CHAPTER 10
FINANCIAL VIABILITY, FARE STRUCTURE AND FINANCING OPTIONS

10.1 INTRODUCTION

The Lines of AHMEDABAD Metro are proposed to be constructed from 2006-2010.

The fixed cost of the project at June 2004 prices is estimated to be Rs. 3587 crore, excluding taxes and duties but including the cost of private land (Rs. 52 crore). With an estimated escalation factor of 5% p.a. the project would cost Rs. 4295 crore on completion. This cost does not include the element of interest during construction (IDC). Land cost is not escalated since land acquisition would have to be completed in the initial two years of the construction period and, hence, should not invite any escalation.

10.2 Costs

10.2.1 Investment Cost

10.2.1.1 For the purpose of calculating the Financial Internal Rate of Return (FIRR), the completion cost of Rs. 4295 crore has been taken as the initial investment. The cash flow of this investment is in Table –10.1 below.

Table 10.1 Year –wise Investment

Figs in Rs. Cr.

Year	Construction Cost (Fixed)	Land Cost	Completion Cost
2006-07	177	17.40	208
2007-08	884	17.40	1016
2008-09	1237	17.40	1485
2009-10	707		881
2010-11	354		462
2011-12	177		243
2012-13	0		0
Total	3535	52	4295

10.2.1.2 Although the construction is expected to get over by 31st March 2010 the cash flow spills up to March 2012 on account of payment normally required to be made to the various contractors up to that period necessitated by contractual clauses.

10.2.1.3 The land cost is divided into three initial years during which it is expected that the land acquisition work would be over and related payments would have to be released.

10.2.1.4 The escalation factor used is 5% p.a.

10.2.1.5 These costs do not take into account taxes and duties.

10.2.2 Additional Investment

Total additional investment cost of Rs. 287 crore (at June 2004 price level) has been provided in the years 2021 and 2031. These costs have been provided to take care of increased requirement of Rolling Stock and related equipment on account of the increased traffic since the existing rolling stock would be insufficient to carry the traffic estimated in these years. These costs have been brought to the current price level by using an escalation factor of 5% p.a.

11.2.3 Operation & Maintenance Costs

10.2.3.1 The Operation & Maintenance costs can be divided into three major parts:

(i) Staff costs
(ii) Maintenance cost which include expenditure towards upkeep and maintenance of the system and consumables
(iii) Energy costs

10.2.3.2 The staff is assumed to be provided @ 45 persons per kilometer and the annual cost on this account in the year 2011 is estimated at Rs. 77.01 crore. The escalation factor used for staff costs is 9% per annum to provide for both escalation and growth in salaries.

10.2.3.3 The cost of other expenses is based on the O & M unit cost expected for the Delhi Metro Phase-1 project. The rate of electricity is assumed at Rs. 4.50 per unit. The O&M cost for AHMEDABAD metro (excluding staff cost) has been obtained by providing an escalation of 5% per annum.

10.2.3.4 The total O&M cost in the year 2011 is expected to be Rs. 275.59 crore. The year-wise O&M costs are as indicated in Table 10.2 below:

Table 10.2 Operation and Maintenance Costs

Figs in Rs. Cr.

	Staff	Maintenance Expenses	Energy	Total
2010	77.01	138	60	275.59
2011	83.94	145	63	292.57
2012	91.49	152	67	310.56
2013	99.73	160	70	329.74
2014	108.70	168	73	350.22
2015	118.49	177	77	372.08
2016	129.15	185	81	395.42
2017	140.77	195	85	420.36
2018	153.44	204	89	447.01
2019	167.25	215	94	475.50
2020	182.30	225	98	505.96
2021	198.71	289	124	611.25
2022	216.60	303	130	649.76
2023	236.09	318	137	690.91
2024	257.34	334	144	734.90
2025	280.50	351	151	781.94
2026	305.74	368	158	832.26
2027	333.26	387	166	886.10

