#### CHAPTER-7

#### **TRANSPORT**

Transportation is very important aspect in each stage of human civilisation and is considered as a backbone of urban infrastructure and the lifeline of the city by providing an efficient public transportation system, control of vehicular pollution, registration of vehicles in Delhi, collection of road taxes etc.

Transportation has contributed much to the development of economy, social, political and cultural fields and uplifting their condition. Delhi being a capital city of India has significant reliance on its transport system. The city has developed a highly efficient public transport system. The public transport system in the city comprises the Delhi Transport Corporation(DTC) bus system, the Delhi Metro, E-Rikshaw, Auto Rikshaw, Cycle Ricshaws, Gramin Sewa and the cabs/taxies etc. which cater the needs of the Delhi citizens.

There are 103.83 lakh motor vehicles in the city as on 31<sup>st</sup> March, 2017. Traffic congestion is the major problem in Delhi which causes the huge loss of man hours while commuting between home and office through public transport. Therefore, serious efforts, including a number of transport infrastructure projects, are under way to encourage usage of public transport in the city. The objective of good Transport system is to facilitate the city resident for day to day activities within our city. This is sought to be achieved by:

- Construction & redesigning of Roads for better traffic management, Road Bye-Pass, Express Corridors and Construction of RUB/ROB/Flyovers to make major roads signal free to improve the traffic flow on all major roads as well as barrier free pedestrians moments may be taken up.
- Construction of new Foot Over Bridges (FOBs) and maintenance of existing FOBs may be included for better result.
- Improvement of Bus Transport System by replacement of old fleet of DTC buses by new buses, making functional of Corporate Sector Bus Operating System in all 17 Clusters and construction of new BRT Corridors, Operation and Maintenance of existing BRT Corridor.
- Encourage greater use of public transport and non-motorized modes by offering financial assistance for this purpose.
- Construction of Multi-level Parking lots, new Bus Depots & Terminals, construction of new ISBTs/Redevelopment of existing ISBTs to improve the quality of Bus Transport system in Delhi.
- Building capacity (institutional and manpower) to plan for sustainable urban transport and establishing knowledge management system that would service the needs of all urban transport professionals, such as planners, researchers, teachers, students, etc.

- Raising finances, through innovative mechanisms that tap land as a resource, for investments in urban transport infrastructure.
- Reducing pollution levels through changes in traveling practices, better enforcement, strict norms, technological improvements etc.
- Addressing concerns of road safety and trauma response with special focus on pedestrian safety.

Revised outlay & expenditure of 2016-17, Approved outlay & Revised Outlay 2017-18 and Annual Outlay 2018-19 for Transport Sector are as under:

[₹ in Crore]

	201	16-17				
Sector	RE	Exp	BE	RE	Exp	2018-19 BE
PWD	1146.00	890	1183	1060	943.4	1591
North DMC	100.00	85.82 <b>[100]</b>	31	20	20 <b>[34.81]</b>	Nil
South DMC	50.00	73.07 <b>[45]</b>	10	15	15 <b>[14.96]</b>	Nil
East DMC	13.00	45.08 [nil]	2	3	3 [Nil]	Nil
Transport Department	1772.00	1752	1830	1886	1864.95	977
Total	3081.00	2845.97 [145]	3056	2984	2846.39 [2858.16]	2568

### I. PUBLIC WORKS DEPARTMENT

The budget provision has been kept for various projects of PWD is  $\stackrel{?}{\sim}$  1591 cr. for the year 2018-19.

# 1. FLYOVERS / UNDERPASS

# A. <u>C/o flyover / underpass at Karawal Nagar, Bhajanpura and Gagan Cinema</u> on Mangal Panday Marg and underpass at Loni Road:-

Keeping in view the signal free movement and reduction in travel time, the construction of flyover/underpass at Karawal Nagar, Bhajanpura and Gagan Cinema on Mangal Panday Marg and underpass at Loni Road has been taken under consideration. The project will be started after getting the approval of UTTIPEC. Approval from DUAC is also awaited. Entire stretch from Outer Ring Road to UP Border will become Signal free. Travel time will be reduced to 25 minutes from 40 minutes. The budget provision of ₹ 35 cr. has been kept for this project in the year 2018-19.

