

VIII -TRANSPORT

Schemes under the sector envisage construction, widening and improvement of various roads, improvements of intersections, providing street lighting, cycle tracks, grade separators at intersections and 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.

Under road Transport Programs of Transport Department scheme of Motor Driving training Schools, Inspection Pit, construction of ISBTs, Mass Rapid Transit System, regional Rail Network etc. Rationalisation and Revival of DTC have also been included.

The agency-wise financial position for the 9th plan period is given below :

(Rs. in lakhs)

S. No.	Agency	9 th Plan 1997-2002	
		Approved outlay	Expenditure
1.	PWD	118205.00	65234.16
2.	MCD	50135.00	39350.00
3.	NDMC	2500.00	1270.00
4.	Transport Deptt.	145000.00	120215.06
	Total	315840.00	226069.22

The following projects were completed/commissioned for traffic.

(a) Flyovers/Separators

PWD : 1. Moti Bagh, 2. Africa Avenue, 3. Savitri Cinema, 4. Nehru Place

DDA : 1. Sarita Vihar, 2. Nelson Mandela Marg, 3. Jail Road (Lajwanti Chowk)

MCD : 1. Pul Mithai, 2. Grade Separator on Najafgarh Road-Jail Road intersection of
Tilak Nagar

DTTDC : 1. Raja Garden Flyover, 2. Peera garhi

(b) Subways at the following sites :

PWD : Munirka and GTB Nagar

MCD : Rampura crossing, Kirti Nagar, Najafgarh Road in front of Tilak Nagar

The first phase of Delhi Mass Rapid Transit System for a length of 55.3 Km in three corridors costing Rs.4860.00 crores at April, 1996 price level was cleared by Govt. of India during September, 1996. It has been revised to Rs.8155 crore April 2001 prices. The Delhi Metro Rail Corporation Ltd. is executing agency for the project.

Due to change in corridors the length of phase I has reduced to 52 Km. There is a proposal to substitute the Trinagar-Nangloi corridor (13 Km) by the Connaught-Dwarka Corridor (23.16 Km) in phase I of MRTS.

The target dates of commissioning of different sections of Rail and Metro corridors to be commissioned in phase I are as follows :

Name of Section	Target Date of commissioning
Shahdara – Tis Hazari	31 st December, 2002
Tis Hazari – Tri Nagar	30 th September, 2003
Tri Nagar – Rithala	31 st March, 2004
Rithala – Barwala	31 st December, 2004
Tri Nagar – Nangloi	Kept on hold
Vishwavidhyalaya – ISBT	31 st December, 2004
ISBT – Central Secretariat	30 th September, 2005

25 major tenders valued at about Rs.6000 crore were awarded during the last year. Overall progress of MRTS phase-I achieved till 31.12.2001 is 21.5%. Total expenditure incurred on the project till 31.12.2001 is Rs.1627.5 crore. The Draft Loan Agreement for the 3rd tranche of JBIC loan for 28659 Million Japanese Yen has been signed in December, 2001.

10th Five Year Plan and Annual Plan 2002-2003

The agency wise approved outlay for the 9th Five Year Plan 1997-02 and expenditure 1997-2001 approved outlay and tentative expenditure 2001-2002 and approved outlays for the 10th Five Year Plan 2002-07 and Annual Plan 2002-2003 are given below :-

(Rs. in lakh)

S. No.	Agency	9 th Five Year Plan 1997-2002 Approved outlay	Expenditure 1997-98 to 2000-01	Annual Plan 2001-02		10 th Five Year Plan 2002-07 Approved Outlay	Annual Plan 2002-03 Approved Outlay
				Approved outlay	Expenditure (Tentative)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	PWD	116005.00	47096.96	22200.00	15753.01	187280.00	22500.00
2.	MCD	50135.00	31850.00	9000.00	7500.00	60000.00	9000.00
3.	NDMC	2500.00	970.00	300.00	300.00	2000.00	350.00
4.	Transport Department	145000.00	88804.40	59040.00	31410.66	293891.00	57669.00
	Total	313640.00	168720.40	90540.00	54963.67	543171.00	89519.00
	TYADB	2200.00	2089.01	600.00	295.18	1500.00	400.00

Provisions for the following major projects are included in the 10th Plan and annual Plan 2002-03.

1. Flyover at Punjabi Bagh, Dhaula Kuan, and Safdarjung Crossing
2. MRTS
3. Regional Rail Network
4. ISBT at Dwarka
5. Express way in the outskirts of Delhi for diversion of heavy traffic. This project has taken up by MOST

I PWD

The transportation system in the National Capital Territory of Delhi is road based. The road pattern is generally conforming to ring and radial system. The area of roads in Delhi is about 14% of the total land whereas the area of roads in Kolkatta is 6.5% and in Mumbai is 8%. Even though road area in Delhi is almost 2 times compared to Mumbai

but the number of registered vehicles in Delhi is almost 35 lakhs which is equivalent to the total number of vehicles in Kolkata, Mumbai and Chennai put together. The area of roads in Delhi is far in excess of the area available in other metros.

Of late efforts have been made by Delhi Government to provide alternate mode of transport. With this objective in view, construction of Delhi metro has been taken up. Even with the construction of metro, the pressure on road system is not likely to decrease since annual compound growth of registered vehicles is about 6.7% Besides new sub-cities i.e. Narela, Dwarka and Rohin in Delhi and setalite town of Delhi e.g. Noida, Gaziabad, Gurgaon and Faridabad are going to generate substantial vehicular traffic which will impose further load on road system.

In order to improve the level of service, it is necessary that existing road system in Delhi is continuously upgraded and new roads in the sub-city like Narela, Dwarka and Rohini are constructed. Construction of expressway linking five national highways, need to be expedited so as to divert the interstate traffic from Delhi. This will help in reducing congestion on Delhi roads to a large extent and also reduce pollution. The master plan 2001 prepared by DDA also envisages construction of freight complexes at the outskirts of Delhi. This will help in trapping the movement of heavy goods vehicles at the outskirts of Delhi .

In Delhi the road infrastructure is maintained by PWD, NDMC, MCD & Delhi Contentment board and PWD.

Delhi PWD is responsible for construction and maintenance of district and other roads in Delhi. The total length of district and other roads under the control of PWD is 393 km which is equivalent to 1882 km lane length. This excludes the master plan roads which are to be constructed in Narela sub-city, by PWD. In addition, service road measuring 153 km which are mostly along ring roads outer ring road, are under the control of PWD. Keeping in view that other states specifically UP, Haryana, and Maharashtra are not incurring any expenditure on development of roads in colonies developed by a Colonizer, a policy decision is to be taken by Government of Delhi for

development of master plan roads in colonies developed by DDA/private colonizers. In order to develop PWD roads in a systematic way keeping in view their importance and necessity, the roads have been divided under 5 heads as under

1. Ring Road
2. Outer Ring Road
3. Trans Yamuna Roads
4. Rohini Roads
5. Other Rods

Details of various schemes proposed to be taken up during the 10th Five Year Plan under each head are enumerated as under

I- Ring Road:

Ring Road is the most important road which is about 52.76 km. long with six lane divided dual carriageway having 283 km. lane length and it runs through the heart of the city. In addition, 45km. long service road exists along Ring Road with equivalent of 90 km. lane length. Thus total lane length of Ring Road inclusive of service road is 373 km. All the five National Highways passing through Delhi namely, NH-1, NH-2, NH-8, NH-10 and NH-24 start from this road.

Ring Road caters not only to intra-city traffic, but also it caters to inter-city traffic not destined for Delhi as there is no bye pass for Delhi so far. Consequently vehicles emanating from one neighbouring state and destined to another neighbouring state have to pass necessarily through Delhi & for this purpose Ring Road has to be used. Thousands of heavy vehicles and light vehicles use Ring Road every day extensively even though they may not be destined for Delhi. Therefore, it is essential that Ring Road is maintained by way of strengthening and widening, wherever required, to the appropriate standard. The right of way of Ring Road as per the current master plan is 210 ft. This width is available except for the stretches passing through Defence Colony, New Delhi South Extension and Naraina. In fact the existing width of Ring Road is the least at

Naraina. By and large, Ring Road is a divided dual carriageway with three lanes on either side, a central verge, footpaths and storm water drains, service roads etc. in a large stretch of the road. The corridor improvement study carried out in the year 1999 suggests widening of Ring Road, wherever feasible, to 4 lanes on either side in a phased manner. In pursuance of this plan, it is proposed to widen Ring Road between Safdarjung hospital crossing and Punjabi Bagh crossing in the first instance except those stretches which have already been widened due to the construction of the flyovers at Safdarjung Hospital crossing, Africa Avenue crossing, Moti Bagh crossing, Mayapuri crossing and Raja Garden crossing and Punjabi Bagh crossing. Apart from these works, 1.5 lakh sqm. of road surface of Ring Road at important intersections are proposed to be treated with bitumastic mastic asphalt to impart durability to the wearing surface of Ring Road against heavy stresses and strains caused by the movement of vehicles. It is also proposed to provide micro sealing for a lane length of 60 km. of Ring Road using cold emulsion technology, which is environment friendly, to increase the service life of Ring Road. It is also proposed to provide road signages and traffic signages conforming to appropriate standards. It is also proposed to provide modern street lighting on Ring Road to improve the level of illumination for smooth flow of traffic. It is proposed to provide resurfacing/strengthening of the entire stretch of 283 km. lane length of Ring Road and 90 km. lane length of service road. In addition, it is proposed to upgrade the service roads including construction of missing links, wherever necessary, so as to facilitate their use by the cyclists, upgradation of footpath and provisions of the road side drains wherever they are not existing.

Apart from the above mentioned works construction of modern bus queue shelters and bus bays was undertaken as a special scheme in the years 2000-01 and 2001-02 as per the instructions of the Chief Minister all along Ring Road from I.S.B.T, Kashmere Gate to Dhaula Kuan. Provision to complete the ongoing works, which are likely to spill over during the first year of the 10th Five Year Plan, has been made. An outlay of Rs. 10500 lacs is approved in the 10th Five Year plan & Rs. 845 lacs in the annual plan 2002-03.

The following works are proposed to be taken up during the year 2002-03. Most of the works/schemes will be taken up division wise to have better control on works and expenditure.

(a) Ongoing schemes:

**(1) S/o Ring Road Ph-V from Azadpur intersection to Jn. of Road No. 41
(Rs. 25 lacs):-**

The work is likely to be completed by 1st quarter of year 2002-03. An outlay of Rs. 25.00 lacs is approved in the 10th Five Year plan as well as annual plan 2002-03.

(2) Providing and laying of mastic asphalt at crossings of Ring Road between Rajghat to Metcalf House. (Rs. 45 lacs)

The intersection of Ring Road are subjected to heavy stresses due to increased volume of Vehicular traffic. The normal life of bituminous Pavement is Five years. Mastic asphalt work has A normal life span of ten years. The intersections Between Raj Ghat and Metcalf House will be Provided a 25 mm thick asphalt layer. An outlay of Rs. 45.00 lacs is approved in the 10th Five Year plan & Rs. 35 lacs in the annual plan 2002-03.

**(3) Const. of bus queue shelters from Safdarjung hospital to Dhaula Kuan
(Rs.20 lacs)**

This scheme was taken up on the instruction of the Chief Minister and it envisaged providing modern and state of art bus shelters. An outlay of Rs. 20 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(4) Development of area around bus queue shelters and construction of bus bays from Dhaula Kuan to Moti Bagh (Rs. 15 lac).

An outlay of Rs. 15 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(5) Development of area around bus queue shelters and construction of bus bays from Moti Bagh to Safdarjung hospital (Rs. 15 lac).

Extensive development works were required to be done for locating some of the bus queue shelters mentioned at sl.nos.(i) & (ii) above. This work was undertaken to carryout the works necessary to provide the bus queue shelters. An outlay of Rs. 15.00 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(6) Construction of bus queue shelters on Ring Road from Ashram to Safdarjung crossing (Rs. 4.00 lac). SH: Construction of bus bays, footpath, S.W.drain and dwarf wall. An outlay of Rs. 4.00 lacs is approved in the 10th Five Year plan as well as annual plan 2002-03.

(b) New Schemes:

(7) Strengthening of Ring Road in Phase-I, II, III, IV & V except where strengthening has already been carried out recently. The increased volume of traffic and increase in the axle load of vehicles is causing ever increasing stresses on the roads which, in turn, causing excessive wear and tear. A study was conducted by the CRRI to ascertain the extent of strengthening required to be carried out accordingly strengthening of ring road is to be taken up from Rajghat to Wazirpur Depot via Ashram and I.P. College to Metcalf House. An outlay of Rs.1800.00 lacs is approved in the 10th Five Year plan & Rs. 500.00 lacs in the annual plan 2002-03.

(8) Providing mastic asphalt on important intersections on Ring Road from Rajghat to Wazirpur Depot. The intersection of Ring Road are subjected To heavy stresses due to increased volume of Vehicular traffic. The normal life of bituminous Pavement is Five years. Mastic asphalt work has A normal life span of ten years. The intersections Between Raj Ghat and Metcalf House will be Provided a 40 mm thick asphalt layer. An estimate has already been sanction for scheme No. 2. Therefore, case of duplication will

be examined. An outlay of Rs. 50 lacs is approved in the 10th Five Year plan & Rs. 15 lacs in the annual plan 2002-03.

(9) Improvement of footpath in various stretches. Footpath of Ring Road in various stretches requires up grading/improvement due to its extensive use. An outlay of Rs. 50 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(10) Provision of road signages, MS railing, road marking and replacement of existing damaged railing. It has been planned to provide road signages at various locations on Ring Road for the guidance and convenience of the user public. These signages will be provided as per international standards. In addition, the scheme in this regard envisages provision of MS railing, road marking of appropriate standard and replacement of damaged railing, wherever necessary, in order to upgrade the status of Ring Road. An outlay of Rs. 50 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(11) Micro surfacing from Rajghat to Metcalf House. The normal life of bituminous pavement is 5 years. However, micro sealing the wearing course using polymer modified bitumen increase the life of the pavement. Cold emulsion is environment friendly and does not cause pollution. Hence, it is proposed to use this technology. An outlay of Rs. 200 lacs is approved in the 10th Five Year plan & Rs. 15 lacs in the annual plan 2002-03.

(12) Developing model stretch of PWD Roads (NH-I bye pas from Rajghat to Metcalf House.(Rs.300 lack) It is proposed to develop this stretch of Ring Road into a model stretch. An outlay of Rs. 300 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

(13) Widening of road from 6 lanes to 8 lanes from Safdarjung to Dhaula Kuan including construction of footpath, storm water drain, railing in missing reaches/replacement of damaged portion and shifting of various services. An outlay of Rs. 300 lacs is approved in the 10th Five Year plan & Rs. 25 lacs in the annual plan 2002-03.

(14) Widening of road from 6 lanes to 8 lanes from Dhaula Kuan to Raja Garden including construction of footpath, storm water drain, railing in missing reaches/replacement of damaged portion and shifting of various services etc. An outlay of Rs. 500 lacs is approved in the 10th Five Year plan & Rs. 30 lacs in the annual plan 2002-03.

(15) Widening of road from 6 lanes to 8 lanes from Raja Garden to Punjabi Bagh including construction of footpath, storm water drain, railing in missing reaches/replacement of damaged portion and shifting of various services. An outlay of Rs. 200 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

(16) Construction of service road from Ashram Chowk to Maharani Bagh intersection(Rs. 30 lacs).

The service road is missing in this portion of Ring Road. It is planned to construct the service road in order to enable the easy entry and exit of the residents of Maharani Bagh along this stretch. An outlay of Rs. 30 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(17) Construction of split rotary at Ring Road near I.G.Stadium. (Rs.525 lacs) :

It is proposed to construct a split rotary Between ITO crossing and Rajghat to facilitate Right turn movement of traffic emanating from the Institutions located along this stretch. An outlay of Rs. 525 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(18) Mastic asphalt work on the intersection of Maharani Bagh and DESU Colony. (Rs. 7 lac)

An outlay of Rs. 7 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

(19) Construction of storm water drain from Rajghat to drain No.12-A .(80 lacs)

Road side drainage is essentially required to head rain water away from the road surface so that it does not get damaged. No road side storm water drainage system exists

in this stretch. So, scheme has been worked out in this regard. An outlay of Rs. 80 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

- (20) Widening of Ring Road from 6 lanes to 8 lanes between Rajghat to Safdarjung crossing. (Rs. 700 lacs)

It is proposed to widen Ring Road along its entire length from 6 lanes to 8 lanes as per corridor improvement study. An outlay of Rs. 700 lacs is approved in the 10th Five Year plan. However, no provision has been made in the annual plan 2002-2003.

- (21) Construction of footpath from Bhairon road to Kalindi Kunj.

An outlay of Rs. 20.00 lacs is approved in the 10th Five Year plan. No provision has been made in the annual plan 2002-03.

- (22) Construction of missing link of service road at the junction of Ring Road and road No.4. (Rs. 5 lacs)

The service road along important and busy roads play a vital role in regulating the flow of traffic on such roads. The users coming out and going to the properties along the main roads use service roads for commuting. This not only results in faster flow of traffic on the main roads, but also it reduces chances of road accidents. The service roads are also used by the cyclists. Hence, it is proposed to construct the missing link of service road in the stretch. An outlay of Rs. 5 lacs is approved in the 10th Five Year plan & Rs. 4 lacs in the annual plan 2002-03.

- (23) Construction of service road from Ashram Dharm Kanta to New Friends Colony. (Rs. 3 lac)

The service road along important and busy roads play a vital role in regulating the flow of traffic on such roads. The users coming out and going to the properties along the main roads use service roads for commuting. This not only results in faster flow of traffic on the main roads, but also it reduces chances of road accidents. The service roads are also used by the cyclists. Hence, it is proposed to construct the missing link of service road in the stretch. An outlay of Rs. 3.00 lacs is approved in the 10th Five Year plan as well as annual plan 2002-03.

- (24) Improvement/construction of footpath, central verge and storm water drain from Ashram to Safdarjung crossing.

An outlay of Rs. 130.00 lacs is approved in the 10th Five Year plan. However, there is no provision in the annual plan 2002-03.

- (25) Mastic Work at Andrews Ganj, Lajpat Nagar and Srinivas Puri intersection:-

An outlay of Rs. 70 lacs is approved in the 10th Five Year plan no provision in the annual plan 2002-03.

- (26) Schemes which cannot be distinctly identified, :- (Rs.5286 lacs)

- (i) Bhairon Road & Kallindi Colony. There is no footpath in this reach of Ring road. Although there is a scheme to provide footpath, no provision has been made in this regard during 2002-2003.

- (ii) As apart of the overall upgradation scheme, it is proposed to construct/improve footpath, central verge and storm water drains, where ever required, in this stretch of Ring Road. However, no provision has been made for 2002-2003 in this regard.

- (iii) The Lt. Governor has ordered that the existing street lighting of Ring Road should be improved and upgraded. The existing street lighting is obsolete looks shabby apart from being energy inefficient. A scheme is worked out to modernize the street lighting. Modern system has already been provided/upgraded at a no. of locations on Ring Road not able among which are I.S.B.T., Kashmere Gate, ITO crossing, Africa Avenue and Moti Bagh. Where ever flyover are under construction by the PWD, providing upgraded street lighting is a apart and parcel of such flyover projects. The scheme for the balance portion is being worked out.

II. Outer Ring Road. (Rs. 4045 lacs)

This is the second important road carrying heavy to very heavy traffic for most of its length. At present the length of outer ring road is 35 km which comprises of Road No.6, 7, 8, 10 and 26. Outer ring road take off from NH-2 near Okhala flyover and continues upto to NH-8 passing through Nehru Place, Panchsheel,Park, IIT, Munirka and Vasant Vihar. From NH-8 there is missing link upto Najafgarh Road and thereafter it

again takeoff from Najafgarh road and goes upto Mukarba Chowk passing through Peeragarhi, Mangolpuri, Madhuban Chowk and Parshant Vihar and thereafter it joins NH-I. The missing link between NH-8 to Najafgarh is due to non-acquisition of land which belongs to Delhi Contonement Board. Keeping -in view of importance of road it is necessary to complete the missing link between NH-8 to Najafgarh road.

During the 10th Five Year Plan it is proposed to strengthen 175km lane length of road while 10 km lane length is proposed for widening during 2002-03. It is also proposed to construct service road in the stretches where it is not constructed. The details of schemes to be taken up in different reaches are as under

(a) ONGOING SCHEMES (NIL)

(b) NEW SCHEMES

1. Strengthening / Re-surfacing of the entire stretch of road including service road having 50 km lane length including improvement of street lighting.
2. C/o missing links of service road from Aruna Asaf Ali road to Nelson Mandela Road and some portion in front of IIT Delhi.
3. Mastic treatment on six important intersection / junctions on this road shall be provided.
4. Footpath and central verge of 4 km shall reconstructed.
5. 2 km SW drain shall be constructed to complete the missing links.
6. Provision of 1 km railing was been made to bridge the gaps in the railing.
7. The entire area of main carriage way will be provided with micro sealing treatment using polymer modified cold emulsion to enhance the life of wearing course by 2 to 3 years.
8. Lump sum provision of Rs. 9 lakhs has made to provide signages and bus-bays to facilitate the movement of traffic.

- (1) **Micro-surfacing of Outer Ring Road – 26 from Madhuban Chowk to Mukerba Chowk:- (Rs. 150 lacs)**

To increase the life span of road. Surface it is proposed to provide a coat of micro sealing. An outlay of Rs. 150 lacs is approved in the 10th Five Year plan including Rs. 30.00 lacs in the annual plan 2002-03.

- (2) **Stg. Of Road No. 26 from Najafgarh Road to Peeragarhi Chowk:- (Rs.300.00 lacs)**

This stretch of Outer Ring Road is to be strengthened during this year. strengthening of this portion is over due as it was strengthened last more than 5 years. An outlay of Rs. 300.00 lacs is approved in the 10th Five Year plan & Rs. 45.00 lacs in the annual plan 2002-03.

- (3) **Pdg. Of Mastic treatment on intersections on the stretch from Mukerba Chowk to Najafgarh Road:- (Rs.200.00 lacs)**

The stretch from Mukerba Chowk to Peeragarhi Chowk was strengthened in year 2001 due to which all imp. crossings are to be provided with mastic treatment to bear the Impact of vehicular abrasion due to sudden halt. Similar works is also to be taken in other reaches divisions wise. An outlay of Rs. 200 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

- (4) **Improvement of footpath in various stretches on Outer ring Road division wise:- (Rs. 250 lacs)**

An outlay of Rs. 250 lacs is approved in the 10th Five Year plan & Rs. 25 lacs in the annual plan 2002-03.

- (5) **Improvement of service roads in various stretches division wise.**

An outlay of Rs. 200 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

(6) Improvement of central verge in various stretches division wise.

An outlay of Rs. 100 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

(7) Pdg./replacement of MS Railing, Road signage, road marking in Outer Ring Road – 26 Mukerba Chowk to Najafgarh Road (Rs. 100 lacs).

An outlay of Rs. 100 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

(8) Misc. works on Outer Ring Road – 26 (Rs. 100 lacs) .

An outlay of Rs. 100 lacs is approved in the 10th Five Year plan & Rs. 20 lacs in the annual plan 2002-03.

(9-10) Road No. 8 (Gamel Abdul Naseer Marg) :- Strengthening alongwith micro sealing of this road is proposed in the five year plan besides the construction of footpath/ drain etc in some stretches. An outlay of Rs. 247 lacs is approved in the 10th Five Year plan & including Rs. 100 lac in the annual plan 2002-03.

(11-12) Road No. 10 (Olof Palme Marg) Rs. 200 lac:- Micro-sealing on this road is proposed besides the construction of small stretch of service road, footpath stormawater drain & missing link of service road. An outlay of Rs. 200 lacs is approved in the 10th Five Year plan including Rs. 60 lacs in the annual plan 2002-03.

(13). C/o missing links of DRR from Najafgarh Road to NH.8:-

An outlay of Rs. 100 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

(14). Road No. 3

This Road is 1.2 Km. long having 6 lane divided carriage way with footpath and drain from ROB – 22 to S.A. Road Jn. and 4 lane divided carriage way from S. A. Road Jn. to Bhairon Temple .

It is proposed to take up the following works during 2002-2003

(1) Resurfacing / strengthening of entire road . An outlay of Rs. 50 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

Further, the following works are also proposed to be taken up during 10th F. Y. Plan .

- a. Widening from 4 lanes to 6 lanes . (10th Plan outlay Rs.150 lacs)
- b. Improvement of footpath and c/v . (10th Plan outlay Rs. 30 lacs)
- c. Improvement of SW drain . (10th plan outlay Rs.25 lacs)

15. Road No. 6 (Ho Chi Minh Marg) (Rs.250 lacs)

This road is 2.5 Km. long having 6 lane divided carriage way and service road on both sides .

It is proposed to take up the following works during 2002-2003

- (i) Resurfacing / strengthening of entire road . (Rs.10 lacs)
- (ii) Improvements of footpath , central verge and drainage system from Bhairon Mandir to Chirag Delhi Flyover (Rs.10 lacs)
- (iii) Improvement of Northern service road from G.K. Enclave – I to Paras Cinema . (Rs. 14 lacs)

The following works are also proposed to be taken up dg. 10th F. Y. Plan .

- (i) Improvements of island and footpath around Chitranjan Park Crossing .

An outlay of Rs. 250 lacs is approved in the 10th Five Year plan & Rs. 34 lacs in the annual plan 2002-03.

16. Road No. 7

This road is 3.5 Km. long having 6 lane divided carriage way and service lane on both side .

It is proposed to take up the following works during 2002-2003

- (1) Strengthening / resurfacing, An outlay of Rs. 250 lacs is approved in the 10th Five Year plan & Rs. 16 lacs in the annual plan 2002-03.
- (ii) C/o planters near IIT Flyover . An outlay of Rs. 20 lacs is approved in the 10th Five Year plan as well as in the annual plan 2002-03.

