

Property Development

10.1 Introduction

The potential for developments of a few growth centers (townships) between Sabarmati and Gandhinagar has been examined for part funding of Metro Project and additional ridership on Metro system. The development of growth centres can also help in part funding of the metro system. The potential of development and possible financing of the project through this development is discussed herein. For value capture from property development following three aspects have been specifically analyzed:

- (a) Property Development (Commercial, Institutional and Residential) along Metro Corridor in GUDA area.
- (b) Selected pockets of property development along and near Metro Corridor in AUDA area.
- (c) Value capture from increased FSI / FAR and levy of betterment charges along metro corridor (upto 1 Km width) on both sides of alignment.

10.2 Approach and Methodology

The study for abovementioned purpose was carried out in two phases, first in February 2004 and second time in June 2005. The study team has found pace of development along the stretch between Motera Village – Koba Circle and Koba Circle to Indorda Circle extremely high. During the study, reliance has been placed on:

- (a) Development Plan of Gandhinagar – 2011 AD (January 2001) and Revised Development Plan of Ahmedabad Urban Development Authority (May 2002 Notification) with the subsequent changes.
- (b) Detailed discussions with GUDA and AUDA officials both in February 2004 and June 2005. The discussions centered around availability of land, to the extent it is possible to earmark the land for property development along metro line, the likely acquisition price and mode of acquisition, the growth scenario etc. With assistance of GUDA and AUDA, it has been possible to earmark the areas which can be acquired for property development purpose in all three categories of institutional, commercial and residential.
- (c) Inspection along the alignment and the adjoining areas twice at an interval of one year has helped in assessing the current pace (and projecting the future) of real estate development along the alignment particularly in the reference area of the study.
- (d) Discussions have been held (both in February 2004 and June 2005) with a representative sample of market players (both developers and real estate brokers) to understand market side perspective, market psychology, likely realization from property development (in both pre-metro and post-metro perception),

capacity of market to absorb the quantum of commercial, institutional and residential property which metro property development is likely to unleash, types of potential buyers etc.

This study is done from the perspective of maximum value capture from four angles:

- i) To generate cash for development of metro rail;
- ii) To generate substantial source of supplementary revenue during the operations phase;
- iii) To use the real estate and township development to create and enhance ridership and
- iv) To enable capturing of extra revenue over a time by levy of betterment charges by providing extra FSI along metro corridor.

10.3 Site Specific Observations

- i) **Gandhinagar Urban Development Area:** Originally Gandhinagar was built at a distance of about 32 – Km North of Ahmedabad. However it was expected that the vacant area between old and the new capital city would be filled up in due course due to rapid urbanization. A reconnaissance survey of the proposed alignment (alignment at the centre of the existing Highway – 71) indicates that the gap between the two cities is reducing fast and what can be today described as vacant area is more on Gandhinagar side (outside jurisdiction of AUDA) beyond Narmada Canal from Koba Circle to Indroda Circle. This vacant portion was identified as a length of 10 Km approximately in February 2004 and the same was available in plenty on both sides of the State Highway with villages being sparsely populated.

However during June 2005 survey, a drastically different scenario is found along the proposed Metro rail corridor between Motera Stadium and Indroda circle via Koba circle. Reconnaissance survey, market intelligence and discussion with market players as well as discussions with GUDA officials indicate that landscape along SH 71 (proposed alignment) is not only changing but has also drastically got altered in the one year three months elapsed time, (the gap between two studies of DMRC). This change has been witnessed on all the three fronts – commercial, institutional and residential property. It is also understood that in case of bulk of the land earmarked for agricultural use, investors and developers have either already taken position or are in the process of doing so. This has already had two way effect – one side it has already spurred the development along proposed metro corridor and has been pushing the land prices of all categories upwards, on the other side bulk of the land identified in February 2004 to part fund metro rail development through value capture is no longer available in June 2005. The Annexure I gives a glimpse of fast pace development. In any case development along the route in past has largely been restricted due to lack of Governmental permissions initially and lack of proper urban transport facility in recent times.

