

TRANSPORT

The Transportation is one of the vital component of urban infrastructure and the lifeline of the city. A well-developed and planned transportation system accelerates economic growth. The ever-growing population of Delhi has resulted in mounting pressure on the transportation system and this is bound to increase further in coming years. The urban transportation system has to be developed to cater to the burgeoning population growth.

12th FYP approach is

- 2.1 To improve the Multi-Modal Public Transport System by providing network of the Multi-Modal in the areas not covered so far as well as to design the network in the manner to provide the facilities of inter-change at all major Traffic Centers so as to provide an incentive to the commuters to shift from personal modes of transport to public modes of transport.
- 2.2 Construction of new Roads, Road Bye-Pass, Express Corridors and Construction of RUB/ROB/Flyovers to make major roads signal free to improve the traffic flow on all major roads as well as safe for pedestrians and cyclists etc.
- 2.3 Improvement of Bus Transport System by replacement of old fleet of DTC buses by new low-floor buses, making functional of Corporate Sector Bus Operating System in all 17 Clusters and construction of new BRT Corridors.
- 2.4 Construction of Multi-level Parking lots, new Bus Depots & Terminals, construction of new ISBTs to improve the quality of Bus Transport system in Delhi.
- 2.5 The IIIrd phase of Delhi Metro will be made fully functional during 12th Five Year Plan for which plan outlay of ₹ 6310 Crore is proposed. On its completion, 103 km. of new Metro line will be added to make the total network of 293 kms. in Delhi.
- 2.6 The construction of Western Peripheral Expressway from Kondli to Palwal is in full swing and is likely to be completed during 2012-13. The construction of Eastern Peripheral Expressway from Palwal to Kondli connecting Noida and Ghaziabad is proposed to be completed during 12th Five Year Plan.
- 2.7 Govt. of Delhi has supported the proposal of NCR Planning Board and is willing to contribute its due share for construction of RRTS Project. On construction of its first phase for Delhi-Meerut, Delhi-Sonepat and Delhi-Alwar Corridors, daily passengers will be benefitted from this new dedicated transport system for the National Capital Region.

- 2.8 Some of the other major recommendations of the Workshop on Transport Sector included in the Approach Paper are construction of underground roads, Tube Roads, Divided Arterial Highways, Integration of all modes of Public Transport, new modes like Mono Rail, LRT, Ring Rail, Integrated Passenger Information System, Common Ticketing, Research Units for improving in-house capabilities of the concerned Departments, etc.
- 3 Under Transport sector, the implementing departments for road based public transport, Mass rapid transport and other modes of travel are Transport department, DTC and DMRC. For construction of roads, bridges, flyovers, widening and improvement of various roads, improvements of intersection, providing street lighting, cycle tracks, construction/ widening of bridges on various roads, over river Yamuna and other drains in Delhi and constructions of subways etc. to facilitate free flow of traffic in Delhi; PWD, MCD, NDMC and Transport Department are the implementing agencies.
- 4 The agency wise approved outlay and anticipated expenditure for 11th FYP 2007-12, and proposed and Outlay for the 12th FYP 2012-17, Annual Plan 2012-13 are given in the following table:-

I. PWD [Roads & Bridges/Street lights]

[₹ in Crore]

Sector	11 th Five Year Plan (2007-12)		12 th Five Year Plan (2012-17)	
	Approved Outlay	Provisional Expenditure	Plan Outlay 2012-17	Plan Outlay 2012-13
Normal (Roads & Bridges)	913.32	1081.25	6500.00	700.00
CRF	121.78	65.32	300.00	50.00
TYADB (PWD)	18.27	0.91	35.00	5.00
CWG	1561.91	2544.48	35.00	30.00
JNNURM	6000.00	1493.59	1177.00	240.00
Roads & Bridges (DTTDC)	250.00	621.65	350.00	290.00
BRTS Corridor			800.00	35.00
Peripheral Expresses		175.75	450.00	100.00
Total (PWD)	8865.28	5982.95	9647.00	1450.00

II. Delhi Municipal Corporations [Roads & Bridges]

[₹ in Crore]

Sector	11 th Five Year Plan (2007-12)		12 th Five Year Plan (2012-17)	
	Approved Outlay	Provisional Expenditure	Plan Outlay 2012-17	Plan Outlay 2012-13
Normal Roads	300.00	744.13	1000.00	200.00
CRF	182.66	248.72	300.00	50.00
CWG Street Scaping & Covering Drain	374.42	485.00	300.00	75.00
C/o RUB/ROB (CWG) ₹ 20.50 Crore relese in 2006-07		219.50		
Improved Str. Light (CWG)		83.00		
JNNURM (i/c improvement by RMC)	1000.00	175.08	1000.00	100.00
Total (DMCs)	1857.08	1955.43	2600.00	425.00

III. NDMC (Roads & Bridges)

[₹ in Crore]

Sector	11 th Five Year Plan (2007-12)		12 th Five Year Plan (2012-17)	
	Approved Outlay	Provisional Expenditure	Plan Outlay 2012-17	Plan Outlay 2012-13
Regular	20.00	12.00	-	-
CWG	43.32	56.00	-	-
Total [NDMC]	63.32	68.00	-	-

IV. Transport Department

[₹ in Crore]

Sector	11 th Five Year Plan (2007-12)		12 th Five Year Plan (2012-17)	
	Approved Outlay	Provisional Expenditure	Plan Outlay 2012-17	Plan Outlay 2012-13
MRTS	2708.20	5190.66	6310.50	1071.70
DTC [Purchase of Buses]				
a. CWG	135.00	1032.30	-	-
b. JNNURM	-	580.34	440.00	40.00
c. Others	1065.00	56.00	700.00	200.00
Total (DTC)	1200.00	1668.64	1140.00	240.00
BRTS	680.75	192.80	800.00	10.00
Others	3198.25	563.09	1457.12	175.30
Total (Transport Department)	7787.20	7615.19	9707.62	1497.00
Total [Transport Sector]	18572.89	15621.56	21954.62	3372.00

I. PWD

1. Flyovers /Grade Separators/ Bridges/ RoBs/ RuBs:

Commonwealth games were of very success in Delhi in Oct-2010. All the projects linked directly or indirectly with CWG-2010 were commissioned before beginning of the games. Works of 24 new flyovers/grade separators/bridges/RoBs/RuBs as listed below were taken up for improving road infrastructure in order to ease intra-city traffic movement in run up to Commonwealth Games-2010 and **all except Sl. No. 24 were completed/commissioned & opened to traffic before the games. The project of RoB on Road No. 68 (sl. no. 24) was also completed & commissioned in Feb. 2011.**

- 1 Mangolpuri Flyover
- 2 Geeta Colony Bridge
- 3 RoB on road No. 63
- 4 Mukerba Chowk Grade Separator
- 5 Bhera Enclave underpass
- 6 Nangloi NH-10 Flyover
- 7 Aruna Asaf Ali Marg/ Africa Avenue Flyover
- 8 BJ Marg/RTR Marg Flyover
- 9 Nelson Mandela/Vivekanand Marg Flyover

- 10 Azadpur Grade Separator
- 11 ITO Chungi Grade Separator
- 12 R.R. Kohli Marg Grade Separator
- 13 Shastri Nagar Pusta Road Grade Separator
- 14 Naraina Flyover
- 15 Flyover on NH-24 Bypass near Ghazipur
- 16 Bridge at Neela Hauz
- 17 Alignment over Barapulla Nallah.
- 18 Apsara Border Grade Separator
- 19 Corridor Improvement of Road No. 56
- 20 Ring Road Bypass
- 21 U.P. Link Road
- 22 Shyam Lal College G.T. Road
- 23 RuB on road no. 58-64.
- 24 RoB on Road no. 68 (executed by DTTDC).