ROADS EAST OF RIVER YAMUNA (TRANS YAMUNA ROADS)

The Trans Yamuna area which lies to the East of river Yamuna is a heavily populated area compared with the remaining part of Delhi lying to the west of river Yamuna. The Trans-Yamuna area transport system requires attention in respect of following aspects explained below:

(A) Bridges for Quick, adequate and properly spaced connection to the rest of Delhi lying across Yamuna: -- To achieve this objective ISBT bridge, 2nd Nizamuddin Bridge and 2nd ITO bridge have been added in the last decade which have given some relief to the people travelling across River Yamuna. But due to increase in population, growing expectations of the users, rising cost of fuel, and to provide better transport facilities at par with the more developed cities in the world

The proposal for Bridges work to be undertaken during the 10th Five Year Plan are given under “Bridges & Flyovers”.

(B) Efficient, fast transport within Trans Yamuna Area:-- The Trans-Yamuna area has grown tremendously in the last few decades necessitating additional roads, providing and fixing railings, Mastic at crossing, widening of roads to the maximum possible extent, providing all necessary road furniture, greening, etc. The proposed works on major roads and other roads of Trans Yamuna are given under **(A) “Trans Yamuna roads”**.

C. Ring road for Trans Yamuna: -

It is envisaged that just like ring road in west part of Delhi there must be Ring/Peripheral road system for Trans-Yamuna area also. This can be created by integrating NH-24, Marginal Bund road, Road no 59&63, Road no 70&56 road along Gazipur drain, UP Link road, which join back at NH-24 making ring complete. The roads forming part of this Trans-Yamuna peripheral road network must be developed with adequate flyovers, subways. The intersections must be kept to minimum numbers to make higher speed possible on this Ring Road. The Subways proposed are given under **“Subways”**.

D. Fast and easy passage through East Delhi to the users coming from U.P.: -

There are 5 major entry Roads to Delhi from U.P. in Trans-Yamuna area. They are.

- a) Road No. 63 (with traffic using road no 59 to go to Delhi across Yamuna) (Bhopura Border).
- b) G.T. road (with traffic using G.T. road / Vikas Marg to reach center of Delhi) with MCD.
- c) Road no 56 (Maharajpur with traffic using NH-24/ Vikas marg to reach Delhi across Yamuna)
- d) NH-24 (Using Nizamuddin Bridge).
- e) UP–Noida Link Road.(using Nizamuddin Bridge).

These important roads have to cater the traffic coming from U.P. as well as the internal traffic coming from Trans-Yamuna area itself. These 5 roads need to convert into express ways with minimum intersections. Sufficient Flyovers, sub-ways, must be provided on these roads. Full right of way needs to be cleared and developed after clearing the encroachments as soon as possible. The proposals for these Major road are also incorporated in **“Trans Yamuna Roads”**,

E. Development of Entry points –

There are following Entry Points to Trans Yamuna area from UP.

1. Road No.63 (Bhopura Border).
2. G.T. road (with traffic using G.T. road / Vikas Marg to reach center of Delhi)
3. Road no 56 (Maharajpur with traffic using NH-24/ Vikas Marg to reach Delhi across Yamuna)
4. NH-24 (Using Nizamuddin Bridge).
5. UP–Noida Link Road. (Using Nizamuddin Bridge).
6. MB Road near Sabhapur.

S.No. 1&4 shall be taken up in Annual Plan year 2002-2003.

F. Cycle Track:-

Cycle track must be provided where ever feasible in Trans Yamuna area as mixed traffic is high. At present Cycle track is provided at following places.

- (i) On Marginal Bund Road (from Khajuri chowk to ISBT bridge).
- (ii) Nizamuddin Bridge (including approach Roads).
- (iii) ITO Bridge.

It is proposed to have cycle tracks on following Roads in coming Years.

- (iv) On UP Link Road upto Noida Mode.
- (v) On Vikas Marg.

G. Greening/ Beautification/ Development of basic facilities on right of ways.

During next 5Year- The right of ways of various Roads in Trans Yamuna are proposed to be fully developed by utilizing the full width of right of way for the purpose of greening, Parking places, Public Toilets, Essential shopping for users. Unless Planned efforts is made to develop the right of way by planning adequate numbers of facilities mentioned above the surplus right of way will be misutilized by squatters, encroachers. Provision for such works is made in “ Trans Yamuna Roads”.

(III) TRANS-YAMUNA ROADS:-

(1) Road No. 59:-

- (ii) MS Railings.

This scheme have already been sanctioned in the Year 2001-2002 & will continue in the Year 2002-2003. An outlay of Rs. 30 lacs is approved in the 10th Five Year plan as well as Annual plan 2002-03.

(ii) to (vii)The work of beautification (i.e. Horticulture work), Semi-flexible crash barrier, Improvement of south side, Strengthening of road No.59, Embankment protection, Service Road (Balance portion) have been taken as new schemes The sanction of strengthening work & Improvement of south side are expected shortly. An

outlay of Rs. 330 lacs is approved in the 10th Five Year plan & Rs. 190 lacs in the annual plan 2002-03.

(2) Road No.62(Rs. 90 lacs)

There are 3 sanctioned works of Mastic, Widening & BM & DAC respectively. The tenders for these works have already been invited in 2001-02. . An outlay of Rs.90 lacs is approved in the 10th Five Year plan as well as Annual plan 2002-03.

(3) Road No.63:- (Rs.130 lac)

- (i) A provision of Rs. 10 lac has been kept for miscellaneous works during 2002-03 .
- (ii) to (iv) There is a proposal of beautification of Bhopura border & also strengthening of service road on this road. The strengthening of this road is also expected at the end of 10th. 5 Yr. Plan. Accordingly a provision of Rs 20 lacs is kept in the 10th. 5 Yr. Plan, however provision for Yr. 2002-03 is only 40 lacs for beautification of entry points and any other work sanctioned.

(4) Road No.64:- (Rs 40 lacs)

There is one work of Construction of footpath which is sanction in the Yr. 2001-2002. Provision of Rs.40 lacs has been kept in the 10th five year plan as well as annual plan 2002-03.

(5) Road No. 66:- (Rs.180 lacs)

- (i) There is a sanctioned work of widening of road by removing of footpath. Sanction for relocating jhuggies (78 Nos) is also received which will be paid in 2001-02 or 2002-03. An outlay of Rs. 30 lacs is approved in the 10th Five Year plan as well as in the annual plan 2002-03.

(ii) & (iii) Widening of west side of Road shall be taken up Provision for Microsurfacing has aslo kept. Provision for 2002-07 is 150 lacs. The provision for 2002-03 is kept as 20 lacs.

6& 7 Road No. 68-69- (Rs. 35 lacs)

There is a sanctioned work of Storm water drain on this road Tenders have already been invited for Road No.69. Provision is kept for miscellaneous works. An outlay of Rs. 35 lacs is approved in the 10th Five Year plan as well as in the annual plan 2002-03.

(8) Road No. 70:- (Rs. 140 lacs)

- (1) There is a sanctioned work of footpath & drainage and for which 40 lacs has been kept during 2002-03.
- ii) Missing link in the 10th. 5 Yr Plan & for 2002-07. This work is requires availability of land/ transfer of land. An outlay of Rs. 100.00 lacs is approved in the 10th Five Year plan no provision is kept for the annual plan 2002-03

(9) Eastern Approach Road: on ISBT:- (Rs. 90 lacs)

- (i) A provision of Rs. 10 lacs has been kept in the Year 2002-03 for miscellaneous works.
- (ii) & (iii) There is a provision of shifting of Jhuggies & development of ROW on the river Yamuna side by planting trees etc.. There is also a provision of improvement of Central Verge of road in the 10th. Five Year Plan. A provision of Rs 30 lacs has been kept in 10th. Five Year Plan. Out of this a provision of 30 lacs has been kept for Yr. 2002-03 for anticipated sanctions.

(10) Marginal Bund road:- (Rs.2150 lacs)

- (i)and (ii) There are 2 works for which sanction is available & tenders have been called.
 - (a) Service road from 3rd. Pusta to Khajuri chowk. (b) work of Road from 3rd. Pusta to Pontoon bridge Rs 45 lacs and Rs 50 lacs are approved for work (a) & (b) respectively in the annual plan 2002-03.

(iii) Lane Marginal Bund Road from ITO Chungi to N

This work is in progress and was held up for removal of Jhuggies. Now the Jhuggies are likely to be shifted in April 2002, therefore a provision is kept for completion of this work during An outlay of Rs. 1100 lacs is approved in the 10th Five Year plan & Rs. 500 lacs in the annual plan 2002-03.

- (vi) W/o MB Road from ITO to Kailash Nagar : 10th plan outlay Rs. 525 lacs & Annual plan 2002-03 outlay Rs. 20 lacs.

- (ix) Stg. Of MB Road from Khajuri Chowk to Shabhapur.: 10th plan outlay Rs.70 lacs & Annual plan 2002-03 outlay Rs. 30 lacs.
- (x) Stg. of MB Road from Shastri park to Khajuri Chowk. : 10th plan outlay Rs. 100 lacs & Annual plan 2002-03 outlay Rs. 30 lacs.
- (xi) Provision of MS railing. 10th plan outlay Rs. 10 lacs .

W/o MB Road from GT Road to Khajuri Chowk is proposed to be taken up from CRF.

The scheme numbers iv, v, vii, viii & xiii incorporated in statement but no writeup.

(11) UP Link road:- (Rs. 410 lacs)

There is a sanctioned work of strengthening of UP Link road for which tenders have been invited. A provision of Rs 110 lacs has been kept for 10th five year plan as well as annual plan 2002-03.

UP Link road (from NH-24 to Chilla Regulator)-

It is expected that this road will be widened from 6 lane to 8 lane dg. 10th. 5 Yr. Plan. Extra modern signage's etc. must be provided on this important road. A provision of Rs. 300 lacs has been kept for 10th. Five Year Plan.

- (12) a. Shifting of bus ways at ITO -- No Write up.
- b. C/O bus ways. -- No Write up.

(13) Guide bund (right bank) of river Yamuna near ISBT:-

A provision of Rs.10 lacs has been kept for improvement of side slopes at U/S guide bund at Udhister Setu during 2002-03.

(14) Vikas Marg:- (Rs. 465 lacs)

No. proper write- up has been given by the department works will be taken up as per statement.

(15) Road No. 56 & 56-A:- (Rs. 15 lacs)

(i) and (ii) There are 2 sanctioned works of improvement of footpath and mastic asphalt work on this road. A provision of Rs.15 lacs has been kept for 10th five year plan as well as annual plan 2002-03 (iii) to (ix) Department has not provide proper write- up work will be taken up as per statement.

(16) Road No. 57 & 57-A:- (Rs. 5 lacs)

A provision of Rs. 5 lacs has been kept in the annual plan 2002-03 for providing and fixing MS railing & footpath .

(17) Road No. 71, 71-A- (Rs. 10 lacs)

A provision of Rs. 10 lacs has been kept for Construction of footpath and drainage system during 10th plan . The same amount is kept in the annual plan 2002-03.

(18) Road No. 72 & 72 Extn. (Rs. 10 lacs) :- No proper write up is available work will be taken up as per statement.

(19) Other PWD works in Patparganj Area (Rs. 390 lacs) :- No proper write up was supplied by the department works will be taken up as per statement.

(20) Road No.65:- (Rs 150 lacs)

Work will be taken up as per statement. An outlay of Rs. 150 lacs is approved in the 10th Five Year plan & Rs. 30 lacs in the annual plan 2002-03.

(21). Other road works in Trans Yamuna Area:-

No proper write- up is suitable – wrked will be taken up as per statement.

(22) Roads in development colonies.

M.P Road No. 111,112 & 113, Other MP road to be taken from DDA:-

A provision have been kept for providing railing, signage's, Planters, strengthening, Micro surfacing etc. in the 10th. Five Yr. Plan and provision has been kept for Yr. 2002-03 for providing signage's, railing etc. Work will be taken up only offer policy decision on development of road in colonies developed by DDA / Coloniser.

23. Guide Bund on right bank of River Yamuna near ISBT:- (Rs 50 lacs)

A provision of Rs. 50 lacs have been kept for Improvement of Guide Bund during 10th. Five Year Plan.

24. Road near Chicken/ Fish Market on side of NH-24 & road along Ghazipur drain from NH-24/ITO UP Link road.:-

No proper write- up has been supplied by the Department work will be taken up as per statement.

25. C/o compound wall for Horticultural works and Borewell. (Rs. 50 lacs)

No writeup has been supplied by PWD.

26. Cycle track on UP Link road:- (Rs. 50 lacs)

There is Cycle Track from Nizamuddin Bridge to U.P. Link Road to facilitate Cycle movement from Noida to Ring road. Provision is kept for Cycle Track in 10th five Year Plan. No provision is kept in the annual plan 2002-03.

27. Development of entry point of NH-24- (Rs. 50 lacs)

No write- up has been supplied by PWD.

28. Geological / Hydraulic / Traffic survey etc.- (Rs 50 lacs).

No write- up has been supplied by PWD.

29. ROB-36:-(Rs. 200 lacs)

No porper write up has been supplied by the PWD. Works will be taken up as per statement.

30. Miscellaneous & Unidentified works:-

There is a provision of Rs 3315 lacs in the 10th five year plan for works will be identified in coming years Rs 190 lacs are kept for unidentified works during annual plan 2002-03.

IV. Rohini Roads.

DDA has developed Urban Extn., area in north-west of Delhi which is popularly known as Rohini. This is one of the biggest residential colony catering about 1.5 million population. Originally the master plan roads were developed by DDA and some of the

roads were handed to PWD in 1993. The total length of master plan roads handed over to PWD is 24.05 km. Some of the roads in Rohini Urban Extn. Area are yet to be handed over by DDA, The major roads in Rohini which link outer ring road, is Road No.41-A. It links outer ring road at Madhuban Chowk and passes through sector 7, 8 and 9. Other major road is 45 meter wide road which passes through sector 13, 14, 15 and 16. This road also joins outer ring road near Prashant Vihar. It is proposed to strengthen 150km lane length of Rohini roads during 10th Five Year Plan. In addition, 12 km lane length is to be widened besides footpath and central verge shall also be developed during the 10th Five Year Plan. The scheme-wise details to be taken up during 10th Five Year Plan and the year 2002-03 are as under. Chief Engineer (CE-III) informed in the plan Review Meeting that minister is keen in policy decision on development of master plan roads.

(a) ONGOING SCHEME (Rs. 400 lacs)

- (1) Stg. Of 45m wide road passing through Prashant Vihar & Sector 13,14,15,16 & 11 in Rohini Ph-II. An outlay of Rs. 300 lacs is approved in the 10th Five Year plan & Rs. 123 lacs in Annual plan 2002-03.
- (2) Widening of Road No. B-2 between Sector 10 & 11 Rohini Ph-II. An outlay of Rs. 100 lacs is approved in the 10th Five Year plan as well as in Annual plan 2002-03.

Following works are proposed to be taken up in the Annual Plan 2002-03.

(b) NEW SCHEME

Department has given proper write up the schemes. Works will be taken up as per statement.

An outlay of Rs. 1137 lacs is approved in the 10th Five Year plan & Rs. 170 lacs in Annual plan 2002-03 for different new works.

V. Other PWD Roads.

PWD master plan roads which are not covered under Ring Road, Outer Ring Road,

Trans Yamuna Roads and Rohini Roads, have been clubbed under Other Roads. The major roads under this heading are Road No.4, 5, 5C, 5D, 12, 13, 13-A., 14, 25, 28, 29, 30, 36, 37, 37-A, 40, 41, 42, 43, 44, 46, 89, 316, 317, 318, 319 etc. Some of the roads carry heavy to very heavy traffic like Road No.43, Road N0.37 and Road No.40. The 10th Five Year Plan outlay for these roads has been proposed as Rs.192.15 crores: 570 km lane length is proposed to be strengthened/resurfaced 80km lane length is proposed for widening and 2 lakhs sq.m.of road area is proposed to be treated with mastic asphalt. In addition, 110 km of drain are proposed to be constructed/strengthened besides provision of M.S railing for about 18km lane length for improvement of central verge and footpath has been made. It is also proposed to carry out micro surfacing for important stretches so as to increase the life span of the road surface

(a) ONGOING SCHEME

1. Improvement of Road surface of Service Road (both side) of DRR NH-10 from km 12.300 to 18.200. An outlay of Rs. 35 lacs is approved in the 10th Five Year plan as well as in Annual plan 2002-03.
2. Construction of Storm water drain between Ring Road and Junction of Road No. 29 on Road No. 28 (RHS). An outlay of Rs. 67 lacs is approved in the 10th Five Year plan & Rs. 50 lacs in Annual plan 2002-03.
3. GTK Road
 - (i) Flood damage repair and improvement of service road . SH:- Repair of kms from RD 17.994 to 17.264 km.
 - (ii) Construction of footpath and drainage from Km 17.25 to 18.885 near Libaspur village.

Scheme Nos. 4,5,6,7 : Department has not supplied write up. Works will be taken up as per work included in the statement.

8. Road no. 4 (Captain Gaur Marg) (Rs. 437 lac)

This Road is 2.15 km. long and connects Ring Road at Lajpat Nagar to Outer Ring Road at Modi flour Mill. It has got 4 lane divided carriageway with footpath at

some locations. The work of widening of this road is in progress and the same will spill over to the Annual Plan 2002-2003 .

It is proposed to take up the following works during 2002-2003

- (i) Widening from 4 lanes to 6 lanes including footpath on both sides in the entire length i/c shifting of central verge due to unsymmetrical widening and S. W. Drain on both sides of the road . An outlay of Rs. 75 lac is approved for the 10th FYP and as well as Annual Plan 2002-03.

The following works are also proposed to be taken up dg. 10th F. Y. Plan .

- (ii) Resurfacing of entire Road and strengthening wherever required based on the Bankelman beam test .
- (iii) Relocation Charges of Jhuggies.
- (iv) Mastic work on intersections .

An outlay of Rs. 362 lac is approved in the 10th FYP and Rs. 188 lac in the Annual Plan 2002-03.

9. Road no. 14 (Guru Ravi Dass Marg) (Rs. 362 lacs)

This road is 3.84 km. long and connects Maa Ananda Mayee Marg to Mahrauli Badarpur Road. It has got 4 lane divided carriageway with footpath in part stretches. The work of widening from 4 lanes to 6 lanes in the stretches from RD 0 to 600 m and RD. 1700 m to 3840 m is in progress and balanced widening will be taken up when the ROW of road is demarcated by the revenue authority / DDA .

It is proposed to take up the following works during 2002-2003

- (i) Widening of Road from 4 lanes to 6 lanes in the stretch from RD. 600 m to RD 1700 m .

An outlay of Rs. Rs. 10 lacs is approved in the 10th Five Year plan as well as annual plan 2002-03.

- (i) Widening of Road from 4 lanes to 6 lanes in the stretch from RD.600 m to RD 1700 m . An outlay of Rs. 10 lac is approved in the 10th FYP as well as in Annual Plan 2002-03.
- (ii) Improvement/construction of footpath from RD. 600 m to 1700 m.
- (iii) M. S. Railing in parts .
- (iv) Development of road side parks from RD 620 to 1280 m on M.B.Road Bound carriage way .
- (v) Covering of side trunk drain from RD 70 to 230 m on M.B. Road Bound carriageway .

Further, the following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) Remodeling of S. W. Drain in part .
Resurfacing / strengthening .

An outlay of Rs. Rs. 362 lacs is approved in the 10th Five Year plan & Rs. 70 lacs in the annual plan 2002-03.

10 .Approach Road from ISBT Sarai Kale Khan to Nizamuddin Railway Station (2nd Entry)(Rs.38.00 lacs)

This road connects Ring Road to Nizamuddin Railway Station , and has got 6 lanes divided carriage way with footpath on one side .

It is proposed to take up the following works during 2002-2003

- (i) Resurfacing of road surface and strengthening of main road wherever required based on Benkelman Beam test report .

An outlay of Rs. Rs. 38 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

11. Link Road between Nizamuddin Bridge and Lodhi Road (Tunnel Bypass) (Rs. 15.00 lac)

Above work is proposed for this work in Annual Plan 2002-2003 .

An outlay of Rs. Rs. 15 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

12. Road passing South of Ishwar Nagar to link ROB-22 with NH-2 bypass (Rs.50.00 lacs)

This road is 1.35 Km. (including approach as ROB – 22) and connects ROB – 22 to Mohd Ali Marg . It has got 6 lanes divided carriage way having footpath on both sides .

It is proposed to take up the following works during 2002-2003

- (i) Improvement of footpath , central verge and S. W. Drain from ROB to Mohd. Ali Marg .

The following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) Resurfacing / strengthening .

The above work is proposed for all the works mentioned above alongwith some unidentified works in the 10th F.Y. Plan

An outlay of Rs. Rs. 50 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

Scheme No.13 to 31:-The department has not supplied proper write-up of these schemes. Works will be taken up as per statement.

32 (a) Road no. 5 (Joseph Broz Tito Marg) (Rs. 196 lacs)

This road is 2.96 km. long and connects Ring Road at Moolchand flyover to Outer Ring Road at Chirag Delhi flyover. It has got 6 lane divided carriageway with footpath on both sides and service road in part stretches.

It is proposed to take up the following works during 2002-2003

- (i) Improvement of footpath and central verge from 'T' Jn. to Moolchand flyover .
(ii) Road marking with thermoplastic paint.

The following works are also proposed to be taken up dg. 10th F. Y. Plan .

- a. Resurfacing of Road surface using Cold Emulsion Technology
- b. Mastic work at intersection .

An outlay of Rs. Rs. 196 lacs is approved in the 10th Five Year plan & Rs. 36 lacs in the annual plan 2002-03.

33. Road no. 5-C (August Kranti Marg) (Rs. 218 lacs)

This road is 3.2 km. long and connects Ring Road at Andrews Ganj crossing to Outer Ring Road at Malviya Nagar crossing . It has got 6 lane divided carriageway with footpath on both sides.

It is proposed to take up the following works during 2002-2003

- (i) Improvement of footpath and central verge wherever required .
The following works are also proposed to be taken up during 10th F. Y. Plan
- (ii) Resurfacing / strengthening .

An outlay of Rs. Rs. 218 lacs is approved in the 10th Five Year plan & Rs. 40 lacs in the annual plan 2002-03.

34. Road no. 5-D (Balbir Saxena Marg) (Rs. 100 lacs)

This road is 0.80 km. long and connects Road no. 5-C (August Kranti Marg) at Sirifort Auditorium to Aurobindo Marg. It has got 4 lane divided carriageway with footpath on both sides.

It is proposed to take up the following works during 2002-2003

- (i) Improvement of footpath and central verge .
- (ii) S. W. Drain near Gulmohar Park/ DDA Flat side .

The following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) Resurfacing / strengthening .

An outlay of Rs. 100 lacs is approved in the 10th Five Year plan & Rs. 50 lacs in the annual plan 2002-03.

35. Link Road to Road No. 5 (Rs. 41.00 lac)

This road 0.50 km. long and connects road No. 5 (Joseph Broz Tito Marg) to LSR College intersection . It has got 6 lane divided carriageway with footpath on both sides .

It is proposed to take up the following works during 2002-2003

- (i) Mastic work at G. K. – I intersection .

The following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) Resurfacing / strengthening .

An outlay of Rs. Rs. 41 lacs is approved in the 10th Five Year plan & Rs. 5 lacs in the annual plan 2002-03.

36. Road No. 13 (Rs. 232 lacs)

This road is 3.00 Km. long and connects Road No. 14 near Tuglakabad Extension with NH-2 near Sarita Vihar . It has got footpath on both side of carriageway in part .

It is proposed to take up the following works during 2002-2003

- (i) Improvement of footpath , S.W. Drain and central verge .
- (ii) C/o service road from R/A to ‘T’ jn.
- (iii) P/f M. S. Railing in c/v and changing of kerb stone .

The following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) Resurfacing / strengthening .
- (ii) Relocation charges of Jhuggy clusters .

An outlay of Rs.. 232 lacs is approved in the 10th Five Year plan & Rs. 42 lacs in the annual plan 2002-03.

37. Road no. 15 (Press Enclave Marg) (Rs. 289 lacs)

This road is 3.80 km. long and connects Lal Bahadur Shastri Marg at Chirag Delhi to Aurobindo Marg at PTS, Malviya Nagar. It has got 6 lane divided carriageway with footpath on both sides and service road in part stretches.

It is proposed to take up the following works during 2002-2003

- (i) Improvement / Construction of footpath and central verge from Modi Hospital to Aurbindo Marg .
- (ii) Improvement/ remodelling of S. W. Drain from Modi Hospital to Saket .

The following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) M. S. Railing in parts .
- (ii) Resurfacing / strengthening .

An outlay of Rs. 289 lacs is approved in the 10th Five Year plan & Rs. 25 lacs in the annual plan 2002-03.

38. Sirifort Road (Rs. 185 lacs)

This road is 1.25 km. long and connects Road no. 5 (Joseph Broz Tito Marg) to Road no. 5-C (August Kranti Marg). It has got 4 lane partly divided carriageway with footpath on both sides.

It is proposed to take up the following works during 2002-2003

- (i) Widening of entire road from 4 lanes to 5 lanes .
- (ii) Improvement of footpath towards Sadiq Nagar / Anand Lok and construction of central verge in balance portion and S. W. Drain in missing portion towards Sadiq Nagar side . (43.35)
- (iii) M. S. Railing in central verge in the entire length as demanded by the Traffic Police .

The following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) Resurfacing / strengthening .

An outlay of Rs. 185 lacs is approved in the 10th Five Year plan & Rs. 35 lacs in the annual plan 2002-03.

39. Maa Anand Mayee Marg (S.A. Road) (Rs. 802 lacs)

This road is 5.46 km. long and connects Outer Ring Road (No. 3) at Kalkaji Temple to M. B. Road . From Outer Ring Road (No. 3) to round about (RD 2500 m) It has got 6 lane divided carriageway with footpath and service road on both sides . From round about (RD – 2500 m) to M. B. Road Jn. it has got 4 lane divided carriageway .

