

CHAPTER 19

FINANCING OPETIONS, FARE STRUCTURE AND FINANCIAL VIABILITY



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CHAPTER 19

FINANCING OPTIONS, FARE STRUCTURE
AND FINANCIAL VIABILITY

19.1 INTRODUCTION

The Nagpur Metro consisting of two corridors are proposed to be constructed with an estimated cost of Rs 6862.00 Crore with Central Taxes, State Taxes and land cost. The corridor-wise length estimated cost at June-2012 price level without taxes and with all taxes is placed in **Table 19.1** as under:

Table 19.1
Cost Details

<i>Rs. in Crore</i>				
Corridor No	Name of Corridor	Distance (KMs)	Estimated Cost without Central taxes at June-2012 Price Level	Estimated Cost with all taxes at June-2012 Price Level
I	North-South Corridor	19.658	3015.00	3,435.00
II	East-West Corridor	18.557	2984.00	3,427.00
Total		38.215	5999.00	6862.00

The estimated cost at June-2012 price level includes Rs. 410.00 Crore and Rs.214.00 Crore as land cost respectively for Corridor I and II. The estimated cost at June-2012 price level also includes an amount of Rs.20 Crore as one-time charges of security personal towards cost of weapons, barricades, and hand held and door detector machine etc. However, the recurring cost towards salary and allowances of security personal have not taken in to account in FIRR calculation with an assumption that the required police personnel will be provided free of cost by the state government since it is as state subject.



19.2 COSTS

19.2.1 Investment Cost

For the purpose of calculating the Financial Internal Rate of Return (FIRR), the completion costs with central taxes & state taxes have been taken with an escalation factor @7.50% PA.

The construction work is expected to get completed by 31.03.2018. The Revenue Opening Date (ROD) has been assumed as 01.04.2018. The total completion costs duly escalated and shown in the table 19.2 have been taken as the initial investment. The year-wise cash outgo is shown in **Table 19.2** as below.

Table 19.2
Year –wise Investment

Rs. in Crore

Financial Year	Cost at June 2012 Price Level	Completion Cost
2013-14	447.00	452.00
2014-15	944.00	1021.00
2015-16	1555.00	1874.00
2016-17	1865.00	2412.00
2017-18	1430.00	1983.00
2018-19	497.00	740.00
2019-20	124.00	198.00
Total	6862.00	8680.00

Although the construction is expected to get over by 31st March 2018, the cash flow spill over up to March 2020 is necessary on account of payment normally required to be made to the various contractors up to that period necessitated by contractual clauses.

The land cost is divided into two initial years during which it is expected that the land acquisition work would be over and related payments would have to be released. Therefore, no escalation has been considered on it.

19.2.2 Additional Investment

Total investment provided in the FIRR calculation towards requirement of additional rolling stock to take care of incremental traffic, duly escalated @5% PA is placed in **Table 19.3** as under: -

Table 19.3



Additional Investment towards Rolling Stock
Rs. in Crore

Year	No. of Cars	Amount with Taxes
2021-22	15	241.00
2026-27	9	184.00
2031-32	6	157.00
2036-37	12	400.00
2041-42	12	511.00

19.2.3 Operation & Maintenance (O&M) Costs

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

The staffs are assumed to be provided @ 35 persons per kilometre. The escalation factor used for staff costs is 9% per annum to provide for both escalation and growth in salaries.

The cost of other expenses is based on the actual O & M unit cost for the Delhi Metro Phase-II project. The average rate of electricity being paid by Delhi Metro for its Phase-I and Phase-II operations in Delhi is Rs. 5.80 per unit whereas in Nagpur the applicable rate is Rs. 5.00 per unit. The latter has been used for all calculations. The O&M cost (excluding staff cost) has been obtained by providing an escalation of 7.50% per annum. The O&M costs which has been calculated on life cycle cost basis is tabulated in Table 19.4 as below:-