INNURM Projects

The following 13 PWD projects were approved under JNNURM, Govt. of India, under one time relaxation as these projects were already in progress when the sanction was to be granted by Govt. of India.

2.1 C/o Clover leaves at Karkari More (Intersection of Vikas Marg and Road No. 57) and widening of existing bridge on Trunk Drain No. 1)

The straight flyover across the Vikas Marg on Road No. 57 was completed in the year 2002. The clover to the existing Flyover was proposed to be constructed to make the intersection signal free. The project was approved by the then Technical Committee of DDA as well as DUAC on 3.7.2006 and 6.7.2007 respectively; but it was later dropped by UTTIPEC in its meeting on 29.10.2010.

2.2 C/o Grade Separator on Road no. 56 at ISBT Anand Vihar

The project has improved & eased intra-city traffic in East Delhi. The work involved construction of flyover on Road No. 56 at TELCO junction ('T' junction of Road No. 56-57), widening of bridge on trunk no. 2 at junction of Road No. 58A and 71 with Road no. 56, widening of RoB no. 15 and U-turn below the RoB at both ends for easy and smooth traffic movement. **FoBs have also been constructed to facilitate pedestrian movement. The project stands completed.**

2.3 C/o 3 additional clover leaves at Noida More Flyover including slip road, bridge, footpath, cycle traffic and underpass

The work of Flyover across NH-24 and one clover leaf were already completed and opened for traffic in 2004. For the remaining 3 clover leaves, slip roads etc., the proposal was also approved by Technical Committee of DDA as well as DUAC on 1.2.2007 and 13.7.2007 respectively.

Subsequently, a proposal was received from Akshardham Temple Authorities making certain changes in the approved plan as it not only destroys the aesthetically planned

and meticulously maintained cultural garden but also assumed as a security threat to the entire complex.

The work will not be taken up now as decided by UTTIPEC in its meeting on 15.04.2011.

2.4 RoB/RuB at Railway Level crossing at Road No. 68 Near Nandnagri Delhi

The project comprises of C/o RoB & RuB along Road No. 68. The cost of the project is ₹ 107 cr. ROB has already been completed in Feb 2011 & RUB is likely to be completed by **June 2012. The current progress of the work is 88%.**

2.5 Flyover at Africa Avenue & Aruna Asaf Ali road and

2.6 Flyover at Vivekanand Marg, Nelson Mandela Marg, Poorvi Marg.

The projects aimed to improve intra – city traffic movement in South Delhi. The work involved construction of 3 flyovers each at IIT & Munirka on Outer Ring Road (ORR) to make the stretch of ORR signal free. Besides, it included landscaping, footpath, street-lighting and signages etc. 6 nos. of Foot Over Bridges (FOBs) are also being provided for pedestrian movement. The cost of the project is ₹ 188 cr. The projects were completed and opened to traffic before CWG-2010.

2.7 C/o Grade Separator at Raja Ram Kohli Marg intersection on Marginal Bund Road, Geeta Colony Delhi and

2.8 C/o Grade Separator for free flow of traffic at T-junction of marginal Bund Road & Master Plan Road over Disused canal near Shastri Nagar in East Delhi.

The projects aimed to relief traffic congestion and signal free movements and Eastern junction of Geeta Colony Bridges and master plan road over disused canal with marginal Bund Road and improve intra – city traffic movement in East Delhi. The work involved construction of Grade Separator at Raja Ram Kohli Marg & Shastri Nagar intersection on Pushta Road and included C/o Main flyover, loops, slip roads, cycle track, drainage & allied services. The completion cost of the project is ₹ 282 crores. The projects were completed and opened to traffic in December 2009.

2.9 C/o Grade Separator at the Junction of G. T. Road and Road No. No. 56, near Apsara Border.

The project aimed to improve intra – city traffic movement in East Delhi. The work involved construction of Main flyover on G. T. road, two under-passes on road No. 56 & 62 along both sides of the RoB on Road No. 56, landscaping, footpath, 3nos. of FOBs, street lighting and signages etc. It provides additional lanes at the intersection of all the 4 directions for easy traffic movement. The cost of the project is ₹ 210 crore. The work has been completed and opened to traffic. **3 Nos. FOBs have also been completed.**

2.10 C/o Signature Bridge and its approach over River Yamuna downstream of the existing Bridge at Wazirabad, Delhi.

The existing two lane wide barrage-cum-bridge at Wazirabad has been serving as a vital link between Delhi and UP areas for the last fifty years. There is tremendous increase in the volume of road traffic using this bridge, which has far exceeded its designed capacity. There has also been large scale developments in the trans-Yamuna areas which further resulted in tremendous increase in traffic volume. Therefore, a new bridge is proposed on the down-stream of existing bridge-cum-barrage at Wazirabad. The proposed bridge will connect NH-1 (Road No. 45) on Western bank and Wazirabad Road (Road No. 59) on Eastern bank of the river Yamuna. This proposed East-West corridor over River Yamuna will cater to the needs of commuters from Yamuna Vihar, Gokulpuri, Nandnagri, interstate traffic from Ghaziabad, Sahibabad on the eastern side and Timarpur, Burari, Mukherjee Nagar, Mall Road & North-West Delhi etc on the Western side. The proposed bridge will have a signal free approach from NH-1 (Road No. 45) on western bank and Wazirabad Road (Road No. 59 Khajuri Khas intersection) on the Eastern bank for entry & exit of traffic in two directions. Planning of the project was started on 27.4.2004 which was approved by DDA's Technical Committee on 14.06.06 and by DUAC on 20.10.06. Modified estimated cost of the project, ₹ 1131 crore was approved by Govt. of NCT of Delhi on 26.02.2010. Flyover on Ring Road is a part of the project. One carriage way of the flyover has already been made operational and the second carriage way would be made operational by July 2012. Entire project is likely to be completed by December 2013.