#### B. C/o under pass at Ashram Chowk:-

Under this project the main focus is to reduce decongestion of traffic on Ashram crossing on ring road. DDA vide their letter dated 14/07/2014 has granted 80% funds under Urban Development Fund (UDF) as per guideline. The remaining 20% amount plus escalation amount of ₹ 50 lakh is to be sanctioned by Delhi Govt. The likely cost will be ₹ 85 cr. including cost of shifting of utilities. Length is the approximately 400 mtr. (Including ramps). All the commuters travelling through Ashram Chowk will be benefited A token Provision of ₹ 1 lakh has been kept for this project in the year 2018-19.

# C. Flyover at Majnu ka Tilla & Metcalf House on Outer Ring Road:-

Due to tremendous increase in traffic on Outer Ring Road, the flyover at Majnu ka tilla & Metcalf House on Outer Ring Road is taken under consideration. Travel time will be reduced to 5 minutes from 17 minutes. A token Provision of ₹ 1 cr. has been kept for this project in the year 2018-19.

#### D. East-West Corridor:-

This corridor starting from ISBT Anand Vihar (Road No. 56) connecting East Delhi area along the railway line to the intersection of Outer Ring Road and Rohtak Road (Peeragarhi Chowk) via New Delhi Railway Station. Railways have to be pursued at higher level to allow C/o elevated corridors in their Right of way. The Consultant has been appointed for the project and inspection report has submitted. Proposal for stage –I and Stage-II submitted to UTTIPEC on 26.05.20116. NOC from Railway has not been received. The budget provision of ₹ 5 cr. has been kept for this project in the year 2018-19.

#### E. North -South Corridor:-

This corridor starting from Signature Bridge to intersection of Dhaula Kuan. This will lead to major decongestion of traffic in the North-South area of Delhi. Proposal was submitted to UTTIPEC on 26/05/2016 and approval is awaited. The Consultant has been appointed for the project and inspection report has submitted. Proposal for stage –I and Stage-II submitted to UTTIPEC on 26.05.20116. NOC from Railway has not been received. The budget provision of ₹ 5 cr. has been kept for this project in the year 2018-19.

#### F. Widening of bridge :-

# (a) Widening of bridge on najafgarh drain at basai darapur to cover the complete ROW:-

This is a new proposed road, there is no existing road. After widening of bridge, travel time will be reduced to 1 minute from 5 minutes. The budget provision of ₹ 10 cr. has been kept for this project in the year 2018-19.

### (b) Widening of Bridges on Najafgarh Drain at NH-10 at Nangloi:-

This is a new proposed road. Estimate has been submitted to Director General (RD), MoRTH, Govt. of India in Feb' 2018. Administrative Approval & Expenditure Sanction yet to be received from MoRTH. After widening bridges, travel time will be reduced to 2 minutes from 6 minutes. The budget provision of ₹ 10 cr. has been kept for this project in the year 2018-19.

# (c) <u>Widening of Bridges on (i) NH-10 at Rampura, (ii)Tri Nagar/Inderlok and (iii) Karampura, Delhi:-</u>

This is a new proposed road. Sanction received in March 2018. After widening of bridges, travel time will be reduced to 2 minutes from 5 minutes. The budget provision of ₹ 20 cr. has been kept for this project in the year 2018-19.

### G. Repair & Rehabilitation of bridges & flyovers:-

The delay in traffic permission and NOC of traffic diversion issued to execute the work in parts to minimise the inconvenience to the public. Total number of bridges & flyovers to be Repaired / Rehabilitated in the year 2018-19 is six. The budget provision of ₹ 25 cr. has been kept for this project in the year 2018-19.