Table 19.4
Operation and Maintenance Costs

Rs. In Crore

YEAR			Staff	Maintenance Expenses	Energy	Total
2018	-	2019	75.26	48.92	37.98	162.00
2019	-	2020	82.03	52.58	40.83	175.00
2020	-	2021	89.42	56.53	43.89	190.00
2021	-	2022	97.46	60.77	48.58	207.00
2022	-	2023	106.24	65.32	52.22	224.00
2023	-	2024	115.80	70.22	56.14	242.00
2024	-	2025	126.22	75.49	60.35	262.00
2025	-	2026	137.58	81.15	64.87	284.00
2026	-	2027	149.96	87.24	83.68	321.00
2027	-	2028	163.46	93.78	89.96	347.00
2028	-	2029	178.17	100.82	96.71	376.00
2029	-	2030	194.20	108.38	103.96	407.00
2030	-	2031	211.68	116.51	111.76	440.00
2031	-	2032	230.73	125.24	125.48	481.00
2032	-	2033	251.50	134.64	134.89	521.00



YEAR			Staff	Maintenance Expenses	Energy	Total
2033	-	2034	274.13	144.73	145.01	564.00
2034	-	2035	298.81	155.59	155.88	610.00
2035	-	2036	325.70	167.26	167.57	661.00
2036	-	2037	355.01	179.80	199.99	735.00
2037	-	2038	386.96	193.29	214.99	795.00
2038	-	2039	421.79	207.78	231.11	861.00
2039	-	2040	459.75	223.37	248.45	932.00
2040	-	2041	501.13	240.12	267.08	1008.00
2041	-	2042	546.23	258.13	328.34	1133.00
2042	-	2043	595.39	277.49	352.96	1226.00
2043	-	2044	648.97	298.30	379.44	1327.00

19.2.4 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.

19.2.5 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, it is expected that only 50% of the Signalling and Telecom and 25% of electrical works would require replacement after 20 years. Further, 50% of the Signalling and Telecom and 25% of electrical works would require replacement after 30 years. These costs have been provided duly escalated @ 5% per annum.

19.3 REVENUES

The Revenue of Nagpur metro mainly consists of fare box collection and other incomes from property development, advertisement, parking etc.

19.3.1 Fare box

The Fare box collection is the product of projected ridership per day and applicable fare structure based on assumed trip distribution at different distance zones.

19.3.2 Traffic

The year-wise projected ridership figures are as indicated in **Table 19.5** as below: -

Table 19.5
Projected Ridership

Year	Corridor-1 & 2 Trips Per Day (lakhs)
2018-19	3.67
2021-22	3.83
2026-27	4.19



Year	Corridor-1 & 2 Trips Per Day (lakhs)
2031-32	4.59
2036-37	5.09
2041-42	5.64

b. The growth rate for traffic is assumed at 2.10% Per Annum.

19.3.3 Trip Distribution

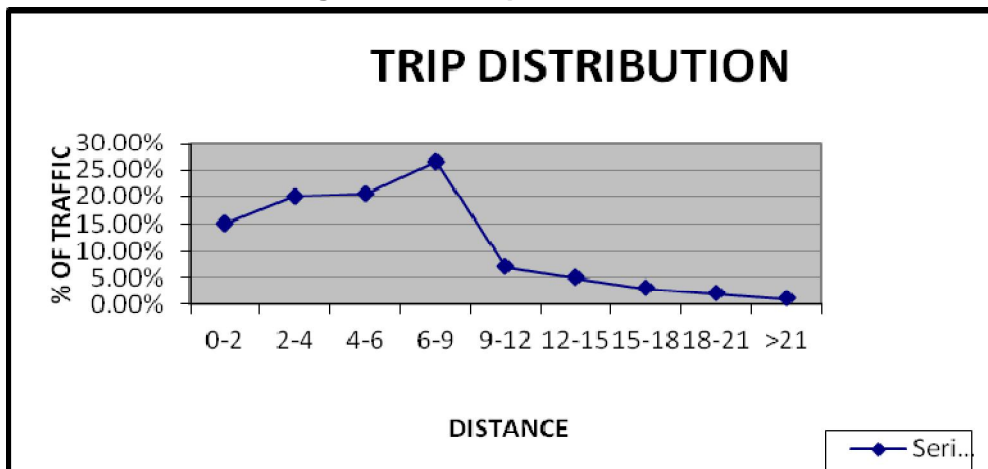
The trip distribution has been worked out by considering average lead of 6.28 KM, which is placed in **Table 19.6** below: -