2028	363.25	406	174	943.73
2029	395.95	426	183	1005.45
2030	431.58	448	192	1071.56
2031	470.42	573	242	1286.20
2032	512.76	602	254	1369.33
2033	558.91	632	267	1458.30
2034	609.21	664	280	1553.57
2035	664.04	697	295	1655.62
2036	723.80	732	309	1764.96
2037	788.95	769	325	1882.16
2038	859.95	807	341	2007.83
2039	937.35	847	358	2142.62
2040	1021.71	890	376	2287.25
2041	1113.66	934	395	2442.48
2042	1213.89	981	414	2609.15
2042	1323.14	1030	435	2788.16
2043	1442.23	1081	457	2980.49

10.2.4 Depreciation

Although depreciation does not enter the FIRR calculation (not being a cash outflow) unless a specific depreciation reserve fund has been provided, in the present calculation, depreciation calculations are placed for purpose of record. These are taken @ 3% of the total completion cost adjusted for land cost.

10.2.5 Replacement Cost

The replacement costs are provided for meeting the cost on account of replacement of equipment due to wear and tear. With the nature of equipment proposed to be provided for AHMEDABAD Metro, it is expected that only 10% of the equipment comprising signalling and electrical works would require replacement after 20 years. These roughly add up to 10% of the project cost. Further, 25% of the project cost comprising Rolling Stock and traction is expected to have a life of 30 years after which it shall be required to be replaced. These costs have been provided duly escalated @ of 5% per annum.

10.2.6 The interest charge on the loan is assumed to be 7.5% since the proposed SPV for constructing the project would be able to tap the domestic market at this rate of interest with government guarantee. In case JBIC funding is resorted to the rate of interest is assumed as 1.3%. The IDC element forms part of the principal amount of the loan to be repaid as part of the loan. In the case of BOT route the interest rate has been taken as 9% p.a.

10.3 Revenues

10.3.1 Fare box

10.3.1.1 Traffic

10.3.1.1 a. In the year 2010 traffic has been estimated at 6.75 lakh trips per day. The ridership figures for certain years is as indicated below:-

Year	Trips per day (lakhs)
2010	6.75
2035	17.10

10.3.1.2 b. The growth rate for traffic from 2011 to 2021 is assumed at 3.8% per annum.

10.3.1.3 Trip Distribution

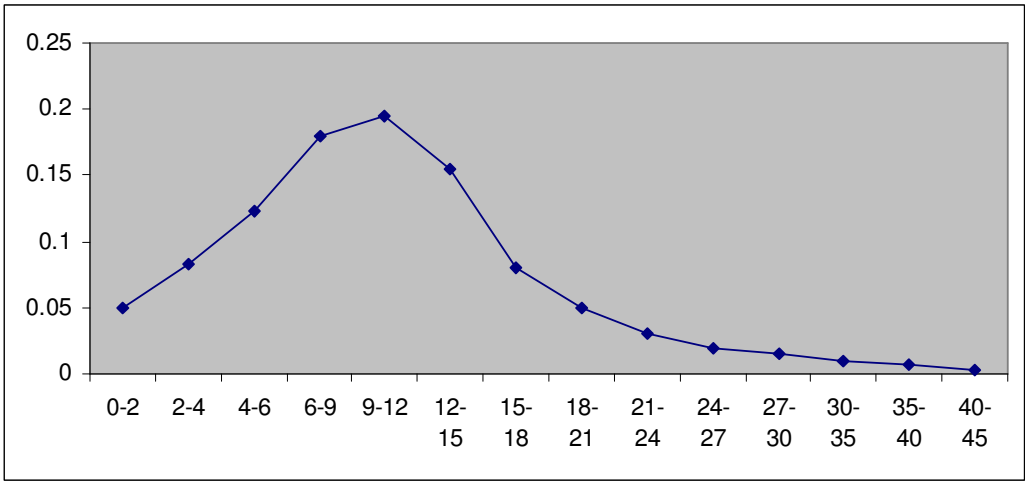
The distribution of trips has been assumed as in Table 10.3 below: -

Table 10.3 Trip Distribution

Distance in kms.	Percent distribution
0-2	5%
2-4	11%
4-6	25%
6-9	24.25%
9-12	17%
12-15	8%
15-18	4%
18-21	2%
21	3.75%

The graphic presentation of the same is placed below in Figure-10.1.