The following works as proposed to be taken up during 10th Five Year plan.

- (i) Resurfacing / strengthening from RD 2500 m to RD 5469 m .
- (ii) Widening of Road from 4 lanes to 6 lanes from round about to ESI Hospital i/c construction of service road towards Okhla Industrial Area . including footpath on both sides of the carriageway and service road i/c improvement of central verge and S. W. Drain .

The following works are also proposed to be taken up during Annual Plan 2002-03.

- a. Mastic work at intersections .
- b. Improvement of drainage system near Masjid .
- c. M. S. Railing from RD 0 m to RD 2500 m .

An outlay of Rs. 802 lacs is approved in the 10th Five Year plan & Rs. 69 lacs in the annual plan 2002-03.

40. Bhairon Road (Rs. 160 lacs)

This road is 0.9 km. long & connects Mathura road to Ring Road . It has got 6 lane divided carriageway having footpath on both sides .

It is proposed to take up the following works during 2002-2003

- (i) Improvement of carriageway by providing and laying paver blocks under RUB

The following works are also proposed to be taken up during 10th F. Y. Plan .

- (i) Remodeling of footpath and central verge and S. W. Drain .
- (i) Lane marking with thermoplastic paint .

An outlay of Rs. 160 lacs is approved in the 10th Five Year plan & Rs. 35 lacs in the annual plan 2002-03.

41. Kishan Ghat Road in front of Delhi Sachivalya (Rs. 99.00 lac)

This road is 1.13 Km. long and connects Vikas Marg and Ring Road to Kishan Ghat and passes in front of Delhi Secretariat . It has got 6 lane divided carriage way having footpath on both sides .

It is proposed to take up the following works during 2002-2003

- (i) Mastic work at loop road and intersection near Rose Garden SPS duct .
- (ii) Resurfacing / strengthening is proposed to be taken up in 10th Five Year Plan.

An outlay of Rs. 99 lacs is approved in the 10th Five Year plan & Rs. 10 lacs in the annual plan 2002-03.

42. Road No. 13- A (Rs. 558 lacs)

This road is 3.12 Km. long which connects NH-2 near Sarita Vihar to Okhla Barrage . It has got 4 lane divided carriageway and footpath near Kalindi Kunj .

It is proposed to take up the following works during 2002-2003 :-

- (i) Resurfacing, footpath , S.W. Drain , Anti encroachment measures, Mastic Asphalt treatment and Road Marking .
- (ii) Widening from 4 lanes to 6 lanes from NH-2 to Kalindi Kunj i/c service road from NH-2 to Agra Canal towards Sarita Vihar side .
- (iii) Bus bays near Sarita Vihar.
- (iv) P/f M. S. Railing in c/v and changing of kerb stone .

An outlay of Rs.558 lacs is proposed for Xth Five Year Plan 2002-07 & Rs. 317 lacs for Annual Plan 2002-03 .

43. Road No. 43. (Rs.810 lac)

The PWD has not supplied the writeup the scheme. An outlay of Rs. 810 lacs is approved in the Xth Five Year Plan & Rs. 300 lacs in the Annual plan 2002-03.

NEW ROAD SCHEMES

VI. Master plan roads in Narela Sub city (Rs. 6040 lacs)

Provision for construction of 80m and 100m ROW master plan roads in Narela sub-city is proposed for 10th Five Year Plan. The digment plan for the roads has been finalised and submitted to DDA for approval.

Two major Master Plan Roads with 80 Mt. and 100 Mt. Right of Way connecting G.T.Karnal Road to Delhi Rohtak Road(NH-10) will be taken up by PWD. These roads is to be constructed atleast upto DSIDC Complex coming up in Bawana by PWD in Phase-I. The detail alignment of these Master Plan Roads has been approved by DDA and the acquisition of land is also under process by DDA and notification under section-4 has already been issued for land acquisition. PWD has also assisted DDA by conducting P.T.Survey at the problem points of the alignment for the road of 80 Mt. ROW where temporary and permanent structure are falling in ROW or along ROW. The total cost of these roads will be about Rs.60.40 Crores. In addition one ROB on each Road is to be constructed across Delhi-Ambala Railway. The scheme of each road will be taken up separately.

An outlay of Rs. 6040 lacs is approved in the Xth Five Year Plan & Rs. 400 lacs in the Annual plan 2002-03.

Other states like UP, Haryana and Maharastra are not incurring any expenditure on roads in colonies developed by colonizer. L.G, C.S. and ministers are of the view that

policy decision should be taken on development of M.P. Road. Therefore work may be taken after policy decision.

VII. Peripheral Expressway (Rs. 59380 lacs)

The traffic coming from the state of Haryana on NH-I, NH-10, NH-8, NH-2 and going to other states has to pass Delhi. It creates lot of traffic problems. To avoid Delhi this expressway which will have controlled access and will connect NH-I, NH-10, NH-8 and NH-2. A large area & land is required to be acquired for this project.

An outlay of Rs. 59380 lacs is approved in the Xth Five Year Plan & Rs. 100 lacs in the Annual plan 2002-03.

VIII. NH-2 Bypass from Kalindi Colony Ring Road to Haryana Road.(Rs. 12000 lacs)

It is proposed to construct 14 km long bypass connecting Kalindi Colony to Badarpur Border. The construction will be taken up in two parts. The 1st part to be known as “ Kalindi Bypass” will be from Kalindi Colony Ring Road to Kalindi Kunj Road No. 13 – A and the 2nd part to be known as “NH-2 Bypass” will be from Kalindi Kunj Road No. 13-A to Haryana Border. The Bypass will have 6 lanes divided carriage way with footpath on both sides. Mastic work on crossing and S.W. Drain on both sides and Anti Crash Railings on footpath as well as central verge. The Bypass will also have clover leaf interchange near Kalindi Colony, Flyovers at Sailors Club, Road NO. 13-A at Kalindi Kunj and Bridges on Agra & Gurgaon Canal near IOC Bottling Plant near Madanpur Khader and at Haryana Border near Sector 37 respectively. It is proposed to provide Mastic work on crossing and S.W Drain on both sides of the Bypass.

An outlay of Rs. 12000 lacs is approved in the 10th Five Year Plan & Rs. 100 lacs in the Annual plan 2002-03.

FLYOVERS/BRIDGES

(A)FLYOVERS

As development schemes of roads are emphasized for smooth flow of traffic with a safe and convenient speed, the objective can not be achieved unless intersection of roads, are also improved simultaneously with due care. In fact, the intersections of roads/road with rail have been recognized as a major source of delays and delay related losses on these roads. The intersections also cause bunching of traffic which has perceptible impact on capacity and speed of straight roads particularly when the intersections are located less than a kilometre apart.

On most of the main roads of Delhi like Ring Road, Outer Ring Road Vikas Marg, Link roads etc. the total traffic per day is exceeding 1 Lakh P.C.U. (Passenger Car Unit) equivalent vehicles. On most of the intersections of these important roads with PWD, the traffic per hour is exceeding 15000 PCU equivalent vehicles. The threshold values for a four armed intersection with 6 lane approaches (signalized) is only 6000 PCU/hour and traffic rotaries with a proper island can cater for 5500 PCU/hour only. Beyond these values two level grade separator (13000 PCU/hour) & three level grade separator (18000 PCU/hour) etc. are desirable. Thus to provide an uninterrupted vehicular movement along these roads construction of flyovers with allied structures in an organised & planned way is of paramount importance in the development of transport infrastructure in Delhi. Construction of flyovers at some important locations in the past showed phenomenal improvement in the vehicular traffic. Planning and construction of flyovers at these busy road intersections has therefore been accorded a high priority by the State Govt. PWD, Govt. of Delhi, on its part, has embarked upon an ambitious programme for construction of flyovers all over Delhi.

PWD. Govt. of Delhi had the privilege of constructing 8 flyovers in the city earlier. Some of these locations are ISBT flyovers, Hanuman Setu, Visvesarvayya Setu on Mathura Road near Okhla and Mool Chand crossing at Ring Road. Very recently flyovers

at Moti Bagh crossing, Africa Avenue (Ring Road Crossing), Savitri Cinema (Ring Road) crossing and Nehru Place Crossing have been completed. Presently the flyovers at Andrews Ganj, Safdar Jung, Dhaula Kuan, Mayapuri and Punjabi Bagh Crossing are under construction. The elevated part of flyover at Punjabi Bagh has already been offered for use. PWD, Govt. of Delhi is using State-of-the-Art technology for its flyover projects to minimize construction activity and to have better control of quality of works. Special care has been taken for aesthetics, speed of construction and least disturbance to traffic while using the technology.

In addition to above, 42 flyovers are in various stages of construction & planning stage with PWD, Govt. of Delhi out of which 12 are proposed at Ring Road and 04 are at Outer Ring Road. The planned provisions and for various flyovers in the jurisdiction of PWD, Govt. of Delhi are described as under:-

ONGOING SCHEMES

1. Pontoon Bridge over river Yamuuna near Wazirabad & Shantivan (Rs. 500 lac)

An outlay of Rs. 500 lacs is approved in the Xth Five Year Plan & Rs. 100 lacs in the Annual plan 2002-03.

2. ROB and approaches on Road No.13 across Delhi Mathura Rail Line (Rs.100.00 Lac)

This ROB is proposed to be constructed to connect Sarita Vihar and Okhla Phase – II . Construction of this ROB will provide a direct access to Okhla Industrial Area and Delhi Mathura Road , Outer Ring Road No. 3 and S. A. Road presently being used by the traffic from Noida side to reach Okhla Industrial Area will be avoided , there by reducing congestion on these roads . This ROB is at planning stage .

An outlay of Rs. 100 lacs is approved in the Xth Five Year Plan & Rs. 15 lacs in the Annual plan 2002-03.

3. ROB 21 at Punjabi Bagh Crossing (Rs. 500 lacs)

It is a three level grade separator at Ring Road – Rohtak Road intersection at Punjabi Bagh and consists of a flyover along Ring Road , vehicular underpass along Rohtak Road , Rotary at ground level for turning traffic and pedestrian plaza . The flyover along Ring Road has already been completed and opened to the traffic . This work is likely to be completed dg. 2002-03 .

An outlay of Rs. 500 lacs is approved in the Xth Five Year Plan as well as in the Annual plan 2002-03.

4. Construction of Safdarjung Flyover (2100 lacs)

This flyover is being constructed at Ring Road and Abrindo Marg intersection with an estimate cost of Rs 68 crores with curved position of flyover of length 118m and straight flyover length 102m. This flyover shall give totally signal free design with free movement in all directions.

An outlay of Rs. 2100 lacs is approved in the 10th Five Year Plan & Rs. 1969 lacs in the Annual plan 2002-03.

5. C/o 4 lane parallel ITO bridge (Lok Nayak Satu) (Rs. 250 lacs)

This is a continuing scheme . The bridge has already been constructed and opened to traffic . The River protection works are proposed to be taken up in 10th five year plan.

An outlay of Rs. 250 lacs is approved in the Xth Five Year Plan & Rs. 100 lacs in the Annual plan 2002-03.

6. Flyover at Dhaula Kuan (Rs. 3676 lacs)

This Grade separator is to be provided at Dhaula Kuan intersection to eliminate the traffic congestion . This project has been divided into parts . The 1st part is ground level improvement works and the 2nd part is a grade separator .

An outlay of Rs. 3676 lacs is approved in the 10th Five Year Plan & Rs. 2200 lacs in the Annual plan 2002-03.

7. Wazirabad Bridge (6 Lane):-

In the 5 Year Plan 1997-2002 it was proposed that the construction of 6 Lane Bridge at Wazirabad would start and provision was kept for this purpose. However much progress could not be achieved for the construction of 6 Lane Bridge as the feasibility study for combining the Bridge and Barrage is not yet completed, with the result the construction of 6 lane Bridge has been delayed. An outlay of Rs. 5200 lac is approved in the 10th FYP and Rs. 100 lac in the Annual Plan 2002-03.

8. Rehabilitation of ITO Bridge: - (Rs. 500 lac)

The old bridge requires immediate rehabilitation. Estimate has been sent to competent authority for Rs. 5 Crores. Provision of 5 Crore is kept in 10th five year plan. An outlay of Rs. 10 lac is approved in the Annual Plan 2002-03.

9. Geeta Colony Bridge:- (Rs. 1000 lac)

A provision was made in the Five Year Plan 1997-2002, however much progress was not achieved, only preliminary study & preparation of GAD can be taken up, which is in progress & a provision has been kept for completion of GAD of the bridge which is expected to be completed in Yr. 2001-02. Construction work is proposed to start in the year 2002.

An outlay of Rs. 1000 lacs is approved in the Xth Five Year Plan & Rs. 10 lacs in the Annual plan 2002-03.

10. Bridge on Road No.38 (Rs. 300 lacs)

The work is likely to be started during annual plan 2002-03. Part of the work for construction of road has already been completed. The bridge could not be started earlier as department of I&F has given NOC only during 2001-02.

An outlay of Rs. 300 lacs is approved in the Xth Five Year Plan & Rs. 100 lacs in the Annual plan 2002-03.

11. C/o bridge across supplementary drain on Road No. B-3 in Rohini, Ph-I, (Rs. 419 lac)

The planning of this bridge has been completed and estimate has been sent to Delhi Govt. for sanction for 8 lanes bridge. A provision of Rs.419 lacs is approved in the Xth five year plan and Rs.50 in Annual Plan 2002-03.

12. W/o Chirag Delhi Nallah Birdge on Outer Ring Road No. 7 (Rs. 200 lac)

It is proposed to be widen this bridge from existing 4 lanes to 6 lanes for which a sum of Rs. 200 lakhs is approved in 10th Five year plan and Rs. 25 lac in the Annual Plan 2002-03.

13. Constuction of Naraina Flyover(Ring Road) (Rs. 5000 lacs)

Flyover has been proposed at Naraina which will take off from the existing ROB and on crossing road No 89 and market area slopes down to meet Ring Road near Kendriya Vidyalaya. With the completion of the flyover there will be smooth movement of the traffic in the narrow stretch of Naraina on Ring Road which is a major bottleneck from traffic point of view.

An outlay of Rs. 5000 lacs is approved in the 10th Five Year Plan & Rs. 5 lacs in the Annual plan 2002-03.

14. Construction of Mayapuri Flyover(Rs. 1000 lacs)

This flyover is being constructed along the Mahatma Gandhi Marg at the intersection with Road No 36. This flyover is planned in a way so as to merge with existing Naraina ROB. The Flyover is 20m wide, and total length of the flyover is 608m. The flyover is being constructed by the use of prefabricated steel superstructure and is likely to be completed by 30.6.2002. Total cost of the project is Rs 25.00 crores.

An outlay of Rs. 1000 lacs is approved in the 10th Five Year Plan & Rs. 730 lacs in the Annual plan 2002-03.

15. Flyover on Ring Road at Moti Nagar (Rs. 1800 lac)

A sum of Rs.1800 lakhs is approved for this work in 10th five year plan and Rs.25 lac is approved in Annual Plan 2002-03.

16. Britannia Chowk Flyover (Rs. 2933 lacs):- This flyover is taken up at the fag end of annual plan 2001-02. The work of diversion road etc. is being awarded. A total expenditure of Rs 450 lacs is expected in the Annual plan 2001-02. An outlay of Rs.2933 lacs is approved in the 10th FYP and Rs. 1000lacs in the Annual plan 2002-03.

17. Flyover at Azadpur T-junction:- The Azadpur intersection is a very busy intersection catering to the heavy traffic of Azadpur Subzi Mandi as well as outgoing and incoming traffic of NH-I from Northern part of India. The flyover at Azadpur T-junction is a necessity for smooth movement of traffic. There is no provision in the 10th FYP.

18 Construction of B-Avenue Flyover (Rs. 2500 lacs)

The proposed flyover along Ring Road is 287.4m long consisting of 158.4m on stilts and 129.00m embankment portion with gradient of 1:30 towards Safdarjung & Dhaula Kuan. The total width of flyover shall be 20.00m consisting of carriage way of 9m each 1.2m central verge & 0.5m crash barrier on either side. The stilt portion will be based on Precast Segmental construction technology & embankment portion shall be constructed using Reinforced Earth technology/ Geotextiles. The cost of this project will be approx. 31.48 crore.

An outlay of Rs. 2500 lacs is approved in the Xth Five Year Plan & Rs. 10 lacs in the Annual plan 2002-03.

19. Flyover on Ring Road at Srinivas Puri

This flyover will be constructed along with the subway by DTTDC .

20. Flyover on Ring Road at Lajpat Nagar

This flyover will be constructed along with the subway by DTTDC .

21. Construction of Moti Bagh Flyover (Rs. 50 lacs)

This work has been completed and anticipated expenditure has been kept for finalization of the bills.

An outlay of Rs. 50 lacs is approved in the 10th Five Year Plan & Rs. 10 lacs in the Annual plan 2002-03.

22. Flyover at Ashram Chowk (Rs. 250 lacs)

This flyover is a six lane flyover being constructed by NTBCL as a part of there traffic dispersal scheme of Noida Toll Bridge as per the agreement between M/s TBCL and Govt. of Delhi . As per agreement a cost of shifting of services is to be born by Govt. of Delhi a demand of Rs. 250 lakhs has been received from M/s Noida Toll Bridge towards cost of shifting of services by the utility department .

An outlay of Rs. 250 lacs is approved in the Xth Five Year Plan & Rs. 50 lacs in the Annual plan 2002-03.

23. ROB at Marginal Bund Road over Railway Line between Noida Mode & Vikas Marg:- (Nil)

This ROB will be constructed by Railway who is already taken action in this regard. The A/A & E/S for Rs. 37.70 Crore has been received for providing ROB,its approach and connecting concrete road. The work of concrete road is under progress .It is expected that about 50% progress will be achieved in this work upto 2001-2002.Requirement of funds by Railway for ROB to be ascertained. No provision has made in the 10th FYP.

24. Under pass at the Jn. of Link Road from NH-24 and Ring Road going to Lodhi Road crossing Railway Track . (Rs. 100 lac)

A sum of Rs. 100 Lakhs is approved in 10th five year plan and Rs. 15 lac in the Annual Plan 2002-03.

25. Construction of Africa Avenue Flyover (Rs. 10 lacs)

This work has been completed and anticipated expenditure has been kept for finalization of the bills.

An outlay of Rs. 10 lacs is approved in the 10th Five Year Plan as well as Annual plan 2002-03.

26. Construction of Khelgaon Marg Flyover(Rs. 1450 lacs)

This flyover is being constructed along the Mahatma Gandhi Marg at the intersection with the Khel Gaon Marg. The Flyover is 20m wide, and total length of the flyover is 478m. One pedestrian subway connecting NDSE Part I, with NDSE Part II, and one underground U-turn for light vehicles shall also be constructed along with the flyover. The flyover is being constructed by the use of prefabricated steel superstructure and is likely to be completed by 31.3.2002. Total cost of the project is Rs 45.00 crores.

An outlay of Rs. 1450 lacs is approved in the 10th Five Year Plan & Rs. 1030 lacs in the Annual plan 2002-03.

27. Construction of Nehru Place Flyover (Rs. 10 lacs)

This work has been completed and anticipated expenditure has been kept for finalization of the bills.

An outlay of Rs. 10 lacs is approved in the 10th Five Year Plan as well as in the Annual plan 2002-03.

28. Construction of Savitri Cinema Flyover (Rs. 10 lacs)

This work has been completed and anticipated expenditure has been kept for finalization of the bills.

An outlay of Rs. 10 lacs is approved in the 10th Five Year Plan as well as in the Annual plan 2002-03.

29. Repair & rehabilitation of Wazirabad Bridge(Rs. 60 lacs)

This is one of the oldest bridge on river Yamuna and repair & rehabilitation work is in progress Yr. 2002-03 for the work which will be completed during Yr 2002-03.

An outlay of Rs. 60 lacs is approved in the Xth Five Year Plan as well as in the Annual plan 2002-03.

30 C/o flyover at Mukerba Chowk. (Rs. 650 lac)

An outlay of Rs. 650 lac is approved in the 10th FYP and Rs. 10 lac in the Annual Plan 2002-03.

31. Widening of ROB No. 37 (Rs. 500 lac)– The ROB is to be widened from 4 lanes to 8 lanes for which matter has been taken up with Railway for submitting the estimate. The approaches are to be widened by PWD and ROB is to be widened by Railway as deposit work. An outlay of Rs. 500 lac is approved in the 10th FYP and Rs. 50 lac in the Annual Plan 2002-03.

32 Rehabilitation of bridge on NG Drain at Road No. 37:- (Rs. 50 lac) 4 lanes divided carriageway N.G. Drain bridge is to be widened to 5 lanes on Road No. 37. The planning work for the same is in progress. An outlay of Rs. 50 lac is approved in the 10th FYP and Rs. 40 lac in the Annual Plan 2002-03.

33. Construction of Brijwasan Flyover(Rs. 800 lacs)

This proposed RUB (Road Under Bridge) shall be constructed under Delhi Rewari line to cross Brijwasan Najafgarh Road.

An outlay of Rs. 800 lacs is approved in the Xth Five Year Plan & Rs. 20 lacs in the Annual plan 2002-03.

34. Flyover on Outer Ring Road No. 7 at Khel Gaon Marg Jn. (Rs. 1200 lacs)

A full 6 lane flyover is proposed at this location for which a sum of Rs. 1200 lakhs is approved in 10th five year plan .and Rs. 100 lac in the Annual Plan 2002-03.

35. Flyover on Outer Ring Road No. 7 at Malviya Nagar 'T' Jn. (Rs.550 lac)

It is proposed to construct a low height half flyover at this location for which a sum of Rs. 550 lakhs is approved in 10th five year plan and Rs. 50 lac in the Annual Plan 2002-03.

36 ROB at Road No. 63 (Rs. 1200 lac)

A Preliminary Estimate to the tune of Rs. 27 Crore has been submitted to Government of Delhi for approval. The scheme stands cleared from DDA Technical Committee and DUAC . The Consultant for detailed designs is yet to be appointed. An outlay of Rs. 1200 lac is approved in the 10th FYP and Rs. 100 lac in the Annual Plan 2002-03.

37. C/o RUB on Road No. 58/64 (Rs. 1000 lacs)

The T.C approved is awaited .An outlay of Rs. 1000 lacs is approved in the Xth Five Year Plan & Rs. 50 lacs in the Annual plan 2002-03.

38. Flyover on Ring Road at Captain Gaur Marg 'T' Jn.

This flyover will be constructed along with the subway by DTTDC .

39. Flyover at the Jn. of S. A. Road & Outer Ring Road No. 3 . (RS. 750 lac)

Being a 'T' Jn. it is proposed to construct a half flyover near Kalkaji Temple on Southern Carriage way of Outern Ring Road No. 3 . In addition two ramps one from Outer Ring Road No. 3 to Nehru Place and Other from Nehru place to Outer Ring Road are also proposed to be constructed .A rotary for the traffic from ROB-22 to Captain Gaur Marg is also a part of this flyover . An outlay of Rs. 750 lac is approved in the 10th FYP and Rs. 100 lac in the Annual Plan 2002-03.

40. Underpass on Ring Road at Moolchand (Rs. 800 lac)

A sum of Rs. 800 lakhs is approved in 10th five year plan and Rs. 20 lac in the Annual Plan 2002-03.

41. Construction of Punjabi Bagh Club Flyover(Rs. 2100 lacs)

Half flyover has been proposed at the Punjabi Bagh Club intersection, the width of the flyover shall be 9 m and length 500m. An estimate for Rs 20 crores has been submitted to Govt of Delhi for A/A &E/S of the competent authority. With the construction of flyover, the travel time on Ring Road will be reduced.

An outlay of Rs. 2100 lacs is approved in the Xth Five Year Plan & no provision in the Annual plan 2002-03.

42. ROB on Ring Road near IP Gas Turbine Power Station . (Rs. 1274 lac)

A full 6 lane ROB on Ring road is proposed for passing of Goods trains carrying coals to IP Thermal Power Station . A sum of Rs. 1274 lakhs is approved in 10th five year plan and Rs. 50 lac in Annual Plan 2002-03.

43. Special Rehabilitation of the Asiad 82 Flyovers at Moolchand , Lodhi , Oberoi , I. P. Estate & ROB at Ashram . (Rs. 200 lac)

These flyovers were constructed during Asiad 82 and ROB at Ashram was also widened during that period and each has got 6 lanes divided carriageway . It is proposed to take up the work of detail inspection of these structures followed by there rehabilitation . The rehabilitation is to be carried out by adding steel crash barriers , replacement of bearing and by taking any other rehabilitation measure required as per the inspection . Besides this it is proposed to carry out resurfacing / strengthening and S.W. drain in missing portion of their connecting slip roads and approach roads . An outlay of Rs. 200 lac is approved in the 10th FYP and Rs. 140 lac in the Annual Plan 2002-03.

44. Flyover at Ring Road & NH-24 crossing

This flyover is a three lane flyover being constructed by DDA on Eastern carriageway of Ring Road .

45 , 46 , 47 : Write up is not provided by PWD.

48 Flyover on NH-2 at the Jn. of Road No. 13-A (Rs. 100 lac)

This is a flyover having four clover leaves . The main flyover has been completed by DDA and four clover leaves will be provided during the 10th Five Year Plan . An outlay of Rs. 100 lac is approved in the 10th FYP and Rs. 10 lac in the Annual Plan 2002-03.

NEW SCHEMES

1. C/o bridge across Road No.B-3 in Rohini:- (Rs. 100 lac) For C/o Bridge on Western Yamuna Canal at Road No. B-3 (Rohini) Irrigation Department, Haryana has already been requested to submit the estimate, which is expected to be received during current *financial year*. An outlay of Rs. 100 lac is approved in the 10th FYP and Rs. 50 lac in the Annual Plan 2002-03.