Table 19.6
Trip Distribution

Distance in kms.	Percent distribution
0-2	15.00%
2-4	20.00%
4-6	20.50%
6-9	26.50%
9-12	7.00%
12-15	5.00%
15-18	3.00%
18-21	2.00%
>21	1.00%
Total	100.00%

The graphic presentation of the same is placed below in **Figure-19.1**.

Figure 19.1 –Trip Distribution





19.3.4 Fare Structure

The Delhi Metro Fares structures fixed by fare fixation committee in 2009 have been assumed, which have been duly escalated @15% for every two years to arrive at the initial fare structure for Nagpur Metro, which is placed in **Table 19.7**.

Table 19.7
Fare Structure in 2018-19

Distance in Kms	DMRC Fare as Revised in 2009	Nagpur Metro Fare (Rs.) in 2018-19
0-2	8	15
2-4	10	19
4-6	12	23
6-9	15	28
9-12	16	30
12-15	18	34
15-18	19	36
18-21	21	39
>21	22	41

19.3.5 Other sources of revenues

19.3.5.1 Property Business- Other revenues from Property business i.e. advertisement, Kiosk, ATM etc. have been estimated at 10% of the fare box revenues during operations. 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 corporate, film shootings and special events on metro premises.

19.3.5.2 Additional Taxes- Income assumed from additional taxes i.e. FSI, Additional Stamp Duty, Development Fund as proposed by Nagpur Improvement Trust vide letter dated 25.09.2013 is placed at Table no. 19.8. The amount of taxes as provided by Nagpur Improvement Trust has been considered from 2018-19 for FIRR calculations:-

Table 19.8 : Income assumed from additional taxes

Rs. In Crore

Year			FSI	Additional Stamp Duty@1%	Development Fund Revenue	Total
2016	-	2017	-	85.00	5.00	90.00
2017	-	2018	-	94.00	5.00	99.00
2018	-	2019	103.00	103.00	5.00	211.00
2019	-	2020	460.00	113.00	5.00	578.00
2020	-	2021	638.00	125.00	5.00	768.00
2021	-	2022	850.00	137.00	5.00	992.00
2022	-	2023	734.00	151.00	5.00	890.00
2023	-	2024	931.00	166.00	5.00	1,102.00



2024	-	2025	582.00	183.00	5.00	770.00
2025	-	2026	717.00	201.00	5.00	923.00
2026	-	2027	876.00	221.00	5.00	1,102.00
2027	-	2028	1,061.00	243.00	5.00	1,309.00
2028	-	2029	511.00	267.00	5.00	783.00
2029	-	2030	610.00	294.00	5.00	909.00
2030	-	2031	726.00	323.00	5.00	1,054.00
2031	-	2032	860.00	356.00	5.00	1,221.00
2032	-	2033	1,015.00	391.00	5.00	1,411.00
2033	-	2034	-	431.00	5.00	436.00
2034	-	2035	-	474.00	5.00	479.00
2035	-	2036	-	521.00	5.00	526.00
2036	-	2037	-	573.00	5.00	578.00
2037	-	2038	-	630.00	5.00	635.00
2038	-	2039	-	693.00	5.00	698.00
2039	-	2040	-	763.00	5.00	768.00
2040	-	2041	-	839.00	5.00	844.00
2041	-	2042	-	923.00	5.00	928.00
2042	-	2043	-	1,015.00	5.00	1,020.00
Total			10674.00	10315.00	135.00	21124.00

19.4 FINANCIAL INTERNAL RATE OF RETURN (FIRR)

The Financial Internal Rate of Return (FIRR) and costs for 30 years business model including construction period is **10.35%**. The FIRR with all taxes is produced in **Table 19.9**

Table 19.9
FIRR (with all taxes)