Figure 10.1 –Trip Distribution



10.3.1.4 Fare Structure

The fare structure has been estimated on the Delhi metro pattern based on the recommendations of the Fare Fixation Committee. The fare table used is as depicted in Table 10.4.

Table 10.4 Fare Structure in 2010

Distance slabs in Kms	Fare in Rs.
0-2	8
2-4	9
4-6	11
6-9	13
9-12	15
12-15	16
15-18	17
18-21	19
21-24	20
24-27	21
27-30	22
30-35	23
35-40	24
40-45	25

10.3.2 Other sources of revenues

Other revenues from Property Development and advertisement have been estimated at 10% of the fare box revenues during operations and Rs. 1500 Crore upfront. Apart from development of property on metro stations and depot it is possible to raise resources through leasing of parking rights at stations, advertisement on trains and tickets, advertisements within stations and parking lots, advertisements on viaducts, columns and other metro structures, co-branding rights to corporates, film shootings and special events on metro premises. A report on the PD potential for the Ahmedabad metro is placed at Annexure 1.

10.4 Financial Internal Rate of Return (FIRR)

10.4.1 The Financial Internal Rate of Return (FIRR) obtained with the above revenues and costs is 4.64 %. This is produced in table 10.5.

Table 10.5 –FIRR **Figs in cr. (Rs.)**

YEAR			Completion cost	Running Expenses	Replacement cost	Total Cost	Fare box revenue	PD & ADVT	Total Revenue	Net cash flow for FIRR
2006	-	2007	208			208			0	-208
2007	-	2008	1016			1016			0	-1016
2008	-	2009	1485			1485			0	-1485
2009	-	2010	881			881			0	-881
2010	-	2011	462	275.59		738	294.91	29.49	324.40	-414
2011	-	2012	243	292.57		535	306.11	30.61	336.73	-199
2012	-	2013	0	310.56		311	350.32	35.03	385.35	75
2013	-	2014	0	329.74		330	363.63	36.36	399.99	70
2014	-	2015	0	350.22		350	416.13	41.61	457.75	108
2015	-	2016	0	372.08		372	431.95	43.19	475.14	103
2016	-	2017	0	395.42		395	494.32	49.43	543.75	148
2017	-	2018	0	420.36		420	513.10	51.31	564.41	144
2018	-	2019	0	447.01		447	587.19	58.72	645.91	199
2019	-	2020	0	475.50		475	609.50	60.95	670.45	195
2020	-	2021	0	505.96		506	697.51	69.75	767.26	261
2021	-	2022	321	611.25		932	724.02	72.40	796.42	-136
2022	-	2023	0	649.76		650	828.56	82.86	911.42	262
2023	-	2024	0	690.91		691	860.05	86.00	946.05	255
2024	-	2025	0	734.90		735	984.24	98.42	1082.66	348
2025	-	2026	0	781.94		782	1021.64	102.16	1123.80	342
2026	-	2027	0	832.26		832	1169.16	116.92	1286.07	454
2027	-	2028	0	886.10		886	1213.58	121.36	1334.94	449
2028	-	2029	0	943.73		944	1388.82	138.88	1527.70	584
2029	-	2030	0	1005.45		1005	1441.59	144.16	1585.75	580
2030	-	2031	0	1071.56		1072	1649.75	164.98	1814.73	743
2031	-	2032	523	1286.20		1809	1712.44	171.24	1883.69	75
2032	-	2033	0	1369.33	821	2191	1959.71	195.97	2155.68	-35
2033	-	2034	0	1458.30	863	2321	2034.18	203.42	2237.60	-83
2034	-	2035	0	1553.57		1554	2327.91	232.79	2560.70	1007
2035	-	2036	0	1655.62		1656	2416.37	241.64	2658.00	1002
2036	-	2037	0	1764.96		1765	2717.33	271.73	2989.06	1224
2037	-	2038	0	1882.16		1882	2771.67	277.17	3048.84	1167
2038	-	2039	0	2007.83		2008	3116.88	311.69	3428.57	1421
2039	-	2040	0	2142.62		2143	3179.22	317.92	3497.14	1355
2040	-	2041	0	2287.25		2287	3575.19	357.52	3932.71	1645
2041	-	2042	0	2442.48		2442	3646.70	364.67	4011.37	1569
2042	-	2043	0	2609.15	6690	9300	4100.89	410.09	4510.98	-4789
			5138	**34842**	**8374**	**48355**	**49905**	**4990**	**54895**	**4.64%**

