department had notified the norms which increased the amount of Transfer of Development Rights (TDR) that can be loaded on the plot for the island city and suburbs. As per the notification, the 'Admissible TDR' limits increases with the increase in width of the access road.

The DCPR 2034 carries forward the same set of regulations w.r.t. TDR for the suburbs; however, for the island city, DCPR 2034 marginally increases the 'Admissible TDR' limits further for road width greater than 12.2 metres, thus making it higher than what was permitted as per November 2016 notification of Urban Development Department (UDD).

TABLE:1 **FOR ISLAND CITY (RESIDENTIAL)**

		Prior to DCPR 2034				
Road width	Basic	Additional FSI on payment of Premium	Admissible TDR	Permissible FSI	Add Fungible FSI @	**Total FSI**
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
up to 9m	1.33	-	-	1.33	35%	1.80
9m - 12m	1.33	-	0.17	1.50	35%	2.03
12 m - 18m	1.33	-	0.37	1.70	35%	2.30
18 m - 27m	1.33	-	0.57	1.90	35%	2.57
>27 m	1.33	-	0.67	2.00	35%	2.70

Source: Knight Frank Research, DCPR 2034

TABLE:2 **FOR SUBURBS (RESIDENTIAL)**

		Prior to DCPR 2034				
Road width	Basic	Additional FSI on payment of Premium	Admissible TDR	Permissible FSI	Add Fungible FSI @	**Total FSI**
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
up to 9m	1.0	0.5	-	1.50	35%	2.03
9m - 12m	1.0	0.5	0.5	2.00	35%	2.70
12 m - 18m	1.0	0.5	0.7	2.20	35%	2.97
18 m - 27m	1.0	0.5	0.9	2.40	35%	3.24
>27 m	1.0	0.5	1.0	2.50	35%	3.375

Source: Knight Frank Research, DCPR 2034

If we refer to the table number 1 and 2 below, we observe that:

FOR ISLAND CITY:

The increase in FSI in the island city for road width greater than 9 metres, is accruing from an increase in "Admissible Transfer of Development Rights" on the plot and the increase in limits for "Additional FSI available on payment of premium". Earlier 'Additional FSI on payment of premium' was not available for the island city. Thus, the overall development potential of a plot located in the island city has been enhanced under DCPR 2034. Moreover, the 'Total FSI' for the island city increases with the increase in width of the access road.

FOR SUBURBS:

While development potential in the island city has been enhanced, there is no increase in development potential or 'Total FSI' for the suburbs. Rather, the DCPR 2034 reduces the 'Total FSI' for plots having access roads less than 9 metres wide.

As per DCPR 2034						Difference
Basic	Additional FSI on payment of Premium	Admissible TDR	Permissible FSI	Add Fungible FSI @	**Total FSI**	
G	**H**	**I**	**J = G + H + I**	**K**	**L = J*(1+K)**	**M = L - F**
1.33	0.00	0.00	1.33	35%	1.80	**0.00**
1.33	0.50	0.17	2.00	35%	2.70	**0.68**
1.33	0.62	0.45	2.40	35%	3.24	**0.95**
1.33	0.73	0.64	2.70	35%	3.65	**1.08**
1.33	0.84	0.83	3.00	35%	4.05	**1.35**

As per DCPR 2034						Difference
Basic	Additional FSI on payment of Premium	Admissible TDR	Permissible FSI	Add Fungible FSI @	**Total FSI**	
G	**H**	**I**	**J = G + H + I**	**K**	**L = J*(1+K)**	**M = L - F**
1.0	0.0	0.0	1.00	35%	1.35	**-0.675**
1.0	0.5	0.5	2.00	35%	2.70	**No difference**
1.0	0.5	0.7	2.20	35%	2.97	**No difference**
1.0	0.5	0.9	2.40	35%	3.24	**No difference**
1.0	0.5	1.0	2.50	35%	3.375	**No difference**

There are a variety of ways in which the TDR can be generated, and the plan specifies how much from each category should be used. As per the DCPR 2034, the slum TDR that can be loaded on the plot has been restricted to a minimum of 20% and maximum of 50%. Earlier, the minimum amount of slum TDR that should be used was 20% and there was no cap on the maximum. Presently, the remaining TDR which can be loaded, has to be generated by surrendering of plots marked as reserved in the plan to the BMC and TDR generated by providing road setbacks.

These provisions would lead to lesser resistance by developers / land owners / residents against road widening projects; otherwise they would lose out gains accruing from the increase in development potential with increased road width. Earlier, before the November 2016 notification, there were no such incentives in the form of higher FSI for having a wider access road.

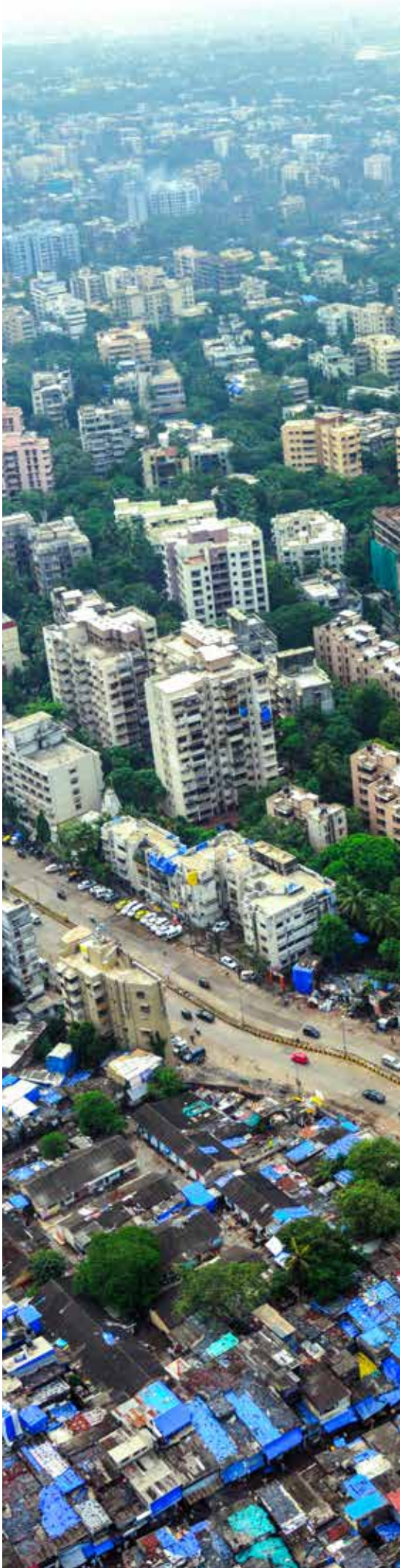
Further, the process of surrendering of reserved plots to the BMC would also accelerate, as there would be demand for TDR generated through surrendering of such plots as well as for the TDR generated by providing for road setbacks.