# 2. SIGNAL FREE MOVEMENT ON OUTER RING ROAD FROM VIKAS PURI TO WAZIRABAD (20 KM)

As per Delhi MPD 2021 goals, for signal free movement on Outer Ring Road (ORR) and Ring Road (RR), which are the main arterial roads of Delhi, feasibility studies were carried out by PWD from Vikaspuri to Wazirabad (approx. 20km) on ORR in five different stretches. These stretches of road have got number of intersections which remain always chocked due to very heavy traffic on ORR and RR. Most of the elevated corridors from Vikaspuri to Wazirabad have been completed during 2016-17 except corridor improvement Wazirabad to Mukerba chowk for which ₹ 50 crore has been kept and for other remaining elevated corridors, some amount has been kept in the year 2018-19 for clearing the pending bills.

The progresses of these projects are as under:-

#### The Major components of Project are as under:-

S. No.	Name of Stretch with length  Length of Elevated Corridor / Details of flyovers		Cost (in crore)	Progress Mar'2016
(i)	Vikas Puri to Meera Bagh	Elevated road : 3.30km	559.60	Completed
	(4.30 km) on ORR			and open to
				public
(ii)	Mangolpuri to Madhuban	Elevated road :	423.05	completed
	Chowk (3.90 km) on ORR	2.60km		
(iii)	Madhuban Chowk to	Elevated road :	421.79	Completed
	Mukarba Chowk (3.80 km)	2.61km		& opened
	on ORR			to Traffic

S. No.	Name of Stretch with length	Length of Elevated Corridor / Details of flyovers	Cost (in crore)	Progress Mar'2016
(iv)	Mukarba Chowk to Wazirabad (8.00 km) on ORR	4 Flyovers & 2 loops Total length: 4.09km. Also a new 6 Lane parallel 8.00 Km long divided road on other side of drain.	633.17	96.5%
(v)	Mukarba Chowk to Wazirabad (parallel road from SGT Nagar to Wazirabad chowk)	Parallel road along NH-1	200.27	Completed

# 3. CONSTRUCTION OF HALF FLYOVERS

This scheme for construction of half flyovers has been launched in the last financial year to avoid traffic congestion. There are two projects, one at Punjabi Bagh Club and second at Punjabi Bagh west near Janmashtmi Park are under consideration. A provision of ₹ 1 cr has been kept in BE 2018-19.

# 4. (1) CORRIDOR IMPROVEMENT OF OUTER RING ROAD FROM IIT TO NH-8 and (2) UNDERPASS AT JUNCTION OF BJ MARG AND INNER RING ROAD

The construction of this corridor will ease traffic on the ORR and improve connectivity to central and North Delhi areas from the south. The cost of the project is 364 cr. The work has been started in the Nov. 2013 but delayed due to tree cutting permission, shifting of services and court cases. Percentage of work completed is 35% .Now it will be completed by the end of 2019. Travel time will be reduced to 25 minutes from 40 minutes after completion. A provision of ₹ 85 crore has been kept in the year 2018-19 for the said projects.

### 5. JNNURM PROJECTS

13 PWD projects approved under JNNURM by Govt. of India, out of which 9 projects have been completed, one project (Karkari Mor) has been fully dropped, 1 project at Noida Mor has been partially dropped wherein, phase-I of this project has been completed while Phase-II of it has been dropped. The remaining two projects as mentioned below are in progress:-

# 5.1 <u>C/o Signature Bridge and its approach over River Yamuna downstream of the existing Bridge at Wazirabad, Delhi</u>

Construction of Signature Bridge and its approaches over river Yamuna downstream of existing bridge at Wazirabad Delhi is a replacement of existing two lane wazirabad bridge with eight lane bridge connecting north Delhi with Khajori khas

in north East Delhi. The direct benefit of this bridge is easing out the flow of traffic between North Delhi and North-East Delhi.