- ii) **Ahmedabad Urban Development Authority Area:** On Ahmedabad side there is little scope for development of many townships along the metro corridor. In AUDA area the happening place for property development today is near Motera village and near Narmada Canal but the pace of development is so brisk there that there is hardly any land left for acquisition even at a prohibitively costly rate. Nevertheless, June 2005 discussions with AUDA authorities have thrown forward interesting possibilities of acquisition of part of the TP Nos – 235, 236, 237, 238, 239 and a sizeable chunk of land between TP 44 and TP 46.
- iii) The land holding pattern indicates that along the alignment Government land is miniscule or non-existent along SH-71. The entire land holding is private. In the initial stage the method of land development by the State Government in Gandhinagar city was through bulk acquisition and development of land (planned on a grid iron pattern, divided into 30 sectors of 1000m x 750m = 75ha. each) and disposing the plots through allotment. A more participatory approach of development has been adapted by Gandhinagar and Ahmedabad Urban Development Authorities who carryout infrastructure development while majority of the land remains with the original owners now. **The present scenario is such that the lands being identified in both AUDA and GUDA area, unless are earmarked and stopped for any development clearance, even the land being identified now will get developed fast and will not be available for property development for metro rail.**
- iv) The Development Authorities have planned future development of Gandhinagar along the two highways NH-8C (Sarkhej – Gandhinagar highway) and SH 71 (the proposed metro alignment route). The development could be linear and nodal at major nucleus village like Adlaj, Koba, Pethapur, Wavol and Chiloda. GUDA prefers to maintain a buffer zone between Ahmedabad and Gandhinagar to maintain green and planned character. However, if the changing scenario along SH-71 between Koba circle and Indroda circle is any indication, it has already gained a momentum not visualized even one year back. Annexure I as discussed above provides the list of developments which have already taken place.
- v) Informed market feedback twice in one year, based on discussions with brokers and developers based at Ahmedabad and Gandhinagar clearly indicates that market absorption of the plots or buildings, institutional, commercial or residential is welcome and the brisk pace of development is sustainable and definitely at current prices. It has been ascertained that likely development of real estate by metro rail will get absorbed in 2-3 years time.

10.4 Financing through Urbanization along Metro

Transport corridors are natural harbors of rapid urbanization. Metro systems have the beneficial effects of appreciation in adjoining property values wherever they have come either in distant or recent past. This

phenomenon has been vigorously tapped by the cities like Hong Kong, Tokyo, Kobe and Singapore as source of recurring income as well as to derive profits so as to fund future developments. In fact the early transit routes in U.S. also had the dual purpose of creating transport infrastructure and cities.

In Indian conditions Delhi Metro Rail Corporation has already initiated a new chapter by initiating value capture from property development along Delhi Metro Rail. The likelihood of deriving funds from these sources for the development of the connecting rail link between the twin cities of Ahmedabad and Gandhinagar follows from the above observations and what other cities are able to achieve in similar circumstance.

However the value capture cannot be a substantial or complete source for funding upfront construction costs but they do hold substantial promise when it comes to developing new territories in the periphery of big cities. This not only acts as source of fund generation but also provides much needed captive transit passengers. It is also suited to part supporting metro rail operations. Further, property appreciation occurs over time with the development of the metro rail service. Therefore, the gains of the property appreciation can best be tapped a little later rather than earlier. An attempt has been made to suggest a strategy for property development in the region with a view to maximizing the gains from the same.

10.5 Potential Area for Development in GUDA portion along Alignment

As per the draft land use plan of GUDA, the immediate strip alongside the highway (and proposed metro) has been designated as commercial on both sides. The land beyond this is to be developed as residential property, both high density and low density and the area immediately adjoining the Indroda Circle is to be developed as institutional area. The width of commercial zone on both side of SH-71 is 400 meter for an approximate length of 5200 meters after 1.2 Km from Indroda Circle to near Koba Circle is GUDA area. The institutional area on both sides is 1.2 Km of length while the width on one side is 400 meters (on the side of location of proposed Indroda depot) on the other side of the road the width of institutional area is more than 2 Km and already part of it houses the existing Info City. The enclosed map of relevant portion of GUDA indicates that between Koba and Indroda Circle other than the above commercial and institutional areas. Residential zones have been earmarked at R4 towards Indroda side and as R5 towards the Koba side. The respective sites are earmarked on the map as such.