2.11 Alignment over Barapulla Nallah

The project aimed to provide an efficient connectivity for the general public by passing busy Lala Lajpat Rai Path & Mathura road and connecting ring road. It was used as an exclusive corridor for the sports personnel between the Games village and Jawahar Lal Nehru Stadium during CWG-2010. The work involves construction of an elevated road corridor of about 3.8 km starting from Sarai Kale Khan to Jawahar Lal Nehru Stadium in phase - I and further connectivity from JLN stadium to INA market in Phase - II. Total cost of the project is ₹ 1202 crore, out of which work in Phase-I has already been completed in Oct-2010 for ₹ 550 cr. **Two connectivities with this elevated road have also been provided. One descending to Lala Lajpat Rai Marg commissioned recently in March-2012 and the other ascending from Sunheri Nallah is to be completed by June-2012. Execution of work in Phase-II i.e. Jawahar Lal Nehru Stadium to Aurobindo Marg for which estimate has been submitted for accord of sanction. For Phase-III, stretch from Sarai Kale Khan to Mayur Vihar Phase-I feasibility consultant has been appointed.**

2.12 C/o Ring Road bypass from Salimgarh Fort to Velodrome Road.

Package – I: Velodrom Road to back of Rajghat Power Station;

Package – II: Back of Rajghat Power Station to Salimgarh Fort

The project involved providing a signal free and smooth flow of traffic from Ring Road and dispersal of traffic from Geeta Colony Bridge. The project also solved the necking in Ring Road between Red Fort & Salimgarh Fort.

The project has resulted decongestion of traffic on ring road near Samadhi areas as these are places of national importance and frequently visited by VVIPs. The cost of the project is ₹ 654 crore. The project taken in two packages and work of both the packages were completed and commissioned in Sept./Oct.-2010 before opening of CWG-2010 **and stands completed.**

2.13 Corridor improvement of U.P. Link road from NH-24 Crossing (Noida Mor) to Chilla Regulator.

The project aimed to ease traffic movement in East Delhi. It included widening of existing 6 lane to 8 lane and constructing cycle track/service lane on both the sides. It comprised of a half (one way) flyover at 'T' junction Khudi Ram Bose Junction, a full (two way) flyover at the intersection of Road to Glaxo Apartments and four armed junction of U.P. Link road, Ghazipur Road and DND Road. A4 – lane bridge over Chilla Regulator has also been provided. The cost of the project is ₹ 334 crore. This project was commissioned before CWG-2010. **3 Nos. FOBs on UP Link Road at Samachar Apartment, Mayur Vihar Extension and Delhi Police Apartment have also been completed.**

3. Road Works

3.1 Road Widening & Strengthening.

Works relating to road widening and strengthening on various roads have been completed.

3.2 BRT corridors:

It has been decided that PWD would construct 7 BRT corridors on their respective roads. Therefore an amount of ₹ 35 crore has been allocated in the A.P. 2012-13

Package-I: This package consists of the following corridors-

i) Narela to Azadpur (GT Karnal Road, NH-1)	15 Km
ii) Sarai Kale Khan to Jorbagh (Via Barapullah Nallah)	6 Km.
iii) Kirbi Place to Tilak Nagar (MCD Road)	4.3 Km.

M/s Urban Mass Transit Co. Ltd. has been approved as the consultant for preparing detailed project report etc.

Package-II: This package consists of the following corridor:-

Mukundpur to Palam More (ORR, NH-8)	29 Km.
-------------------------------------	--------

M/s Egis India Consulting Engineers Pvt. Ltd. has been approved as the consultant for preparing detailed project report etc.

Package-III: This package consists of the following corridor:-

ISBT Kashmere Gate to Shahi Idgah, Mundka, Tikri Border (NH-10)	26.5 Km.
---	----------

M/s Consulting Engineering Service (India) Pvt. Ltd. has been approved as the consultant for preparing detailed project report etc.

Package-IV: This package consists of the following corridor:-

(i) National Stadium to Gazipur	13.2 Km.
(ii) ISBT Anand Vihar (Tata Telco Motors) to CP (Road 57, Vikas Marg, DDU Marg)	11 Km

M/s RITES Ltd. has been approved as the consultant for preparing detailed project report etc.

3.3 Road Maintenance

(i) Resurfacing by Hot-in-Situ Recycling Technology

Many important PWD Roads including Ring Road have been resurfaced by Recycling Technology. which is a New Technology . The existing milled material is recycled and laid by adding about 25% to 30% new material. The depth of the road surface does not increase to that extent and therefore avoids disturbing the footpaths & Kerb stones. The work sanctioned for ₹ 108 Crore has been completed.

(ii) Resurfacing by using Plastic Wastes

This new technology involves use of plastic waste which is added in bitumen to improve binding properties of bitumen and resurfacing of roads. This technology decreases pollution and is environment friendly. Certain roads were resurfaced with this technology as of which the life of resurfaced road with this technology is 25% more than normal resurfaced road. The sanctioned work for ₹ 48 crore completed before Oct, 2010.

(iii) Micro Surfacing

Certain roads which had been resurfaced about 2 to 3 years back have developed fine cracks due to constant wear & tear. Micro surfacing technology is a thin layer of asphalt mix with very small size aggregate which virtually fills the cracks and seals the entire surface at top to make it more resistant to withstand future load. Many important roads which are due for such treatment have been proposed to be microsurfaced. Roads with this technology sanctioned for ₹ 29 crore have been completed.

(iv) MCD Road taken over by PWD

Out of 534 MCD roads of 60 feet and above width having length of 676 kilometer proposed to be taken over by PWD, 512 roads having length of 645 Kilometer have been taken over. PWD will maintain and improve the condition of all such roads for which a budgetary provision of ₹ 250 Crore has been proposed in A-P- 2012-13.

4. Street-Scaping

Roads around Commonwealth Games venues needed improvements as per Host City agreement and of world class in their look and were to be made user friendly by providing street furniture and other amenities side by side creating good landscaping & horticulture works. The stretches of roads were identified in consultation with various road owning departments. Consultants were appointed for streetscaping of such stretches of roads around all the games venues. The works were completed before the Commonwealth Games 2010. **Now these stretches are proposed for comprehensive maintenance.**

5. Street Lighting

For improving the street lighting of the national capital of Delhi to the international standards for the Commonwealth Games 2010, it was decided to upgrade and modernize street lighting of Delhi including of PWD Roads. The total work was divided into three packages, one each under three PWD maintenance zones. All the street lighting work has since been completed. Side by side, the SCADDA system has been installed for effecting automatic ON/OFF facility and locating the faults also.

6. Signages

The signages (Retro-reflective sheets of international standards) have been provided for entire city on PWD roads in run up to CWG-2010. The same has been completed. **It has been proposed for the maintenance /repairs/retrofitting of these signages damaged due to vandalism, accidents etc.**

7. Foot Over Bridges

Under this scheme, Foot Over Bridges are being constructed on important roads like Ring Road and Outer Ring Road as per the requirement of pedestrians at particular locations. Subway Committee of Govt. of Delhi examines the requests for construction of FoBs depending upon the actual requirement and feasibility. 17 Nos FOBs have been completed during the year 2011-12. 10 FOBs are in progress during the year 2012-13.