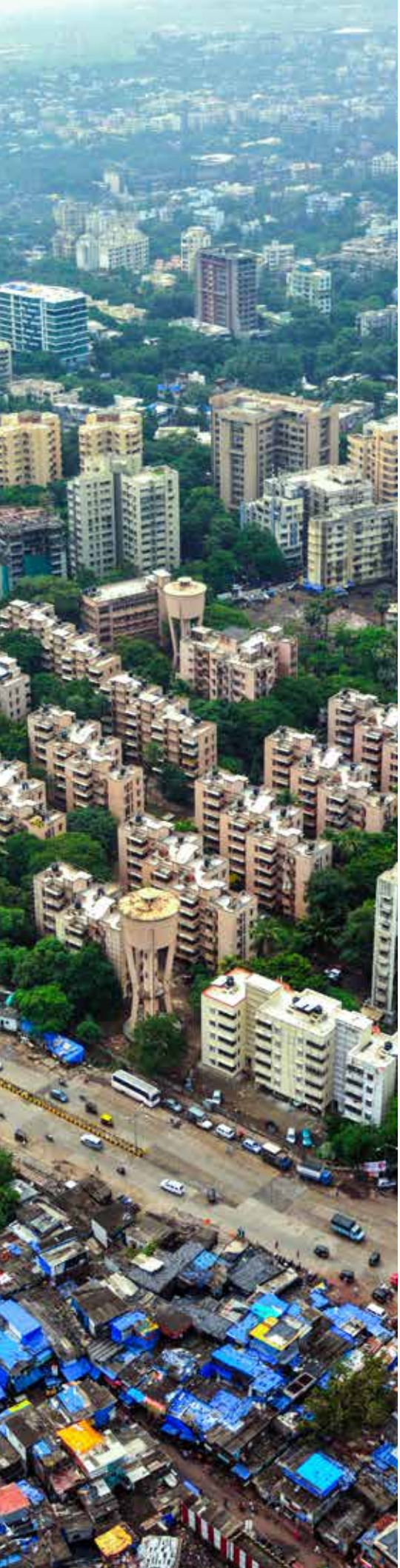
Another change in DCPR 2034 was the additional FSI in on payment of premium, which was earlier available only in the suburbs, has now been extended to the island city as well. This premium would be shared between between the State Govt., municipal corporation, MSRDC and Dharavi Authority on 25:25:25:25 basis.. By extending additional FSI on payment of premium in the island city, the government would be able to increase its revenues.

While there has been a perennial call for increasing FSI in Mumbai city, so that more and more people can stay closer to work and spend less time travelling, the planning authorities have finally heard the call and have increased the FSI depending on road width. The extent of increase and whether we have the infrastructure to support it is another big issue and can be debated endlessly. However, this increase in FSI in the island city under DCPR 2034 does not come on the back of increase in basic (base) FSI, but it comes via increase in 'Admissible TDR' and 'Increase in FSI available on payment of premium'. Had the development plan increased the basic (base) FSI on the plot, which is available for free, there would not be any incentive for the stakeholders to expedite the process of road widening, slum rehabilitation and surrendering of reserved plots and these important objectives would have languished. Even the government, its agencies and the municipal corporation would have lost out on revenues.

INCREASING DEVELOPMENT RIGHTS FOR AREA SURRENDERED:

The November 2016 notification of the Urban Development Department increased the TDR generated for land surrendered to the BMC due to reservation on the plot to 2.5 times the area of land surrendered for the island city and 2 times the area of land surrendered for the suburbs. Prior to that, TDR under both was 1. The same regulation has been continued in the DCPR 2034.





As indicated above, the increase in 'Total FSI' for the island city in DCPR 2034 has been permitted by increasing the limits for the TDR, which can be loaded on the plot and by an increase in additional FSI available on payment of premium. Further, the DCPR 2034 proposes that at least 50% and maximum 80% of the TDR should come from TDR generated from sources other than slum TDR like surrendering of reserved plots or surrendering land for road setbacks. This would ensure that there would be a steady demand for such TDR. By increasing the amount of TDR generated through surrendering land to 2.5/2 times from 1x of the area surrendered earlier and ensuring demand for such TDR generated, the plan has provided sufficient incentives for the supply side stakeholders as well. These incentives would thus create a conducive environment for generation and consumption of TDR, which would eventually fulfill the objective of surrendering of reserved plots to BMC.

ADOPTING RERA'S DEFINITION OF CARPET AREA:

RERA's definition of carpet area is not ideal from the consumer's point of view, as the definition of carpet area includes area falling under internal walls. The customer would be paying for the area which is unusable. The Maharashtra Ownership Flats Act, (MOFA) definition of carpet area is ideal as it includes the net usable carpet area, i.e. area between the walls and does not include the area falling under walls.

However, in the DCPR 2034 the definition of carpet area has been changed from MOFA's carpet area definition to the one prescribed by RERA. Aligning to a uniform definition is a noble thought to reduce ambiguities, but eventually it is the customer who suffers. Earlier, the developers used to use better construction materials and flat layouts, which would minimise the area under the walls, thereby increasing the usable carpet area despite it adding to the cost. Now the incentive to use such products and layout is limited.