Agricultural land: In the western side of SH-71 plenty of land is available earmarked Agricultural use (as high as 8000 Hectares) surrounding the villages of Kudasani, Pora, Amiyapur and Ambapur. This piece of agricultural land closer to metro rail (1 Km width x 3 Km length) is a clear potential area available and the availability of the same and possibility of acquisition to the extent needed has been confirmed by GUDA authorities.

The development plan of GUDA is supposed to cater to development upto 2011 but did not factor the existence of a modern rail based mass transit in Ahmedabad and Gandhinagar and a corridor connecting the two cities. The property development (either nucleus or linear) along side metro rail gives an opportunity to reset the new growth pattern and possibility of generating revenues for the metro project. Thus in view of the proposed MRTS, the draft GUDA plan will need to be realigned for a more co-ordinated growth.

10.5.1 Linear City vs Nucleus Development in GUDA Area

One of the key important issues is whether it is beneficial to develop two / three townships or the ribbon growth along the corridor. The draft development plan of GUDA indicates – the development pattern along SH-71 to be

- Linear growth of commercial and institutional area.
- Residential Townships beyond these areas and around nucleus villages (Koba & Chiloda to be prominent).

A close observation of the development pattern along the SH-71 over last one year has already indicated that while linear development along the road and proposed metro line (see Annexure A) has already fast turned into a reality even nucleus development in the areas farther from road is going to materialize, fast and in the opinion of DMRC sooner than later.

DMRC's recommendation is to adopt the linear approach for commercial and institutional development and nucleus approach for residential development.

10.5.2 The Actual Developable Land in GUDA Area

Commercial Development: As discussed above the total earmarked commercial land between Indroda and Koba Circles is 400 meter wide x little more than 5000 meter long strip, on both sides of the road. The plots are divided in two parts – first two hundred meters wide (front side) and of same width immediately after that. During discussions with GUDA authorities in June 2004 it transpired that despite rapid development in last one year, all development permissions for commercial use along this strip has been stopped in last two months. It has also been indicated by GUDA officials that:

- In the commercial area in the front 200 meter width, 25 – 30% of the total land can be allotted for property development for metro railway. However, for the sake of conservatism it is assumed by DMRC that only 20% of the front land can be provided for PD.
- Similarly in the case of backside 200 meter wide commercial strip, GUDA authorities have indicated that 50% of the same can be given for property development for metro line. Here as well, the actual likely area has been taken as 30% (instead of 50%) to account for conservatism.

- The rate of commercial land has been taken as Rs. 50 Lacs per hac upto 200 meter from road and Rs. 45 Lacs for land between 200 – 400 meter from road.
- In view of above the actual area available for PD for metro has been assumed as follows:

~ 200 m from road	20%	40 Hectares	Both sides of road taken together
~ 200 – 400 m from road	30%	60 Hectares	

Total Ground Coverage permissible for commercial development is 35% and maximum permissible height is 30 meter G + 7. This is a restriction imposed as it is understood that generally a building higher than state secretariat (10 storied building) is not permitted in Gandhinagar. Nevertheless, even here it has been presumed that only 20% of commercial development will be of permitted high rise (G + 7) and majority 80% of the development will be of low rise type (G + 4).

Institutional Development: The Indroda Depot land is part institutional and part REI (Recreational use). The 30 Hectares land has roads from three sides – SH-71 along alignment, NH-8C and Dhaula Kuan Road. On SH-71, opposite Depot site already Info City exists. This site is a perfect site for more institutional development (high rise along the roads – SH-71 and NH-8C) and above the depot deck area. It has been assumed that 10 hectares worth of land can be developed for IT park / Bio-tech Park/ Info City in this land. Ground Coverage for the same has been assumed as 50% as applicable for such development in Gandhinagar area with permissible G + 7 floors.