8. Drainage

- i. **Improvement & remodeling of storm water drains:-** Remodelling /Providing drainage system on most of the roads have been completed. The same is presently nearing to completion at Road Nos. 43 (Sakurpur), 66 (Maujpur to Naharkothi). Few drains on road nos. 63 (Loni flyover to Bhopura), 59(Bhajanpura Chowk to Loni Flyover), 68(Maujpur Chowk to Road no. 69) Road No. 72, Road No. 69 would be taken up this year.

- ii. **Storm Water Drain from Mahipal Pur to Nazafgarh CWG related:-** It is the peripheral Drain along the Airport to collect discharge of the storm water of IGI Airport. The work comprises of C/o Storm Water Drain from Mahipalpur Chowk to Najafgarh Drain and was taken up in two phases. The work has since been completed.

9. Parking

- i. Development of parking facility for DTC buses including facility for baggage scanning has been done at I.P. Power Station Ring Road Delhi. Cost of the project is ₹ 61 crore. The work has since been completed before the Commonwealth Games.
- ii. Development of park and ride facility for buses near Rajghat Power plant has been done at a cost of ₹ 18.86 crore before CWG-2010.

10. Work in concept stage to be taken up in 2012-13.

10.1 Grade Separator at Sanjay Gandhi Transport Nagar

The work was sanctioned for ₹ 139.49 Crore in May, 2008. The work could not be taken for construction due to protest by the residents residing in the alignment of the project. The consultant has now developed alternative scheme, which has been submitted by PWD to UTTIPEC, (DDA) for approval. UTTIPEC is being pursued for its early approval. The same is awaited.

10.2 East-West Corridor

Proposal for East West Corridor connecting M.B. Road near Akshardham temple to Punjabi Bagh via New Delhi Railway Station is being re-studied by MTC (Urban Mass Transit Company Ltd.) to explore the possibility of having a BRT Corridor.

10.3 Phase II & Phase III of Barapulla Elevated Corridor

Phase II of Barapulla Nalla Elevated Corridor from Jawaharlal Nehru Stadium to INA Market, which has already been approved under JNNURM, is to be taken up for which a PE has already been submitted for sanction. For **Phase -III from Sarai Kale Khan to Mayur Vihar Phase-I, feasibility consultant have been appointed.**

10.4 C/o Flyover on Bahadur Shah Zafar Marg

DMRC corridor is in the alignment and East West corridor has to be merged with BRT corridor.

10.5 Signal free movement on outer Ring Road from Vikas Puri to Wazirabad(20 km) and on Ring Road from Azadpur to Prembaripul (2.6 km.)-

As per Delhi MPD 2021 goals, for signal free movement on Outer Ring Road (ORR) and Ring Road (RR), which are the main arterial roads of Delhi, feasibility studies were carried out by PWD from Vikaspuri to Wajirabad (approx. 20km) on ORR in four different stretches, and from Prembari Pul to Azadpur (approx. 2.10 km) on RR taking into account the existing flyovers / underpasses already constructed. These stretches of road have got number of intersections which remain always chocked due to very heavy traffic on ORR and RR. These were approved by Governing Body of UTTIPEC.

Based on above, Preliminary Estimates (6 nos.) for different stretches of above schemes, total amounting to around ₹ 2385.00 crores have been framed and submitted for sanction under UDF. However, only part of the project may be funded under UDF.

Keeping in view the above, importance quotation for appointing structural consultants also been initiated.

The major components of Project are as under:-

S. No.	Name of Stretch with length	Length of elevated corridor/details of flyovers
(i)	Vikas Puri to Meera Bagh (4.30 km) on ORR	Elevated road : 3.30km
(ii)	Mangolpuri to Madhuban Chowk (3.90 km) on ORR	Elevated road : 2.60km
(iii)	Madhuban Chowk to Mukarba Chowk (3.80 km) on ORR	Elevated road : 2.61km
(iv)	Mukarba Chowk to Wazirabad (8.00 km) on ORR	4 Flyovers & 2 loops: Total length 4.09km. Also a new 6 lane parallel 8.00km long divided road on other side of drain.
(v)	Prembari Pul to Azadpur (2.10 km) on RR	Elevated road : 1.60 km

10.6 Kalindi Bypass:-

Kalindi Kunj –Palla By-pass project was an important road project of Govt. of Delhi conceived in 1990's to reduce traffic load on NH-2. The DDA Technical Committee approved the scheme in June, 1993. Studies were carried out by CWPRS, Pune, and based on its study; Yamuna Standing Committee constituted by Central Water Commission accorded its approval to the alignment on 13.11.2003.

The total length of the road is 42.5 Km, out of which 27 Km has already been constructed by HUDA and 1.8 km from Badarpur to inside of Haryana is to be constructed by Haryana Govt. Balance 13.7 Km was required to be constructed by PWD in two phases.

Work was taken up in phase I, construction of 6.5 Km of Express way connecting NTBCL Interchange and Road No. 13-A (Kalindi Kunj Road) in 2002 at a cost of ₹ 100.14 crores (including cost of land amounting to ₹33.45 Cr). However, the work could not proceed due to following exceptional and unusual problems faced after the start of work:

- i) Objections of Noida Toll Bridge Company to the clover leaves of Kalindi Bypass.
- ii) Objection of U.P. Irrigation Department due to the alignment passing through Yamunotri Parisar and land ownership.
- iii) Objection of U.P. Forest Department Bird Sanctuary.
- iv) Order of Hon'ble High Court of Delhi that no road be constructed within 300m from edge of River Yamuna, which was later reduced to 120 m by the Hon'ble Court.

In the meeting held on 13.4.2010 at Raj Niwas, it was decided by Hon'ble LG that Kalindi By-pass project should be revived. Hon'ble Lt. Governor also gave his approval for going ahead with the appointment of consultant for construction of entire 13.7 km long Kalindi Bypass from DND flyover near Maharani Bagh, Delhi to Badarpur border under PPP mode. Details are as below:

- i) DND flyover to Kalindi Kunj :- 6.30 km
- ii) Kalindi Kunj to Badarpur border :- 7.40 km
- Total :- 13.70 km**

The project is being reviewed afresh by the Govt. because of the land issues involved and a consultant is being appointed to conduct feasibility of the studies.

10.7 Service Duct

The envisaged project will accommodate utility services such as power & communication cables in ducts known as duct bank. It will have another soft corridor running parallel on both sides; to accommodate water supply & gas pipe lines on one side and sewage on other side.