The various sensitivities with regard to increase/decrease in capital costs, O&M costs and revenues are placed in Table 10.6 below: -

Table 10.6 –FIRR Sensitivity

CAPITAL COSTS			
10% increase in capital cost	20% increase in capital cost	10% decrease in capital cost	20% decrease in capital cost
3.81%	2.96%	5.49%	6.38%
REVENUE			
20% decrease in revenue	10% decrease in revenue	10% increase in revenue	20% increase in revenue
NEGATIVE	1.22%	6.68%	8.24%
O&M COSTS			
10% increase in O&M cost	10% decrease in O&M cost		
2.75%	6.07%		

These sensitivities have been carried out independently for each factor.

10.5 Financing Options

10.5.1 Background

10.5.1.1 Rail-based systems are heavily capital intensive with long gestation periods. They are viewed more as investments with a view to increasing the economic benefits to the society at large rather than yielding high financial rates of return. Very few metros all over the world are able to cover their operating costs and therefore grants and subsidies for operations as well as additional investments are the order of the day. However, history is full of examples where volume of traffic is not very high except in areas like Japan and Hong Kong. Since costs of operation are more or less fixed in nature, any increase in passenger volumes would improve the viability of the system. There are other issues peculiar to this nature of travel. The setting up of such systems generates externalities which normally do not get monetised and flow back to the system to sustain its development. In other words, the economic benefits flowing to the society and other benefits generated by the setting up of metro systems do not get translated to monetary benefits for the system itself. Very few countries have been able to channelise these as sources of revenue back to the system.

10.5.1.2 Since the governing objective of setting up these systems is social the fares are set at levels which are publicly and politically acceptable thus setting in the vicious cycle of deficits leading to a fallback on subsidies/government support.

10.5.2 Alternative Models of Financing

10.5.2.1 A wide variety of models can be theoretically considered for financing of metros ranging from completely government owned to totally privatised. There are certain benefits and drawbacks of both. Whereas completely government owned lack transparency and are shackled by bureaucracy the completely privately owned ones would not serve the social sector but be lured by the objective of profit maximisation. The social purpose of such projects can never be ignored, however, at the same time it is of utmost importance to run these systems with efficiency comparable to the private sector. These purposes can be served by creating an SPV independent of the bureaucratic controls and vested with sufficient powers to run the system independently or be evolving some form of Public –Private partnership which would bring together the strengths of both the public and private sectors. The Delhi metro model is the SPV model which has been able to construct and run the system efficiently without compromising the social objective.

10.5.2.2 SPV Approach: The Corporate model involves the formation of a special purpose vehicle (SPV) to own/implement and also to operate the project. There is a possibility/potential of involving some private sector entity as equity holder. The financial structure of the project can then be determined in such a way that a part of the capital cost is contributed as equity and the remaining is borrowed as senior or subordinate debt from the government, financial institutions, banks or bilateral / multilateral funding agencies. Another source of funding which has been extensively used in Hong Kong is funds from real estate development for financing capital expenditure. In this case upfront contribution required from the equity holders is much less than the project cost. The debt and the interest there on are repaid by the SPV from its net revenue streams. Long time debt is normally possible only when government guarantees are made available for repayment of loan as well as for the interest charges there on. Because of the need for high volume of debts, the project viability depends to a large extent on the rate of interest and the tenure of the debt. The SPV, being a corporate body, has flexibility in implementation and operation of the project. It can be responsive to customer requirement and can attempt various ways of revenue augmentation. SPV being a corporate body is liable to pay corporate tax and other taxes if applicable. The above model can be further improved upon if after construction the SPV hands over the operations and maintenance of the same to a private body.