Residential Development: It has been ascertained from GUDA authorities that 50% of the areas in R4 and R5 can be earmarked for metro rail property development purpose. Despite this assurance DMRC has noted the fact that a portion of even this land already may be in possession of developers by now. In view of this it has been assumed that only 25% of R4 and 15% of R5 (R5 is closer to Koba where more of residential development is already taking place) will be available in place of blanket 50% suggested by GUDA. In terms of development parameters it has been assumed that only 35% Ground Coverage and maximum of 5 floors (G + 4) will be possible.

Residential Development – Village Agricultural Land: Earlier in the chapter we have indicated about the plenty of agricultural land (upto 8000 ha) being available, a good portion of which can be earmarked for residential development. The land is between SH-71 and villages Kudasani, Por and Ambapur. However, DMRC believes that residential development along SH-71 for this agricultural land should be first considered for only upto one km of width and 3 Km length, as any thing beyond one Km width that goes really out of metro rail catchment area in present circumstances. Moreover, even out of this 300 hectares (3 Km x

1 Km) it has been assumed that only 50% of the land will be made available though GUDA authorities have confirmed that there is no problem in acquisition of this land.

10.6 Area for Development in AUDA area:

The land availability in AUDA area is far lesser than that of GUDA area. However, DMRC after due consultation with AUDA authorities has identified following specific areas for acquisition for property development purposes:

	Total Area	Total Area proposed to be acquired	
TP No. 235, 236, 237	450 ha	200 hectare	Residential
Triangular land partly in TP 44 and TP 46 close to Motera and Metro Alignment		100 hectare	
TP No. 238, 239	200 – 250 ha	50 hectare	Commercial

It is ascertained from AUDA authorities that earmarking the above lands for metro rail purposes is possible and the land between TP 44 and TP 46 needs to be acquired fast. As regards TP 238 and 239 land, this is one of the few stretches of part land vesting with government and Government of Gujarat is already planning a show case International Convention Center on part of TP 238 plot.

Apart from above, limited property development of 5 hectares of Depot Deck is possible at Thaltej Depot site. This site has no doubt limitation of being low lying and total area available for Depot is limited to 18 hectares (including 6.5 hectares of Railway land), the fact remains that this land is just across prestigious Sarkhej – Gandhinagar road and Institutional / Commercial property development above the depot deck (Hong Kong style) is an eminently viable and desirable proposition.

10.7 Financing through Planned Development

The potential for financing the metro project has been evaluated based on the analysis for the planned development of 720 hectares of land. The detailed analysis has been carried out to arrive at the potential money that can be raised from value capture from real estate for funding of metro railway. The details of the working is provided in Annexure B and the same is summarized below:

	Commercial	Institutional	Residential	Total
Total Land in ha.	150	20	550	720
Cost				
<i>Land Cost</i>	292	29	882	1204
<i>Development Cost</i>	45	6	165	216
<i>Cost of construction</i>	1617	400	0	2017
				3437
Sale				
<i>Sale Price</i>	1200	1100	300	
<i>Sale Proceeds</i>	3792	946	2031	6769
Profit	1838	510	984	3332

For arriving at the above conclusions, two broad options available for property development have been used to provide a proper mix between profit maximization and upfront requirement of cash for development.

- The land is acquired, developed and sold off to private developers for construction.
- The land is acquired, developed, constructed and then sold off.

10.7.1 Option I: Acquire, Develop and Sell

The pattern of development, in this case assumes that the role of the metro rail development agency would be limited to development only. Once the land has been acquired by State Government and basic infrastructure is provided by Metro SPV, it will be sold to developers and private parties for construction and use as per the land use defined.