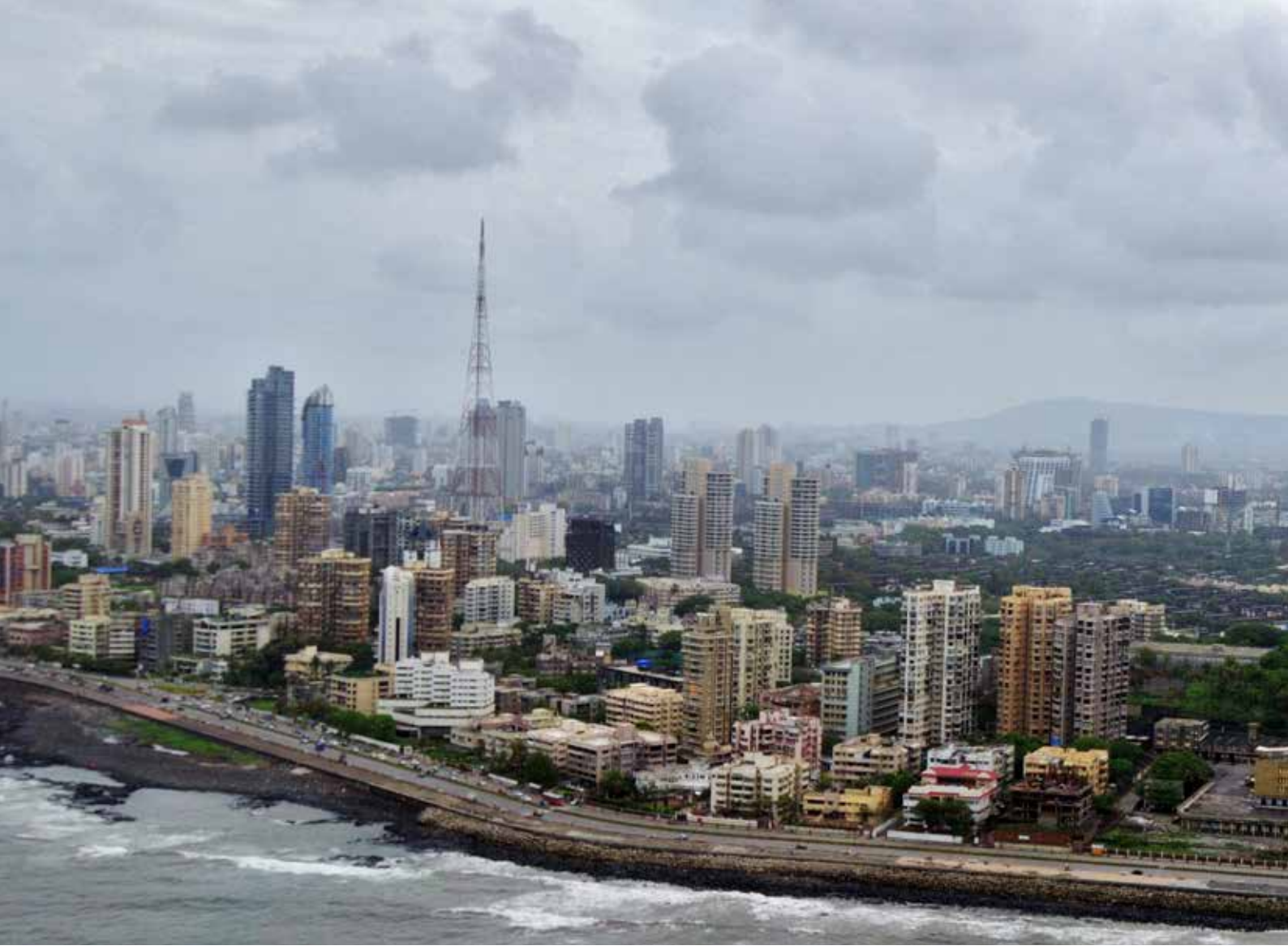
CONCENTRATION OF DISCRETIONARY POWERS:

Few years ago, several discretionary powers of the municipal commissioner were decentralised and designated to individual departments and a standard operating procedure was enacted to use those powers in special circumstances.

However, the current DCPR 2034 has again increased scope of the discretionary powers to the municipal commissioner. Concentration of discretionary powers to one person would make it susceptible to misuse.

SLUM REHABILITATION:

If we delve into the pyramid of Mumbai, about 50–55% of the population resides in slums. There are around 1.5 – 1.6 million slum households in Mumbai. Several state governments



have tried to address the issue of slums in the city through policy interventions, the most noteworthy effort of them being establishment of the Slum Rehabilitation Act, 1995. There were several incentives that were given under the slum rehabilitation scheme and the entire slum rehabilitation/redevelopment process was to be supervised by the slum rehabilitation authority (SRA). However, despite all these efforts, hardly any progress was made; approximately only 100,000 (or 1 lakh) slum houses were rehabilitated over the past 20 years. At this rate, it will take another 300 years to rehabilitate slums – provided no new slums are added.

The primary reason for failure of the earlier policy is the lack of understanding of the market conditions. The planning authorities have still not learned from past mistakes and are framing policies as per "one size fits all" model.

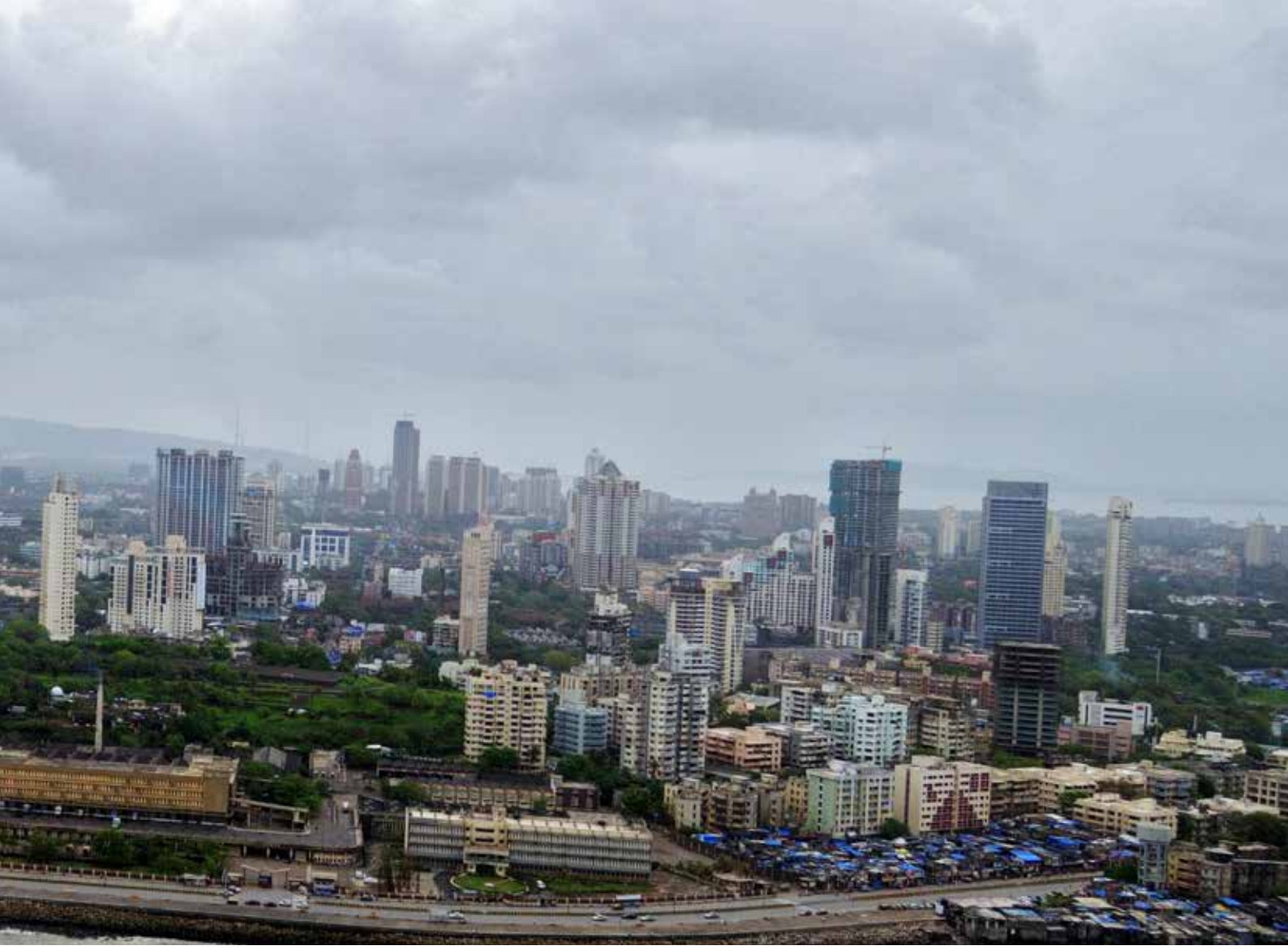
The slums of Mumbai are not just a place of residence for the poor, but a host of other industrial/commercial activities including manufacturing, retail, tuitions, restaurants, etc. takes place. Even the people who reside in the slums are from different strata within the lower income segment of society.