10.5.2.3 PUBLIC-PRIVATE PARTNERSHIPS

11.5.2.3.1 The various forms Public-private partnerships can take are *Supply and service contracts, Management contracts, Leases*, *Concessions, Joint ventures and Divestiture.* Supply and service contracts and management contracts are in the nature of contracts awarded to a private party as out sourced jobs or management of the operations. Concessions not only give the private operator the responsibility of O&M of utility asset but also for investment. The ownership remains with the government but full use rights vest with the operator. Concessions are a form of lease in which the contractor agrees to make certain fixed investments and retains the use of the assets for a longer contract period. In this approach, the state (or municipality or other public entity) delegates the right to provide a service to the private sector and yet retains some control over the sector by

incorporating a concession contract or license defining the terms and conditions (including the rights and obligations of the service provider) that will govern the infrastructure project or company. This type of arrangement is most suited to sectors with monopolistic characteristics. This may take the form of lease and operate (or affermage) contract, under which the private contractor is responsible at his own risk for providing the service, including operation and maintenance of the infrastructure against payment of a lease fee. The other forms of concession could be BOOT/BOT/BOO. These are used generally for Greenfield projects. The concessionare in such projects is also responsible for building and financing new investments. At the end of the concession term the sector assets are returned to the state. BOO (build own operate) is a similar scheme but it does not involve transfer of assets. All these forms of concession stipulate transferring of the right and the obligation to provide an infrastructure service to a private company. This company takes over responsibility for the operations and at least for a part of the commercial risk of service provision. The concessionaire is, by and large, held responsible for achieving specified results in service delivery and is given some freedom to choose the means for meeting those targets.

10.5.2.3.2 The success of this type of contracts depends on their duration which reflects the number of years the investors need to recoup their investment. In the French style concessions (affermage) the assets return to the state at the end of the period free of charge or for a nominal amount. The public authority remains responsible for financing most investments; hence, affermage are shorter (10-15 years) than Greenfield BOTs or concessions requiring major upfront capital expenditures. In the latter cases these can exceed 30 years.

10.5.2.3.3 The concessionaire approach has not been adopted in the rail based urban transit system in India because the project construction costs are very high. This naturally involves requirement of huge amount of debt to be raised from the market sources to undertake such a project. The highway sector has been quite successful in the country in developing Highway projects through the BOT .Power sector has a very limited experience of project development under BOO route.

10.5.2.3.5 There is no available history to justify the development of mega transport projects under BOT route in India except in the case of Konkan Railway Corporation. KRCL was the first effort by the Indian Railways in the form of a corporate enterprise for the construction of a railway track. The finances for KRCL came from the promoters – the Ministry of Railways and the State governments of Goa, Maharashtra, Karnataka and Kerala- and the issue of tax-free bonds. The funds could be secured at an average cost of 11%. . This emerges from the inability of the major debt market players to provide resources for large projects. The other, and the most important, factor responsible for the inability of raising resources from the market is the inability of project developer to come out with a risk mitigation mechanism acceptable to the lenders.

11.5.3 Options for Financing of Ahmedabad Metro

10.5.3.1 The consultant is of the view that two possibilities regarding funding of Ahmedabad metro can be examined. The first is the SPV model based on

the Delhi Metro approach. In this model the element of equity contribution by the government is suggested at 40% against 28% in Delhi Metro since in the case of the latter the exchange rate fluctuation risk is being borne by the government. Apart from this the land should be made available by the State government. Further, about Rs. 2000 crore can be raised from Property Development. The balance amount of funds should be raised by external/ domestic debt. The external debt is characterised by exchange rate fluctuation whereas the domestic debt rates are much higher as compared to external multilateral/bilateral funding. Government guarantees would be required in both the cases. The Domesting funding and JBIC funding options are shown as Annexures 2 and 3 respectively.