With development of the rail and other properties, the land values will definitely appreciate. In fact, commercial and private property will definitely command a premium over prices prevailing within Gandhinagar, which essentially caters to the public sector and Government Offices. This model has been applied only in case of residential development, where it has been assumed that after development the land will be parceled out and the calculation has been arrived at by applying a bare minimum Rs. 220 per sq feet in GUDA area and Rs. 450 per sq. feet in AUDA area (in AUDA area near Motera the cost of developed land is much higher even today).

The key point here is that delaying the sale of land, will not only allow the property values to escalate but also allow the opportunity to enjoy a larger share in the gains and because of this the residential property should be parceled out and disposed off in lots. The fact that developing, constructing and then selling residential property by Metro SPV itself or in partnership will fetch significantly higher return and is recommended

for at least part of residential development, for the financial calculation more conservative option of develop and sell is adopted.

10.7.2 Option II: Acquire, Develop, Construct and Sell

Under this pattern of property development, the relevant authority does not merely sell off the land but undertakes construction and therefore realizes higher gains by selling built up area versus just land.

Thus the returns from selling constructed property in this area are much higher than those from sale of land. The profit margin in acquire, develop, construct, sell scenario is at least 2 to 3 times than simply develop and sell scenario.

The downside with this option is that upfront funds requires for not only land acquisition and development but also for construction, which is likely to be substantial. Also, there would be additional responsibilities of marketing the properties ensuring development in line with market trends etc. However, the impact of more requirement of upfront money is lessened by the fact that in property market after initial investment of 20 – 25% of cost, balance is automatically taken care of by the revolving cash generation nature of the business on installment receipts after booking starts.

Another possible solution would be to enter into a joint venture with developer(s), with the land being the only contribution from the metro development or property development on BOT. The developer funds the construction and undertakes all the hassles of marketing etc. In turn for their contribution, the authority receives a commensurate share in the final returns, this could be anywhere from 45% - 50% depending upon the market value of the land. This approach has been successfully adopted in Hong Kong for the development of their metro system. This is a win-win situation and is already being used in Delhi Metro as well.

Both the options are compared below:

Option I	Option II
Pros <ul style="list-style-type: none"> • Quick upfront funds inflow from sale of plots to support metro development • Low initial capital cost burden 	Pros <ul style="list-style-type: none"> • Higher property development profits realized • Initial cost burden 25% in case of self development but lower realizations if JV approach or BOT is adopted
Cons <ul style="list-style-type: none"> • Lower returns from the property 	Cons <ul style="list-style-type: none"> • Funds inflow is realized with a lag • Some market risk, in terms of non sale of property

10.8 Recommended Strategy for Development

Given the objective of maximum gain from property appreciation and the constraints in terms of the requirement for upfront funds for developing the metro, a mixed as well as a phased approach to development is deemed the most appropriate strategy. This will ensure:

- Some immediate funds inflow from the sale of developed land to commence construction of metro rail as well as to kick start property development. The land can be sold to some large anchor tenants and developers who will create a pull effect for consequent development and an upward pressure on the land prices. In fact the pull effect can already be seen now.
- Meanwhile, part of the land can be developed either by SPV on its own or partly through the JV / BOT mechanism to realize a larger share of the profits.
- Realisations from subsequent phases whether only land or constructed property will be substantially higher with the phase I developments under way or completed.
- The financial calculations for total residential plots have been done on the basis of develop and sell and total commercial and institutional as construct and sell primarily to keep a balance between conservatism and profit maximization.
- It has been seen earlier that the land earmarked in February 2004 is no longer available for property development. DMRC firmly believes that unless there is “total stop” on any more development permissions on the land parcels identified now it will be impossible to find land for development of metro rail and associated property development to fund it.
- Apart from freezing permission for further development, immediate action will be required to be taken for acquisition of the identified land under Section 17 (Emergency Provision) of the Land Acquisition Act.
- The prioritization of property development should be development and selling of residential plots to generate initial cash (25% to 30% of residential property), development of institutional “signature” property opposite Info City in Depot land as demonstration effect by SPV itself and then a few demonstrated pockets of commercial development to start with either on its own or through PPP.
- Ideally, the land should be transferred to the metro SPV without any cost. Alternatively, a subordinate debt (at low cost) may be provided to acquire the land, as in the case of Delhi. This can be paid off at a later date when the operations permit.
- The above manner of direct land sale of residential land should be limited to less than 35% of the total area available. The main purpose behind this is to mobilize 50% funds immediately and also kickstart development activity through large scale high profile developments.
- At a later stage, once these earlier developments take off, the metro must actively consider construction of properties, both commercial

and residential, for the purpose of generating rental income. This will be critical for supporting operations as well as debt serving.