II. DELHI MUNICIPAL CORPORATIONS

1. On Going Schemes

North Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹50000 Lakh
Annual Plan 2012-13 : ₹ 12000 Lakh

South Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 40000 Lakh
Annual Plan 2012-13 : ₹ 7000 Lakh

East Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 10000 Lakh
Annual Plan 2012-13 : ₹ 1000 Lakh

Plan Outlay (Total Ongoing Schemes)

XII FYP : ₹ 100000 Lakh
Annual Plan 2012-13 : ₹ 20000 Lakh

To overcome the frequent traffic congestions and chaos, it is proposed to construct over bridges, grade separator subways widening of roads improvement in riding quality, construction of central verge, footpath, improvement of geometric of intersections signalization of intersections etc.

2. CRF (₹ 5000 lakh):

North Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 12000Lakh
Annual Plan 2012-13 : ₹ 2000 Lakh

South Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 15000 Lakh
Annual Plan 2012-13 : ₹ 2500 Lakh

East Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 3000 Lakh
Annual Plan 2012-13 : ₹ 500 Lakh

Plan Outlay (Total CRF)

XII FYP : ₹ 30000 Lakh
Annual Plan 2012-13 : ₹ 5000 Lakh

Under CRF, works approved by MORT&H, Government of India are being implemented.

3. C/o ROB/RUB

North Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 15000 Lakh

Annual Plan 2012-13 : ₹ 5500 Lakh

South Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 10000 Lakh

Annual Plan 2012-13 : ₹ 2000 Lakh

East Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 5000 Lakh

Annual Plan 2012-13 : Nil

Plan Outlay (Total ROB/RUB)

XII FYP : ₹ 30000 Lakh

Annual Plan 2012-13 : ₹ 7500 Lakh

Following 17 existing level crossings are to be converted into ROB/RUBs.

(i) Vivek Vihar (ii) Sarai Kale Khan (iii) Sewa Nagar (iv) Bijwasan (v) Nihori Road, Narela (vi) Shakur Basti (vii) Kirti Nagar – Prem Nagar (viii) Samaypur Badali (ix) Swarn Park (x) Rampura (xi) Zakhira (Daya Basti (xii) Mundka (xiii) Sanjay Gandhi Transport Nagar (xiv) Mangolpuri (xv) Sultanpuri (xvi) Roshanara garden and (xvii) Kirari Narela.

Majority of the proposals have been cleared by Railway Board. These projects were to be completed before Commonwealth Games 2010. However majority of the projects are in progress. The estimated cost of works is ₹ 428 crore, out of which 50% cost is being shared by Railways and rest 50% money is being contributed by Govt. of NCT of Delhi in the form of Grant-in-aid. Now the estimated share of MCD is increased to 365 Crore which is to yet to be approved by, Govt. of Delhi. Almost all the railways crossing are proposed to be covered in the 12th FYP.

4. JNNURM

North Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 30000Lakh
Annual Plan 2012-13 : ₹ 2000 Lakh

South Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 50000 Lakh
Annual Plan 2012-13 : ₹ 6000 Lakh

East Delhi Municipal Corporation

Plan Outlay

XII FYP : ₹ 20000 Lakh
Annual Plan 2012-13 : ₹ 2000 Lakh

Plan Outlay (Total JNNURM)

XII FYP : ₹ 100000 Lakh
Annual Plan 2012-13 : ₹ 10000 Lakh

10 projects have been approved by GOI under JNNURM. Work on some of the projects have already been taken up remaining project is being taken up. Four projects have been dropped.

III. TRANSPORT DEPARTMENT

1. PLANNING AND MONITORING CELL:

Plan Outlay

XII FYP : ₹ 7 Lakh
Annual Plan 2012-13 : ₹ 1 Lakh

It is proposed to strengthen this cell in the areas of Transport Planning and Research. The main activities proposed are collection, compilation and publication of transport related statistics and their analysis for policy changes and new policy initiatives appraisal of schemes/projects. In this regard a detailed review of all the studies commissioned by the Transport Department will be carried out for formulating the plan of action.

The Planning and Monitoring Cell will maintain data such as vehicle registration, traffic volume, trip information, parking, movement of public transport, pollution level norms, fuel supply accidents, enforcement and all other aspects of transport. The Planning and Monitoring Cell will also take up evaluation studies pro-actively. This will also be responsible to publish the 'Motor Transport Statistics', an annual journal on different activities, regular updating of the departmental website and making it to undertake more schemes.

2. MOTOR DRIVING TRAINING SCHOOLS:-

Plan Outlay

XII FYP : ₹ 150 Lakh

Annual Plan 2012-13 : ₹ 25 Lakh

The objective of this scheme is to establish MDTS to impart training in driving skills to potential drivers and also upgrade the skills of existing drivers on scientific lines. by employing modern equipments and highly trained instructors. Annually the licensing authorities in Delhi issue about 3 lac driving licenses. During the 10th Plan, a new initiative was taken for establishing premier motor training schools in the Delhi in the PPP mode. So far 3 schools have been established under this scheme:-

- i) IDTR (Institute of Driving Training and Research), Loni Road, jointly with Maruti Udyog Ltd.
- ii) MDTS (Burari), has been established in collaboration with M/S Ashoka Leyland.
- iii) MDTS (Sarai Kale Khan) as an extension of IDTR Maruti Udyog Ltd. Loni.

In the 12th Plan, more Premier MDTS in PPP mode will be opened. DDA has allotted land at Dwarka and Zhulzhuli (Najafgarh). As there is an obligation to earmark 17% of the outlay for Special Component Plan for Scheduled Castes Sub Plan (SCSP), it is proposed to give financial assistance to SC/ST candidates for undergoing drivers training in the MDTS particularly in Heavy Vehicle driving.

3. COMPUTERISATION OF RECORDS:-

Plan Outlay

XII FYP : ₹ 2500 Lakh

Annual Plan 2012-13 : ₹ 403 Lakh

The prime objective of this scheme is to implement the E-governance plan of the Government for providing a citizen friendly and efficient delivery of services. The specific activities charted out for the plan period are:

- a) Registration of commercial vehicles on smart card.
- b) Implementation of e-payment scheme to collect the permit fee/ composition fee for issuance of all types of permits.
- c) On line services for the payment of Road-tax, various fees, fines and data retrieval linking with Delhi on-line portal.
- d) Networking of all zonal offices, VIU & ARU, Burari with Headquarter through leased lines.
- e) Issuance of PSV Driver Badges on Smart Card.
- f) Projects like BRT, bus queue shelters and other reforms
- g) Management of GPS system
- h) OCC (Operation Control Centre) & AFCS (Automatic Fare Collection System)
- i) Automatic Vehicle Location & Monitoring System.
- j) Licensing, traffic management on BRT, passenger information system and networking of existing service centres,

The Transport Department has entered into an MOU with the National Informatics Center (NIC) to computerize all the major activities at headquarter, zonal and sub-zonal offices for setting up an on-Line Transaction Processing (OLTP) based computer system, on a turnkey basis. The responsibility of NIC involves system analysis, design, software development and implementation, procurement and installation of hardware and other equipments and they are working in three locations viz. VIU Burari, Auto Rickshaw & Taxi Unit Burari and Headquarter. Necessary constant upgradation of hardware and software through system study NIC alone has not been able to render timely support to the department in this regard. Therefore, during the 12th Plan, the department also proposes to obtain technology inputs through reputed outside agencies to supplement NIC's work.