Rs. In Crore

Year			Completion Cost	Additio nal Cost	Runnin g Expens es	Replac ement costs	Total Costs	Fare Box Revenu e	PD & ADVT	Revenu e from Additio nal Taxes	Total Revenu e	Net Cash flow for IRR
2013	-	2014	452				452				0	-452
2014	-	2015	1021				1021				0	-1021
2015	-	2016	1874				1874				0	-1874
2016	-	2017	2412				2412				0	-2412
2017	-	2018	1983				1983				0	-1983
2018	-	2019	740		162		902	303	30	211	544	-358
2019	-	2020	198		175		373	309	31	578	918	545
2020	-	2021	0		190		190	362	36	768	1166	976
2021	-	2022	0	241	207		448	362	36	992	1390	942
2022	-	2023	0	0	224		224	426	43	890	1359	1135
2023	-	2024	0	0	242		242	434	43	1102	1579	1337
2024	-	2025	0	0	262		262	514	51	770	1335	1073
2025	-	2026	0	0	284		284	525	53	923	1501	1217



Year			Comple tion Cost	Additio nal Cost	Runnin g Expens es	Replac ement costs	Total Costs	Fare Box Revenu e	PD & ADVT	Revenu e from Additio nal Taxes	Total Revenu e	Net Cash flow for IRR
2026	-	2027	0	184	321		505	604	60	1102	1766	1261
2027	-	2028	0	0	347		347	617	62	1309	1988	1641
2028	-	2029	0	0	376		376	723	72	783	1578	1202
2029	-	2030	0	0	407		407	738	74	909	1721	1314
2030	-	2031	0	0	440		440	866	87	1054	2007	1567
2031	-	2032	0	157	481		638	872	87	1221	2180	1542
2032	-	2033	0	0	521		521	1028	103	1411	2542	2021
2033	-	2034	0	0	564		564	1049	105	436	1590	1026
2034	-	2035	0	0	610		610	1233	123	479	1835	1225
2035	-	2036	0	0	661		661	1258	126	526	1910	1249
2036	-	2037	0	400	735		1135	1480	148	578	2206	1071
2037	-	2038	0	0	795		795	1511	151	635	2297	1502
2038	-	2039	0	0	861		861	1774	177	698	2649	1788
2039	-	2040	0	0	932	1702	2634	1811	181	768	2760	126
2040	-	2041	0	0	1008	1363	2371	2128	213	844	3185	814
2041	-	2042	0	511	1133	0	1644	2170	217	928	3315	1671
2042	-	2043	0	0	1226	0	1226	2552	255	1020	3827	2601
Total			8680	1493	13164	3065	26402	25649	2564	20935	49148	10.35%

The various sensitivities with regard to increase/decrease in capital costs, O&M costs and revenues are placed in **Table 19.10** below :-

Table 19.10
FIRR Sensitivity

CAPITAL COSTS with all Taxes			
10% increase in capital cost	20% increase in capital cost	10% decrease in capital cost	20% decrease in capital cost
9.44%	8.63%	11.39%	12.59%
REVENUE			
20% decrease in Traffic revenue	10% decrease Traffic in revenue	10% increase in Traffic revenue	20% increase in Traffic revenue
8.93%	9.67%	10.99%	11.58%
O&M COSTS			
10% increase in O&M cost		10% decrease in O&M cost	
10.03%		10.66%	

These sensitivities have been carried out independently for each factor.



19.5 FINANCING OPTIONS

19.5.1 Objectives of Funding

The objective of funding metro systems is not necessarily enabling the availability of funds for construction but coupled with the objective of financial closure are other concerns, which are of no less importance: -

- a. Ensuring low project cost
- b. Ensuring debt funds at low rates of interest
- c. Creating self sustainable system in the long run by
 - Low infrastructure maintenance costs
 - Longer life span
 - Setting fares which minimise dependence on subsidies
- d. Recovering returns from both direct and indirect beneficiaries

Rail based mass transit systems are characterised by heavy capital investments coupled with long gestation period leading to low financial rates of return although the economic benefits to the society are immense. Such systems generate externalities, which do not get captured in monetary terms and, therefore, do not flow back to the system. However, experience all over the world reveals that both construction and operations of metro are highly subsidised. Government involvement in the funding of metro systems is a foregone conclusion. Singapore had a 100% capital contribution from the government, Hong Kong 78% for the first three lines and 66% for the later 2 lines. In India also, GOI & concerned state government have contributed entire equity capital and equally provided interest free subordinate debts for land and central taxes along with ODA loan from JICA for Delhi, Chennai, and Bangalore metro's.