2 Construction of Flyover at B J Marg(Rs. 2000 lacs)

The proposed flyover along Ring Road is 712 m long consisting of 300m on stilts and 161m embankment portion with gradient of 1:30 towards South Campus & 251m with gradient 1:30 toward Moti Bagh. The total width of flyover shall be 10 m consisting of carriage way of 9m & 0.5m crash barrier on either side. The stilt portion will be based on Precast Segmental construction technology & embankment portion shall be constructed using Reinforced Earth technology/ Geotextiles. The cost of this project will be approx. 29.26 crore.

An outlay of Rs. 2000 lacs is approved in the Xth Five Year Plan.

3. Flyover at Nehru Place (Bhairon Temple) (Rs. 1000 lac)

A sum of Rs. 1000 lakhs is approved in the 10th five year plan and RS. 20 lac in the Annual Plan 2002-03.

4. Elevated Road on NH-2 at M.B. Road jn. (Rs. 1500 lac)

This elevated road will be 1689 meter long and starts from NTPC Gate on North side and ends 581 m before the Haryana Border . It is a six lane flyover with anticrash railing and has got 9 m wide slip road on either side with 1.5 m wide footpath and a pedestrian subway near Badarpur Market . Construction of this flyover will eliminate queuing of traffic on Mathura Road , M. B. Road and Jaitpur Road . An outlay of Rs. 1500 lac is approved in the 10th FYP and Rs. 200 lac in the Annual Plan 2002-03.

5. Flyover on Ring Road at Sarai Kale Khan (Rs. 800 lacs)

This flyover is a three lane flyover being constructed by DDA on the Western carriageway of Ring road .

An outlay of Rs. 800 lacs is approved in the Xth Five Year Plan & Rs. 50 lacs in the Annual plan 2002-03.

6. C/o Flyover at J. B. Tito Marg at the Jn. Lala Lajpat Rai Marg (Rs. 750 lacs)

This flyover will be constructed by DDA along with the subway near Central School at Andrews Ganj

An outlay of Rs. 750 lacs is approved in the Xth Five Year Plan & Rs. 25 lacs in the Annual plan 2002-03.

7. Flyover at J. B. Tito Marg at Sirifort Road crossing (Rs. 1000 lac)

This flyover will be constructed by DDA. An outlay of Rs. 1000 lac is approved in the 10th FYP and Rs. 25 lac in the Annual Plan 2002-03.

8. ROB-22 at Okhla (Rs. 100 lac)

This flyover is 6 years old and the main flyover has got 6/ 8 lanes divided carriage way. It has got two clover leafs of three lane each and two nos. elevated slip roads It is proposed to improve the riding quality of slip road , clover leaf and approaches by providing mastic work and resurfacing/strengthening.

An outlay of Rs. 100 lacs is approved in the Xth Five Year Plan & Rs. 10 lacs in the Annual plan 2002-03.

9. Trumpet interchange on Ring Road at Bhairon Road 'T' Jn. (Rs. 400 lac)

A sum of Rs. 400 lakhs is approved for this work in 10th five year plan and Rs. 10 lac in the Annual Plan 2002-03.

10 Flyover on NH-8 at Jn. of Station Road (Carriappa Marg). (Rs. 500 lac)

A provision of Rs. 500 lac is approved in 10th Five Year Plan and Rs.25 lac in the Annual Plan 2002-03.

11. Flyover on Outer Ring Road from Aurbindo Marg to NH-8. (Rs. 2000 lac)

Flyovers to be constructed on Outer Ring Road in stretch from Aurbindo Marg to NH-8. An outlay of Rs. 2000 lac is approved in the 10th FYP and Rs. 10 lac in the Annual Plan 2002-03.

12. C/o Bridge on Old Agra Canal at Okhla (Rs. 50 lac)

This bridge has been constructed by U.P. Irrigation department as deposits work of by PWD . A small work of approaches is yet to be completed . An outlay of Rs.50 lac is approved in the 10th FYP and Rs. 5 lac in the Annual Plan 2002-03.

13. W/o bridge on Drain 12-A on Ring Road near I. P. Depot . (Rs. 100 lac)

There is proposal to widen the Ring Road from 6 lane to 8 lane from Rajghat to Barapullah Nallah so this bridge on Drain No. 12-A near I. P. Depot is proposed to be widened . An outlay of Rs. 100 lac is approved in the 10th FYP and Rs. 40 lac in the Annual Plan 2002-03.

14. W/o bridge on Nallah on Ring Road near Bhairon Road crossing (Rs. 100 lac)

There is a proposal to widen the Ring Road from 6 lanes to 8 lanes so this bridge is proposed to be widened . An outlay of Rs. 100 lac is approved in the 10th FYP and Rs. 10 lac in the Annual Plan 2002-03.

15. W/o bridge across Barapullah Nallah along Ring Road (Rs. 500 lac)

As there is a proposal to widened the ring road from 6 lanes to 8 lanes so this bridge is proposed to be widened . An outlay of Rs. 500 lac is approved in the 10th FYP and Rs.50 lac in the Annual Plan 2002-03.

16. W/o bridge at Jaitpur Nallah on D. M. Road (Rs. 50 lac)

The D. M. Road from 16.50 km. to 18.80 km. has already been widened but bridge on Jaitpur Nallah is only 4 lane bridge. The widening of this bridge is in progress and will spill over to the financial year 2002 – 03 . An outlay of Rs. 50 lac is approved in the 10th FYP and Rs. 10 lac in the Annual Plan 2002-03.

17. W/o existing bridge on Road No. 4 near MCD office (Rs. 100 lac)

Due to widening of Road No. 4 from 4 lanes to 6 lanes, which is in progress, this bridge which is 4 lanes at present , is to be widen to 6 lanes . An outlay of Rs. 100 lac is approved in the 10th FYP as well as in the Annual Plan 2002-03.

18 C/o bridge on Service Road of Road No. 4 (Rs. 200 lac)

A sum of Rs.200 lakhs is approved in 10th five year plan and Rs.150 lac is approved in the Annual Plan 2002-03.

19. C/o under pass on Road No. 37- Ring Road Crossing. (Rs. 500 lac)

20. ROB on 100m wide master plan road in Nerala Extn. area on Delhi Ambala Railway line.(Rs. 500 lac)

An outlay of Rs. 500 lac is approved in the 10th FYP and Rs. 100 lac in the Annual Plan 2002-03.

21. ROB on 80m wide master plan road in Nerala Extn. area on Delhi Ambala Railway line. (Rs. 500 lac)

An outlay of Rs. 500 lac is approved in the 10th FYP and Rs. 100 lac in the Annual Plan 2002-03.

22. Bridge on 100m wide master plan road in Nerala Extn. area. across western Yamuna Canal (Rs. 500 lac)

An outlay of Rs. 500 lac is approved in the 10th FYP and Rs. 100 lac in the Annual Plan 2002-03.

23. Bridge on 80m wide master plan road in Nerala Extn. area across western Yamuna Canal(Rs. 500 lac)

An outlay of Rs. 500 lac is approved in the 10th FYP and Rs. 100 lac in the Annual Plan 2002-03.

24. Widening of Culvert in old Mughal drain(Rs. 15 lacs)

The widening work is in progress & is likely to be completed by 31.3.2002. The provision has been kept for Yr. 2002-03 for finalization of accounts etc.

An outlay of Rs. 15 lacs is approved in the Xth Five Year Plan as well as in the Annual plan 2002-03.

25. Flyover at Road No. 59 at Khajuri Chowk. (Rs. 1000 lac)

There is lot of traffic at the Intersection of Wazirabad road with Marginal Bund road. A new flyover is proposed at this Intersection of Khajuri Chowk. Provision has been kept for traffic study geological investigation during year. 2002-03. An outlay of Rs.1000 lac is approved in the 10th FYP and Rs. 20 lac in the Annual Plan 2002-03.

26. Rehabilitation of ISBT Bridge:- (Rs.300 lac)

The ISBT bridge requires some rehabilitation work such as expansion joint ext. as it is more than 10 Year old. An outlay of Rs . 3 crore is approved in the 10th. Five Year Plan. No provision is kept in the Annual Plan 2002-03.

27. Corridor Improvement of Vikas Marg:-(Rs. 750 lac)

It is proposed to improve the corridor of Vikas Marg where DMRC is going to construct elevated railway line alongwith elevated road or Flyover network planning is essential. Therefore, this scheme has been incorporated in the 10th. Five Year Plan . An

outlay of Rs. 750 lac is approved in the 10th FYP and Rs. 50 lac in the Annual Plan 2002-03.

28. Road over disuse canal from Geeta Colony bridge to Karkari More:- (Rs. 525 lac)

There is a proposal for Construction of a road over disuse Canal from Geeta Colony bridge to Karkari More for easy access. A provision of Rs. 525 lac is kept in 10th. Five Year Plan for this work and provision for Yr. 2002-03 has been kept Rs. 50 lac for plan & survey activity.

Subways.

With the increase in total number of vehicles on Delhi roads the number of accidents involving pedestrians has gone up during the last five years as per, the survey carried out by Delhi Traffic Police. In order to segregate pedestrians and traffic, and also to improve the movement of traffic specially along major arterial corridors, it is essential that pedestrian subways are constructed at important locations. PWD has taken up construction of subways at a number of important locations since 1993 and 14 subways has so far been constructed i.e. at Wazirpur Depot across Ring Road, GTB Nagar across Mall Road, Mangolpuri across outer Ring Road, Saraswati Vihar across Outer Ring Road, Swami Nagar across Outer Ring Road, Munirka across Outer Ring Road, near Vikas minar across Ring Road, Laxmi Nagar across Vikas Marg, Preet Vihar across Vikas Marg etc. Two subways across Mall Road Extn. and one subway across road No.40 at Inderlok are under construction and are likely to be completed during 2002-03. Even though utilisation of subway is still inadequate, however, pedestrians have to be educated to make use of the subway, as these are being provided for their safety. Traffic police authorities have also been requested to educate the public so as to encourage them to make use of the subway. During the 10th Five Year Plan, 29 subways are proposed to be constructed at different locations. Efforts will also be made to construct subways in BOT.

(a) ONGOING SCHEMES:-

1. Construction of Subway at Munrika (Rs. 2 lac)

This work has been completed. An amount of Rs 2.00 lakhs has been kept in the Annual Plan 2002-03 for finalization of the bill.

2. Subways at Guru Ravi Dass Marg at Govind puri (Rs. 150 lac)

It is proposed to take up the work of construction of Subways at Guru Ravi Dass Marg at Gobind Puri . An outlay of Rs.1 50 lac is approved in the 10th FYP and Rs. 10 lac in the Annual Plan 2002-03.

3. Subways across Outer Ring Road at Panchsheel (Rs.65 lacs)

These subways are the part of the schemes of the flyovers on Outer Ring Road . An outlay of Rs. 65 lac is approved in the 10th FYP and Rs. 1 lac in the Annual Plan 2002-03.

4 & 5. Subways across Ring Road at Srinivas puri , Lal Sai Mandir , Lajpat Nagar Market & Moolchand crossing. (Rs. 135 lac)

These subways are to be constructed along with the flyovers through DTTDC . An outlay of Rs. 135 lac is approved in the 10th FYP and Rs. 3 lac in the Annual Plan 2002-03 for Srinivas puri and Moolchand subway.

6. At Inderlok across Road No.40:- (Rs. 20 lac) The subway is likely *to be* completed by April 2002 . An outlay of Rs. 20 lac is approved in the 10th FYP as well as Annual Plan 2002-03.

7. Sub-way of Subzi Mandi Azadpur Gate No.1&2 across Mall Road Extn. (Rs. 500 lac) in front of Subzi Mandi Azadpur Gate No.1&2 two subways are in progress and likely to be completed by 8/2003. An amount of Rs.500 lacs is approved in the 10th FYP and Rs. 350 lac in annual plan 2002-03.

8. At Subhadra Colony across Road No. 40(Rs.75 lacs)

A sum of Rs.75 lakhs is approved in 10th five year plan and Rs. 7 lac in the Annual Plan 2002-03.

**9. Subway across J. B. Tito Marg near Andrews Ganj Central School
(Nil)**

This subway will be got executed through DDA along with the flyover at this location .

NEW SCHEMES

1. Subway at GSSS Badarpur across D. M. Road (Rs. 70 lac)

It is proposed to construct a subway near Badarpur School No. 1 & 2 to facilitate the School Children and pedestrians to cross D. M. Road . An outlay of Rs. 70 lac is approved in the 10th FYP and no provision is kept in the Annual Plan 2002-03.

2. Subway at Harkesh Nagar across D. M. Road (Rs. 70 lac)

It is proposed to construct a Sub way at Harkesh Nagar to facilitate the pedestrian from Harkesh Nagar, Jasola and Okhla Treatment Plant to cross the Mathura Road . An outlay of Rs. 70 lac is approved in the 10th FYP and no provision is kept in the Annual Plan 2002-03.

3. Jwala Heri Road No.30 (Rs.75 lacs)

A sum of Rs.75 lakhs is approved in 10th five year plan and Rs. 7 lac in the Annual Plan 2002-03.

4. Meera Bagh (ORR) (Rs.75 lacs)

A sum of Rs.75 lakhs is approved in 10th five year plan and Rs. 7 lac in the Annual Plan 2002-03.

5. Construction of Subway at Nariana (Rs. 200 lac)

A/A & E/S for the subway has been received for Rs 164 lakhs Soil investigation work completed and the work is expected to start by Feb' 2002 which is expected to be completed by August'2003. The subway will add to the pedestrian safety at the location

where villages/ School going children etc cross the Ring Road which has very high volume of traffic. An outlay of Rs. 200 lac is approved in the 10th FYP and Rs. 50 lac in the Annual Plan 2002-03.

6 . Construction of Subway at Basai Darapur (Rs. 200 lac)

Preliminary Estimate for Rs 155 submitted to Govt of Delhi and simultaneously the proposal has been submitted to road traffic & transportation committee also for its clearance. The work is expected to start within 6 months of getting the A/A & E/S of the competent authority & clearance from RS&TTEC. An outlay of Rs. 200 lac is approved in the 10th Five Year Plan and Rs13.00 lacs in Annual Plan 2002-03.

7. Subway at Nangloi (Rs. 200 lac)

An outlay of Rs. 200 lac is approved in the 10th FYP and Rs. 8 lac in the Annual Plan 2002-03.

8,9,10,11 : No write up is provided by the department.

9. Subway across Outer Ring Road No. 6 at G. K. Enclave – I (Nehru Apartments) (Rs. 150 lac)

A sum of Rs. 150 lakhs is approved in 10th five year plan and Rs. 10 lac in the Annual Plan 2002-03.

12. Nigam Bodh Ghat Ring Road (Rs. 175 lac)

An outlay of Rs. 175 lac is approved in the 10th FYP and Rs. 7 lac in the Annual Plan 2002-03.

13. Subway across Ring Road at Sarai Kale Khan (Rs. 70 lac)

It is proposed to constructed a subway at this point to facilitate the people and pedestrian, crossing the road for ISBT , Sarai Kale Khan and Railway Station . This subway is included in the scheme of flyover at Ring Raod at sarai Kale Khan being

constructed by DDA . An outlay of Rs. 70 lac is approved in the 10th FYP and no provision is kept in the Annual Plan 2002-03.

14. Subway at Badarpur Market (Rs. 70 lac)

It is proposed to construct a subway to facilitate the local people to cross the D. M. Road for marketing . This subway is included in the scheme of elevated road on NH-2 at M. B. Road Jn. An outlay of Rs. 70 lac is approved in the 10th FYP and no provision is kept in the Annual Plan 2002-03.

15. Subway at Okhla Mor on D. M. Road (Rs.80 lac)

It is proposed to construct a subway at Okhla mor on D. M. Road to facilitate the School children and other pedestrians to cross the D. M. Road . An outlay of Rs. 80 lacs is approved in the 10th FYP.

16. Subway at Apollo Hospital on D. M. Road (Rs. 70 Lac)

It is proposed to construct a subway near Apollo Hospital to facilitate the pedestrians to cross the Mathura Road . An outlay of Rs. 70 lac is approved in the 10th FYP and no provision is kept in the Annual Plan 2002-03.

17. C/o subway at NH-X Jwala Puri.(Rs.75 lacs)

A sum of Rs.75 lakhs is approved in 10th five year plan and Rs. 7 lac in the Annual Plan 2002-03.

18. Construction of Subway at Ring Road in front of RRRC (Rs. 200 lac)

The subway is to be constructed based on specific need of the Army people Feasibility is to be got done and estimate to be prepared. An outlay of Rs.200 lac is approved in the 10th FYP and Rs. 5 lac in the Annual Plan 2002-03.

D&E No provision in the 10th FYP.

F Traffic Transportation Engineering Cell (Rs. 500lac)

Corridor improvement studies of Ring Road and Outer Ring Road will be carried under the scheme. An outlay of Rs. 500 lac is approved in the 10th FYP and Rs. 50 lac in the Annual Plan 2002-03.

G. Trans Yamuna Area Development Work (PWD) (Rs. 1500 lac)

(A) TYADB Works:-

In the 10th Five Year Plan following works are proposed to be taken up under TYADB:-

1. Subway at Shastri Park.
2. Subway at NH-24.
3. Unidentified Subways under Trans-Yamuna area.
4. Road along the Ghazipur drain extension.
5. Schemes to be identified under TYADB.

A provision is kept under 10th. Five Year Plan under TYADB. Since all are new identified schemes a provision is kept for Year 2002-03 for planning works such as Geotechnical study & preliminary investigation of these works.

MCD

Delhi's population has been rising in a spectacular manner due to normal growth and abnormal heavy inflow of migrant population from the adjoining states. Delhi attained extraordinary population growth due to increasing concentration of economic, education, medical and industrial activities, apart from being the nerve centre of political activities of the country. This is evident from the fact that Delhi's population has increased from 17 lacs during 1941 to about 94.21 lacs in 1991 and is 138 lacs in 2001. The tremendous increase & growth of population together with elevated standard of living has resulted in an alarming race in the growth of vehicular traffic. The number of motor vehicles has increased in the last two decades from 5.7 lacs in 1981 to more than 34 lacs in 2001, which is higher than motor vehicles put together in there gaining three metropolitan cities. In the absence of efficient mass rapid transportation system through railways, the entire burden has fallen on the existing road transport system. Thus

transportation in Delhi is very predominantly road oriented for meeting the infra city and inter city demand. However, the role of the local railways in neutralizing intricate demand is practically insignificant.

On account of tremendous increase in the population, there has been an unplanned growth of the city resulting in certain degree of income portability between physical form and functional character of the various areas. Apart from this, road user in Delhi are using the road in an undisciplined manner and there is inadequacy in physical adoption of traffic engineering techniques. Unplanned city growth increased the average trip length. Heterogeneous nature of traffic has further added fuel to the fire. These factors had lead to frequent traffic congestion's and chaos, Delhi has, to be honest, become a victim of its own giantism.

Inspite of the fact that MCD and other road agencies in Delhi had starved hard to over come these problems of high magnitude by carrying out construction of over bridges, grade separators, sub ways, widening of roads, improvement in the riding quality, disciplining pedestrian traffic by providing MS grill on central verge, providing footpath, improving geometric of intersection, signalization of intersection etc. through massive plan Grants, but there is no denying the cardinal fact that much still remains to be accomplished. The issue had also been engaging the attention of the Planning Commission well as other Planners. For immediate action in the behalf thrust is being given on the following aspects while formulating Xth Five Year Plan so as to put to optimum use the existing Infrastructural facilities.

TO COMPLETE ONGOING SCHEMES:

It is proposed to accord top most priority to the ongoing spill over schemes of 9th Plan and to complete the same in the shortest possible time.

NEW PROPOSALS FOR 10TH PLAN

A. Urban roads:

On account of abnormal manifold increase in the number of motor vehicles, increase in trip length and changing culture of Delhi on account of affluence, traffic on

existing road net work is increasing day by day thereby resulting in frequent traffic congestion's and chaos MCD has not been able to undertake periodic resurfacing of roads for the last several years on account of its difficult ways and means position. With the increasing pressure of traffic and enhanced axle load of traffic, Delhi roads get over stressed with the result that their condition deteriorates faster than in the normal wear and tear. As such it requires frequent resurfacing & strengthening.

Most of the major arterial roads have already been widened and scope for further widening is now almost exhausted. Therefore, as a policy, efforts are now being made to widen and improve the other city roads, main colony roads, peripheral roads, so that these may share the traffic burden to some extent and can act as bypasses of major congested roads, including blockage of main roads during various agitation and road accidents. This is likely to ease the tremendous traffic pressure on major arterial roads and go a long way in checking encroachment on the roads in times to come. Therefore, the following major steps are being proposed.

- a) To widen, improve, strengthen all the major plan road and arterial roads.
- b) To widen, improve, strengthen the sub-arterial roads with ROW of 45' and above.
- c) To construct dedicated independent cycle tracks along main roads, wherever bicycle traffic is heavy & space is available.
- d) To improve geometric of inter-sections by providing slip roads, medians, traffic - islands etc.
- e) To construct bus bays.
- f) To improve illumination standard of streets through lighting.
- g) To improve the road drainage system to avoid frequent damage to roads.
- h) To improve road markings, destination boards, road signs etc. & to provide grill, particularly at intersections to check frequent cross joy walking and to regulate the pedestrian traffic.

An outlay of Rs. 27745lacs is approved in the 10th Five Year plan for ongoing and new works. Out of which Rs. 5115 lacs are approved for the Annual Plan 2002-03 .

B. Grade separators/Road Bridges/Road under Bridges/ Widening of Bridges(Rs. 20580 lacs)

There is an extraordinary heavy traffic on certain intersections due to various factors and on account of site limitations there, further widening is not possible. Therefore, to manage and regulate the traffic, it is imperative to provide grade separators on these intersections and ROB/RUB at various Rly. crossings. Most of the schemes included are those which had been recommended in various studies made from time to time. Prima facie, this step shall help in reducing the haltage time at these intersections and shall also economise in fuel, time and foreign exchange in petrol which is being imported. It will also help in checking the pollution of mono-oxide emitted by the vehicles during idling period at these intersections. An outlay of Rs. 205.80 lacs is approved in the 10th Five Year plan and Rs. 2424 lacs in the Annual plan 2002-03.

C. Subways, Elevated Walkways & Foot over bridges. (Rs. 2654 lacs)

Great concern has quite often been shown in the behavioral pattern of pedestrians in as much as their interests are not being taken care of. That is why the high death rate of pedestrians and their involvement in the accident cases is alarmingly higher on Delhi roads. Therefore, a massive programme for construction of subways, elevated walkways/FOB on important roads where pedestrian volume is considered quite high had been drawn up. This shall be only case the spill over traffic of the pedestrians on the carriage way in the congested areas, but also result in reducing the high degree of conflict with vehicular traffic. An outlay Rs. 2654 lacs is approved in the 10th Five Year plan and Rs. 349 lacs in the Annual plan 2002-03.

D. Development of Parking sites (Rs. 4960 lacs)

At present, there is an acute parking problem of vehicles throughout the city with the result that vehicles are mostly being parked on the side portion of the carriage way itself. Improper parking further aggravates the problem and reduces the carriageway carrying capacity. Therefore, there is a dire necessity to construct multi level parking to reduce the parking problem on the carriage way, particularly in the congested areas. An outlay Rs. 4960 lacs is approved in the 10th Five Year plan and Rs. 514 lacs in the Annual plan 2002-03.

E. Transport Nagar (Rs. 1400 lacs)

It is proposed to develop one transport nagar near the entry of each national highway so that heavy goods vehicles coming to Delhi may unload the goods in these transport nagars and may leave the city without entering main bazars, whole sale markets and heart of the city. An outlay of Rs. 1400 lacs is approved in the 10th Five Year plan and Rs. 440 lacs in the Annual plan 2002-03.

Write up for some of the major projects are given below:-

1. Const. of Two Addl. openings on either side of existing RUB 12 near Zakhira. (Rs. 80 lacs)

The existing RUB 12 at Zakhira is not sufficient to cope up with the increased volume of traffic. This results in blockage of traffic specially in peak hours. An estimate for Rs. 320.74 lacs was sanctioned by MOST on 7.1.87. Two addl. openings by the side of existing RUB 12 with conventional girders methods, were to be constructed. Later on due to adoption of "Box pushing Techniques" by Rlys. the same was revised to Rs. 1345.37 lacs and as approved by MOST & MCD on 31.12.90.

There is a provision of providing 4 boxes of 9.0m each under Rly. line with approaches on either side besides underground drainage. It also include const. of sumpwell and shifting of different services.

The scheme was started in 1992 by Rlys. and had completed the work of 4 pushing boxes. The payment has been made for shifting of various services DJB had demanded Rs. 222lacs for sump& pump house, part payment of Rs. 50lacs has been made. The work is likely to be completed by March, 2003.

An outlay of Rs. 80 lacs is approved for the 10th Five year Plan to complete this scheme. An outlay of Rs. 12 lacs is approved for the Annual plan 2002-03.

2. Bridge over S.S. Light Rly. Line on G T Rd. Ghaziabad (Widening to 6 lanes with Footpath) Rs. 480 lacs)

With the completion of bridge over Yamuna near ISBT, it has become very essential to construct flyover bridge cum grade separate on S S light Rly. Line on G T Rd. to meet the demand of heavy vehicular traffic from Delhi to U.P.

This bridge will also cater to the demand of vehicular traffic, from large no. of new colonies developed by DDA in Trans Yamuna area near the boarder and Institutional complex & Jhilmil Industrial area. The following provisions are made in this scheme:-

1. Elevated rd. having four lanes divided c/way in a length of 1.207 km.
2. Road over bridge having 7 lanes divided c/way in a length of 0.423 km.
3. Service roads of 3 lane C/way (11mm wide) in a length of 0.700 km on either side of ROB.
4. 2.5m wide footpath on external sides of the service road in the entire length.
5. Two subways for crossing of pedestrian traffic.
6. Suitable turn around for the service roads between the elevated roads.