In a step ahead, the department has introduced the SMART OPTICAL CARD for Registration and allied activities in all zonal offices for non-transport vehicles. The department is using VAHAN software in registration of vehicles provided by NIC for this purpose. The activity is further extended to commercial vehicles like registration, permit issuance, road-tax collection, fitness of vehicles for TSR replacement scheme and Education Cab. The same will be implemented very soon in other category also.

Recently, the department has started the issuance of permit on smart card for Auto-Rickshaws at Burari in a phased manner.

The department has also started the issuance of smart card based driving license in all the zonal offices of the department and SARTHI software provided by NIC is being used for the same and it was also decided by the department that PSV Driver Badges will be issued on Smart Card.

Presently, smart card based registration and allied activities are being carried out in fourteen zonal offices including VIU Burari and Auto-rickshaw unit Burari. However, the NIC officials will be required to assist the department.

4. ROAD SAFETY:

Plan Outlay

XII FYP	: ₹ 1000 Lakh
Annual Plan 2012-13	: ₹ 100 Lakh

Awareness building on the importance of Road safety through all available medium for communication is the objective of this scheme. The objectives are to be achieved by observance of the National Road Safety Week, participation in important events etc. Road safety material / will be prepared and distributed in this regard. The Road Safety advertisements will be released through Newspaper & Print Media, TV channels, etc.

5 STRENGTHENING & MODERNISATION OF TRANSPORT DEPARTMENT **(including restructuring of Transport Department)**

(A) STRENGTHENING OF ENFORCEMENT BRANCH

Enforcement Branch of the Department is required to be enforced in accordance with the provisions of Motor Vehicle Act and Rules. But with the latest stringent directions given by the High Court of Delhi this strength is found to be grossly insufficient for ensuring effective compliance of even just the Court's orders. Hence, it is proposed to introduce Radio Frequency Identification Device for strengthening the enforcement work with better coordination with other branches.

- i) Training of Enforcement Staff: This is a continuing process. Physical fitness and keeping abreast with law are essential for good enforcement work.
- ii) Land for securing impounded vehicles.

(B) SETTING UP OF A LEGAL CELL IN TRANSPORT DEPARTMENT

Plan Outlay

XII FYP : ₹ 17000 Lakh

Annual Plan 2012-13 : ₹ 1000 Lakh

The Department files a large number of challans in the competent courts. Due to lack of staff, the *pairavi* in these cases is grossly inadequate. There is a need for a dedicated team for this purpose for effectively protecting the interests of the Department. This will also reduce litigation with effective and timely follow up. Therefore, it is proposed to establish a Legal Cell in the Department as under:

6. MASS RAPID TRANSIT SYSTEM

The basic objective is to increase metro connectivity in Delhi. The work on Phase II of MRTS for Delhi has been completed. The work of Phase-III metro approximate 103.05 Kms of Metro line has been taken. The proposed lines are: -

S. No.	Corridor	Length Kms.
1.	Mukundpur-Rajouri Garden-Dhaura Kuan-Anand Vihar-Yammuna Vihar	55.70
2	Janakpuri west Munirka-Kalka Ji-Kalindikunj	33.49
3.	Central Sectt.-Mandi House-Kashmiri Gate	9.37
4.	Jhangirpuri-Badli	4.49
	Total	103.05

Of the 103.05 kms of phase III, 41.04 Kms. is underground and 62.01 kms is elevated/at grade. The capital cost of these corridors including taxes will be ₹ 35242 crores. The work on phase III has already been started on April 2011.

The proposed outlay for 12th Five Year Plan 2012-2017 and for Annual Plan 2012-13 is as under:

(₹ in lakhs)

Details	Proposed outlay for 2012-17	Proposed outlay for 2012-13
MRTS		
Equity	374850.00	65000.00
Subordinate Debt for Land Acquisition	255000.00	42000.00
Studies / MRTS Cell / Reimbursement of VAT	1200.00	170.00
TOTAL	631050.00	107170.00

7. MODERNISATION OF INFRASTRUCTURE FOR CERTIFICATION OF ROAD WORTHINESS OF VEHICLES

Plan Outlay

XII FYP : ₹ 550 Lakh

Annual Plan 2012-13 : ₹ 350 Lakh

The objective of this scheme is to introduce more automated testing lanes so that every transport vehicle is annually inspected on these automated lanes.

Transport Department has set up 5 automated vehicle inspection and certification lanes in Burari and these are functional.

S. No.	Activities	Remarks
1.	Redevelopment of Burari Complex	For modernizing of infrastructure development
2.	Extension of Automated Test lanes	This consists of Automated lanes and on road inspection.
3.	New Automated Test lanes at Jhulzuli (Najafgarh).	New Automated Vehicle Testing lanes
4.	Inspection support and their recurring expenses	From revenue

8. CONTROL OF VEHICULAR POLLUTION FROM THE EXHAUST OF MOTOR VEHICLES

This scheme is being implemented with the following objectives:

- To control pollution caused by motorized vehicles plying in Delhi.
- To create awareness amongst the motoring public in particular and public in large about the effects of various vehicular pollutants.
- To enforce the statutory provision (prescribed in the Central Motor Vehicles Rules, 1989) for periodical pollution control certification on the motor vehicles plying in Delhi.
- To provide adequate pollution checking and certification facilities in Petrol Pumps and Workshops.
- To promote Environment friendly fuels viz CNG, LPG, etc.
- To facilitate enforcement of pollution control related orders of Supreme Court and environment pollution (prevention & control) Authority for the NCR region.

i. Creation of public awareness.

Promoting use of CNG

ii. Authorization of PUC Centres and regulation thereof:

Petrol pumps and Workshops numbering approx. 580 have been authorized to check the exhaust emission tuning of pollution vehicles and issue of Pollution Under Control Certificate for both petrol and diesel driven vehicles.

iii. On-line uploading of data collected at computerized Pollution checking centre:

The department has completed the computerization of all authorized pollution checking centers (numbering about approx. 580), all of which are now have internet facility and are networked with the central server of the department.

The department is now making suitable upgradation of the concerned software in order to ensure simultaneous uploading of the pollution measurements values of the vehicles being checked at these Centers. This would remove the chances of tampering, if any, in the pollution level certification by these Centres. The emission data base of these vehicles would help the department in identifying the vehicles classes/groups which are polluting beyond the norms thereby taking necessary remedial measures accordingly.