The overall progress is 96% and the target for completion of the project is Dec. 2018. A provision of ₹ 100.00 crore has been kept for this project in the year 2018-19.

#### 5.2 Alignment over Barapulla Nallah Project Phase-II

The project aimed to provide an efficient connectivity for general public by passing through busy Lala Lajpat Rai Path & Mathura road and connecting ring road. The work involves construction of an elevated road corridor of about 3.8 km starting from Sarai Kale Khan to Jawahar Lal Nehru Stadium in phase–I has already been completed and further connectivity from JLN stadium to INA market in Bahaullah Phase-II is in progress and 99% work of this project has also been completed except three locations (1) at Seva Nagar crossing, (2) near CVC building and (3) at Aurobindo Marg. A provision of ₹ 25 cr has been kept for this project in the year 2018-19. The cost of this project is ₹ 530 cr. and the work will be completed by June, 2018.

# 6. ALIGNMENT OVER BARAPULLA NALLAH PROJECT PHASE-III

The barapulla elevated road project Phase-III has been started in April 2015 from Sarai Kale Khan to Mayur Vihar Phase-I. The work is in progress and 55% work has been completed. There are two hindrances in completion of this project.

- a. Land 8.5 acre is required from farmers which is yet to be acquired
- b. HT line of DTL is to be shifted for which approval has been received recently.

Expected date of completion is 31/03/2020 (Subject to Acquisition of land by 30.09.18). The provision of ₹ 175 crore has been kept for this project in the year 2018-19.

#### 7. ROAD WORKS

#### 7.1 Road Strengthening / Resurfacing / Microsurfacing

Now the road works of PWD have been divided in four parts to improve riding quality and structural stability of roads. The four parts of the scheme are mentioned below:-

- a. <u>Strengthening of PWD roads (NH)</u>:-To improve riding quality and structural stability of roads in NH-10 and NH-24. A provision of ₹ 32 cr has been kept in BE 2018-19.
- b. Strengthening of PWD roads (RR & ORR):- To improve riding quality and structural stability of roads in Ring Road and Outer Ring Road (RR&ORR). A provision of ₹ 50 cr has been kept in BE 2018-19.

- c. <u>Strengthening/Resurfacing/Microsurfacing of PWD roads (Arterial Road):</u>
  To improve riding quality and structural stability of Arterial Roads. A provision of ₹ 100 cr has been kept in BE 2018-19.
- d. Strengthening/Resurfacing / Microsurfacing of PWD roads (Roads with Right of way less than 30 meters):- To improve riding quality and structural stability of roads with right of way less than 30 metres. A provision of ₹ 100 cr has been kept in BE 2018-19.

# 7.2 <u>Construction of four lane roads along bank of Drain No. 8 (Najafgarh Drain)</u> from Dhansa Regulator to Dwarka Mor.

It will have at grade along Najafgarh drain in the stretch of 25 Km. The commuters travelling from Haryana to west Delhi will be benefitted by reduction of travel time to 15 minutes as they need not to cross Najafgarh area. NOC from I&FC department awaited. Thereafter UTTIPEC will give approval. Expected date for UTTIPEC approval is 30.06.2018. This is a new proposed road. There is no existing road. A token provision of ₹ 1 cr has been kept in BE 2018-19.

# 7.3 <u>Construction of elevated road over Najafgarh Drain from Kakrola More to Wazirabad.</u>

It will have elevated road/ at grade along Najafgarh drain in the stretch of 25 Km. The commuters travelling from Najafgarh and west Delhi towards Wazirabad and East Delhi will be benefitted by reduction of travel time to 20 minutes from 60 minutes. NOC from I&FC Dept. yet to be received. Thereafter UTTIPEC will give approval. Expected date for UTTIPEC approval is 30.06.2018. This is a new proposed road. There is no existing road. A token provision of ₹ 1 cr has been kept in BE 2018-19.