10.5.3.2 The second possibility of funding Ahmedabad metro is through the PPP route. The land would be made available to the concessionaire free of cost and Rs. 1500 crore would be made available to him through Property Development. Further, he would be given an upfront grant of Rs. 1500 crore to be shared equally between the central and state governments. Of the balance project cost 33.33% would be funded out of equity investment by the concessionaire and balance funds would be arranged by the concessionaire through debt. The residual value of the investment at the end of the concession would be payable to the concessionaire. The pre tax return on equity of the concessionaire would work out to 14%. The cashflow showing the concessionaire's expected position is shown in Annexure 4.

10.5.3.3 In the second option an SPV would be required whose role would be limited to that of a regulatory authority and also as an agency for raising funds from Property Development and transferring to the concessionaire. The SPV would monitor the implementation of the project and on its commissioning perform the tasks such as laying down passenger fares, targets for the minimum number of services to be run by the Concessionaire, their frequency, punctuality, reliability and safety, etc. The SPV, in this option, will have to enter into an agreement with the Concessionaire clearly listing out obligations and rights of the Concessionaire and the client. Following are the important terms, which are usually included in the agreement.

- Land required for the project and grant/equity for the project shall be made available to the Concessionaire. The balance project cost is to be mobilised by the Concessionaire himself.
- Implementation of the project and its subsequent operation and maintenance is to be the responsibility of the Concessionaire. The concession is for a period of 30 years of construction plus the period of construction.
- A guarantee for the minimum level of ridership would be required to be given to the concessionaire. If this level of ridership does not materialize for any reason, the Concessionaire will have to be compensated for the shortfall.
- Operation and maintenance expenditure for the project shall be borne by the Concessionaire. All revenues generated shall go to the Concessionaire including revenues from property development, advertisements, etc.
- Standards to which the assets of the project are required to be maintained and the quality of the assets at the time of transfer of these assets to the Client at the end of the concession period should be clearly spelt out.

- Normally a metro system will require addition of assets like rolling stock, etc. over a period of time due to increase in traffic. The source of funding of the same is explicitly spelt out in the agreement — the Concessionaire or the Client. Similarly, the responsibility of replacement of assets on completion of their life, if due during the period of Concession, is clearly spelt out — whether by the client or the Concessionaire.
- A mechanism for quick resolution of disputes between the Concessionaire and the Client is provided for.
- Insurance liability of the Concessionaire is indicated.
- The Concessionaire transfers all the assets to the Client at the end of the concession period at a nominal residual value.

10.7 RISK ANALYSIS

Normally certain risks are involved with the implementation of such large infrastructure projects. These risks are enhanced with implementation through PPP. The major risks involved are:-

- Construction risk
- Revenue risk
- Operations risk
- Financial risk
- Legal risk
- Commercial risk
- Exchange rate risk
- Policy risk
- Guarantees
- Exclusivity
- Speed of process

Table 10.8 identifies some of the main risks in the project and suggested mitigation measures. However, as mentioned earlier, the work of selection of suitable concessionaire should be done through specialised consultant as success of implementation of Metro project on PPP shall depend on suitable concessionaire.