In addition, a vigil is being maintained on these PCC and whenever short comings are observed necessary, action is initiated.

iv. Procurement of Remote Sensing Devices:

Department is in the process of procuring 19 nos. of RSD set ups. RSD is a device which can check the pollution levels of moving vehicles without stopping them. The operation, maintenance of RSDs and the work relating to the issue of notices shall be outsourced to the firm supplying the RSDs. The firm would be required to issue a minimum of 2500 notices per month per unit. This unit will enhance the capability of the department to detect polluting vehicles, without stopping them. The technical and financial bids have been opened by the department and the financial bid is being evaluated.

v. I & C programme for Non-transport vehicle:

At present non -transport vehicles are given road worthiness initially for a period of 15 years at the time of registration. These vehicles are required for testing of all major safety parameters viz. Brake testing, suspension, side slip, noise level, idle emissions, steering Joints play, body inspection, Headlight etc. These safety tests can only be carried out in the automated inspection and certifications lanes. It is essential that the Ministry of Road Transport and Highways, GOI should modify and enacts changes in the M.V. Act and rule framed to make it mandatory for the non-transport vehicles for having a periodic inspection. The GOI also specify the test to be carried out and protocol for carrying out these tests. Initially the department would take up these matters with the GOI and subsequently establish the inspection and certification centres for the non-transport vehicles in accordance.

vi. Loaded mode Test for Diesel/ CNG vehicles:

Plan Outlay

XII FYP : ₹ 16000 Lakh

Annual Plan 2012-13 : ₹ 300 Lakh

The rule 115 of CMVR, 1989 prescribed free acceleration method for testing the smoke density of diesel engine vehicles which is vague in nature and provides scope for manipulation in measurement of smoke density. Studies show that smoke opacity test currently done under PUC system has poor correlation with particulate emission. It is therefore, proposed that a short transient dynamometer test procedures for use of diesel vehicles be defined and implemented in which both visible smoke and particulate matter can be measured. Similarly, a loaded test for CNG vehicles may also be developed for measurement of the NOX. For this purpose, the department has planned to establish sophisticated testing equipment at its VIU Centre, Burari shortly.

9. RE-STRUCTURING OF DTC AND CITY BUS OPERATIONS

DTC has the objective to provide efficient, affordable, reliable, safe, environmental friendly and comfortable transport system.

Plan Outlay

XII FYP : ₹ 114000 Lakh

Annual Plan 2012-13 : ₹ 240000 Lakh

APPROACH

- **Modernizing of the Fleet.**

In the fleet of 6029 buses, 2248 are Standard Floor buses which have almost completed their economic life cycle and are required to be scrapped in order to reduce the running expenditure. DTC is required to maintain a fleet size of 4400 buses in the scheme of total 11000 buses in the ratio of 40:60 between DTC and Cluster buses. The new buses that DTC will induct will comprise of Semi Low Floor buses with comprehensive AMC during the life cycle of the buses i.e. for 12 years extendable to another three years.

10. DEVELOPMENT OF ALTERNATIVE MODE OF TRANSPORT INCLUDING ETB.

The Committee on Sustainable Transport, after having considered all aspects, recommended that, in addition to augmenting mass transport options, the way forward is to evolve policies and instruments to discourage the use of personalized vehicles in Delhi. The only solution to tackle the present urban transport problems in Delhi, is creating sustainable multi-modal transports such as HCBS, Monorail and LRT (to supplement the Metro Rail) and the present DTC and other bus services. Accordingly a plan known as the Integrated Multi-Modal Transit Systems has been approved by the Delhi Govt. for implementation by 2021. The first phase of this plan, consisting of 19 corridors, including 14 corridors of HCBS, two corridors of Monorail and three corridors of LRT, is planned for completion. For implementing this plan, a Special Purpose Vehicle known as Delhi Integrated Multi Modal Transit Systems Company Ltd. has been established.

Alternative transport modes including Metro for improving the public transport system have been planned as detailed below:

Modes	Corridors	Length
BRT PWD	7	105.00 Km
DIMTS	7	124.4 km
Elevated LRT	6	74 Km
Elevated Monorail	3	48 Km

The respective position of the proposed alternative modes of transport is given in the ensuing paragraphs.

a) Bus Rapid Transit (BRT)

For this programme, seven corridors have been identified. For smooth operation of such buses, road stretches, that create bottlenecks in the running of buses, would be systematically improved through road re-engineering, route by route, for better bus turn-around time and improvement in the quality of service. Preferential traffic signalling for BRT buses, at intersections, shall be provided to avoid delay at crossings.

BRT First Phase corridor from Ambedkar Nagar to Delhi Gate 14.5 Km. is completed.

BRT Second Phase The detailed Project report of the corridor from Karawal Nagar to Shastri Park extended upto Gandhi Nagar, Yamuna Vihar and ISBT Mori Gate 15 Kms stretch Detailed Project Report has been prepared by M/s DIMTS. The entire BRT project is being reviewed.

S. No.	Name of the Corridor	Length in Kms
1	Gandhi Nagar to Chilla Regulator (MB Road)	18.8
2	Dilshad Garden to ISBT (GT Road)	8.0
3	Karkari More to Gokulpuri (Road 57- 63)	8.0
4	Mundka to Poot Khurd (MCD Road)	18.9
5	Dhaura Kuan to Chhawala (Cant, MCD Road)	20.3
6	Badarpur to Airport (MB Road, Maharauli - Mahipalpur Road)	25.0
7	Mukundpur to Kondali (Wajirabad Road, Road No 56)	25.4
Total		124.4

b) MONO RAIL

The Monorail is proposed to be run on two corridors viz. (i) Delhi University to Pulbangash (17kms.) and (ii) Kondli to Daryaganj (13 kms). DIMTS has submitted updated study on Monorail and DSIIDC has also suggested new route in East Delhi area which is being examined by this Deptt. A detailed study to ascertain its feasibility and viability will be examined and investment decision will be taken. East Delhi project will be developed by the DMRC.

c) LIGHT RAIL TRANSIT SYSTEM

Plan Outlay

XII FYP : ₹ 80000 Lakh

Annual Plan 2012-13 : ₹ 1000 Lakh

For this system, three corridors viz. (i) Qutab Minar to Dwarka sec 22 (17 kms), (ii) Badarpur to Mehrauli (11 kms.) and (iii) Saket to IG Stadium(15 kms.) have been identified. A Techno-Feasibility study is completed and based on which the investment decision will be taken.