#### 7.4 New connectivity along Haryana canal from Bawana to Inderlok

This link will provide useful connectivity between Outer Ring Road to Inner Ring Road, Outer Ring Road to DTU, DTU to Bawana and from Inner Ring Road to Inderlok Metro station. NOC from I&FC Dept., Haryana yet to be received. Thereafter UTTIPEC will give approval. Expected date for UTTIPEC approval is 30.09.2018. This is a new proposed road .There is no existing road. After connectivity, travel time will be reduced to 20 minutes from 60 minutes. A token provision of ₹ 5 cr has been kept in BE 2018-19.

# 7.5 <u>C/o Kalindi Bypass between DND flyover and Faridabad along Yamuna and Agra Canal.</u>

The length of the bypass road will be 13 Km. Proposal approved in 2012. NOC from UP Govt. for construction of Elevated Road and surface road on embankment of Agra Canal which belong to UP Irrigation Department is awaited.

#### 7.6 C/o Elevated road from Signature Bridge to Kalindi Kunj Bypass

The length of the elevated road will be around 12 Km. It will decongest ring road between Wazirabad and DND Flyover. Pre-feasibility completed and the proposal in-

principle agreed by Hon'ble Minister. Approval from UTTIPEC will be on 30.09.18. After construction of elevated road, travel time will be reduced to 20 minutes from 45 minutes.

### 8. LAND SCAPING OF PWD ROADS

Provision has been kept for greening of medians and kutcha earthen portion of 500 km road length. This is a new scheme to initiate edge-to-edge paving/ greening and beautification of all PWD roads. The Preliminary Estimate has been submitted. Administrative Approval & Expenditure Sanction awaited. A provision of ₹ 200 crore has been kept for this project in the year 2018-19.

#### 9. WIFI DELHI:-

It is proposed to provide Wifi facility at public places of Delhi to improve general facility to public. Work entrusted to PWD from IT Department, GNCTD. A provision of ₹ 100 crore has been kept for this project in the year 2018-19.

### 10. CONSTRUCTION OF SUBWAYS:-

Construction of Subway near Baba Khak Shah /Balmiki Mandir at G.T.K Road near Azadpur, Delhi. Services of various utility agencies DJB, IGL, TPDDL have been shifted but cables / services of MTNL yet to be shifted which is being persuad. Tender will be floated as soon as shifting of MTNL cables will be nearing on completion. A provision of ₹ 15 crore has been kept for this project in the year 2018-19.

#### 11. STREET-SCAPING OF ROADS

Roads in Delhi needed improvements to make user friendly by providing street furniture and other amenities side by side creating good landscaping & horticulture works. The stretches of roads were identified in consultation with various road owning departments.

Street scaping and beautification of PWD roads without deteriorating traffic conditions will be made. 11 important stretches of roads have been identified for taking up improvement for providing barrier free pedestrian and other amenities and creating good land-scaping and horticulture work. The Budget provision of ₹ 19 crores has been kept for 11 Nos. of identified Roads (70 Km) and Other PWD roads (150 Km) in the year 2018-19.

#### 12. <u>FOOT OVER BRIDGES</u>

Under this scheme, Foot Over Bridges are being constructed on important roads like Ring Road and Outer Ring Road as per the requirement of pedestrians at particular locations. Subway Committee of Govt. of Delhi examines the requests for construction of FoBs depending upon the actual requirement and feasibility. A provision of ₹ 25 cr. has been kept for foot over bridges in the year 2018-19. Following foot over bridges has been taken under construction in the year 2018-19:-

- I. Foot Over Bridges at Metcalf House, main Gate of Ring Road, Delhi.
- II. Foot Over Bridges at Yusuf Sarai Market
- III. Foot Over Bridges at Africa Avenue Road
- IV. FOB at Aali Mod, Mathura Road
- V. FOB at Harkesh Nagar, Mathura Road
- VI. Foot Over Bridge Near Oberoi Hotel at Lala Lajpat Rai Marg, New Delhi (Civil Work).