For the policy to be effective, it should be framed considering the need of each stakeholder separately and addressing their problems. With such fragmentation within the slum cluster, it is difficult to expect a single policy to suit the requirements of people across these categories.

The planners failed to learn from the mistakes of the past DP and the same set of policies/mistakes with minor modifications have been carried into the current DCPR 2034 and with this same approach it is very difficult to address the problem of slums in Mumbai.

REDUCTION OF CONSENT CLAUSE FOR REDEVELOPMENT OF BUILDINGS IN CERTAIN CATEGORIES:

The minimum irrevocable consent required for redevelopment of buildings under section 33(7) which deals with redevelopment of cessed buildings as well as for section 33 (5), which deals with redevelopment of housing schemes of MHADA, has been reduced from 70% to 51%. Earlier, irrevocable consent of minimum 70% of tenants was needed to appoint a particular developer for the society redevelopment. In DCPR 2034 it has been reduced to minimum 51%, which is likely to lead to chaos and many projects getting stuck in court litigations.



While getting the consent of 70% of tenants was arduous and used to consume significant amount of time, the scope for litigations was lower once 70% of tenants agreed for a particular developer. Further, when minimum 70% consent was required, it implied that majority of the residents are in agreement for redevelopment and are in favour of opting for that particular developer , now it has been reduced to 51%. Considering the magnitude of a society redevelopment decision, consent of the other 49% of occupants is too large a percentage to ignore in a co-operative society set-up.

Presently, as the consent of 51% residents would be sufficient to proceed for redevelopment, a large number of societies would suffer as the redevelopment process will be jeopardised if even a small portion of members turn hostile mid-way. For example, if we take the case of smaller housing societies with 10–20 tenants, if half the people agree to go for a particular developer and the other half with another, the vote of 1 tenant from either side can sway the scale in the favour of a particular developer or even mar the prospects of on-going redevelopment.

Another interesting aspect to be noted is that, for redevelopment of housing schemes of MHADA the problem lies w.r.t. the ownership/title of the flat rather than the cut-off (70% or 51% of certified and eligible occupants) for consent. For MHADA buildings the homebuyer purchasing the flat in that building has to pay a sum of up to INR 25,000 to the society for transferring the flat in the name of the buyer. The society in turn must pay this amount to MHADA and get the name changed in the official records of MHADA. Many societies over the years have collected the transfer charges from the buyer, but did not notify MHADA about the transfer or submit the transfer charges. As a result, there are instances where the flats have changed multiple hands and MHADA does not have any record of the transaction. The name of the current resident/flat owner is different from that in the records of MHADA and this is creating issues while giving consent for redevelopment as the criteria for certified tenant is not met. MHADA insists that the current flat owner must trace all the previous owners and bring a NOC from all the previous buyers stating that they have sold the flat to the subsequent/next buyer and only then they will update their records. This is stalling the process of redevelopment; hence reducing the extent of consent required is not going to solve the problem.

2

Increase in FSI for office development projects

The DCPR 2034 has emphasised on the need to increase the availability of commercial office space in Mumbai by increasing FSI. The rationale given by the DCPR 2034 was that – increasing office space availability via increasing FSI for office development would create more jobs and they aim to create 8 million new jobs in the city via this policy. As a result, the FSI for office space developments has been increased in DCPR 2034 (refer table 3 and 4 below) and is higher than that provided for residential (only if the road width is greater than 12 metres). In the earlier DP, the FSI for a plot in a particular geography was the same irrespective of the type of development.

New office space development does not necessarily create new jobs. The jobs that office developments would certainly create are construction-linked jobs, and those in ancillary industries. Many such jobs are temporary and cease to exist once the buildings are constructed. The actual/permanent jobs – those which will be housed inside these commercial buildings - will be created by the users and occupiers of office spaces. Space absorption by occupiers is primarily dependent on a multitude of economic factors. Hence, while this step does help create office spaces, the spaces will be filled only if the businesses grow. In this respect, the DCPR's provision will come handy in case there is a major surge in business growth. By itself, the provision of the DCPR can only act as a support or an enabler for building more offices, instead of being a large-scale job-creator.

TABLE: 3 **FSI FOR OFFICE SPACE DEVELOPMENT IN THE ISLAND CITY**

Road width	TOTAL FSI		DIFFERENCE
	Prior to DCPR 2034	As per DCPR 2034	
> 12m	2.30	4.05	**1.76**
> 18m	2.57	5.40	**2.84**
> 27m	2.70	6.75	**4.05**

Source: Knight Frank Research, DCPR 2034

TABLE: 4 **FSI FOR OFFICE SPACE DEVELOPMENT IN SUBURBS**

Road width	TOTAL FSI		DIFFERENCE
	Earlier	Now	
> 12m	2.97	4.05	**1.08**
> 18m	3.24	5.40	**2.16**
> 27m	3.375	6.75	**3.375**

Source: Knight Frank Research, DCPR 2034

If we refer to table 3 and 4, we can infer that for developers who have decided to construct an office space development on their plot have gained from this policy. But for developers who are evaluating the various real estate development opportunities on their plot, the important aspect that needs to be evaluated is – are the current set of incentives sufficient to promote office space developments over other kinds of real estate development (residential, retail, warehousing, industrial, etc.) which can be constructed on their plot.