19.5.2 Alternative Models Of Financing

The financing option shall depend upon selection of the dedicated agency created to implement the project. The prominent models are: -

- (i) Special Purpose Vehicle under the State Control (Delhi Metro Rail Corporation (DMRC) /Bangalore Metro Rail Corporation (BMRC) model)
- (ii) Public-Private Partnership (PPP) mode
 - Built Operate and Transfer (BOT) model
 - Other PPP Model

19.5.3 DMRC/BMRC/CMRL pattern of Financing

A Special Purpose Vehicle (SPV) is set up for the implementation of the project and for its subsequent Operation & Maintenance. Under this arrangement Government of India and Government of Maharashtra shall make equal equity contribution and run the SPV as a commercial enterprise as a joint venture of GOI & GOM. As per the prevalent practice, Central Government may be willing to contribute 15% to 20% of the project cost as their equity contribution. An equal amount can be contributed by Government of Maharashtra aggregating the total equity to 40%. With the equal ownership of the SPV, both the governments nominate their representatives as



members of the Board of Directors, which in turn select functional directors. Such a SPV has a benefit of independent management under the aegis of Indian Companies Act, 1956. Delhi Metro Rail Corporation, Chennai & Bangalore metro corporations are shining example of success of such SPV. For the balance 60% funding requirement, options available are as follows: -

- (i) **Subordinate Debt:** - For Delhi Metro, land and rehabilitation and resettlement cost have been borne by GOI & GNCTD equally as interest free subordinate debt. Now, MOUD have changed the policy under which the cost of land for Bangalore Metro was borne by Government of Karnataka as interest free subordinate debt. Similarly, the cost of Land including rehabilitation and resettlement cost amounting to **Rs.644.00** Crore may be contributed as interest free subordinate debt by GOM. This mezzanine financing is of extreme help in quickening the pace of land acquisition, since the compensation amount is released to evacuate instantaneously. The loan is of longer duration and becomes repayable only after other long term loans raised for the project is repaid.

- (ii) **Debt:** - The balance cost is to be met through loans from various institutions namely JICA, Local borrowing, loans from ADB/World Bank and Suppliers Credit.

JICA Loan: -Overseas Development assistance from Japan International Cooperation Agency (JICA) may be availed of for metro rail projects with interest @ 1.40%PA lend it to the SPV on back to back basis. The loan is repayable in 30 years including moratorium period of 10 years. The loan is being provided by JICA to GOI which in turn releases the same to SPV under a Pass Through Assistance (PTA) mechanism. Normally, JICA funds for underground civil works, Electrical, Signalling & Telecom and Rolling Stock only. Since the loan will be in Japanese Yen, fluctuation in exchange rate at the time of repayment shall be borne by the Central Government and Government of Maharashtra in proportion to which their share holding. Alternatively, JICA can release the loan to the SPV for which a sovereign guarantee will be required from Central Government. Foreign exchange variation in such eventuality will be borne either by the SPV or GOM. In either case loan shall be repaid by SPV from the income streams of metro operations.

Loan from Asian Development Bank (ADB)/World Bank: - The Loan shall be available from ADB/World Bank, but as per the experience its processing and approval normally takes 8-12 months. The interest rate is linked with periodically LIBOR. These bilateral funding institutions also charge some margin ranging from 200 basis points to 300 basis points. This may delay the implementation of the project resulting in avoidable increase in the completion cost. Recently, Bangalore Metro availed ADB loan.