Table 10.8
Risk Mitigation Measures

Main Risks	**Risk Mitigation measures**	**Relevant Document(s)/ contract(s) to cover the risk**
Commuter Volume Risk	No competitive mode of public transport Due diligence by concessionaire on traffic risk Traffic risk guarantee not a solution as the same encourages inefficiencies	NIL

Passenger Fare Increase Risk	The fares of rail as well as well as competing bus system should be set by an independent regulator to ensure that bus fares are not subsidized Better if independent regulator is in place before grant of license or concession	Safety clause in concession on setting up of regulator.
Increase in Capital Cost and implementation period	Lump sum fixed time construction contract with considerable penalty and bonus provision	EPC Contract
Poor Maintenance of Infrastructure	Penalty for poor upkeep. Agreement should provide for detailed specification and standards.	Technical audit by regulator to be provided for in concession/ license agreement.
Risk of bankruptcy in case of poor financial returns	Competent financial advisor to help avoid over-zealous bids.	Proper conditions in the agreement for take over of assets and smooth O&M in case of bankruptcy
Non Performance by Concessionaire	Selection of competent consultant for bid process management Proper pre-qualification and selection process Reasonable equity stake in project vehicle compulsory for main operator Adequate Performance Guarantees from the Concessionaire	Relevant clauses in the Bid document and Agreement
Poor maintenance of rolling stock	Penalty for poor upkeep.	Agreement should provide for detailed specification and standards.
Insufficient investment in trains sets	To be covered under minimum frequency clause for which train sets for peak and non-peak periods has to maintained	Specific provisions in agreement for frequency during peak and non-peak period. Some flexibility to concessionaire necessary for the sake of financial

		viability
Safety Risk	Mandatory filing of safety plan with Regulator and implementation of the same Continuous monitoring of safety plan, with stiff penalty for non compliance Proper Disaster Management Plan to be in place in coordination with other civic authorities	Concession/ License Agreement
Law and order risk in trains, as well as, at stations	Government to assist concessionaire on stations. Concessionaire to hire security staff for security during operations. The concessionaire security staff to work under overall supervision of state police	Agreement Conditions
Risks associated with any public utility serving people at large.	Protection against fire, rioting, general stampede Insurances and better management through trained security personnel in trains as well as at stations.	Concession Agreement to provide for insurances, as well as, for level of training required for the staff
Natural and force majeure risks	Insurances, Insurance costs to be part of cash flows	Concession Agreement and Contract Agreements to ensure proper coverage
Direct and Indirect Political Risk	GOM to ensure payment of Debt Due and equity investments on line of NHAI policy in case of Direct and In-Direct political risk events Political risk insurances may prove costly and counter productive for the project Lower equity and investment and more management commitment may reduce overall political risk on investment.	Concession Agreement to provide for payments in case of such events
Third party Liability risk	Insurances, Insurance costs to be part of cash flows	Concession Agreement to specify amount and type of Insurances to be maintained and assignments

Financing Risk	Concessionaire to bear the risk. Pre-qualification process and specific guarantee to ensure financial strength of the Concessionaire Financial closure condition must before start of condition.	Concession/ License agreement
Regulatory risk	Concessionaire to bear the risk Competent, independent Regulator. Clear and unambiguous scope of regulation Appeal process should be available	Concession Agreement
Legal Risk	GOM and Concessionaire Enact and notify the required laws	Concession Agreement to mention enactment of laws (if required) as conditions precedent

10.5.1 Revenue from Property Development

Property Development has been a major source of finance in the Hong Kong metro and for the Delhi Metro Phase 1 also 3% of the project cost was to be raised from development of property. Further, during the operations phase also property income is expected to augment operations revenues and also help in repayment of debt. An independent study was carried out to assess the returns from property development and redensification in AHMEDABAD along the proposed corridor (report attached as Annexure 1). The report states that Rs. 3300 crore is realisable from PD during the construction time frame, however, a minimum amount of Rs. 2000 crore should be earmarked for construction of the project.

10.6 Recommendations

The financing of the Ahmedabad metro is recommended on a BOT basis. An SPV would be required to generate and transfer funds from property development (Rs. 1500 crore) and also as a regulatory authority over the concessionaire. Rs. 1500 crore is proposed as viability gap to be shared equally between the Central and state governments. Land shall be made available to the concessionaire free of cost. Of the balance amount it is proposed that the concessionaire shall carry out the financing in a ratio of 2:1. The residual value of his investment shall be handed over to him at the end of the concession.