In most areas of Mumbai, residential development is the best alternative to an office development as the sale price/realisation is higher for residential developments. Hence, there can be instances where despite availing benefits of higher FSI, it would still be favourable to construct a residential project and this policy may find it difficult to deliver on its objective.

2.1

Commercial office space developments across the city (including IT, ITeS, biotech)

For our analysis, we have calculated the cost of developing an office project on a plot using all the FSI incentives versus constructing a residential project and analysed whether the current set of incentives are sufficient to promote an office space development over a residential development or not. We have assumed the same market conditions (sales velocity) for office as well as residential projects in order to make it comparable.

Example 1 – Office space development v/s residential development in the island city

TABLE: 5 **FSI FOR RESIDENTIAL V/S COMMERCIAL IN THE ISLAND CITY**

As per DCPR 2034

				FSI limits for residential		
Road width	Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Total Permissible FSI	Fungible FSI @50% of ASR	**Total FSI (Column F)**
Cost as a percentage of ASR		50%			50%	
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
> 12m	1.33	0.62	0.45	2.40	35%	3.24
> 18m	1.33	0.73	0.64	2.70	35%	3.65
> 27m	1.33	0.84	0.83	3.00	35%	4.05

** Note- Island city identified with Lower Parel | Source: Knight Frank Research, DCPR 2034*

Table 5 indicates the total FSI on a plot for residential development v/s office development which varies as per the road width. For office space developments on road width less than 12 metres, there are no additional FSI incentives over and above that provided for residential. Hence, we are considering the FSI applicable on road width greater than 12 metres for our analysis.

For road width greater than 12 metres, the developer can avail of additional FSI as indicated in column J of table 5 on payment of premium @50% of ASR (Annual Schedule of Rates). This additional FSI is over and above what is available for residential development. In addition, the developers can avail 35% of 'Permissible FSI' as fungible on paying premium @60% of ASR for an office space development, which is similar as that available to a residential development. As per DCPR 2034, the premium for fungible FSI for an office space development has been reduced from 80% of ASR to 60% now and also the amount of fungible FSI that can be loaded has been increased from 20% to 35%. On account of the additional fungible FSI on payment of premium @50% of ASR (as indicated in Column J of table 5) and the overall increase in fungible FSI for office buildings (as indicated in column L of table 5), we are getting higher FSI for office buildings (as indicated in column M of table 5). Column N of table 5 gives the difference in total FSI between office space developments and residential developments, which increases with the increase in road width. We need to evaluate whether the FSI incentives are enough to promote office development over residential development on a plot considering the same restrictions (height, fire, setbacks, open space, etc.) and similar market conditions to apply irrespective of the kind of development either residential or office.

TABLE: 6 **PRICE**

ASR (as per average of Ready Reckoner rates)	INR 12,958 per sq ft	INR 139,475 per sq m
TDR cost	INR 7,500 per sq ft	INR 80,730 per sq m
Residential selling price	INR 50,000 per sq ft	INR 538,200 per sq m
Commercial selling price	INR 32,500 per sq ft	INR 349,830 per sq m
Plot area	100,000 sq ft	9,290 sq m

Note: Selling prices are based on carpet area prices | Source: Knight Frank Research

FSI limits for office							DIFFERENCE IN TOTAL FSI BETWEEN OFFICE AND RESIDENTIAL
Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Additional (Incentive) FSI on payment of premium @50% of ASR	Permissible FSI	Fungible FSI @60% of ASR	**Total FSI (Column M)**	
	50%		50%		60%		
G	**H**	**I**	**J**	**K = G + H + I + J**	**L**	**M = J * (1+K)**	**N = M - F**
1.33	0.62	0.45	0.60	3.00	35%	4.05	**0.81**
1.33	0.73	0.64	1.30	4.00	35%	5.40	**1.76**
1.33	0.84	0.83	2.00	5.00	35%	6.75	**2.70**

TABLE:7 **FEASIBILITY**

All figures in INR mn	Realisations from		Cost of residential FSI	Cost of office FSI	Net realisations from residential	Net realisations from office	Difference in net realisations from office and residential
Road width	Residential	Office					
	A	**B**	**C**	**D**	**E = A – C**	**F = B – D**	**G = F – E**
> 12m	16,200	13,163	1,283	1,944	14,917	11,218	**-3,698**
> 18m	18,225	17,550	1,565	2,884	16,660	14,666	**-1,993**
> 27m	20,250	21,938	1,847	3,823	18,403	18,114	**-289**

Source: Knight Frank Research, DCPR 2034

We have considered the average selling price for top residential and office properties of that area to estimate the realisations from residential and office (columns A and B of table 7). The cost of FSI in the form of premiums, TDR and fungible components are as indicated (in columns C and D of table 7 and the prices are as indicated in table 6).

If we refer to the last column of table 7 (column G), i.e. the difference between the net realisations between residential and office; one can infer that the current set of incentives by the DCPR 2034 are not sufficient to promote an office space development over a residential development. After subtracting the cost of additional FSI from realisations, the scale is still tilted in the favour of residential. Even for road width greater than 27 metres, where the difference in FSI between commercial and residential for the island city is as high as 2.76, it is still favourable to construct a residential development.

The above analysis was for one of the most sought-after business districts of the city – Lower Parel. We did a similar analysis for the major business districts located in other regions of Mumbai. The results were as indicated below:

Example 2 – Office space development v/s residential development in the Western Suburbs

TABLE: 8 **FSI FOR RESIDENTIAL V/S COMMERCIAL IN THE WESTERN SUBURBS**

As per DCPR 2034

		FSI limits for residential				
Road width	Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Total Permissible FSI	Fungible FSI @50% of ASR	**Total FSI (Column F)**
Cost as a percentage of ASR		50%			50%	
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
> 12m	1.00	0.50	0.70	2.20	35%	2.97
> 18m	1.00	0.50	0.90	2.40	35%	3.24
> 27m	1.00	0.50	1.00	2.50	35%	3.375

** Note- Western Suburbs identified with Marol, Malad West, Goregaon East | Source: Knight Frank Research, DCPR 2034*

TABLE: 9 **PRICE**

ASR (as per average of Ready Reckoner rates)	INR 18,132 per sq ft	INR 195,170 per sq m
TDR cost	INR 4,000 per sq ft	INR 43,056 per sq m
Residential selling price	INR 30,500 per sq ft	INR 328,302 per sq m
Commercial selling price	INR 17,148 per sq ft	INR 18,4581 per sq m
Plot area	100,000 sq ft	9,290 sq m