The original project cost of Rs. 1936 lacs was revised to Rs.4762.30 lacs and approved by MOST on 30.04.93. The work had been taken up in hand in Oct. 89 and 94.5% work has been completed on 12.11.93 middle four lanes for through traffic had been opened but work of approaches to ROB is held up for want of removal of encroachments for which DDA is being persued.

To complete the balance work an outlay of Rs. 480 lacs is approved for the 10th Five Year Plan and 72 lacs for the Annual Plan 2002-03.

3. **Widening of Calcutta Bridge on S.P. Mukherjee marg Yamuna Bazar.(Rs. 160 lacs)**

The objective of the scheme is to remodel the existing arch bridge on S.P. Mukherjee marg which is a bottleneck to the huge traffic running between central Delhi and East Delhi near Yamuna Bazar Chowk. This scheme provides for 4 nos. of 7.5m span and improvement to approaches of the bridge with 3 lanes divided carriageway with 1.2m central verge and footpaths on both sides.

The scheme prepared as per traffic study was approved by MOST for Rs. 996.94 lacs on 20.11.92 and by Corporation on 26.4.93. Main work is to be done by the Railways and the advance payment of Rs.500.00 lacs has been made to Railways. Railways has taken up the work at site. An outlay Rs. 160 lacs is approved for the 10th Five Year Plan Rs. 24 lacs in the Annual Plan 2002-03.

4. CONSTN. OF ROAD UNDER BRIDGE AT LEVEL CROSSING ON PATTARGANJ NEAR MADHUBAN. (Rs. 160 lacs)

A level crossing situated near Mathuban on Patparganj road connects Vikas marg to Patparganj enrouting to mother diary. At this level crossing perpetual traffic jams occur as about 110 to 120 trains pass on this track round the clock. This problem is likely to aggravate further with the no. of new colonies and group housing societies coming up on both sides of this crossing. Provision of R.U.B. at this location will provide much relief to the public.

A project estimate for Rs. 4.93 Crores was approved by MOST on 6.1.92 and MCD on 10.02.92. R.U.B. in the railway portion will be constructed by railway with box pushing technique. Salient features of the scheme are as under:-

- | | |
|---------------------------------|---|
| 1. Length | 475m including the Rly.portion. |
| 2. Right of way | Vikas Marg side - 80 Ft.
Mother dairy side - 100 ft. |
| 3. Under bridge in Rly. Portion | 2 No. RCC boxes each of 35m length 9m width. |
| 4. Clear height of bridge | 5.5m |
| 5. Approaches | Two divided carriageways of 7.5m each with 1.2m wide central verge 1.5m wide footpath on either side of the level crossing. |

Railways was paid Rs.2.06 Crores towards survey and planning charges and execution of work. Another advances of Rs. 7.07 lacs and Rs. 10.70 lacs have already been paid to DVB and DJB for shifting of services respectively Balance payment of Rs. 95.22 lacs is to be made to the DVB. Rs.11.42lacs are to be paid to DJB. The scheme was revised to Rs. 1404.74lacs by most on 22.07.99. Main work of boxes has been

completed . An outlay of Rs. 160 lacs is approved for 10th Five year plan to complete the balance work. An outlay of Rs. 24 lacs is approved in the Annual Plan 2002-03.

ALLIED WORKS

There are a number of allied works required to be carried out for smooth flow of traffic on roads and to facilities constructions of roads it is necessary to do proper survey of the location where road is required to be constructed, provision of road machinery for construction and maintenance roads through departmental labour.

It is also proposed to provide bicycle track on following roads

MB Road to ITO
GT Road to Vikas marg
Paschim Puri to Puchukian Road
Shah. To Chandni chowk
Pankha Road to Maya puri

Provision have also been kept for improvement to drainage system in city area, provision of destination boards, provision of Busways and Mastic treatment at important cross section on roads.

It is also proposed to construct bridges across major drains/Cannel to provide, Shorter/alternate route to the traffic at following drains.

1. Najafgarh drain near Bharat Nag.
2. Najafgarh drain at Kalidass marg.
3. Najafgarh drain at joining block 38-39 with Desu colony in Shakti Nagar.

11 IMPROVEMENT TO ROADS/STRENGTHENING OF FOOTPATHS (Rs. 10 .00 lacs)

With the implementation of Delhi Metro, the vehicular linkage as well pedestrian linkage needs to be strengthened. In view of this, roads, footpaths and cycle tracks around Metro Stations need to be improved/strengthened. There are 3 metro stations in NDMC area and it is envisaged that for strengthening of vehicular and pedestrian/cycle track linkage the cost would be around Rs.20 lacs and thus total requirement would be

Rs.60 lacs. An outlay of Rs.10 lacs is approved for Tenth Five Year Plan 2002-07 and Rs. 2 lacs for Annual Plan 2002-03.

12. WIDENING UP OF MINTO ROAD/BRIDGE (Rs. 100 lacs)

Northern Railway has contemplated providing two additional tracks on the Minto Bridge. Since the road width below this bridge is narrow as compared to road width on either side, Northern Railway has proposed to widen the bridge also so as to have uniform road width.

As per normal procedure, the proportionate cost of widening of bridge is required to be shared by MCD and NDMC as one side of the area falls with MCD and the other in NDMC jurisdiction. NDMC's share as indicated by Northern Railway is Rs.4.5 crores. The Chief Secretary, GNCT has agreed in principle to provide grant to the local bodies towards the cost of its share for widening of the bridge to be paid to Railways. An outlay of Rs. 100 lacs is approved for 10th Five Year plan & Rs. 10 lacs for Annual plan 2002-03.

1. TRANSPORT DEPARTMENT

Over the years, Delhi has witnessed unprecedented growth in its population as it has increased from 94.21 Lakh in 1991 to 137.83 Lakh in 2001 (provisional figures). The character and requirements of the city have also been changing due to heavy influx of about 2.5 Lakh people every year into Delhi, who mostly settle down in slums or jhuggi clusters. The majority of this population (88%) is residing in urban areas and only 12% in rural areas.

Studies show that by 2021, Delhi will be a mega city with an estimated population of more than 20 million. This phenomenal increase in population will further strain the transport network. As on 31-3-2001, the vehicle population in Delhi is 34.56 Lakh and is growing at the compound growth rate of 6.7% per annum. This has resulted in several

problems like high level of air and noise pollution, congestion on roads, increase in number of accidents and poor level of satisfaction of commuters demand for transport services. This is particularly attributable to absence of adequate mass transport network resulting in tremendous increase in the use of personalised vehicles, which in turn is causing the problems of congestion and parking, which needs to be addressed.

The Planning Commission, in a document titled 'Urban Transport in the Integrated Transport Policy', has emphasised two important issues to meet the challenge. One of them is mass transit requirement of the metro cities and the other strategic land use development policy with an aim to integrate land use with mass transit transport planning models. In a multi-modal transport system, the urban transit system should complement and not compete with other components of the system. Since mass transit system is expensive, it requires massive resource mobilisation and a long gestation period. In this situation, financing issues in urban transport projects needs to be addressed by a multi-pronged approach. Therefore, financing of urban transport projects needs to be taken up with consortium approach.

In Delhi, there is a multiplicity of authorities, who are handling different aspects of urban transport with an acute lack of coordination amongst them. There is a need to create a statutory body like unified metropolitan transport authority (UMTA) to coordinate the various agencies & modes and strengthen the regulatory framework within each mode.

Besides the requirements of slow moving vehicles, cyclists and pedestrians are to be accommodated.

During the 9th Five Year Plan, against the approved outlay of Rs 145000.00 Lakh, an expenditure (tentative) of Rs 120215.00 Lakh was incurred. For the 10th Five Year Plan, an outlay of Rs 293891.00 Lakh is approved including Rs 57669.00 Lakh for the Annual Plan 2002-03.

1. **ESTABLISHMENT OF A CENTRALISED UNIT FOR COLLECTION AND UPDATE OF DATA UNDER PLANNING AND MONITORING CELL SCHEME (Rs 40.00 Lakh)**

On the recommendation of Delhi Environment and Infrastructure improvement project Delhi-21, it is proposed to establish a centralised unit for collection and updating of data in various aspects of traffic & transportation.

As for a scientific approach in planning for long run and short term measures, it is necessary to have a database which will have to be continuously updated.

This unit will provide/maintain data such as vehicle registration, traffic volume, trip information, parking, truck movement public transport, pollution level norms and action etc. The work will be assigned to reputed organisations who will collect the data as well as conduct surveys as per requirement of this department.

For better coordination and to undertake the field studies effectively, availability of a field vehicle is essential and therefore it is proposed to purchase one Maruti Van which will be used for survey work. Beside provision for purchase of office furniture, equipment, personal computers (PCs) and one Photostat machine has also been made under this scheme.

Since it is one of the most important aspect of transport planning, it is proposed to continue this scheme in the Tenth Five Year Plan (2002-07) also.

An outlay of Rs. 80.00 Lakh was allotted for this scheme for the Ninth Five Year Plan (1997-2001) against which an expenditure of is Rs.9.99 Lakh was incurred . An outlay of Rs.40.00 Lakh is approved in the Tenth Five Year Plan 2002-07 including Rs 8.00 Lakh for the Annual Plan 2002-03.

2. MOTOR DRIVING TRAINING SCHOOLS (Rs 2914.00 Lakh)

Initially there were only two Govt. Motor Driving Training Schools, one at Burari and the other at Loni road for imparting training in motor driving. The motor driving training school at Loni road has been made a state of the art institution and is being run by a registered society called FAITH. The matter as to the nature of status of such motor driving schools i.e. whether in partnership with private institution or a private institution or an NGO, is under consideration and a decision to this effect will be taken soon.

The department's responsibility is to test drivers skills as per Motor Vehicles Act. At present, motor driving licenses are being issued after testing the skill of the applicants. Keeping in view the number of licenses to be issued and the quality which is required from the driving license holders, it is proposed to open one motor driving training school, of international standard, in each zone of Transport Department to be run in partnership with NGOs and the private sector. A scheme to formalize the same is being formulated. Some of the zonal offices have space constraints as the same are being run in rented accommodation. It is, therefore, proposed to construct zonal office along with motor driving training schools.

In 1997, Delhi was divided into 9 zones corresponding to the 9 police districts and in accordance with Govt. policy to reach nearest to the public Transport Department also opened its own offices housing motor licensing offices in each of the nine Zones.

At least 10 acres of land is required for opening a motor driving training school. Accordingly for South Distt (Okhla side), North Distt (Narela) and East Distt (Gazipur/ Mayur Vihar), department propose to purchase 10 acres of land for each of the motor driving training schools @ Rs50.00 Lakh per acre costing Rs.5.00 crores and for three Motor Driving Training School, the total cost will be Rs.15.00 crores

Similarly, for creating infrastructure on the existing land and also on the land proposed to be purchased, an amount of Rs.2.00 crore will be required. For the remaining six places, an amount of Rs. 12.00 crores will be required.

An outlay of Rs 1150.00 Lakh was provided in the 9th Five Year Plan (1997-2002) against the expenditure was Rs 253.83 Lakh. An Outlay of Rs 2914.00 Lakh is provided in the 10th Five Year Plan (2002-07) and Rs 400.00 Lakh is provided for the Annual Plan 2002-03.

3. **COMPUTERISATION OF RECORDS OF TRANSPORT DEPARTMENT
(Rs 827.00 Lakh)**

Computerization of records is a continuing plan scheme of the Department. Since more than thirty four Lakh vehicles stand registered under different categories in Delhi, lot of paper work/record is generated, which has to be retained on a permanent basis.

It was decided to computerise the record in respect of the following activities, for record management, monitoring and to provide efficient and effective services to the public: -

- (i) Registration of Vehicles
- (ii) Road Tax collection
- (iii) Issue of Permits
- (iv) Driving Licences
- (v) Computerisation of Pollution Control data
- (vi) Research and Development in respect of data pertaining to transport
- (vii) On line updation of transport data
- (viii) Public Relation Operations
- (ix) M A C Ts

The Transport Department, Govt. of Delhi, has entered into an MOU with the National Informatics Center (NIC), to computerize all its major activities at Headquarters, Zonal and sub-offices on an On-Line computer system. On a turn-key-basis, the responsibility of NIC involves System Analysis & design, software development & implementation, procurement and installation of hardware and other equipment.

During the Tenth Plan period, following activities are proposed to be undertaken:

-

- 1) Completion of the online computerisation for registration of vehicles and associated activities.
- 2) Driving Licenses with Image Processing at Headquarters and Zonal offices and networking through ISDN/RFLink.
- 3) All the Zonal computer systems are proposed to be networked through ISDN lines to allow flexibility of on-line updation and transaction of business at any Zonal office.
- 4) To stabilise day-to-day computer operations to handle public dealing in a transparent manner.

The Computerization program of the Department envisages creation of a Wide Area Network (WAN) connecting all Zonal authorities, two sub-offices and National Crime Record Bureau (NCRB) with host computer installed at Headquarter.

All the Zonal offices having on-line computer facilities for Registration and allied activities are needed to be provided with adequate technical staff for feeding information to the computer. The sensitive and sophisticated equipment installed at each Zonal office needs to be handled by technical staff, who are well conversant with the operations and proper upkeep of hardware, system application software. It is, therefore, essential the following minimum technical personnel are made available: -

- | | |
|------------------------|----|
| i) Data Entry Operator | 50 |
|------------------------|----|

During Tenth five year plan, it is proposed to have our own website after purchasing & installing web site with web server, which is likely to involve an expenditure of Rs.50.00 Lakh.

It has also been decided go on-line for all transaction by the year 2002. It is expected that by Dec. 2003, most of the transaction in respect of various activities related to registration, will be available to public on-line subject to the completion of other

procedural activities and security of transactions. The Core Committee constituted to advise Govt. of Delhi in e-governance will be requested to guide the department in this respect. For tax collection from public, it is proposed to invoke the facility of “Electronic Fund Transfer” so that there is no interface with public i.e. public is not required to visit Transport Department for payment of taxes & other payment related activities. As mentioned above, it is proposed to install/commission web server to transmit information sought by the public.

Department has decided to introduce SMART OPTICAL CARD in the Transport Department for Registration of Vehicles and its associated activities, like Registration, Permit issuance, Road Tax Collection, Fitness of vehicles, Challaning and Pollution Control activities etc. on BOO (Built Own Operate) basis. Chief Minister (Delhi) and Ministry of surface Transport have already approved this proposal. This card has been recommended for use as it has latest technology.

E-Governance and Office Automation of Transport Deptt.(HQ)

We have already installed Proxy Server with 15 Nos. of Intelligent Work station (based on Client Server Technology on LAN) for 15 senior officers of the Deptt. for E-Governance and office Automation. We are going to have one ISDN connection for 15 officers for Internet, E-Mail and office Automation purposes. It is hoped that it will create an environment of E-Governance and Office Automation.

The site preparation including purchase of air-conditioners for the remaining zonal computer cells and the front-end terminals will be undertaken. Besides maintenance/ renovation/ repair of the existing computers is required and it is proposed to make a provision of Rs. 50.00 Lakh has been made under Capital head for the Tenth Five Year Plan (2002-07) .

To meet other expenses including contracting services, a provision of Rs.300.00 Lakh is proposed for the Tenth Five Year Plan (2002-07).

For Ninth Five Year Plan (1997-2002), an outlay of Rs.700.00 Lakh was approved for the scheme and an expenditure of Rs.272.80 Lakh was incurred during the

first four annual plans. For Annual Plan (2001-02), an outlay of Rs.246.00 Lakh has been approved against which the anticipated expenditure is likely to be Rs.172.00 Lakh.

For the Tenth Five Year Plan (2002-07), an outlay of Rs.827.00 Lakh (Rs. 777 lakh under Revenue + Rs. 50 lac under Capital) and for Annual Plan (2002-03), an outlay of Rs.240.00 Lakh has been approved. (Rs.245 lakh under Revenue + Rs. 15 lac under Capital)

4. GRANT IN AID TO NGO's (Rs. 450 Lacs)

Due to heavy incidence of road accidents in Delhi, which is primarily attributed to the over speeding and lack of following the driving rules/signs, Road Safety Programmes are assuming more and more importance. To meet this requirement, it is proposed to undertake intensive road safety programmes. The road safety programmes would mainly be taken up through voluntary and non-governmental organisations, who would be given grant-in-aid for the purpose which is released on the basis of proposals submitted by organisations, who should be a registered as a society, on the basis of their past performance and record of good work and have two to three years experience in the field. One of the better ways to control over speeding on roads is to check their speed through interceptors. Keeping in view their utility, it is proposed to put more and more interceptors on Delhi roads to ensure adherence of traffic rules and maximum safety for the road users and 8 interceptors have already been deployed on Delhi's roads. Training of drivers and conductors for public service vehicles will also be taken up directly or through NGOs. Publicity material that helps to promote road safety will also be made available to the public.

For the ninth five year plan (1997-2002) an outlay of Rs. 200.00 lacs was provided against an expenditure of Rs. 204.17 lacs was incurred. An outlay of Rs. 450.00 lacs has been approved for tenth five year plan 2002 – 07 including Rs. 90 lacs for Annual Plan 2002-03.

5. STRENGTHENING OF TRANSPORT DEPARTMENT (Rs. 2000 lacs)

The work relating to registration of vehicles, issue of driving licences and permits etc. has been increasing over the years and to cope up with the increased work load and to enforce Motor Vehicle Rules effectively, the department needs to be suitably strengthened. The AR study has recommended to have a better and effective control over the zonal offices, for which the headquarter has to play an important role.

1. DEVELOPMENT OF ZONAL OFFICES

The Transport Department is having 9 Zonal Offices for various activities like issue of driving licence, registration of vehicles and related activities. On any working day around 250-500 persons attend the MLO office for various works. Thus, the requirement of adequate space modernization/computerisation of various activities of the Zonal office is very important. For faster disposal of work and to have transparency, it is important that the Zonal offices have adequate space, both open and covered.

Presently, MLO offices of New Delhi (Tilak Marg), North-West (Ashok Vihar) and Central Zone (Sarai Kale Khan) are functioning from rented/leased buildings where public money cannot be spent for capital works because of the relevant Financial Rules. Apart from these three office of West Zone (Janakpuri) and South-West (Palam) are working from District centre at Janakpuri which is basically a commercial centre having private shops. This place is quite congested and scope of expansion is almost nil. The number of people coming to office for various works is increasing every year, and this requires increase in physical capacity of the offices.

In view of the above situation, it is proposed to have new office buildings for the above mentioned 5 zones in their respective areas. For this purpose, land is proposed to be acquired from DDA and there after got constructed by Department and furnished. Alternativly Built-up property can be purchased by the Transport Department from DDA. As per the prevailing prices of DDA per Zonal office Rs. 2 Crore are required. Therefore a provision of Rs.10 crores needs to be kept in the 10th Five Year Plan for 5 Zonal Office buildings.

II. STRENGTHENING OF ENFORCEMENT WING

The objective of the scheme are

- check and regulate both transport and private vehicles numbering 35 Lakh on the roads
- have a dedicated system of enforcement
- have a quicker disposal of challan cases

Development of above enforcement system would ensure effective enforcement provision of Motor Vehicles Act and Delhi Taxation Act.

2. Proposed Activities

During the 9th five-year plan period, the department has taken certain measures to modernize enforcement wing by computerizing the challan issued by it and hiring wireless network for communication with the teams deployed in field. It is envisaged to continue the modernization of enforcement infrastructure during the 10th five-year plan period. The department would take up computerization of the remaining parts of challan process and also procure equipment / instruments for proper enforcement of Motor Vehicles Act and rules framed thereunder and also Supreme Court directions. The major activities proposed in this regard are as under: -

- A. Integrated facilities at borders for impounded vehicles.
- B. Vehicles equipped with speed radar gun, video cameras and other modern gadgets to detect violation of provisions of M.V. Act.
- C. Comprehensive training of all enforcement staff in various aspects.

The justification and estimated expenditure of these activities is briefly indicated below:

A. Integrated Facilities at Borders

One of the statutory responsibilities of enforcement wing is impounding of vehicles challaned under Section 207 of the M.V. Act and their safe keeping till they are released. Of the two impounding pits at Burari and Mall Road, one has already been acquired for MRTS scheme by DMRC. On the other hand, the number of vehicles being impounded by the department are on the upswing due to increased pace of enforcement and Supreme

Court directions requiring seizure of vehicles. As a result, the existing impounding pit at Burari in the north-west part of Delhi comprising 3 areas is found to be woefully inadequate.

There are 18 entry points in Delhi of which 8 have very heavy goods and passengers movement. The department is of the view that enforcement facilities need to be developed at 5 main entry points of Delhi. It is, therefore, proposed to set up five integrated enforcement facilities (IEF) of about 10 acres each.

These facilities would perform a variety of functions given below: -

- Deployment of staff in the border area from these locations.
- Impounding pit for vehicles seized in nearby areas.
- Pollution checking of vehicles entering into city with a view to allow entry of only non-polluting vehicles and preventing entry of non Delhi bound goods vehicles from entering into Delhi as in pursuance of Supreme Court directions.
- Weighing bridge to check overloaded vehicles.
- Courts for disposal of challans

Funds to the tune of Rs.3250 Lakh would be required during the 10th Plan period for development of these facilities @ 650 Lakh per facility as given below:

Head	Estimated Outlay
(i) Cost of land	- Rs.500 Lakh
(ii) Construction cost/ Development of facility	- Rs.100 Lakh
(iii) Equipments viz. weighing bridges etc.	- Rs. 50 Lakh

Total	Rs.650 Lakh

B. Modernization of Infrastructure

The department proposes to fully computerizes all aspects of challan process including their disposal. The existing communication system through wireless radio sets is proposed to be improved upon with regard to equipment quality and quantity.

The operational aspect is proposed to be modernized through procurement of 20 vehicles equipped with speed detector, video cameras/tachograph system, pollution gas analyzer and other modern gadgets to detect violation of provisions of law. This would improve mobility of enforcement teams, increased transparency besides reducing the element of discretion in challan process. Funds to the tune of Rs.400 Lakh would be required to develop above infrastructure as given below:

Item	Outlay
(i) Computerisation	Rs.100 Lakh
(ii) Wireless network	Rs.100 Lakh
(iii) Vehicles with equipments	Rs.200 Lakh

C. Training - Refreshers and In-service

The department is of the view that skills of the enforcement staff need to be enhanced by suitably given to training them. The proposed training programmes would cover a wide array of aspects related to computerization, police training (being uniformed staff), development of sensitivity in staff in public dealing aspects and change in their behavioural attitudes etc. Funds to the tune of Rs.50 Lakh would be required for this purpose. It is also proposed to provide uniform to the staff as mandated under Delhi Motor Vehicles Rules.

III. Capacity Building

In order to ensure systematic and scientific development management and operation of an integrated multi-modal transport system in Delhi, an institutional framework is a basic requisite. The focus will be on institutional strengthening and capacity building from within the available mechanism.

III. **Creation of R & I Branch**

With the expansion of the transport activities in Delhi, coupled with the strengthening of the Transport Department, it is essential to set up a R & I Branch in the department at Headquarters to cope up with the large number of incoming and outgoing correspondence and to ensure prompt, efficient and smooth functioning. For this purpose, it is proposed to create a model office where all services related to R&I including post office, courier services, fax services and e-mail will be made available. For this purpose, the advice of

Administrative Reform Deptt, GNCTD and DOP & Transport Department, GOI will be obtained.

IV. SETTING UP OF LEGAL CELL IN TRANSPORT DEPARTMENT

Transport Department has been implementing number of schemes including Delhi Mass Rapid Transit Project and Urban Commuter Rail-cum-Bus Projects with a view to improve the Public Transport System and to make it speedier, comfortable, affordable and pollution free. Besides, the Department also implements the Motor Vehicles Act, 1988 and the Rules framed there under, viz. Central Motor Vehicles Rules, 1989 and Delhi Motor Vehicles Rules, 1993. The nature and functioning of the department is both i.e. a service provider as well as regulator under the law. During the course of implementation of the projects aimed at providing better public transport services and enforcement laws, a number of court cases are instituted and will continue to be instituted against the department.

The nature of cases, so instituted, pertains to acquisition of land for the Delhi MRTS project, grant of permit and fitness to the transport vehicles, interpretation of laws, vehicular pollution, registration of vehicles, levy and collection of taxes on motor vehicles etc. Besides, the regular cases filed against the department in different judicial fora, a number of public interest litigations are also filed in which Transport Department is impleaded as one of the main respondent in the Supreme Court of India, Delhi High Court. Other State High Courts, District Courts, Consumers grievances and redressal forums, Central Administrative Tribunal (by the present and ex-employees) etc. At present, around 300 cases are pending against the department in different judicial fora and Courts.

Transport Department also faces difficulty, many a times, in interpreting the orders of the Court and seeks clarification and opinion on different matters.

There is no legal cell in the department inspite of the fact that it is one of the biggest litigant in the High Court of Delhi. Considering the nature and quantum of litigation work in the Transport Department, it is imperative that a legal cell should be set up with

sufficient manpower. To plead the cases of the department in different courts, a panel of advocates will be prepared and they will be appointed on retainers basis.

An outlay of Rs. 1420 lacs was provided in the 9th five year plan (1997-2002) against which expenditure incurred was 572.87 lacs.

The total outlay approved under this scheme is Rs.2000.00 Lakh for the Tenth Five Year Plan (2002-07) of which Rs.1500.00 Lakh is under capital head. For the Annual Plan 2002-03, a provision of Rs.250.00 Lakh is approved including Rs.175.00 Lakh under capital head.

6. **MASS RAPID TRANSIT SYSTEM (Rs.144141 lacs)**

The implementation of Phase-I of Delhi Mass Rapid Transit System (MRTS) has commenced w.e.f. 01-10-1998. The initial cost of three corridors covered in modified Phase-I namely, Delhi University-Central Sectt.(Metro/Underground-11kms; Shahdara-Tis Hazari-Nangloi(Rail/Surface and elevated corridor-25kms); Pulbangash-Subzimandi-Holombi Kalan (Rail/Surface and elevated corridor-19.3kms) was at Rs.4,860 crores (at April 1996 price level). The total length of these three approved corridors both by the Central Govt. and Govt. of NCT of Delhi was 55.3kms. The revised cost is at Rs.8,155.00 crores (at April 2001 prices).