10.9 Sensitivity

The following land acquisition costs have been assumed for the financial model:

1 Bigha = 2780 sq. m.

Commercial Land: Average Rs. 47,50,000 per bigha.

Residential Land: GUDA – Rs. 30 Lacs

AUDA – Rs. 45 Lacs

Institutional Area: Rs. 35 Lacs per bigha

The cost of acquisition has been assumed in line with the prevailing rates and over and above. The development cost of Rs. 300 per square meter has been adopted separately as per the industry practices.

While cost of construction has been taken as what industry considers as present norms at Ahmedabad – Gandhinagar area, the average selling price of commercial and institutional property is Rs. 1200 per sq feet and Rs. 1100 per sq. feet has been taken at lower end of the market price available in the vicinity along SH-71 along alignment even today. With likely upswing in prices with metro rail there is upside and not much of the downside to this base case scenario.

In view of above a total amount of Rs. 3300 Crores as explained earlier is realizable from the property development within the construction time frame. However in view of the fact that a part development may be done in PPP and part development can be done in such a manner that 50% money from property development is available during the construction period and NPV of balance 50% is available during operations period to take care of any shortfall of fare box revenues and to support debt repayment, it is the final recommendation of DMRC that out of Rs. 3300 Crores, potential realization from property development only less than half of the amount i.e Rs. 1500 Crores should be earmarked or considered for funding the project through property development. In DMRC's opinion, this Rs. 1500 Crores is the absolute minimum amount which will definitely get generated for funding of project.

10.10 Betterment Levy due to Metro Railway and Resultant Redensification Permission

The two corridors for Ahmedabad Metro, Akshardham to APMV Vasna and Kalupur to Thaltej have relatively high densification but density in immediate catchment area are medium to low depending on pre-metro perception of the area. Even along the main road, most of the buildings are low rise with very few high rise structures. With the arrival of rapid rail based mass transit it is strongly advisable to go for planned permitted redensification plan along both sides of the Metro corridor. It is generally seen from the experience of both developed and developing countries

that the immediate catchment area is one km width on either side from the Metro alignment. In the case of Ahmedabad – Gandhinagar Metro rail, it is proposed that the betterment levy should be placed upto 1 Km on either side (assuming 300 meters for commercial and 700 meters for residential).

DMRC has for this purpose at present considered the alignment limited to north – south 15.40 Km and East – West 6.72 Km. This has been arrived after excluding the segment between Motera village to Akshardham circle in AUDA and GUDA area. This segment can be taken up later. Similarly, the segment Kalupur to Shahpur has also been excluded as the walled city has very high density and congestion to permit any development.

In view of above this exercise is limited to upto Motera village in North – South Corridor (15.40 Km) and Shahpur to Thaltej (6.72 Km), thus totaling to 22.2 Km. Already there is an existing scheme of AUDA of permitting 25% more FAR on payment of one time per sq m rate as follows:

- a) Along road of 35 meter or above width
 - Commercial
 - Rs. 2500 per sq meter in municipal area
 - Rs. 2000 per sq meter in AUDA area.
 - Residential
 - Rs. 2000 per sq m in municipal area
 - Rs. 1500 per sq m in AUDA area.

- b) Along road less than 30 meter
 - Commercial
 - Rs. 2000 per sq meter in municipal area
 - Rs. 1500 per sq meter in AUDA area.
 - Residential
 - Rs. 1500 per sq m in municipal area
 - Rs. 1000 per sq m in AUDA area.