Loan from Bank and Financial Institutions: - Funds can be arranged from domestic Financial Institutions like India Infrastructure Finance Company Limited (IIFCL), India Development Financing Corporation (IDFC), Life Insurance Corporation of India (LIC), IDBI Bank, ICICI Bank Ltd etc. These institutions are increasingly engaged to fund infrastructure projects subject to their commercial viability against guarantee from GOI. There are many models available under which the funds can be arranged by these financial institutions with or without syndicating with other commercial banks. IIFCL e.g. fund 20% of the project cost and arrange balance through the syndication of commercial banks with a lead banker among the consortium of bankers. The loan can be given for a period of 20-30 years with interest rate ranging from 9.50% to 12% PA. IIFCL can also provide 100% funding against GOI guarantee. They arrange ECB to the extent of foreign currency requirement at very competitive rate. The funding arrangement may require the central government guarantee as well. Since the rate of interest of these financial institutions is much higher than the interest rates of soft loan provided by JICA, GOI and GOM shall have to bear the interest difference and provide suitable subsidy to the SPV to make the project financially sustainable.

Suppliers Credit: - Suppliers Credit is an established method to secure funding of imports. It is backed by EXIM banks of exporting countries and is often a much better instrument than bilateral aid. While bilateral aid ties the borrowing entity, Suppliers Credit can be used intelligently and effectively to spur competition in competitive international tendering method. In case of Rolling Stock, where market is truly competitive (unlike S&T) an attractive rate of interest for suppliers credit is possible. However, the supplier will load the amount of interest in the cost of supply due to which the effective completion cost will be very high.

The funding pattern assumed under government owned SPV model is placed in **Table 19.11** as under:-

Table 19.11
Funding pattern under SPV model (with All Taxes & Duties)

Particulars	With Taxes & Duties	
	Amount (Rs/Crore)	% of contribution
Equity by GOI	1114.00	12.83%
Equity by GOM	1114.00	12.83%
SD by GOM to central Taxes (50%)	441.00	5.08%
SD by GOI for Central Taxes (50%)	441.00	5.08%
SD by GOM for State Taxes	259.00	2.98%
SD by GOM for Land	644.00	7.42%
Nagpur Improvement Trust Contribution	421.00	4.85%
Nagpur Municipal Corporation Contribution	421.00	4.85%
JICA Loan @ 1.40% PA/Market Borrowing @ 12%	3825.00	44.08%
Total	8680.00	100.00%



19.5.4 Public Private Partnership Mode

Public Private Partnership (PPP) arrangements are steadily growing in use particularly in road, power, and telecom sectors which are more of commercial nature rather than in a social sector project. PPP models are arrayed across a spectrum ranging from BOT where the private sectors have total involvement to other tailor made models where both public and private sector assume separate responsibilities. A few alternatives which can be selected in this regard are: -

BOT Model: - In this model, the private firm will be responsible for financing, designing, building, operating and maintaining of the entire project. The contribution of Government of Maharashtra will be limited to cost of land only. Such a project become eligible for Viability Gap Funding (VGF) upto 20% from the Central Government provided the state government also contribute same amount towards the project. The metro being a social sector project may not attract much private parties. Besides quite expectedly the private operator may demand assured rate of return in the range of 16% to 18% (Equity IRR) or a comfort of guaranteed ridership etc.

The funding pattern assumed under this model to ensure 16% as EIRR is placed in **Table 19.12** tabulated as under: -

Table 19.12
Funding pattern under BOT model (with all taxes)

Particulars	Amount (Rs/Crore)	% of contribution
VGF by GOI	1555.40	20.00%
VGF by GOM	524.60	6.75%
Equity by Concessionaire	1899.00	24.42%
Concessionaire's debt @12% PA	3798.00	48.83%
Total	7777.00	100.00%
Land Free by GOM	644.00	
State Taxes by GOM	259.00	
IDC	445.00	
Total including IDC	9125.00	

19.6. RECOMMENDATIONS

The FIRR of subject metro with all taxes is **10.35%**, and therefore the corridors are recommended for implementation.