Note: Selling prices are based on carpet area prices, ASR- Annual Schedule of Rates | Source: Knight Frank Research

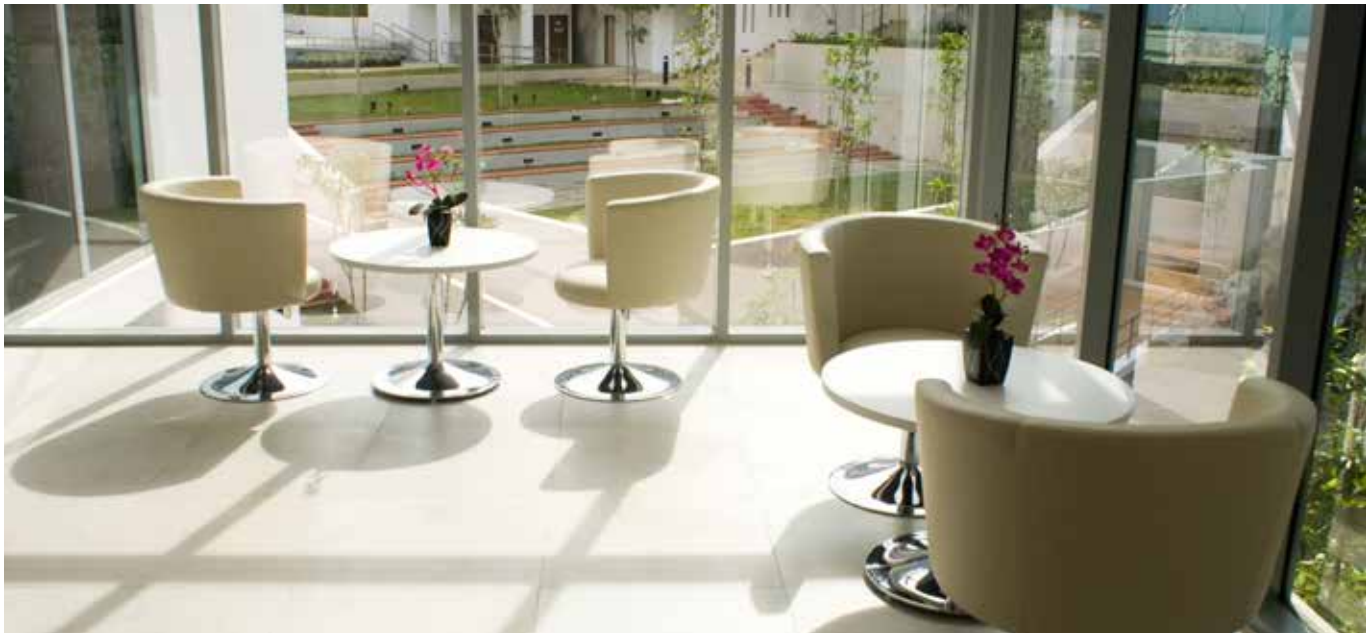
TABLE: 10 **FEASIBILITY**

All figures in INR mn	Realisations from		Cost of residential FSI	Cost of office FSI	Net realisations from residential	Net realisations from office	Difference in net realisations from office and residential
Road width	Residential	Office					
	A	**B**	**C**	**D**	**E = A – C**	**F = B – D**	**G = F – E**
> 12m	9,059	6,945	1,431	2,601	7,627	4,344	-3,283
> 18m	9,882	9,260	1,575	3,787	8,307	5,473	-2,834
> 27m	10,294	11,575	1,647	5,024	8,647	6,551	-2,096

Source: Knight Frank Research

FSI limits for office							DIFFERENCE IN TOTAL FSI BETWEEN OFFICE AND RESIDENTIAL
Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Additional (Incentive) FSI on payment of premium @50% of ASR	Permissible FSI	Fungible FSI @60% of ASR	**Total FSI (Column M)**	
	50%		50%		60%		
G	**H**	**I**	**J**	**K = G + H + I + J**	**L**	**M = J * (1+K)**	**N = M - F**
1.00	0.50	0.70	0.80	3.00	35%	4.05	**1.08**
1.00	0.50	0.90	1.60	4.00	35%	5.40	**2.16**
1.00	0.50	1.00	2.50	5.00	35%	6.75	**3.375**

The feasibility analysis for Western Suburbs has been done in a similar manner as Island City in Example 1. For Western Suburbs, in the widest road category of 27 meters, the FSI potential for office development is higher by 3.375 (column N of table 8). However, as the market scenario analysis provided in column G of table 10 is negative, this clearly indicates that the current set of incentives by the DCPR 2034 are not sufficient to promote an office space development over a residential development in the Western Suburbs for any road width.



Example 3 – Office space development v/s residential development in the Central Suburbs

TABLE:11 **FSI FOR RESIDENTIAL V/S COMMERCIAL IN CENTRAL SUBURBS**

As per DCPR 2034

			FSI limits for residential			
Road width	Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Total Permissible FSI	Fungible FSI @50% of ASR	**Total FSI (Column F)**
Cost as a percentage of ASR		50%			50%	
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
> 12m	1.00	0.50	0.70	2.20	35%	2.97
> 18m	1.00	0.50	0.90	2.40	35%	3.24
> 27m	1.00	0.50	1.00	2.50	35%	3.375

** Note- Central Suburbs identified with Vikhroli West | Source: Knight Frank Research, DCPR 2034*

TABLE:12 **PRICE**

ASR (as per average of Ready Reckoner rates)	INR 4,829 per sq ft	INR 51,978 per sq m
TDR cost	INR 4,000 per sq ft	INR 43,056 per sq m
Residential selling price	INR 27,200 per sq ft	INR 292,781 per sq m
Commercial selling price	INR 14,600 per sq ft	INR 157,154 per sq m
Plot area	100,000 sq ft	9,290 sq m

Note: Selling prices are based on carpet area prices | Source: Knight Frank Research

TABLE:13 **FEASIBILITY**

All figures in INR mn	Realisations from		Cost of residential FSI	Cost of office FSI	Net realisations from residential	Net realisations from office	Difference in net realisations from office and residential
Road width	Residential	Office					
	A	**B**	**C**	**D**	**E = A – C**	**F = B – D**	**G = F – E**
> 12m	8,078	5,913	587	898	7,492	5,015	-2,477
> 18m	8,813	7,884	684	1,273	8,129	6,611	-1,518
> 27m	9,180	9,855	732	1,631	8,448	8,224	-224