During the course of implementation of modified Phase-I of Delhi MRTS Project, Group of Ministers of the Union Cabinet and Govt. of NCT of Delhi have reviewed the Subzimandi - Holombikalan corridor considering the fact that the development of Holombikalan-Narela complex, as estimated, has not turned around and, therefore, this corridor has been abandoned. In lieu thereof, it has been decided to implement Trinagar - Barwala corridor (elevated/surface rail corridor) covering a distance of 15.27kms. As a result of this change, the total length of the three corridors comprising Phase-I of MRTS Project has come down to 52kms.

The Govt. of NCT of Delhi, keeping in view the fact that High Speed Tram System project from Connaught Place to Dwarka (Gulab Bagh) has not materialised and there is considerable demand on this route and the fact that there is only one road connecting the Central Business District down-town area with the rest of the West and South-West Delhi and that the only road remains clogged throughout the day is contemplating the inclusion of Connaught Place-West Patel Nagar-Dwarka Metro/Elevated/Corridor (covering distance of 24.5Kms) in Phase-I of Delhi MRTS.

The total cost of this underground and elevated corridor is likely to be Rs.5,992.00 crores. This Corridor will be taken up in the Phase-I with the approval of the Central Govt. and will continue in Tenth Five Year Plan in lieu of Trinagar-Nangloi section of Shahdara-Trinagar-Nangloi Corridor (10 kms). The additional funds in case of Trinagar-Nangloi corridor being substituted by Connaught Place-Dwarka corridor will have to be contributed totally by Govt. of India and GNCT of Delhi in the form of equity/subordinate loan. The total cost of Phase-I of Delhi MRTS may, therefore, go up from Rs.8,155.00 crores to around Rs.12,000.00 crores. This will consequently require continuation of the equity contribution of Govt. of Delhi during the Tenth Five Year Plan and may also lead to increase in the quantum of contribution to be made every year to Delhi Metro Rail Corporation Ltd. This will also lead to the making of provisions for contribution for land acquisition during Tenth Five Year Plan.

Delhi Metro Rail Corporation Ltd. has assigned the Detailed Project Report in r/o new corridor (Connaught Place-Gulab Bagh) in the Tenth Five Year Plan.

The Shahdara-Tis Hazari section covering a distance of 8.3Kms is likely to be commissioned by December, 2002. The entire Phase-I of Delhi MRTS is likely to be completed within schedule, as 98% of the civil works have been already completed on Shahdara-Tis Hazari Section. Work on the Metro Corridor from Delhi University to Central Sectt. has commenced.

During the 9th Five Year plan, against the approved outlay of Rs. 72300.00 lakhs , an expenditure of Rs. 74131.26 lacs was incurred.

In order to implement and complete Phase-I of the MRTS Project, the following outlays are approved for the Tenth Five Year Plan (2002-07) as well as for Annual Plan 2002-03:-

(Rs. in Lakh)

MRTS	Tenth Five Year Plan (2002-07)	Annual Plan (2002-03)
Studies	Rs.700.00	Rs.30.00
MRTS Cell	Rs.50.00	Rs.5.00
Land Acquisition	Rs.20000.00	Rs.5400.00
Equity Shares	Rs.123391.00	Rs.28315.00
Total:	Rs.144141.00	Rs.33750.00

An outlay of Rs. 144141.00 lakhs is approved in the 10th Five Year Plan 2002-07 including Rs. 33750.00 lakhs for Annual plan 2002-03.

7. MODERNISATION OF INFRASTRUCTURE FOR CERTIFICATION OF ROAD WORTHINESS OF VEHICLES (Rs. 2594 lacs)

Inspection, fitness and certification of commercial/transport vehicles is mandatory under section 56 of the Motor Vehicles Act read with rule 62 of the Central Motor Vehicles Rules,1983. Every new, commercial/transport vehicle requires fitness from Board of Inspection, Burari as defined under Rule 2(b) of the Delhi Motor Vehicles Rules, 1993 at the time of its registration, which is valid for two years. The fitness is required to be renewed there-after every year under the law. The commercial/transport vehicles plying without valid fitness are deemed to be de-registered under the law.

02. At present there are more than 2.00 Lakh commercial/transport vehicles registered in NCT, Delhi. There is only one Inspection and Maintenance facility set up at Burari, which is inadequate. This scheme has two components, namely, (i) Modernization of the Inspection Pit at Burari, (ii) setting up of Additional Inspection Pits.

03. Vehicles Inspection Unit, Burari works under the overall administrative control and supervision of Deputy Director (Technical) who is assisted by Chief Motor Vehicles Inspector. There are 10 Inspectors posted in the Vehicles Inspection Unit. A Board of Inspection comprises two Inspectors who are jointly responsible under the law to inspect, certify and grant/renew fitness. The Certificate of Fitness and renewal thereof is issued jointly and severally by both the Inspectors, constituting Board of Inspectors.

04. During the Tenth Five Year Plan (2003-07), it has been proposed to decentralize the registration and fitness of commercial/transport vehicles, step by step, so that the transporters and owners of these vehicle do not face any difficulty and I & M facilities could be set up in Zonal Offices, wherever land is available. This will require land and infrastructure with technically qualified staff and periodical maintenance of the units and machinery with participation of Private Sector, requirement of technical staff could be minimized to the barest minimum.

The inspection and certification of commercial/transport vehicles plays a pivotal role in ensuring road worthiness of the vehicles and controlling vehicular pollution. Supreme Court of India in Public Interest Litigation – Writ Petition (civil) No. 13029 of 1985 in the matter of M.C. Mehta Vs. Union of India and Ors. On vehicular pollution in NCT of Delhi has, inter-alia, issued vide order dated July 28th, 1998, the following directions to Department of Transport, Govt. of NCT, Delhi.

a). To set up Automated Inspection and Maintenance facility for commercial vehicles in the first phase with immediate effect.

b). Comprehensive inspection and maintenance programmes to be started by Transport Department and private sector by 31.3.2000.

05. The automated inspection and maintenance facility at Burari has been operationalised by undertaking repairs of the Vehicles Testing System (VTS) at a cost of more than Rs.2.00 Lakh. Annual Maintenance Agreement with the representative of the concerned firm (Rotax Marine Pvt. Ltd.), whose VTS has been installed, is under process of execution. Besides the Break Test Analyzer System (three for heavy transport vehicles

and five for light transport vehicles) which had been already set up and installed at Burari, and their overhauling and extensive repairs are likely to be operationalised on priority. The action in this regard has been already initiated.

06. The Vehicles Inspection Unit has taken up with Transport Construction Division Inter-State Bus Terminals, Kashmiri Gate to set up Inspection and Maintenance Units for light commercial/transport vehicles (auto-rickshaws, taxis etc.) at three Zonal Offices of the Department, namely, Sarai Kale Khan, Anand Vihar and Loni. Estimates in respect of two Inspection and Maintenance Units at Loni and Anand Vihar Zonal Offices, prepared by the Transport Construction Division to the tune of Rs.9.00 Lakh each have been prepared & their administrative approval and expenditure sanction have been accorded by the competent authority. The works are likely to be resumed.

Transport Construction Division has recently furnished estimates for the third Inspection and Maintenance Unit at Sarai Kale Khan to the tune of Rs.9.70 Lakh, which is under process. The necessary administrative approval and expenditure sanction in this behalf is likely to be accorded by the competent authority.

07. Vehicles Inspection Unit Burari by performing the statutory responsibility of inspection and certification of commercial/transport vehicle, is in a position to generate revenue for the different years, as indicated in the following Table:

No. of Transport Vehicles Granted Fitness (Estimated Revenue/Fees)

Financial Year		Collected (excluding late fee)
1997-98	19404	Rs. 20 lacs
1998-99	46103	Rs. 50 lacs
1999-00	55219	Rs. 60 lacs
2000-01	95786	Rs. 1.00 crore

08. In order to expand the existing inspection and maintenance facility in respect of commercial/transport vehicles at vehicles inspection unit.Burari, recently, payment of Rs.55.00 Lakh has been made to Delhi Jal Board for a plot of land of 2.5 acres. The

possession of the suitable site of land is being taken from Delhi Jal Board. On this plot of land across the road at Burari I &M Unit for light, medium and heavy goods vehicles will be set up during the 10th Plan. There are at present around one lac goods carrier registered in NCT, Delhi.

09. In addition, during the period of 10th Plan (2002-03 to 2006-07) three Inspection and Maintenance Units for light, passenger, commercial/transport vehicles will be set up at three Zonal Offices viz. Sarai Kale Khan, Anand Vihar and Loni offices. In all five new Inspection and Maintenance Units are planned to be set up during 10th Five Year Plan involving Private Sector by calling "expression of interest".

10. Department of Transport also has concretised a proposal to set up the 5th new inspection and maintenance unit in South West adjoining Inter-state Bus Terminal at Dwarka. The Department has already got possession of land for ISBT in South West from Delhi Development Authority at a cost of Rs.8.16 crores. A plot of land for Inspection and Maintenance Unit at Dwarka would be earmarked for 5th Inspection and Maintenance Unit for commercial/transport vehicles.

11. During the Tenth Five Year Plan (2002-07), it has been proposed to decentralize the commercial registration and fitness, step by step, so that transporters do not face any difficulty and actual R.T.A., could be set up in every zonal office. This will require provision for land and infrastructure with technically qualified staff and periodical maintenance of the units and machinery.

12. With the setting up of five new Inspection & Maintenance Units in different Zones, the private non-commercial vehicles (cars and scooters) of 15 year old and above, which require re-registration after 15 years from the date of first registration, will also be subjected to inspection and certification before allowing their re-registration for five years in accordance with Law. At present these private non-commercial vehicles of 15 year old are not subject to any inspection and certification because facilities for the same do not exist. It is an axiomatic fact that by and large the old vehicles emit higher emissions and are more polluting and these vehicles were manufactured in our country

when we did not have any Emission Standards/Norms. Further, with the setting up of new I/M Units, considering the higher level of vehicular pollution in NCT , Delhi vis-à-vis the rest of the country, private non-commercial vehicles of five year and above could also be subject to inspection and certification by bringing in an amendment in rule 5 of the Central Motor Vehicles Rules, 1989 and urging Central Govt. in this regard.

An outlay of Rs. 1650.00 lacs approved in the 9th Five Year Plan (1997-2002) against which an expenditure incurred is Rs. 315.57 lacs.

An outlay of Rs. 2594.00 lakhs are allotted in the 10th Five Year Plan 2002-07 including Rs. 764.00 lakhs for Annual plan 2002-03.

8. DECONGESTION AND RATIONALISATION OF INTERSTATE BUS TERMINALS (Rs. 6000.00 lacs)

1. Following objectives have been fixed for 10th five year plan under this scheme.
 - i) To reduce the pollution level of the city.
 - ii) To reduce the traffic circulation from roads of Delhi.
 - iii) To ensure that the citizens residing in the outskirts of Delhi have not to do much travelling for getting the buses of required destinations.
 - iv) To reduce the extra load from the ISBT- Kashmere Gate.
 - v) To arrange the trips of various ISBTs in the most suitable way for the commuters.
 - vi) To provide maximum satisfactory services to commuters at all the ISBTs without any compromise on any account.

- a) For the betterment of passengers, commuters and citizens of Delhi and keeping in mind the various pronouncements of the Hon'ble judiciary, two more modern ISBTs are proposed to be constructed at South West and in North Delhi.

- b) The ISBT at South West will be constructed at Dwarka for which land has already been acquired and the ISBT is to be constructed by PWD, Govt of Delhi. The consultant for this construction has already been selected.

- c) In North the ISBT is to be constructed at Narela. The land for this ISBT will be provided by DDA and the construction will be done by PWD. Efforts are being made to get the allotment of land at the earliest.
- d) The work for construction of model ISBT Sarai Kale Khan has also started and the selection of the consultant has already been finalized. The construction is to be done by the PWD, Govt. of Delhi, and land for this construction is already available with the Transport Department.

1. **ISBT-KASHMERE GATE**

- a) In 1993 approx. 3700 trips were operating from here. This figure of trips reached at approx. 5007 trips per day in 1998. In 1998, from here, approx. 758 trips were transferred to Anand Vihar and approx. 397 trips were transferred to Sara Kale Khan, leaving approx. 3852 trips per day for this ISBT. It will not be out of place to mention here that planned capacity of this ISBT was 600 trips per day. Over the years trips from all the three ISBTs have increased/decreased because of the public requirements and because of transfers from one ISBT to another. As on 31-3-2001, approx. 2961, 2219 and 928 trips per day are operating from ISBTs at Kashmere Gate, Anand Vihar and Sara Kale Khan respectively.
- b) This ISBT at present has again become very congested and overloaded with trips. To reduce the trips from this ISBT, it is planned to transfer some bus trips to Anand Vihar and Sarai Kale Khan ISBTs.
- c) It is proposed to take up the following works during the 10th five year plan for the improvement of working at Kashmere Gate.

Electrical works (Kashmere Gate)

- i) The working of ISBT, Kashmere Gate is also proposed to be computerized to keep pace with modern development and better public facilities and quick handling of passenger/traffic and for making their working transparent. The

computerization process shall take care of inquiry , revenue collection, gate passes etc. which is likely to involve an amount of Rs. 25.00 Lakh.

ii) Security system

ISBT is a public place which is heavily visited by the public and therefore, security considerations are of vital importance and consequently it is necessary to modernize and upgrade the existing security by providing close circuit TV and security cameras etc. to help monitor the entire ISBT and shall involve an amount of Rs. 20.00 Lakh.

iii) Fire fighting arrangements

For such a heavily visited public place, fire fighting arrangements are essential for the safety of public. As such a provision of Rs. 60.00 lakh has been proposed for providing fire detection system, fire alarm system and sprinkle system etc. as per fire safety norms.

2 .ISBT- ANAND VIHAR (Rs. 1000.00 lacs)

Because of the increase in trips at Anand Vihar/ISBT due to further expected transfers from Kashmere Gate as mentioned at para-1 and keeping in mind the expected increase in the trips from this ISBT in the 10th five year plan.

CIVIL WORKS

i) Infrastructural improvement

Following infrastructural improvement over the period of five years (2202-2007) shall be necessitated on account of increase in traffic passenger load. The works proposed to be taken up shall cope up with the facilities required for additional buses and public entering ISBT :

	(Rs. in Lakh)
a) Construction of Idle Parking	Rs. 20.00
b) Construction of additional platform with sheds	Rs. 160.00
c) Construction of waiting hall for passengers	Rs. 10.00
d) Construction of additional toilet urinals and water connection etc. for public facility	Rs. 35.00
e) Improvement and providing other facilities such as	Rs. 266.00

Roads, paths, dustbins, fire fighting system, electric Sub-station building, additional reverse osmosis Plant for making water potable, first aid post, Police post building, public address system, Administrative block etc.

Horticultural improvement

It shall be taken up to improve the greening of the ISBT so that the atmosphere becomes environment friendly. An estimated expenditure of approx. Rs. 10.00 Lakh shall be required to be incurred for making the area green.

B. ELECTRICAL WORKS

i) Infrastructural improvement

The additional traffic and passenger load at ISBT Anand Vihar shall require provision of additional electrical requirement and upgradation of existing electrical system such as 11 KVA Electric Sub-Station, additional boosting arrangements for water supply, providing additional coolers, providing high mast lighting, Neon/glow sign boards, additional illumination, providing additional D.G. set for alternate source of electricity etc. for a total cost of Rs. 245.00 Lakh.

ii) Computerisation of ISBT/Anand Vihar

The working of ISBT Anand Vihar shall be computerized to keep pace with the modern development for better public facility and quick handling of passengers and traffic and for making the ISBTs working transparent. The computerization process shall take care of inquiry, revenue collection, gate passes etc. which is likely to involve an amount of Rs. 15.00 Lakh.

iii) Security system

ISBT is a public place which is heavily visited by a large number of people and therefore, security considerations are of vital importance and consequently it is necessary to modernize and upgrade the existing security system by providing CCTV (close circuit TV) and security cameras etc. to monitor the entire ISBT and shall involve an amount of Rs. 18.00 Lakh.

iv) Fire fighting arrangement

For such a heavily visited public place, fire fighting arrangements are essential for the safety of public. As such a provision of Rs. 30.00 Lakh has been proposed for providing fire detection system, fire alarm system and sprinkle system etc. as per fire safety norms.

v) Environmental improvement

A provision of Rs. 16.00 Lakh has been proposed to take care of environmental improvements including providing of adequate lighting ofr parks, water falls and fountains etc.

3. ISBT/SARA KALE KHAN (Rs. 1000 lakhs)

A new model ISBT is to be constructed at Sara Kale Khan, replacing the present ISBT. For the construction of this new ISBT, consultant has already been finalized and the work will be taken up by PWD. Land for this purpose is already in possession of the Transport Department.

To reduce the pressure from Kashmere Gate/ISBT, some trips may also be transferred to ISBT/ Sarai Kale Khan will have to be improved for the betterment of passengers and public till the construction of proposed ISBT. The trips from Sarai Kale Khan may increase because of enforcement action and because of transfer of some trips from Kashmere Gate.

6. a) In the annual plan 2002-2003 an outlay of Rs. 800 Lakh has been proposed for works in four ISBTs which are as follows :

ISBT at Anand Vihar Rs. 175.00 Lakh

ISBT at Sarai kale Khan Rs. 125.00 Lakh

Other ISBTs at North and
South West Delhi Rs. 500.00 Lakh

Rs. 800.00 Lakh

An outlay of Rs. 1900.00 laxhs approved in the 9th Five year plan (1997-02) against expenditure incurred is 464.27 lakhs.

An outlay of Rs. 6000.00 lakhs are allotted in the 10th Five Year Plan 2002-07 including Rs. 800.00 lakhs for Annual plan 2002-03.

Reorganising the management system for ISBTs

The ISBT at Kashmere Gate was transferred from DDA along with relevant staff with relevant clarifications and no further staff has been provided despite the fact that two more ISBTs at Anand Vihar and Sarai Kale Khan have started functioning. The functioning of these two ISBTs is being done by the staff, who has been transferred from DDA to the Transport Department as per MOU. With the passage of time, two more ISBTs namely ISBT/Anand Vihar and Sarai Kale Khan have also started functioning for which additional staff is required. The matter is still under consideration and a proposal for creation of posts, if required, will be moved separately.

Beside, the expenditure involved in providing security, sanitation and scavenging operations, running and operation of D.G. sets has to be met through outsourcing.

9. CONTROL OF VEHICULAR POLLUTION FROM THE EXHAUST OF MOTOR VEHICLES (Rs. 1700.00 lacs)

This scheme has the following objectives:-

- To control pollution caused by motorised vehicles plying in Delhi.
- To create awareness amongst the motoring public in particular and public at large about the effects of various vehicular pollutants.
- To provide adequate pollution checking and certification facilities at Petrol Pumps and Workshops.
- To enforce standards of various pollutants emitted by the vehicles prescribed in the Central Motor Vehicles Rules, 1989.
- To enforce pollution control orders of Supreme Court and Environment Pollution (Prevention and Control) Authority for the NCR Region.

Magnitude of the Problem:

1. The vehicular pollution in Delhi has been growing at a much faster rate than in any other part of the country. From 2 Lakh vehicles registered in 1970, the vehicular population, in Delhi, has reached beyond 34 Lakh. A high growth rate almost 12% per annum is being maintained in the vehicular population against less than 2% of human population.

2. Vehicular pollution in Delhi has also increased rapidly as a result of rapid growth in vehicular population. It is estimated that about 3000 M.T. of air pollutants are emitted every day in Delhi of which 67% is due to vehicular emissions making Delhi one of the highest polluted city of the world. Vehicular emissions interalia include Carbonmonoxide, Hydrocarbons, Oxides of Nitrogen, Particulate matter and Lead. Petrol driven vehicles are mainly responsible for the high levels of particulate matter of Oxides of Nitrogen.

3. According to Central Road Research Institute's (CRRI) vehicular emissions inventory of Delhi (1991), petrol driven vehicles added 86% of the 1,20,349 tonnes/annum of Carbonmonoxide in the atmosphere. Diesel vehicles were higher in emissions of Oxides of Nitrogen & Sulphur (93% & 95%) and solely responsible for the suspended particulate matter (93% to 95%).

4. Vehicular emissions constitute a very important component of any strategy to control air pollution in Delhi because not only it is largest source of air pollution, its share is likely to increase in near future because of projected increase in vehicular population.

The contribution of vehicular, industrial and domestic sources of pollution to the ambient air in Delhi (sources white paper, Govt. of India) is as follows :

	1970-71	1980-81	1990-91	2000-01
Industrial	56%	40%	29%	20%
Vehicular	23%	42%	64%	72%
Domestic	21%	18%	7%	8%

I. Legal Provisions :

A. Govt. of India have laid down specific standards under Rule 115(2) of CMV Rules, 1989 in respect of Carbonmonoxide levels for petrol driven vehicles and smoke emission levels in respect of diesel driven vehicles. As per these standards , idling CO (Carbonmonoxide) emission limits for all four wheeled petrol driven vehicles should not exceed 3% by volume. Similarly, idling CO emission levels of all 2 and 3 wheeled petrol driven vehicles should not exceed 4.5%. Smoke density limits of 65 HSU by Free Acceleration method of Test has been prescribed in respect of Diesel vehicles.

Rule 115(1) of CMV Rules, 1989 requires that every vehicle other than motor cycles of engine capacity not exceeding 70cc manufactured prior to the 31-3-1990 shall be maintained in such condition and be so driven as to comply with the standards prescribed in Rule 115(2) of CMV Rules, 1989.

Rule 115(7) of CMV Rules, 1989 makes it compulsory for every motor vehicle more than one year old to carry a valid PUC Certificate by an agency utilised for this purpose by the State Govt. The certificate shall be always carried in the vehicle and produced on demand by the officers authorised in this regard. In Delhi, validity of period of PUC Certificate has been fixed as 3 months.

Section 190(2) of Motor Vehicles Act, 1988 lays down the penalty for violation of prescribed emission standards. The fine amount Rs.1000/- for first offence and Rs.2000/- for every subsequent offence. This offence is compoundable on payment of compounding fee of Rs.900/- and Rs.1800/- for every subsequent offence. Govt. of Delhi has issued a notification empowering Pollution Level Test Inspector (PLTI) of Transport Department for compounding these offences.

II. Directions of the Supreme Court :

Hon'ble Supreme Court has been seized of a Public Interest Litigation regarding vehicular pollution in Delhi. (CWP No.13029 of 1985 in the matter of M.C. Mehta Vs. Union of India and Others). The Hon'ble Court has issued the following directions

having far reaching consequences which are being implemented/are to be implemented under this Plan Scheme:-.

1. **Phasing out of commercial/transport vehicles of more than a certain age :**

The following directions have been issued in this regard vide order dated 22.09.1998 :

- (a) All commercial/transport vehicles which are more than 20 years old (9,349) shall be phased out and not permitted to ply in the National Capital Territory of Delhi after 2nd October, 1998.
- (b) All such commercial/transport vehicles which are 17 to 19 years old (3,200) shall not be permitted to ply after 15th November, 1998.
- (c) All such commercial/transport vehicles which are 15 years and 16 years old (4,962) shall not be permitted to ply after 31st December, 1998.

2. Plying of Vehicles on Alternate Fuels :

Following directions have been issued in this regard vide order dated 28.07.1998.

- (a) Replacement of all pre 1990 autos and taxies with new vehicles on clean fuels by 31.03.2000.
- (b) Financial incentives for replacement of all post 1990 autos and taxies with new vehicles on clean fuels, by 31.03.2001.
- (c) No 8-year old bus to ply except on CNG or other clean fuels, by 31.03.2000.
- (d) Entire city bus fleet (DTC & Private) to be steadily converted to single fuel mode on CNG by 31.03.2001.

3. Inspection and Maintenance Regulations for Vehicles :

Following directions have been issued, in this regard, vide order dated 28.07.1998 :

- (a) Automated inspection and maintenance facilities to be set up for commercial vehicles in the first phase (immediate).
- (b) Comprehensive I/M Programme to be started by Transport Department and private sector by 31.03.2000.

III. Directions of the Environment Pollution (Prevention & Control) Authority :

(i) Ministry of Environment & Forests, Govt. of India has been constituted an Environment Pollution (Prevention & Control) Authority (EPA) under the directions of the Supreme Court. Under the Environment (Protection) Act of 1986, the authority has been empowered to take all necessary measures for protecting and improving quality of Environment and preventing, controlling and abating environment pollution in the NCR Region.

a. EPA has directed Transport Department, Govt. of Delhi to chalk out a time bound plan to completely eliminate the plying of overloaded vehicles within the NCT of Delhi since it has been felt that overloading of vehicles is one of the major causes of pollution.

EPA has further directed that special check posts at all points of access in Delhi should be established to stop the entry of overloaded vehicles. Also, arrangements for adequate storage facilities have been directed to be ensured in order to handle the goods which are off loaded at the check points.

The department had been asked to implement the action plan and start intensive drive for complete ban on entry/plying of over loaded vehicles in Delhi w.e.f. 15.10.1998.

IV. Work Done: -

The following work is being done under the Scheme: -

- (i) There is statutory requirement of carrying road worthiness inspection of Transport vehicles numbering approx. 3 Lakh. These vehicles are checked for pollution levels at the time of such inspection.
- (ii) It has been made mandatory for every motor vehicle registered in Delhi to obtain Pollution Under Control Certificate after every 3 months.