The total fund contribution of GOI & GOM under various alternatives is tabulated in table 19.13



Table 19.13

Rs. In crore

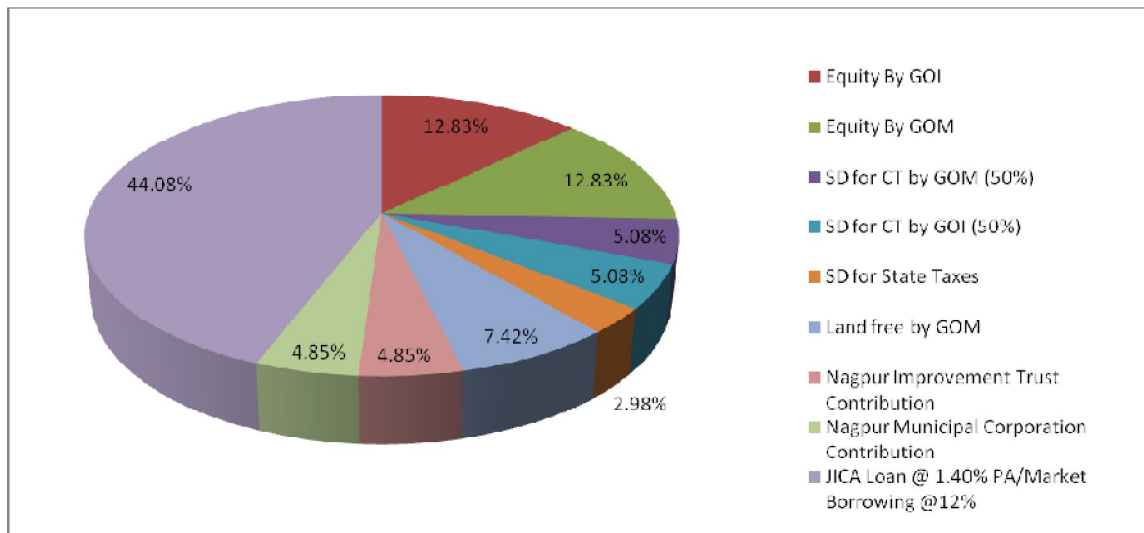
Contributor	SPV Model	BOT
Government of India	1555.00	1555.40
Government of Maharashtra	2458.00	1427.60
Total	3754.00	2983.00

Considering the fact that the innovative financing from additional FAR, Stamp Duty, development fund revenue provided by Nagpur Improvement Trust shall due only to the government instrumentalities and not to the private operator, it is recommended to implement the project under SPV model as per the funding pattern given in Table 19.11.

The details showing cash flow under JICA Loan, Market Borrowing, BOT model to ensure 16% EIRR when the project cost is with all taxes are shown respectively in table 19.14, 19.15& 19.16.

The funding pattern assumed under SPV model is depicted in the pie chart i.e., Figure 19.2 as under: -