Source: Knight Frank Research

FSI limits for office							DIFFERENCE IN TOTAL FSI BETWEEN OFFICE AND RESIDENTIAL
Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Additional (Incentive) FSI on payment of premium @50% of ASR	Permissible FSI	Fungible FSI @60% of ASR	**Total FSI (Column M)**	
	50%		50%		60%		
G	**H**	**I**	**J**	**K = G + H + I + J**	**L**	**M = J * (1+K)**	**N = M - F**
1.00	0.50	0.70	0.80	3.00	35%	4.05	**1.08**
1.00	0.50	0.90	1.60	4.00	35%	5.40	**2.16**
1.00	0.50	1.00	2.50	5.00	35%	6.75	**3.375**

The feasibility analysis for Central Suburbs has been done in a similar manner as Island City in Example 1. For Central Suburbs, in the widest road category of 27 meters, the FSI potential for office development is higher by 3.375 (column N of table 11). However, as the market scenario analysis provided in column G of table 10 is negative, this clearly indicates that the current set of incentives by the DCPR 2034 are not sufficient to promote an office space development over a residential development in the Western Suburbs for any road width.

CONCLUSION

As indicated in the introductory part of this section, developers who had planned to construct an office space development on their plot have gained from the increase in FSI for office developments in the DCPR 2034. However, as we can infer from our analysis of realisations (table 7, 10 and 13), that for a developer who is evaluating the various development options, assuming the same market conditions w.r.t. sales for office and residential, the current set of incentives in DCPR 2034 are not sufficient to promote office development over residential. Even for road width greater than 27 metres, where the difference in FSI between commercial and residential is as high as 2.76 in the island city and 3.375 in the suburbs, it is still favourable to construct a residential development. This is primarily due to the fact that the cost of the premium paid for utilising the additional FSI provided for office development is nullifying the gains accruing from sale of higher saleable area. Hence, the premium for additional (incentive) FSI for office development may need a relook.

2.2

The curious case of Smart Fin Tech centres

The DCPR 2034 envisages promoting the development of Smart Fin Tech centres by providing additional FSI as incentive. As per section 33 (13)(A) of DCPR 2034 –

"The Commissioner may permit additional FSI up to 200% over and above the basic permissible F.S.I. to Smart Fin Tech Centre located in Residential/Industrial/Commercial Zone, which have been approved by the Directorate of Information Technology, proposed to be set up by charging premium of 50% of the land rate for the said land as prescribed in Annual Statement of Rates for the relevant year of granting such additional FSI".

The criteria to classify an office building as fintech is that at least 85% of the total proposed built-up area (excluding parking area) shall be permitted for business of Fin Tech (start-ups, incubators, and accelerators), banking, financial service (including NBFC) and insurance, and IT/ITES with focus on Fin Tech.

We evaluated the incentives offered for Smart Fin Tech centres in the manner similar to what we have done for regular office development projects in section 2.1 above, i.e. are the incentives sufficient to promote development of Smart Fin Tech centres compared to alternative development of residential?

Example 1 – Smart Fin Tech centres v/s residential development in the island city

TABLE:14 **FSI FOR RESIDENTIAL V/S SMART FIN TECH CENTRE**

As per DCPR 2034

		FSI limits for residential				
Road width	Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Total Permissible FSI	Fungible FSI @50% of ASR	Total FSI (Column F)
Cost as a percentage of ASR		50%			50%	
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
> 18m	1.33	0.73	0.64	2.70	35%	3.65
> 27m	1.33	0.84	0.83	3.00	35%	4.05

** Note- Island city identified with Lower Parel.| Source: Knight Frank Research, DCPR 2034*

For Smart Fin Tech centres, as per DCPR 2034 the 'Permissible FSI' (column I of table 14) for the plot is restricted to 3 and it is permitted only on roads wider than 18 metres. The DCPR 2034 permits FSI of 4 for smart fintech centres only on plots having area greater than 200,000 sq m and with access road atleast 24 metres wide. Considering the limited number of such plots being available in Mumbai, we have considered aspect of FSI of 3 for Smart Fin Tech centres in our analysis. As per DCPR 2034, the additional FSI which has to be purchased over and above the base (i.e. basic FSI refer column G of table 14) FSI needs to be purchased by paying a premium @50% of ASR (as indicated in column H of table 14). The cost of premium of additional FSI for Smart Fin Tech centres (@50% of ASR) is same as that for regular office buildings (@50% of ASR) covered in section 2.1 above. In addition, fungible FSI of 35% of Permissible FSI is available by paying a premium @60% of ASR (as indicated in column J of table 14). The difference in total FSI for a Smart Fin Tech centre and residential development is as indicated in column L of table 14. We need to evaluate if the incentives are adequate to promote the development of Smart Fin Tech centres over residential developments considering the same site-specific restrictions and market conditions to apply irrespective of the kind of project either residential or office.

TABLE:15 **PRICE**

ASR (as per average of Ready Reckoner rates)	INR 12,958 per sq ft	INR 139,475 per sq m
TDR cost	INR 7,500 per sq ft	INR 80,730 per sq m
Residential selling price	INR 50,000 per sq ft	INR 538,200 per sq m
Commercial selling price	INR 32,500 per sq ft	INR 349,830 per sq m
Plot area	100,000 sq ft	9,290 sq m

Note: Selling prices are based on carpet area prices | Source: Knight Frank Research

FSI limits for office					DIFFERENCE IN FSI BETWEEN SMART FINTECH AND RESIDENTIAL
Basic	Additional (Incentive) FSI on payment of premium @50% of ASR	Permissible FSI	Fungible FSI @60% of ASR	Total FSI (Column K)	
	50%		60%		
G	**H**	**I = G + H**	**J**	**K = I * (1+J)**	**L = K - F**
1.33	1.67	3.00	35%	4.05	**0.41**
1.33	1.67	3.00	35%	4.05	**0.00**

TABLE:16 **FEASIBILITY**

All figures in INR mn	Realisations from		Cost of residential FSI	Cost of office FSI	Net realisations from residential	Net realisations from office	Difference in net realisations from office and residential
Road width	Residential	Office					
	A	**B**	**C**	**D**	**E = A - C**	**F = B - D**	**G = F - E**
> 18m	18,225	13,163	1,565	1,898	16,660	11,264	-5,396
> 27m	20,250	13,163	1,847	1,898	18,403	11,264	-7,139

Source: Knight Frank Research

We have considered the average selling price for top residential and office properties of that area to estimate the realisations from residential and office (columns A and B of table 16). The cost of FSI in the form of premiums, TDR and fungible components are as indicated in columns C and D of table 16 and the prices are as indicated in table 15.