- (iii) Petrol pumps and Workshops numbering 440 have been authorised to check the exhaust emission tuning of pollution vehicles and issue of Pollution Under Control Certificate for both petrol and diesel driven vehicles.
- (iv) Through mobile enforcement teams, regular checking against polluting vehicles is being carried out and punitive action under provisions of M.V. Act is taken.
- (v) Pollution Control related directions of the Supreme Court including the phasing out of old commercial vehicles are being enforced through mobile enforcement teams.
- (vi) Provisions of the Motor Vehicles Act relating to “Construction and Maintenance” of Transport vehicles are being enforced through mobile enforcement teams.
- (vii) Public awareness campaigns are carried out to educate the people, especially motorists about hazards and need for vehicular pollution control. Assistance of voluntary organisations and school children is being taken in such campaigns.

V. Proposed Activities During 10th Five Year Plan

Creation of public awareness and active involvement of NGOs in a massive way for control of vehicular pollution and promotion of environment friendly fuels like CNG, LPG and Electric vehicles is planned to be continued during the 10th Five Year Plan period.

It is proposed to emphasis public awareness through newspaper advertisements and the widest possible distribution of handbills in large numbers giving vital information such as emission standards laid down for different vehicles; the names of centres utilised for pollution checking; the ill effects of vehicular exhaust etc., benefits of clean fuels/alternate source of energy i.e. CNG, Propane, Electricity, LPG, Solar Power.

Following mass awareness activities are proposed :-

- (i) Advertisement in newspapers.
- (ii) Installation of bus panels/bus shelters/kiosks.
- (iii) Printing of handbills and other educational materials.
- (iv) Honorarium to volunteers and Home Guards.

- (v) Holding of educational talks, seminars, workshops, street plays etc.
- (vi) Giving financial assistance and grants-in-aid to NGOs doing active and useful work in the field of vehicular pollution awareness and control.
- (vii) Establishment of information centres for dissemination of technical Information on all aspects of vehicular pollution and benefits of alternative fuels.
- (viii) Any other activity connected with creation of mass awareness.

A cell consisting of Pollution Control Officers/PLTIs and headed by one Dy. Director is proposed to be established exclusively to co-ordinate steps in this direction. The cell will interact with NGOs, Schools, Colleges, etc. for involving them in public awareness campaigns and enforcement drives on a continuous and permanent basis. It will conduct orientation and briefing programmes for the volunteers participating in the mass awareness programme and enforcement drives.

Regular enforcement drive in the city against polluting vehicles and also technical provisions pertaining to construction and maintenance activities are proposed to be strengthened further. It is also proposed to carry a pilot study for assessing the usefulness of 'Remote Sensing Equipment' in Indian conditions.

The equipment is, reportedly, being used in Western and American cities and to be capable of measuring emissions of Several thousand of vehicles per day and can be effectively to catch the polluting vehicles. It is felt that the equipment can help in development of vehicular emission inventories, identification of most significant vehicle types in relation to high emissions and also of individual high emitting vehicles. It is proposed to procure this equipment subject to results.

The strength of the enforcement is proposed to be increased by continued deployment of about 90 Home Guards. It is estimated that 42 teams would be required for intensive enforcement of provisions of Motor Vehicle Act and rules

framed there under pertaining to vehicular pollution control and also directions of Supreme Court and Environment Protection Authority. The details of vehicular population plying passing through Delhi are as under :-

- A. Private (non-transport) vehicles : 30 Lakh
B. Commercial (Transport) vehicles registered in Delhi
Viz. trucks/bus/autorickshaw etc. : 3 Lakh

The following “Vehicle to enforcement team” ratio is felt desirable to obtain effective results :-

Category	Ratio	No. of teams
A. Pvt. Vehicles registered in Delhi	1,00,000 : 1	30
B. Commercial vehicles registered in Delhi	25,000 : 1	12
TOTAL		42

Transport Department has authorised about 440 petrol pumps and workshops as pollution checking centres (PCCs) to provide facilities for pollution checking, tuning of polluting vehicles and issue of PUC Certificates. These facilities have been expanded substantially.

Though authorization of these centers has benefited vehicles owners considerably and a large nos. of vehicles owners availing PUC checks, the need for the staff for effective checking of these PCCs to contain instances of over charging, checking without proper testing procedure, uncalibrated equipments etc. has also increased.

It is proposed to deploy a team of two Pollution Control Officers in each of the 9 police District of Delhi for conducting regular inspections at these centres for effective monitoring and also intensive training of staff of these centres about polluting testing procedure and operation of equipments.

Contribution to FTL:- Fuel Testing Laboratory has been established at Noida by the petroleum industry in pursuance of directions of Hon’ble Supreme Court. The lab has been established to curb the fuel adulteration in the NCT, Delhi and surrounding areas. In recent years fuel adulteration has been cited as one of major causes of vehicular pollution and regular lifting of fuel samples from petrol pumps in NCT of Delhi through Food and Civil Supplies Department and their free testing at this laboratory will be

strong deterrent to unscrupulous elements engaged in Fuel adulteration and will help in reducing vehicular pollution. Keeping the above in view, Transport Department has agreed to provide Rs.50.00Lakh per annum as the annual running cost of this laboratory.

Rooms/protocabins are proposed to be constructed and existing rooms are to be repaired. Checkposts at the 18 entry points are to be constructed.

An outlay of Rs. 600.00 lakh was allotted in the 9th Five Year Plan against expenditure incurred was Rs. 841.95 lacs.

An outlay of Rs. 1700.00 lakhs is approved in the 10th Five Year Plan 2002-07 including Rs. 240.00 lakhs (Rs. 40.00 lcs under capital head) in the Annual plan 2002-03.

3. RE-STRUCTURING AND REVIVAL OF DELHI TRANSPORT CORPORATION (Rs. 61800.00 lakhs)

As a state transport undertaking of Govt. of Delhi, Delhi Transport Corporation (DTC) has the major responsibility of providing an effective and rapid public transport system in the city at a reasonable price. In the 9th Five-Year Plan, it was envisaged that out of a total requirement of 10000 state carriage buses in Delhi by 2001, DTC will have to provide a fleet of 50 % ie., 5000 buses for city operation. Despite that, DTC has reduced its net loss to Rs. 174.87 crores during the year 2000-01 which is less than the targeted loss of Rs. 187.43 crores.

During the 9th Five-Year Plan, a number of prestigious projects are in hand with the DTC like Global Positioning System, ergonomic norms for body building designs, automatic ticketing machines, introduction of smart cards, bus terminal facilities, commercial use of its assets, computerization of its records and inventories etc. Government of NCT of Delhi has entered into an MoU with the DTC for the year 2000-01 and the MoU for 2001-02 is under consideration with the government.

An outlay of Rs. 33200.00 lacs was approved in the 9th five year plan against which an expenditure was Rs. 42513.00 lacs.

An outlay of Rs.61800.00 Lakh has been approved for Tenth Five Year Plan (2002-07) and Rs.14000.00 Lakh for Annual Plan 2002-03.

12. MODERNISATION OF STATE TRANSPORT AUTHORITY Rs(25.00 lacs)

After the grant of about 3000 Stage Carriage Permits to the Red Lines / Blue-Line Operators in the year 1992-93, the role of STA has assumed far more significance in providing a good public transport system in Delhi. Supreme Court of India has already fixed a target of 10000 total stage carriages to be achieved by in the year 2001. Since switching over to CNG mode of fuel has also to take place, this target has so far remained unachieved. However, with the various new innovative measures initiated by the Transport Department, Delhi and the DTC, STA's role as a Statutory Controlling Authority is bound to increase. The public transport system is poised to undergo a tremendous change because of various new proposals like Zonalization, GPS, Introduction of Smart Cards, Independent Tariff Regulatory Authority, Installation of Electronic Speed Governors, Installation of Electronic Fare Meters etc. The Government has already launched a new Radio-Taxi Project and is seriously considering the introduction of another popular scheme for Cool-Cabs. In this scenario, the role of STA has to be increasingly multifarious and redefined to suit the need of the hour.

It was proposed to divide STA's work into 3 major wings ie., STA Secretariat, DTC's Monitoring Cell and Driver's Databank.

TARGETS FOR TENTH FIVE YEAR PLAN (2002-07)

Strengthening of STA (Rs.25.00 Lakh)

i) Renovation and Refurbishing the STA Branch.

It is proposed to give a complete facelift to the existing STA Branch at the Headquarter of the Transport Department and to make it a public dealing branch on the lines of corporate sector/ banks. For this purpose, funds will be spent on the engagement of a designer / interior decorator, air-conditioning, furniture's and fixtures, other office equipments.

ii) **Computerization.**

Most of the activities of the STA are already computerized. However, Authorization of AITPs, Counter Signature and Renewal of National Permits and Issue of Temporary Permits are still being done manually. It is proposed to computerize these activities through procurement of hardware.

An outlay of Rs. 2000.00 lacs is provided in the 9th Five Year Plan and against that no expenditure is incurred.

An outlay of Rs. 25.00 lac is provided in the 10th FYP including rs. 5.00 lac in the Annual Plan 2002-03.

13. DEVELOPMENT OF ALTERNATIVE MODE OF TRANSPORT INCLUDING OF ELECTRIC TROLLEY BUS (Rs. 28200.00 lakh)

In compliance with Direction of Supreme Court in 1998, all the entire city bus fleet DTC & Private is to be steadily converted to single fuel mode on CNG by 31-03-2001. Most of the existing diesel buses will not be permitted to ply on Delhi's roads and CNG operated bus will not be able to meet the increasing requirement of public transportation of the city. The CNG operated buses have limited capacity and existing diesel buses contributing towards environmental pollution in the city which has already reached on alarming level.

Govt. of National Capital Territory of Delhi is, therefore, seriously considering to provide alternative mode of transport to replace the diesel buses in a phased manner. The Electric Trolley Buses(ETB), which are eco-friendly and have higher capacity is one of the systems under consideration. To start with, it is proposed to introduce this system(ETB) on high density routes.

Transport Department has already approached RITES to carry out a study on ETB in three phases, namely (i) Techno-economic feasibility study, ii) Detailed project report and iii) Tender documents on various routes preferably arterial and work out the viability of the ETB system on the routes.

The ETB system will be fed by the regular buses, and will be planned on routes where it will supplement the proposed MRTS.

1. Sky Bus Metro:- A proposal to introduce Sky Bus Metro in Delhi is under consideration as it is a rapid mass transit system, rail based but not a railways. The Sky Bus Metro network will help in reducing pollution in Delhi. To implement the proposal covering 120 kms (double line) metro, the estimated expenditure will be about Rs.5300.00 crores and will take about four years to complete. Provision of funds will be asked after a policy decision, in this regard, is taken.

2. Sky train: In order to provide an efficient Urban Transport Service along busy roads without disruption and totally free of the restrictions imposed by and on other modes of traffic, it is proposed to introduce the Sky Train Rapid Transit System in Delhi. This system will achieve the goal of decongestion on roads of Delhi at a lower cost than that of any other form of light rail transport. It is a unique transit system which combines the long span technology of wire cables with the strength and rigidity of high tension steel to enable Aero trains carrying 850 passengers upward to travel over traffic locked streets unhampered by vehicular traffic, road intersections, pedestrian crossings and all other factors which can stifle movement of traffic in city.

The Sky train is a suspended light rail system capable of moving people at a rate of over 25,000 per hour in both directions at speeds matching traditional underground rail systems. It also provides the long term guarantee of safety of the track cables and supporting structures as the Guide Wheels on either side of the box tracks ensure against any possibility of derailment and clamp or claw brakes. Besides prevent sliding and aquaplaning and can bring the train to an immediate halt under any weather conditions.

Feasibility Conditions: -

Sky train requires no land. Beside, it does not involve tunnelling at exorbitant cost nor does it require the massive concrete structure of an elevated permanent way. It does not need costly bridging support over rivers and valleys and it can avoid the

need for extension refurbishment or realignment of existing infrastructures by the roads, flyovers, drains, sewers, or other services. Sky train can twist and turn along almost any existing street system and it can climb all but the most exceptional of gradients. There is no need to purchase/acquire buildings/homes etc. which could obstruct the routing of other transit systems nor is there any need to consider elevated roads, ways and pedestrian bridges as impediments to Sky train can flyover them, with the freedom of a bird.

Financial Pattern :-

Following will be the sources of funding through which this revenue will be operated:-

- (a) State share.
- (b) Central share.
- (c) Central Assistance or loan or grant.
- (d) International financial assistance/grant.
- (e) Issue of bonds or loan through local sources.

3. **Plan for modes – mapping routes:-** It is also proposed to get a study conducted about the entire gamut of activities of DTC by appointing a consultant, who will do the road mapping also.

An outlay of Rs. 2500.00 lakh in the 9th five year plan against which no expenditure was incurred.

An outlay of Rs. 28200.00 lakhs is approved in the 10th Five Year Plan 2002-07 including Rs.1100.00 lakhs for Annual plan 2002-03.

14. SETTING UP OF DELHI UNIFIED METROPOLITAN TRANSPORT AUTHORITY (DUMTA) (Rs. 250.00 lakhs)

In Delhi, many authorities are providing/helping in providing transport facilities to the people, like Transport Department , PWD, MCD, NDMC, DDA traffic police etc. who are engaged in construction and maintenance of roads, subways, overbridges, etc.

At times it has been noticed that there is lack of coordination amongst them and overlapping in their functions.

The Delhi Urban Environment & Infrastructure Improvement Project - Delhi 2021 report, prepared by Govt. of India & Planning Department, GNCTD for perspective planning upto 2021, has recommended for early setting up of a Unified Metropolitan Transport Authority to remedy the situation. It has, therefore, been felt that Delhi should have such an authority, who will act as a link between the transport owners and the Govt. The proposed authority will perform several functions and some of its important functions, which have been incorporated in the draft DUMTA Bill also, are enumerated hereunder:-

- i) To prepare long term and short term transport system plan of NCT of Delhi.
- ii) To mobilise resources for development of transport facilities.
- iii) To ensure integrated planning, development and operations of transport system, facilities and services.
- iv) To decide the need for and bring new transport facilities.
- v) To prescribe terms and conditions of a license to a transport facility.
- vi) To provide finance, land and other resources as loan or grant or equity on prescribed terms and conditions etc.
- vii) To facilitate preparation of private enterprise and private resources for transport services.
- viii) To formulate/integrate fare policy for transport policy.
- ix) To render advice to GNCT of Delhi in the matters relating to the development of urban transport technology and other related matters.
- x) Design and maintain Delhi transport information system and --- publish salient features on a regular basis.
- xi) Prescribe safety standards.

The Bill for establishing such an authority has been prepared and is under the active consideration of the Govt.

This is an ongoing scheme for which an outlay of Rs.2000.00 Lakh was approved in the Ninth Five Year Plan (1997-2002) against which an anticipated expenditure of 2.80 lacs was incurred.

An outlay of Rs. 250.00 lakhs is approved in the 10th Five Year Plan 2002-07 including Rs. 50.00 lakhs for Annual plan 2002-03.

15. INCENTIVE FOR LIGHT PUBLIC TRANSPORT PASSENGER VEHICLES (Rs. 800.00 lacs)

GNCTD has decided to grant 4% interest subsidy to the vehicle owner who have replaced their 15 years and old commercial/transport vehicles in pursuance to Supreme Court Order of dated 2.9.1998. the 4% interest subsidy scheme was only upto 31.12.1999 but since the replacing 15 years old vehicle is an ongoing process this Deptt. has sent a proposal to Finance Deptt. to extend 4% interest subsidy scheme.

Honorable Supreme Court has also directed the Deptt. to replace all pre 1990 autos and taxies with new vehicles on the clean fuels. In the same order Supreme Court has also directed to give financial incentives for replacement of all posts 1990 autos and taxis with new vehicles on the clean fuels. Interest subsidy has to be released to financing institution on year by basis till recovery of loan.

An outlay of Rs.500.00 Lakh was approved in the Ninth Five Year Plan (1997-2002) against which an expenditure incurred is Rs. 127.14 lacs.

An outlay of Rs. 800 lacs is approved for the 10th Five year plan and outlay of Rs. 168.00 is approved for Annual plan 2002-03.

16. STUDIES AND CONSULTANCY SERVICES(Rs. 2000.00 lakhs)

Following studies are proposed to be undertaken on priority during Tenth Five Year Plan (2002-07) :-

- i) Phase – II MRTS

- ii) Policy advisory for transport planning estimation of travellers, modal split, supply of services through multiple modes, fares and tariffs.
- iii) Route planning
- iv) Feeder route
- v) Electronic Trolley Bus
- vi) Sky train

An outlay of Rs. 2000.00 lakhs approved in the 9th plan against expenditure incurred is Rs. 15.70 lacs.

An outlay of Rs.2000.00 Lakh is allotted for Tenth Five Year Plan (2002-07) and Rs.75.00 Lakh for Annual Plan 2002-03.

17. DEVELOPMENT OF BUS TERMINALS AND DEPOTS (Rs. 2500.00 lakhs)

Terminal and Depots had got to be expanded in number as well as capacity for infrastructural requirement of buses. . An authority which is in a position to give equal treatment to all operators needs to be set up. After strengthening the administrative support for road based public transport system, the development of bus terminals and depots is a necessary infrastructural requirement. The DDA master plan etc. having formally provided for multi-model public transport in Delhi, the range of activity is such that private sector participation is necessary and desirable. At an appropriate stage, a scheme for setting up of a Corporation, on the lines of IAAI to manage ISBTs, terminals and depot may be taken up.

Priority is being accorded to construction of bus terminal at Najafgarh. Transport Department has already paid an amount of Rs.67.00 Lakh to DDA as cost of land and subsequently an expenditure of Rs.89.00 Lakh was incurred on account of construction of bus terminal and it is expected that minimum facility for passenger interchange is made available in 2000-2003 at Najafgarh Bus Terminal.

Similarly an amount of Rs.1.05 crore has also been paid to DDA for acquiring land at Rohini, Narela, Mangol Puri, Shalimar Bagh, Binda Pur etc. Proposal for allotment of land for proposed bus terminal at Mangol Puri Phase-II is under progress.

All the sites earmarked for bus depot/terminals have been taken over by Transport Department and it is expected that most of the terminals/depots will be made operational in Tenth Five Year Plan.

The sites earmarked for bus terminals are under the control of PWD and proposed bus terminals will be constructed on BOT basis otherwise depending on availability of funds. It is also proposed to purchase land from concerned authority of Ghaziabad, Haryana, Greater Noida for construction of bus terminals to serve NCR region. These authorities have been requested to provide suitable land for construction of bus terminals and provision for staff quarters vide our letter dt.18-05-99. Response from Greater Noida Authority has been received and they are ready to allot 4 acres of land for this purpose. The said land has been inspected by the team of officers from Transport Department which was found suitable. It is proposed to buy this land at the cost of Rs.48.00 Lakh. However, response from land owing authorities is awaited.

This is an ongoing scheme for which an outlay of Rs. 1987.00 Lakh was approved during the years 1998-2002. By the end of Annual Plan 2001-02, an expenditure of Rs.256.61 Lakh has been incurred.

An outlay of Rs.2500.00 Lakh has been approved under capital head for Tenth Five Year Plan including Rs.400.00 Lakh for Annual Plan 2002-03.

4. REGIONAL RAIL NETWORK (Rs. 37550.00 lakhs)

In the third year of 9th Five Year Plan, a scheme viz “Development of Ring Railway in integration with MRTS” was included with a provision of Rs.1.00 crore in the AP 1999-2000 and Rs.1.00 crores in the Annual Plan 2000-01. It was renamed as ‘Regional Rail Network’ in the Annual Plan 2001-02 and a provision of Rs.200 crore was made. For implementation of the scheme, report of M/s Rail India Economic and Technical Services (A Govt. of India Enterprises) commissioned by Ministry of Railways delineating in all 23 Urban Commuter Rail Projects was thoroughly examined by the NCT of Delhi. Out of 23 Urban Commuter Rail Projects, 11 Rail Projects have been recommended for NCT Delhi and remaining 12 in NCR. The list of these projects are listed below.

Commuter Rail Network Development Plan (Phase-I) and Cost Estimates

(Rs. In crore)

S. No.	Description of proposal	Length (km.)	Cost of Rolling Stock	Cost of land	Total cost including (4) & (5) and other cost
1.	2.	3.	4.	5.	6.
IN DELHI AREA					
1.	Shahdara-Shahibabad Dedicated Double Line Electrified BG Corridor	6.80	74.80	7.14	189.67*
2.	Shahdara-Shahibabad Dedicated Double Line Electrified BG Corridor	16.10	177.10	16.91	385.92
3.	New Tilak Bridge-New Delhi Station Dedicated Double Line Electrified BG Corridor (Ajmeri Gate side)	4.50	49.50	100.00	235.00
4.	Holombikalan-Narela Dedicated Double Line Electrified BG Corridor	5.70	62.70	5.95	117.03
5.	Dayabasti to Brijbasan Dedicated Double Line Electrified BG Corridor	18.50	196.25	19.43	376.69
6.	New Tilak Bridge-Tughlakabad Dedicated Double Line Electrified BG Corridor	15.50	170.50	16.27	381.00
7.	Strengthening of Southern portion of Ring Railway	28.00	112.00	-	187.20
8.	A new Terminal at Tilak Bridger suitably integrated with Tilak Bridge station of underground East West MRTS corridor	L.S.	-	40.60	95.00
9.	Provision of Platforms and a halt opposites Pragati Maidan Station on Anand Vihar-Tilak Bridge Line	L.S.	-	-	13.00
10.	Patel Nagar-Shakur Basti Double Line Electrified BG Link	6.25	68.75	6.58	129.53
11.	Brar Square-Delhi Cantt. Dedicated Double Line Electrified BG Link	3.91	43.00	4.20	93.90
	Sub Total:-	105.26	954.60	215.08	2203.94

After due deliberations and dispassionate consideration with Ministry of Railways, Ministry of Urban Development and Poverty Alleviation, NCRPB and other concerned agencies and stake holders, the following five projects have been prioritised. These prioritised projects, which would be taken up for implementation in the Tenth Five Year Plan are delineated below:-

1. Shahdara-Shahibabad
2. Shahibabad-Ghaziabad
3. Shahibabad-New Tilak Bridge
4. Dayabasti-Bijwasan
5. Bijwasan-Gurgaon

The total cost of the implementation of the above prioritised Projects has been estimated at Rs.2073.00 crores (at April 2000 price level). These projects will be completed during the Tenth Five Year Plan. The memorandum of understanding between the concerned stake holders will be duly executed. It will be ensured that two ways electrified dedicated tracks created for integrated development of Rail and Bus Transport System for decongestion of Delhi, shall be exclusively used for running of modernised trains for commuters of NCT and NCR and shall not be used by the railways for either their goods or passenger trains. Two Special Purpose Vehicles (SPV) will be manufactured for implementation of the above projects by the stake holders. Debt Equity ratio for implementation of project may be 1:1. The contribution will be made in the form of equity to the Special Purpose Vehicles to be created for implementation of the projects. M/s RITES have already been assigned the work of preparing detailed project report at the composite Professional Consultancy Fee of Rs.335.00 Lakh (including service tax etc.) and the report is likely to be made available within a period of six months.

The feasibility report of taking up another project from Noida Terminal, the implementation of New Delhi-Tilak Bridge-Mayur Vihar, Mayur Vihar (Delhi Border-Noida Terminal) and Noida Terminal and Greater Noida integrated rail-cum-bus project will also be examined and decision taken thereon.

For implementation of the above, Project in NCT and NCR for decongestion of Delhi, an outlay of Rs.37550.00 Lakh has been approved for Tenth Five Year Plan including Rs.5319.00 Lakh for Annual Plan 2002-03.

MCD

Delhi's population has been rising in a spectacular manner due to normal growth and abnormal heavy inflow of migrant population from the adjoining states. Delhi attained extraordinary population growth due to increasing concentration of economic, education, medical and industrial activities, apart from being the nerve centre of political activities of the country. This is evident from the fact that Delhi's population has increased from 17 lacs during 1941 to about 94.21 lacs in 1991 and is 138 lacs in 2001. The tremendous increase & growth of population together with elevated standard of living has resulted in an alarming race in the growth of vehicular traffic. The number of motor vehicles has increased in the last two decades from 5.7 lacs in 1981 to more than 34 lacs in 2001, which is higher than motor vehicles put together in three metropolitan cities. In the absence of efficient mass rapid transportation system through railways, the entire burden has fallen on the existing road transport system. Thus transportation in Delhi is very predominantly road oriented for meeting the intra city and inter city demand. However, the role of the local railways in neutralizing intricate demand is practically insignificant.

On account of tremendous increase in the population, there has been an unplanned growth of the city resulting in certain degree of incompatibility between physical form and functional character of the various areas. Apart from this, road users in Delhi are using the road in an undisciplined manner and there is inadequacy in physical adoption of traffic engineering techniques. Unplanned city growth increased the average trip length. Heterogeneous nature of traffic has further added fuel to the fire. These factors have led to frequent traffic congestion's and chaos, Delhi has, to be honest, become a victim of its own gigantism.

In spite of the fact that MCD and other road agencies in Delhi had strived hard to overcome these problems of high magnitude by carrying out construction of over bridges, grade separators, sub ways, widening of roads, improvement in the riding quality, disciplining pedestrian traffic by providing MS grill on central verge, providing footpath, improving geometric of intersection, signalization of intersection etc. through

massive plan Grants, but there is no denying the cardinal fact that much still remains to be accomplished. The issue had also been engaging the attention of the Planning Commission well as other Planners. For immediate action in the behalf thrust is being given on the following aspects while formulating Xth Five Year Plan so as to put to optimum use the existing Infrastructural facilities.

TO COMPLETE ONGOING SCHEMES:

It is proposed to accord top most priority to the ongoing spill over schemes of 9th Plan and to complete the same in the shortest possible time.

NEW PROPOSALS FOR 10TH PLAN

Urban roads:

On account of abnormal manifold increase in the number of motor vehicles, increase in trip length and changing culture of Delhi on account of affluence, traffic on existing road net work is increasing day by day thereby resulting in frequent traffic congestion's and chaos MCD has not been able to undertake periodic resurfacing of roads for the last several years on account of its difficult ways and means position. With the increasing pressure of traffic and enhanced axle load of traffic, Delhi roads get over stressed with the result that their condition deteriorates faster than in the normal wear and tear. As such it requires frequent resurfacing & strengthening.