11. ESTABLISHMENT OF DELHI UNIFIED METROPOLITAN TRANSPORT AUTHORITY (DUMTA):

Plan Outlay

XII FYP : ₹ 5 Lakh

Annual Plan 2012-13 : ₹ 1 Lakh

In Delhi, there is a multiplicity of authorities dealing with transport planning and regulation like PWD, MCD, NDMC, DDA, Traffic Police, Railways, Delhi Metro Rail Corporation, NHAI, Transport Department and DTC etc. They are engaged in different activities like construction and maintenance of roads, subways, over bridges, providing of traffic signals, road furniture, enforcement of the Motor Vehicles Act, 1988 and the Rules framed there under etc. In order to bring forth effective coordination amongst various agencies, the Central Government, Ministry of Urban Development has proposed the setting up of an Unified Metropolitan Transport Authority to be called the Delhi Metropolitan Transport Authority through a legislation. The matter is referred to UTTIEC for consideration. A draft bill has been approved by the Council of Ministers Delhi and sent to Ministry of Home Affairs for approval. Comments on responses of MCD, Delhi Police and Ministry of Road Transport & Highways are to be sent.

12. STUDIES AND CONSULTANCY SERVICES AND REFORMS

Plan Outlay

XII FYP : ₹ 6000 Lakh

Annual Plan 2012-13 : ₹ 500 Lakh

For the implementation of MPD 2021, planning for integration of roads and study of transport demand forecast and development of an integrated road cum multi modal public transport network for NCT of Delhi, number of studies and consultancies will have to be conducted during the 12 Five year plan.

13. DEVELOPMENT OF BUS TERMINALS AND DEPOTS

Plan Outlay

XII FYP : ₹ 60000 Lakh

Annual Plan 2012-13 : ₹ 8000 Lakh

The Transport Department has started the Cluster Bus Scheme by allowing corporate sector to ply buses. These clusters have been identified by distributing all Delhi routes into 17 clusters. The cluster-1, 3, 4 & 5 buses have already been started plying on the routes. The cluster 2 will also made operational within this year while the remaining cluster buses will be made operational in the next year. The cluster scheme has replaced the inefficient, unsafe and dangerous blue line services.

Work on new Bus Depots will be taken up during the year at different locations. New Depots will be constructed at Sunhari Nala, Millennium Depot, Paschim Vihar, Ghuman hera etc.

14. RAIL RAPID TRANSPORT SYSTEM

Plan Outlay

XII FYP : ₹ 2000 Lakh

Annual Plan 2012-13 : ₹ 1250 Lakh

The project of RRTS for de-congestion of Delhi by connecting satellite towns was conceived as IRBT/Regional Rail Network.

The Regional Plan 2001 and Functional Plan of Transport 2001 highlighted the need for connectivity in the region for effective and fast movement of commuters for boosting the development of economic activities in the urban nodes of the region and, therefore, the committee agreed to take 3 RRTS corridors on priority basis as under:

S. No.	Corridor	Length (Km)	Estimated Cost (₹ in crore)
1.	Delhi-Ghaziabad-Meerut	67	1040
2.	Delhi-Gurgaon-Alwar	158	2660
3.	Delhi-Sonipat-Panipat	89	1260

A Special Purpose Vehicle (SPV) – An organization i.e. National Capital Region Transport Corporation (NCRTC) is to be constituted for implementation of comprehensive integrated multi-modal suburban commuter transportation system for NCR under an umbrella wherein, Indian Railways, Ministry of Urban Development, NCR Planning Board, Govt. of NCT of Delhi, Uttar Pradesh, Haryana & Rajasthan are the stakeholders. To initiate this project an amount of ₹ 100 crores will be corpus money.

The Central Govt. and the State Govt's will have the equity in the ratio of 50:50, which are as under:-

S. No.	Stake Holder	% of Share
1.	Central Govt.	50%
a)	MoUD	22.5%
b)	Indian Railways	22.5%
c)	NCR PB	5.0%
2.	State Govt.	50%
a)	GNCT Delhi	12.5%
b)	Haryana	12.5%
c)	U.P.	12.5%
d)	Rajasthan	12.5%
	Total	100%

Financial model is yet to be firmed up for which consultation with International Experts have been initiated.

15. LOAN TO DTIDC

• **INTER STATE BUS TERMINALS (ISBTs)**

Plan Outlay

XII FYP : ₹ 30000 Lakh

Annual Plan 2012-13 : ₹ 5000 Lakh

At present, three ISBTs Kashmere Gate, Anand Vihar and Sarai Kale Khan are controlled by DTIDC.

The Anand Vihar ISBT will be rebuilt as per new norms integrating the Bus Stand with Rail and Metro. The old ISBT at Sarai Kale Khan is being rebuilt as a modern ISBT with the change in the development control norms in MPD 2021, the lay out transport integration plan is under consideration of UTTIPEC. Two more new ISBTs, on modern lines, are proposed to be constructed (i) in South-West at Dwarka and (ii) in North Delhi at Narela on PPP basis. Land for both the new ISBT's have been allotted by the DDA. The balance payment of ISBT Kashmere Gate and for up-gradation of ISBT Anand Vihar and Sarai Kale Khan, as 25% of total expenditure on up-gradation of ISBT Anand Vihar and Sarai Kale Khan has to be met by the Company and 75% loan is promised by NCRPB.

16. OPERATION AND CONTROL CENTRE

Plan Outlay

XII FYP : ₹ 10000 Lakh

Annual Plan 2012-13 : ₹ 500 Lakh

Delhi Integrated Multi-modal Transit System Ltd (DIMTS) has been appointed by Government of Delhi to work as Integrated Mechanism under the overall supervision of Department of Transport, Govt. of NCT of Delhi to monitor and manage the restructured private stage carriage bus operations. Operational & control centre is established at ISBT Kashmere Gate to receive real DATA feed from automatic vehicle location system on real time basis. The buses are equipped with GPS device having GPRS connectivity to send real time data to the OCC. From this, location of the bus at any time can be ascertain and this information will be used to give the commuters expected time of arrival of the bus and also used for prosecution purpose whenever any violation is notice. GPS / GPRS System are being implemented in all taxis and TSR in Delhi. The system will help for security of the passenger and location of the vehicle will be traced immediately.

Plan Funds were to be provided for establishing of Operation and Control Centre. Running expenses are to be met out from revenue generated by the centre. No grant is being proposed under Plan.

NEW SCHEMES

17. Encouragement of Pedestrian & Non Motorized Vehicles.

Plan Outlay

XII FYP : ₹ 500 Lakh

Annual Plan 2012-13 : ₹ 100 Lakh

A sustainable transport system must provide mobility and accessibility to all urban residents in a safe and environment-friendly mode of transport. This is a complex and difficult task as the needs and demands of people belonging to various income groups are not only different but also often conflicting the pedestrians, bicyclists and non-motorized rickshaws are the most critical elements in mixed traffic. If the infrastructure design does not meet the requirements of these elements all modes of transport operate in sub-optimal conditions, it is possible to redesign the existing roads to provide a safe and convenient environment to non-motorized modes. This also results in improved efficiency of public transport vehicles and enhanced capacity of the corridor when measured in number of passengers per hour per lane.