If we refer to the last column of table 16 (column G), i.e. the difference between the net realisations of Smart Fin Tech centres and residential developments; as the difference in realisations is negative, one can infer that the current set of incentives by the DCPR 2034 are not adequate to promote the development of Smart Fin Tech centres over a residential development for any road width.

The above analysis was for one of the most sought-after business districts of the city – Lower Parel. We did a similar analysis for major business districts located in other regions of Mumbai. The results were as indicated below:

Example 2 – Smart Fin Tech centres v/s residential development in the Western Suburbs

TABLE: 17 **FSI FOR RESIDENTIAL V/S SMART FIN TECH CENTRE IN THE WESTERN SUBURBS**

As per DCPR 2034

		FSI limits for residential				
Road width	Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Total Permissible FSI	Fungible FSI @50% of ASR	Total FSI (Column F)
Cost as a percentage of ASR		50%			50%	
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
> 18m	1.00	0.50	0.90	2.40	35%	3.24
> 27m	1.00	0.50	1.00	2.50	35%	3.375

** Note: Western Suburbs identified with Marol, Malad West, Goregaon East | Source: Knight Frank Research, DCPR 2034*

TABLE: 18 **PRICE**

ASR (as per average of Ready Reckoner rates)	INR 18,132 per sq ft	INR 195,170 per sq m
TDR cost	INR 4,000 per sq ft	INR 43,056 per sq m
Residential selling price	INR 30,500 per sq ft	INR 328,302 per sq m
Commercial selling price	INR 17,148 per sq ft	INR 18,4581 per sq m
Plot area	100,000 sq ft	9,290 sq m

Note: Selling prices are based on carpet area prices | Source: Knight Frank Research

TABLE: 19 **FEASIBILITY**

All figures in INR mn	Realisations from		Cost of residential FSI	Cost of office FSI	Net realisations from residential	Net realisations from office	Difference in net realisations from office and residential
Road width	Residential	Office					
	A	**B**	**C**	**D**	**E = A – C**	**F = B – D**	**G = F – E**
> 18m	9,882	6,945	1,575	2,955	8,307	3,989	-4,318
> 27m	10,294	6,945	1,647	2,955	8,647	3,989	-4,658

Source: Knight Frank Research

FSI limits for office					DIFFERENCE IN FSI BETWEEN SMART FINTECH AND RESIDENTIAL
Basic	Additional (Incentive) FSI on payment of premium @50% of ASR	Permissible FSI	Fungible FSI @60% of ASR	Total FSI (Column K)	
	50%		60%		
G	**H**	**I = G + H**	**J**	**K = I * (1+J)**	**L = K - F**
1.00	2.00	3.00	35%	4.05	**0.81**
1.00	2.00	3.00	35%	4.05	**0.675**

The feasibility analysis for Western Suburbs has been done in a similar manner as Island City in Example 1.

If we refer to the last column of Table 19 (column G), i.e. the difference between the net realisations from residential and office; as the difference in realisations is negative, one can infer that the current set of incentives by the DCPR 2034 are not adequate to promote development of Smart Fin Tech centres over a residential development for any road width.

Example 3 – Smart Fin Tech centres v/s residential development in the Central Suburbs

TABLE: 20 **FSI FOR RESIDENTIAL V/S SMART FIN TECH CENTRE IN THE CENTRAL SUBURBS**

As per DCPR 2034

				FSI limits for residential		
Road width	Basic	Additional FSI on payment of premium @50% of ASR	Admissible TDR	Total Permissible FSI	Fungible FSI @50% of ASR	Total FSI (Column F)
Cost as a percentage of ASR		50%			50%	
Column	**A**	**B**	**C**	**D = A + B + C**	**E**	**F = D * (1+E)**
> 18m	1.00	0.50	0.90	2.40	35%	3.24
> 27m	1.00	0.50	1.00	2.50	35%	3.375

** Note- Central Suburbs identified with Vikhroli West | Source: Knight Frank Research, DCPR 2034*

TABLE: 21 **PRICE**

ASR (as per average of Ready Reckoner rates)	INR 4,829 per sq ft	INR 51,978 per sq m
TDR cost	INR 4,000 per sq ft	INR 43,056 per sq m
Residential selling price	INR 27,200 per sq ft	INR 292,781 per sq m
Commercial selling price	INR 14,600 per sq ft	INR 157,154 per sq m
Plot area	100,000 sq ft	9,290 sq m

Note: Selling prices are based on carpet area prices | Source: Knight Frank Research

TABLE:22 **FEASIBILITY**

All figures in INR mn	Realisations from		Cost of residential FSI	Cost of office FSI	Net realisations from residential	Net realisations from office	Difference in net realisations from office and residential
Road width	Residential	Office					
	A	**B**	**C**	**D**	**E = A – C**	**F = B – D**	**G = F – E**
> 18m	8,813	5,913	684	787	8,129	5,126	-3,003
> 27m	9,180	5,913	732	787	8,448	5,126	-3,322

Source: Knight Frank Research

FSI limits for office					DIFFERENCE IN FSI BETWEEN SMART FINTECH AND RESIDENTIAL
Basic	Additional (Incentive) FSI on payment of premium @50% of ASR	Permissible FSI	Fungible FSI @60% of ASR	Total FSI (Column K)	
	50%		60%		
G	**H**	**I = G + H**	**J**	**K = I * (1+J)**	**L = K - F**
1.00	2.00	3.00	35%	4.05	**0.81**
1.00	2.00	3.00	35%	4.05	**0.675**

The feasibility analysis for Central Suburbs has been done in a similar manner as Island City in Example 1.

If we refer to the last column of table 22 (column G), i.e. the difference between the net realisations from residential and office; as the difference in realisations is negative, one can infer that the current set of incentives by the DCPR 2034 are not adequate to promote development of Smart Fin Tech centres over a residential development for any road width.

CONCLUSION

As per our analysis of the incentives offered for the development of Smart Fin Tech centres in DCPR 2034, assuming the same market conditions w.r.t. sales, we can infer that the current set of incentives in DCPR 2034 are not sufficient to promote development of Smart Fin Tech centres over residential development for any road width. This is primarily due to the fact that cost of the premium for additional FSI for development of Smart Fin Tech centres is nullifying the gains accruing due to sale of higher built-up area. Hence, the premiums for adttional (incentive) FSI to promote development of Smart Fin Tech centres may need a relook.

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