Most of the major arterial roads have already been widened and scope for further widening is now almost exhausted. Therefore, as a policy, efforts are now being made to widen and improve the other city roads, main colony roads, peripheral roads, so that these may share the traffic burden to some extent and can act as bypasses of major congested roads, including blockage of main roads during various agitation and road accidents. This is likely to ease the tremendous traffic pressure on major arterial roads and go a long way in checking encroachment on the roads in times to come. Therefore, the following major steps are being proposed.

- a) To widen, improve, strengthen all the major plan road and arterial roads.
- b) To widen, improve, strengthen the sub-arterial roads with ROW of 45' and above.
- c) To construct dedicated independent cycle tracks along main roads, wherever bicycle traffic is heavy & space is available.
- d) To improve geometric of inter-sections by providing slip roads, medians, traffic - islands etc.
- e) To construct bus bays.
- f) To improve illumination standard of streets through lighting.
- g) To improve the road drainage system to avoid frequent damage to roads.
- h) To improve road markings, destination boards, road signs etc. & to provide grill, particularly at intersections to check frequent cross joy walking and to regulate the pedestrian traffic.

An outlay of Rs. 27745 lacs is approved in the 10th Five Year plan for ongoing and new works. Out of which Rs. 5115 lacs are approved for the Annual Plan 2002-03 .

B Grade separators/Road Bridges/Road under Bridges/ Widening of Bridges(Rs. 20580 lacs)

There is an extraordinary heavy traffic on certain intersections due to various factors and on account of site limitations there, further widening is not possible. Therefore, to manage and regulate the traffic, it is imperative to provide grade separators on these intersections and ROB/RUB at various Rly. crossings. Most of the schemes included are those which had been recommended in various studies made from time to time. Prima facie, this step shall help in reducing the haltage time at these intersections and shall also economise in fuel, time and foreign exchange in petrol which is being imported. It will also help in checking the pollution of mono-oxide emitted by the vehicles during idling period at these intersections. An outlay of Rs. 205.80 lacs is approved in the 10th Five Year plan and Rs. 2424 lacs in the Annual plan 2002-03.

C. Subways, Elevated Walkways & Foot over bridges. (Rs. 2654 lacs)

Great concern has quite often been shown in the behavioral pattern of pedestrians in as much as their interests are not being taken care of. That is why the high death rate of pedestrians and their involvement in the accident cases is alarmingly higher on Delhi roads. Therefore, a massive programme for construction of subways, elevated walkways/FOB on important roads where pedestrian volume is considered quite high had been drawn up. This shall be only case the spill over traffic of the pedestrians on the carriage way in the congested areas, but also result in reducing the high degree of conflict with vehicular traffic. An outlay Rs. 2654 lacs is approved in the 10th Five Year plan and Rs. 349 lacs in the Annual plan 2002-03.

D. Development of Parking sites (Rs. 4960 lacs)

At present, there is an acute parking problem of vehicles throughout the city with the result that vehicles are mostly being parked on the side portion of the carriage way itself. Improper parking further aggravates the problem and reduces the carriageway carrying capacity. Therefore, there is a dire necessity to construct multi level parking to reduce the parking problem on the carriage way, particularly in the congested areas. An outlay Rs. 4960 lacs is approved in the 10th Five Year plan and Rs. 514 lacs in the Annual plan 2002-03.

E. Transport Nagar (Rs. 1400 lacs)

It is proposed to develop one transport nagar near the entry of each national highway so that heavy goods vehicles coming to Delhi may unload the goods in these transport nagars and may leave the city without entering main bazars, whole sale markets and heart of the city. An outlay of Rs. 1400 lacs is approved in the 10th Five Year plan and Rs. 440 lacs in the Annual plan 2002-03.

Write up for some of the major projects are given below:-

1. **Const. of Two Addl. openings on either side of existing RUB 12 near Zakhira. (Rs. 80 lacs)**

The existing RUB 12 at Zakhira is not sufficient to cope up with the increased volume of traffic. This results in blockage of traffic specially in peak hours. An estimate for Rs. 320.74 lacs was sanctioned by MOST on 7.1.87. Two addl. openings by the side of existing RUB 12 with conventional girders methods, were to be constructed. Later on due to adoption of "Box pushing Techniques" by Rlys. the same was revised to Rs. 1345.37 lacs and as approved by MOST & MCD on 31.12.90.

There is a provision of providing 4 boxes of 9.0m each under Rly. line with approaches on either side besides underground drainage. It also include const. of sumpwell and shifting of different services.

The scheme was started in 1992 by Rlys. and had completed the work of 4 pushing boxes. The payment has been made for shifting of various services DJB had demanded Rs. 222lacs for sump& pump house, part payment of Rs. 50lacs has been made. The work is likely to be completed by March, 2003.

An outlay of Rs. 80 lacs is approved for the 10th Five year Plan to complete this scheme. An outlay of Rs. 12 lacs is approved for the Annual plan 2002-03.

2. **Bridge over S.S. Light Rly. Line on G T Rd. Ghaziabad (Widening to 6 lanes with Footpath) Rs. 480 lacs)**

With the completion of bridge over Yamuna near ISBT, it has become very essential to construct flyover bridge cum grade separate on S S light Rly. Line on G T Rd. to meet the demand of heavy vehicular traffic from Delhi to U.P.

This bridge will also cater to the demand of vehicular traffic, from large no. of new colonies developed by DDA in Trans Yamuna area near the boarder and Institutional complex & Jhilmil Industrial area. The following provisions are made in this scheme:-

1. Elevated rd. having four lanes divided c/way in a length of 1.207 km.
2. Road over bridge having 7 lanes divided c/way in a length of 0.423 km.

3. Service roads of 3 lane C/way (11m wide) in a length of 0.700 km on either side of ROB.
4. 2.5m wide footpath on external sides of the service road in the entire length.
5. Two subways for crossing of pedestrian traffic.
6. Suitable turn around for the service roads between the elevated roads.

The original project cost of Rs. 1936 lacs was revised to Rs.4762.30 lacs and approved by MOST on 30.04.93. The work had been taken up in hand in Oct. 89 and 94.5% work has been completed on 12.11.93 middle four lanes for through traffic had been opened but work of approaches to ROB is held up for want of removal of encroachments for which DDA is being persued.

To complete the balance work an outlay of Rs. 480 lacs is approved for the 10th Five Year Plan and 72 lacs for the Annual Plan 2002-03.

3. **Widening of Calcutta Bridge on S.P. Mukherjee marg Yamuna Bazar.(Rs. 160 lacs)**

The objective of the scheme is to remodel the existing arch bridge on S.P. Mukherjee marg which is a bottleneck to the huge traffic running between central Delhi and East Delhi near Yamuna Bazar Chowk. This scheme provides for 4 nos. of 7.5m span and improvement to approaches of the bridge with 3 lanes divided carriageway with 1.2m central verge and footpaths on both sides.

The scheme prepared as per traffic study was approved by MOST for Rs. 996.94 lacs on 20.11.92 and by Corporation on 26.4.93. Main work is to be done by the Railways and the advance payment of Rs.500.00 lacs has been made to Railways. Railways has taken up the work at site. An outlay Rs. 160 lacs is approved for the 10th Five Year Plan Rs. 24 lacs in the Annual Plan 2002-03.

4. CONSTN. OF ROAD UNDER BRIDGE AT LEVEL CROSSING ON PATTARGANJ NEAR MADHUBAN. (Rs. 160 lacs)

A level crossing situated near Mathuban on Patparganj road connects Vikas marg to Patparganj enrouting to mother dairy. At this level crossing perpetual traffic jams occur as about 110 to 120 trains pass on this track round the clock. This problem is likely to aggravate further with the no. of new colonies and group housing societies coming up on both sides of this crossing. Provision of R.U.B. at this location will provide much relief to the public.

A project estimate for Rs. 4.93 Crores was approved by MOST on 6.1.92 and MCD on 10.02.92. R.U.B. in the railway portion will be constructed by railway with box pushing technique. Salient features of the scheme are as under:-

- | | |
|---------------------------------|---|
| 1. Length | 475m including the Rly.portion. |
| 2. Right of way | Vikas Marg side - 80 Ft.
Mother dairy side - 100 ft. |
| 3. Under bridge in Rly. Portion | 2 No. RCC boxes each of 35m length 9m width. |
| 4. Clear height of bridge | 5.5m |
| 5. Approaches | Two divided carriageways of 7.5m each with 1.2m wide central verge 1.5m wide footpath on either side of the level crossing. |

Railways was paid Rs.2.06 Crores towards survey and planning charges and execution of work. Another advances of Rs. 7.07 lacs and Rs. 10.70 lacs have already been paid to DVB and DJB for shifting of services respectively Balance payment of Rs. 95.22 lacs is to be made to the DVB. Rs.11.42lacs are to be paid to DJB. The scheme was revised to Rs. 1404.74lacs by most on 22.07.99. Main work of boxes has been completed . An outlay of Rs. 160 lacs is approved for 10th Five year plan to complete the balance work. An outlay of Rs. 24 lacs is approved in the Annual Plan 2002-03.

ALLIED WORKS

There are a number of allied works required to be carried out for smooth flow of traffic on roads and to facilities constructions of roads it is necessary to do proper survey of the location where road is required to be constructed, provision of road machinery for construction and maintenance roads through departmental labour.

It is also proposed to provide bicycle track on following roads

MB Road to ITO

GT Road to Vikas marg

Paschim Puri to Puchukian Road

Shah. To Chandni chowk

Pankha Road to Maya puri

Provision have also been kept for improvement to drainage system in city area, provision of destination boards, provision of Busways and Mastic treatment at important cross section on roads.

It is also proposed to construct bridges across major drains/Cannel to provide, Shorter/alternate route to the traffic at following drains.

4. Najafgarh drain near Bharat Nag.
5. Najafgarh drain at Kalidass marg.
6. Najafgarh drain at joining block 38-39 with Desu colony in Shakti Nagar.

IMPROVEMENT TO ROADS/STRENGTHENING OF FOOTPATHS (Rs. 10 lacs)

With the implementation of Delhi Metro, the vehicular linkage as well pedestrian linkage needs to be strengthened. In view of this, roads, footpaths and cycle tracks around Metro Stations need to be improved/strengthened. There are 3 metro stations in NDMC area and it is envisaged that for strengthening of vehicular and pedestrian/cycle track linkage the cost would be around Rs.20 lacs and thus total requirement would be Rs.60 lacs. An outlay of Rs. 0 lacs is approved for Tenth Five Year Plan 2002-07 and Rs. 2 lacs for Annual Plan 2002-03.

12. WIDENING UP OF MINTO ROAD/BRIDGE (Rs. 100 lacs)

Northern Railway has contemplated providing two additional tracks on the Minto Bridge. Since the road width below this bridge is narrow as compared to road width on either side, Northern Railway has proposed to widen the bridge also so as to have uniform road width.

As per normal procedure, the proportionate cost of widening of bridge is required to be shared by MCD and NDMC as one side of the area falls with MCD and the other in NDMC jurisdiction. NDMC's share as indicated by Northern Railway is Rs.4.5 crores. The Chief Secretary, GNCT has agreed in principle to provide grant to the local bodies towards the cost of its share for widening of the bridge to be paid to Railways. An outlay of Rs. 100 lacs is approved for 10th Five Year plan & Rs. 10 lacs for Annual plan 2002-03.

NDMC

1. PROCUREMENT OF SPECIAL T&P (Rs. 100 lacs)

The new technology for resurfacing is being slowly introduced, however, for maintenance of roads technology needs to be strengthened. It is proposed to purchase special T&P to mechanize road repairs by way of purchase of pneumatic cutters, patch making machines or mobile mixing plants for hot mix as well as for cold mix. There is also a need for augmenting/replacement of trippers/trucks/tempos etc. An outlay of Rs. 100 lacs for Tenth Five Year Plan 2002-07 and Rs. 2 lacs for Annual Plan 2002-03 is approved for this purpose.

2. CONSTRUCTION OF SUBWAYS AT VARIOUS PLACES IN NDMC AREA (Rs. 300 lacs)

A survey has been conducted and sites for construction of subways have been identified. So far 15 subways have been constructed in NDMC area. An outlay of Rs. 300 lacs is approved during the Tenth Five Year Plan 2002-07 and Rs. 50 lacs during

Annual Plan 2002-03. NDMC will also explore possibility of construction of subways on BOT.

List of Sub-ways to be constructed At the crossing of C-Hexagon is given below.

1. Shahjahan Road
2. Tilak Marg
3. Sakir Hussain Marg
4. K.G. Marg
5. Peshwa Road- Mandir Marg T-Junction
6. Chemsford Road- Connaught Circus
7. Talkatora Road
8. Baba Khark Singh Marg in front of Bangla Sahib Gurudwara
9. Baba Khark Singh Marg in front of State Emporium
10. Minto Road- Connaught Circus Crossing
11. Sansad Marg- Jai Singh Road Crossing
12. Shaheed Bhagat Singh Marg- Bangla Sahib Crossing
13. Across Janpath near Central Cottage Industries Emporium
14. Subway at Aurbindo Marg in front of Safdarjung Airport
15. Subway at Talkatora Road in between Parliament Annexe

3. STRENGTHENING & RESURFACING OF ROADS IN NDMC AREA INCLUDING STREET LIGHTING (Rs. 500 lacs)

As per recommendations of Sub-Committee which gave its report in 1993, the resurfacing of roads in NDMC area is normally done after every five years by 40mm thick hot bituminous carpet as per conventional method. The technology is being upgraded by laying macro-seal or by laying hot bituminous carpet with the use of polymer (CRMB). This will ensure better riding quality, avoidance of humps and more life i.e. minimum 6 years. With the use of this technology, the resurfacing will be done after 6 years instead of 5 years.

Roads recommended by Sub-committee for resurfacing are listed below.

Sr. No.	<u>Name of Roads</u>	Area in Sq.m.
1.	Baba Kharak Singh Marg	30081
2.	Subramaniam Bharti Marg	35666
3.	Shanti Path (from Ring Road to Satya Marg Round about)	21649
4.	Aurobindo Marg (from Y-4 crossing to Safdarjung Flyover)	25592
5.	Akbar Road	33161
6.	Safdarjung Road- Akbar Road round about	4838
7.	Willingdon Crescent	49916
8.	Kamal Attaturk Marg	19540
9.	Lodhi Road	26032
10.	B-Avenue Road (Sarojini Nagar)	14231
11.	G-Avenue Road (from Satya Marg to B.H.S. Road)	4217
12.	Race Course Road	10175
13.	Rafi Marg (Sunheri Masjid to 'D' Circus)	13900
14.	Barakhamba Road (from Mandi House Circle to Tolstoy Marg Crossing)	9950
15.	Sardar Patel Marg	46115
16.	Shankar Road	23665
17.	Ashoka Road	29576
18.	Pandit Pant Marg	16100
19.	Church Road	14250
20.	Max-Muller Marg	12305
21.	South End Road	9812
22.	Udyan Marg	13740
23.	Copernicus Marg	15840
24.	Brig. Hoshiar Singh Marg	27992
25.	Aurobindo Marg (from Safadarjung Flyover to Yusuf Sarai)	43427
26.	School Lane Flyover (approaches only)	8650
27.	Safdar Hashmi Marg	6340
28.	Bangla Sahib Marg	14660
29.	Tolstoy Marg	26931
30.	Feroz Shah Road	23405

31.	Teen Murti Marg (from Kautilya Marg to P.M. Circus)	16542
32.	Gurdwara Rakab Ganj Road	16148
33.	Africa Avenue (from Ring Road to Satya Marg Round about)	37450
34.	Radial Road C-Point to National Stadium	3060
35.	Radial Road C-Point to Dr. Zakir Hussain Marg	4995
36.	Radial Road C-Point to K.G. Marg.	3850
37.	Radial Road C-Point to Shahjahan Road	3850
38.	Radial Road C-Point to Tilak Marg	5540
39.	C-Point round about	4560
40.	India Gate round about	5110
41.	C-Hexagon to India Gate Road	1321
42.	India Gate to C-Point road	545
43.	Rajpath (C-Hexagon to Vijay Chowk)	21600
44.	Satya Marg	24447
45.	North Avenue	14080
46.	South Avenue	14083
47.	Dr. Zakir Hussain Marg (from Subramanium Bharti Marg to Obroi Hotel Fly-over)	26924
48.	Arch Bishop Macarious Marg	19750
49.	Red Cross Road	4885
50.	Bara-Khamba Road (Connaught Place to Tolstoy Marg)	10178
51.	Mandir Marg	29120
52.	Bhai Vir Singh Marg	12446
53.	Vinay Marg	21024
54.	Shanti Path (Satya Marg to Kautilya Marg)	42000
55.	Bhagwan Dass Road	34300
56.	Nayay Marg	32500
57.	I- Avenue	14650
58.	Panchsheel Marg (S.P. Marg to Shanti Path – Niti Marg to Samrat Hotel)	18660
59.	Park Street	10680
60.	Aurangzeb Road	28300
61.	K.G. Marg	31350

62.	Raisina Road	10540
63.	Sunheri Bagh Road	8599
64.	Tees January Marg	9680
65.	Hukami Bai Marg	1736
66.	Brassy Avenue	1757
67.	Niti Marg	30628
68.	Chander Gupta Marg	26844
69.	San Martin Marg	26100
70.	Rajaji Marg	17529
71.	R.K. Ashram Marg	19450
72.	Tansen Marg	6580
73.	Mahadev Road	6589
74.	Manas Marg	5600
75.	Defence Officers Enclave Road	9900
76.	Simon Boliver Marg	15120
77.	Janpath Road (from Claridges Hotel to Windsor Place)	32000
78.	Krishna Menon Marg	11500
79.	Maulana Azad Marg	18850
80.	Hailey Road	6860
81.	Hanuman Road	5147
82.	Amrita Sher Gill Marg	17853
83.	Atul Grove Road	7263
84.	Panchkuian Road	7097
85.	Tyag Raj Road	10112
86.	Dalhousie Road	11767
87.	Safdarjung Road	17605
88.	Talkatora Road	15674
89.	Kali Bari Marg	10585
90.	Jesus Mary College Road	9800
91.	Babar Road	9833
92.	Purana Quila Road	7535
93.	Janpath Road (Windsor Place to Connaught Place)	18700
94.	Malcha Marg	8500

95.	Sansad Marg	22697
96.	C-Hexagon Road	54980
97.	Humayun Road	8554
98.	Prithvi Raj Road	25253
99.	Windsor Place	7396
100.	Kushak Road	13920
101.	Canning Road	13180
102.	Dr. Bishember Dass Road	6365
103.	Jaswant Singh Road	2836
104.	Pandara Road	10172
105.	Jantar Mantar Road	13470
106.	Peshwa Road	6300
107.	Connaught Place Radial Road	17766
108.	Connaught Place inner Circle	12122
109.	Tuglak Road	23460
110.	Kauitlaya Marg	19500
111.	Connaught Place middle circle	14258
112.	K. Kamraj Marg	8640
113.	Mehrishi Ramana Marg	20400
114.	Man Singh Road	18250
115.	Sikendra Road	15866
116.	Dr. Rajendra Prasad Road	16907
117.	Moti Lal Nehru Marg	20690
118.	Jai Singh Road	10628
119.	Saheed Bhagat Singh Marg	15375
120.	Chelmsford Road	7460
121.	Shahjahan Road	12380
122.	Sher Shah Road	12341
123.	Mandir Lane	6300
124.	Dr. Zakir Hussain Marg (from Subramania Bharti Marg to C-Hexagon)	11020
125.	Road connecting San Martin Marg and S.P. Marg	9800
126.	Road connecting San Martin Marg and Ring Road	6800
	Total	2034123

An outlay of Rs. 500 lacs is approved for the 10th Five Year plan including Rs. 200 lacs for the Annual plan 2002-03.

4. CONSTRUCTION OF PARKING PLOTS IN METROPOLITAN CITY IN NDMC AREA (Rs. 200 lacs)

NDMC area being very important having special status, having higher floating population is facing acute shortage of parking space. So it is proposed that existing parking facilities are to be augmented at following places:

- i) By providing 2 multi-storeyed car parking, one at Kasturba Gandhi Marg and second at Baba Kharak Singh Marg to augment parking for Connaught Place.
- ii) Underground parking at Sarojini Nagar.
- iii) Underground parking at Khan Market.
- iv) Underground parking at Indian Oil Bhawan, Janpath.

For underground parking only two levels shall be utilized for parking, one on the surface and one below the ground level.

An outlay of Rs. 200 lacs is approved for the 10th Five Year plan including Rs. 10 lacs for the Annual plan 2002-03.

5. ROADS IMPROVEMENT SCHEMES AT TOLSTOY MARG, JANTAR MANTAR AND ASHOKA ROAD (Rs. 100 lacs)

An outlay of Rs.100 lacs is approved in the Tenth Five Year Plan 2002-07 whereas an outlay of Rs.7 lacs is approved for the Annual Plan 2002-03.

6. TRAFFIC TRANSPORTATION STUDY OF TRAFFIC CIRCULATION IN CONNAUGHT PLACE (Rs. 5 lacs)

Traffic authorities have been suggesting improvement and geometrics, signage etc. for which traffic studies are required to be conducted. An outlay of Rs. 5 lacs is

approved in the Tenth Five Year Plan 2002-07 including a token provision of Rs. 1 lacs in Annual Plan 2002-03.

7. CONSTRUCTION OF DUCTS (Rs. 33 lacs)

The frequent cutting of roads by various agencies has been a serious concern. The matter has been under active consideration to provide a common duct for laying of services. To take up the work lot of coordination is required. It is proposed to take up this work in the Tenth Five Year Plan in phases, which shall continue, to the 11th Five Year Plan. During the Tenth Five Year Plan 2002-07.

An outlay of Rs. 33 lacs is approved in the 10th Five Year plan including Rs. 5 lacs in the Annual Plan 2002-03.

8. SETTING UP NEW CASTING YARD AND PURCHASE OF MACHINERY ETC. (Rs. 2 lacs)

NDMC has set up a new casting yard at Sarai Kale Khan, which would partially cater to the need of manufacturing cc units such as slabs, manhole covers, kerbstones etc. An outlay of Rs. 2 lacs is approved for the Tenth Five Year Plan 2002-07 as well as Annual Plan 2002-03.

9. WIDENING OF OTHER ROADS AND CONSTRUCTION OF BUS-Q-SHELTERS AND BUS-BAYS (Rs. 50 lacs)

Delhi Traffic Authorities keep on sending the demand for development of bus-bays, which include inter-alia improvement of geomatrics as well as construction of new bus-q-shelters.

An outlay of Rs. 50 lacs is approved for the Tenth Five Year Plan 2002-07 including a token provision of Re.1 lacs in Annual Plan 2002-03.

10 CONSTRUCTION OF GRADE SEPARATORS (Rs. 500 lacs)

Delhi Govt. has provided large number of grade separators, flyovers on express roads such as Ring Road, major roads in north-south axis and east-west axis. In NDMC area, there are only two flyovers, one on Aurobindo Marg and the other at School Lane, which are more than 20 years old. The traffic in NDMC area has increased manifolds and it has become imperative to provide grade separators within the municipal limits on major roads at north-south axis and east-west axis. It is proposed to take up at least one grade separator each year and each grade separator would cost around Rs.20 crores.

An outlay of Rs. 500 lacs is approved in the 10th Five Year Plan including Rs. 50 lacs in the Annual Plan 2002-03.

11. IMPROVEMENT TO ROADS/STRENGTHENING OF FOOTPATHS (Rs. 10 lacs)

With the implementation of Delhi Metro, the vehicular linkage as well pedestrian linkage needs to be strengthened. In view of this, roads, footpaths and **cycle tracks** around Metro Stations need to be improved/strengthened. There are 3 metro stations in NDMC area and it is envisaged that for strengthening of vehicular and pedestrian/cycle track linkage the cost would be around Rs.20 lacs and thus total requirement would be Rs.60 lacs.

An outlay of Rs. 10 lacs is approved for Tenth Five Year Plan 2002-07 and Rs. 2 lacs for Annual Plan 2002-03.

12. WIDENING UP OF MINTO ROAD/BRIDGE (Rs. 100 lacs)

Northern Railway has contemplated providing two additional tracks on the Minto Bridge. Since the road width below this bridge is narrow as compared to road width on either side, Northern Railway has proposed to widen the bridge also so as to have uniform road width.

As per normal procedure, the proportionate cost of widening of bridge is required to be shared by MCD and NDMC as one side of the area falls with MCD and the other in NDMC jurisdiction. NDMC's share as indicated by Northern Railway is Rs.4.5 crores. The Chief Secretary, GNCT has agreed in principle to provide grant to the local bodies towards the cost of its share for widening of the bridge to be paid to Railways.

An outlay of Rs. 100 lacs is approved for 10th Five Year plan & Rs. 10 lacs for Annual plan 2002-03.

13. PEDESTRIANISATION – IMPROVEMENT TO MARKETS (Rs. 100 lacs)

NDMC area having special status in respect of floating population sight seeing, marketing and carnivals. Thus it is felt/observed that certain amenities to pedestrians in near future to encourage shoppers as well as petty traders in almost all the markets in NDMC area is necessary.

Pedestrianisation improvement is proposed in following .markets

- i) Pedestrianisation improvement/pedestrianisation of Connaught Place.
- ii) Improvement and pedestrianisation of Khan Market and Prithviraj Market.
- iii) Improvement and pedestrianisation of Shankar Market
- iv) Improvement and pedestrianisation of Malcha Marg Market.
- v) Improvement and pedestrianisation, Emporia Complex Baba Kharak Singh Marg.

An outlay of Rs. 100 lacs is approved for 10th Five Year plan & Rs. 10 lacs for Annual plan 2002-03.