DMRC has carefully analyzed the existing levy as well as the likely impact on property prices within a medium term period of 3 to 5 years from start of construction. The experience worldwide including the emerging experience along the Delhi Metro corridor suggest that property prices conservatively can go upto 100% within the time frame within the catchment area described above. This likely effect has also been corroborated in June 2005 discussions with property developers and intermediaries in Ahmedabad area.

It is a well accepted global practice to levy betterment charges on account of Metro rail with or without allowing extra FAR. In the case of Ahmedabad – Gandhinagar Metro Railway following increases in maximum permissible FAR are proposed:

	Existing	Proposed	Increase
Commercial	1.8	2.7	50%
Residential	1.8	2.7	50%

For the first 25% increase, the above formula of AUDA can be used but for balance 25% increase, the following one time fees should be levied, combining AUDA formula with the impact of increase in property prices along the catchment area.

	Average
Commercial	Rs. 4000 per sq m.
Residential	Rs. 3000 per sq m

Ideally for the entire 50%, the revised rate should be applied. The total minimum amount likely to be collected out of this betterment levy will be Rs. 378 Crores. However this amount is likely to materialize only gradually over a period of next 10 years. Assuming a 50:50 split between Metro Rail Authority and AUDA, this works out to a minimum of Rs. 189 Crores for Metro Rail Authority per annum.

The detail calculation is given as under:

		North South Corridor	East West Corridor
Total length of the Corridor Earmarked for Betterment levy		15.40 km	6.72 km
Total width proposed for levy			
Commercial	300		
Residential	700		
Area in Sq. Mtr			
Commercial		4620000	2016000
Residential		10780000	4704000
Total		15400000	6720000
Maximum Permissible FAR (Current)			
Commercial	1.8	8316000	3628800
Residential	1.8	19404000	8467200
Total Construction Area		27720000	12096000
Enhanced FAR Recommended			
Commercial	2.7	12474000	5443200
Residential	2.7	29106000	12700800
Total Construction Area		41580000	18144000
Total Construction area in excess of permissible FAR increase of 25%			
Commercial		2079000	1360800
Residential		4851000	3175200
Total betterment levy to be levied (Per Sq. Mtr	Average		
Commercial	4000	8316000000	5443200000
Residential	3000	14553000000	9525600000
Total		22869000000	14968800000
Grand Total			37837800000
Total realization in the next 10 years			Rs 3783 crores
Average per annum realization			Rs 378 crores
Assuming 50%:50% between Metro Rail Corporation and other agencies			189 per annum

10.11 Organization setup for Property Development

It will be absolutely essential to have a full fledged professional organization at arms length from the Government if the above mandate has to be fulfilled. It is recommended that property development is undertaken by a separate SPV which is at least an arms length fully equipped division of Metro Rail Authority or still better a 100% fully owned subsidiary of Metro Rail Authority with a special dispensation on the tax issue as the entire profit from the real estate development is required to be plough back to Metro Rail construction and subsequently for making operations sustainable.

Annexure A

1. Info City opposite Depot Land
2. National Institute of Cooperative Management
3. Water Park
4. National Institute of Fashion Technology
5. National Institute of Design
6. Creative Info City
7. Swami Narayan Temple
8. Pratik Complex
9. Shyam Shruti Project of Shyam Developers
10. Indra Dhanush
11. Simandan Bungalows opposite Dhaula Kuan Station
12. Swagat Resorts
13. Radha Complex (Prerna Developers Officers Residences)
14. The Village Revolving Restaurant
15. Vasant Vihar Bungalows
16. City Pulse – First multiplex in Ahmedabad – Gandhinagar
17. Jain Yogeswar Complex at Por Station
18. Shyam Rath Private Complexes
19. Vedica Residential Flats
20. Satyamev - Chavani II Flats
21. Dev Properties
22. Institute of Hotel Management
23. Rajnagar Realty Pvt Ltd.
24. Pujan Bungalows
25. Sapan Residential Complex
26. Sukan Residential Complex

(The list is only representative in nature)