Figure 19.2
Funding Pattern: - SPV Model





NAGPUR METRO PROJECT																						Table 19.16			
CAPITAL COST-FIXED		6684																							
CAPITAL COST - CURRENT		5697																							
DOMESTIC FUNDING - BASE CASE																									
Year	Completion Cost	Additional Capital	Running Expenses	Depreciation	Replacement Cost	Total Cost	Fare box Revenue	PD & Advertisement	Revenue from Additional Taxes	Total Revenue	Net Cash Flow for IRR	Concessioner Equity	Availability of cash	Cumulative cash	Cum. Loan	Loan	Repayment of Loan	IDC	Cumulative loan incl. IDC	Interest	Profit before Tax	Cash Balance	Cumulative Cash	Return on Equity (EIRR) Pre-Tax	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
2013 - 2014	80					80				0	-80	475	395	395	0	0	0	0	0	0	0	0	0	-475	
2014 - 2015	549					549				0	-549	475	-74	321	0	0	0	0	0	0	0	0	0	-475	
2015 - 2016	1449					1449				0	-1449	475	-974	-653	653	653	0	39	692	0	0	0	0	-475	
2016 - 2017	1812					1812				0	-1812	474	-1338	-1991	1991	1338	0	159	2189	0	0	0	0	-474	
2017 - 2018	1433					1433				0	-1433	0	-1433	-3424	3424	1433	0	247	3869	0	0	0	0	0	
2018 - 2019	290		162	184		452	303	30	211	544	92	0	-290	-3714	3714	290	0		4159	464	-266	-82	-82		
2019 - 2020	84		175	184		259	309	31	578	918	659	0	-84	-3798	3798	84	0		4243	499	60	244	162	244	
2020 - 2021	0		190	184		190	362	36	768	1166	976	0	0	0	0	0	424		3819	509	283	43	204	43	
2021 - 2022	0	241	207	191		448	362	36	992	1390	942	0	0	0	0	0	424		3394	458	534	59	264	59	
2022 - 2023	0	0	224	191		224	426	43	890	1359	1135	0	0	0	0	0	424		2970	407	537	303	567	303	
2023 - 2024	0	0	242	191		242	434	43	1102	1579	1337	0	0	0	0	0	424		2546	356	790	556	1123	556	
2024 - 2025	0	0	262	191		262	514	51	770	1335	1073	0	0	0	0	0	424		2122	305	577	343	1467	343	
2025 - 2026	0	0	284	191		284	525	53	923	1501	1217	0	0	0	0	0	424		1697	255	771	538	2005	538	
2026 - 2027	0	184	321	197		505	604	60	1102	1766	1261	0	0	0	0	0	424		1273	204	1044	633	2638	633	
2027 - 2028	0	0	347	197		347	617	62	1309	1988	1641	0	0	0	0	0	424		849	153	1291	1064	3702	1064	
2028 - 2029	0	0	376	197		376	723	72	783	1578	1202	0	0	0	0	0	424		424	102	903	676	4377	676	
2029 - 2030	0	0	407	197		407	738	74	909	1721	1314	0	0	0	0	0	424		0	51	1066	839	5216	839	
2030 - 2031	0	0	440	197		440	866	87	1054	2007	1567	0	0	0	0	0	0		0	0	1370	1567	6783	1567	
2031 - 2032	0	157	481	202		638	872	87	1221	2180	1542	0	0	0	0	0	0		0	0	1497	1542	8325	1542	
2032 - 2033	0	0	521	202		521	1028	103	1411	2542	2021	0	0	0	0	0	0		0	0	1819	2021	10346	2021	
2033 - 2034	0	0	564	202		564	1049	105	436	1590	1026	0	0	0	0	0	0		0	0	824	1026	11372	1026	
2034 - 2035	0	0	610	202		610	1233	123	479	1835	1225	0	0	0	0	0	0		0	0	1023	1225	12597	1225	
2035 - 2036	0	0	661	202		661	1258	126	526	1910	1249	0	0	0	0	0	0		0	0	1047	1249	13846	1249	
2036 - 2037	0	400	735	214		1135	1480	148	578	2206	1071	0	0	0	0	0	0		0	0	1257	1071	14917	1071	
2037 - 2038	0	0	795	214		795	1511	151	635	2297	1502	0	0	0	0	0	0		0	0	1288	1502	16419	1502	
2038 - 2039	0	0	861	214		861	1774	177	698	2649	1788	0	0	0	0	0	0		0	0	1574	1788	18207	1788	
2039 - 2040	0	0	932	265	1702	2634	1811	181	768	2760	126	0	0	0	0	0	0		0	0	1563	126	18333	126	
2040 - 2041	0	0	1008	306	1363	2371	2128	213	844	3185	814	0	0	0	0	0	0		0	0	1871	814	19147	814	
2041 - 2042	0	511	1133	321	0	1644	2170	217	928	3315	1671	0	0	0	0	0	0		0	0	1861	1671	20818	1671	
2042 - 2043	0	0	1226	321	0	1226	2552	255	1020	3827	2601	0	0	0	0	0	0		0	0	2280	2601	23419	2601	
		5697	1493	13164	5357	3065	23419	25649	2564	20935	49148	15.08%	25729	1899		3798	4243	445		3764	26863	23419		16.00%	