# 13. <u>C/O OF SKY WALK AND FOOT OVER BRIDGE AT W POINT & ITO JUNCTION:-</u>

This project is for safe pedestrian movement at W point & ITO junction. The work is under progress and to be completed by Dec. 2018. The Ministry of Urban Development has approved the sanction of fund from the Urban Development amounting to ₹ 43.47 Crore (80% of ₹ 54.34 Crore excluding cost of land) and a balance of ₹ 11.37 crore is to be borne by PWD, GNCTD.NOC received from ASI & NDMC but NOC is awaited from DMRC and Delhi Traffic Police.

The budget provision of ₹ 5 cr. has been kept for this project in the year 2018-19

# 14. <u>IMPROVEMENT OF RING ROAD FROM SALIMGARH BYPASS TO</u> ISBT:

The said project for improvement of Ring Road from Salim Garh bypass to ISBT has been taken into consideration to decongest traffic at ISBT. The budget provision of ₹ 1 crore has been kept for this project in this financial year i.e. 2018-19.

#### 15. LED SCREENS

It is proposed to install LED screens at road crossing and other important locations for displaying Government messages and information for general public. These LED screens will be used for displaying the information regarding pollution level / social messages/traffic messages and any other information in the public interest as approved by the competent authority time to time. The ownership of project will be with PWD.

A Budget Provision of ₹ 20 crores has been kept under this scheme in this financial year i.e. 2018-19.

#### 16. CCTV CAMERAS

It is proposed to install CCTV cameras at various locations in streets, market and common public places for general safety of public and especially for safety of women. A Budget Provision of ₹ 250 crores has been kept in the year 2018-19.

### 17. STREET LIGHTS ON DARK SPOTS

As on date 31<sup>st</sup> March 2018, 5472 LED lights are installed and energised. Work was executed by PWD for MCDs and the works executed has been handed over to MCDs for maintenance. The Work of reducing dark spots on roads is in progress. Provision of ₹ 40 lakhs has been kept in this financial year i.e. 2018-19.

# II. <u>DELHI MUNICIPAL CORPORATIONS</u>

#### **Financial Assistance to Local Bodies**

A new scheme "Financial Assistance to Local Bodies" has been planned for 03 DMCs for repair of roads and other works etc. All such small lanes and roads of Delhi will be repaired by using this fund and this fund is also for improving dilapidated roads and lanes which is the responsibilities of DMCs. A Provision of ₹ 1000 cr. has been kept in this financial year i.e. 2018-19.

### III. TRANSPORT DEPARTMENT

#### 1. PLANNING AND MONITORING CELL

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

As far as scientific approach in planning for long term and short term measures, it is necessary to have a validated data base which is regularly updated. The Planning and Monitoring Cell will maintain data such as vehicle registration, traffic volume, trip information, parking, movement of public transport, pollution level norms, accidents, enforcement and all other aspects of transport. A Budget Provision of ₹ 1 lakh has been kept for "Planning and Monitoring cell" in the year 2018-19.

### 2. MOTOR DRIVING TRAINING SCHOOLS

The objective of this scheme is to impart training in driving skills to potential drivers and also upgrade the skills of existing drivers on scientific lines by employing modern equipments and highly trained instructors. Annually the licensing authorities in Delhi issue about 5 lakh driving licenses. In view of this, during the 10th Plan a new initiative was taken by the Transport Department for establishing premier motor training schools in the Delhi in the PPP mode. So far 3 schools have been established under this scheme:-

- 1. IDTR (Institute of Driving Training and Research), Loni Road managed by M/s Maruti Udyog Ltd.
- 2. IDTR (Sarai Kale Khan) as an extension of IDTR, Loni Road managed by M/s Maruti Udyog Ltd.

3. DTI (Driving Training Institute) Burari as a society managed by M/s Ashok Leyland Ltd.

All Heavy Vehicle Driving License holders have to compulsorily undergo a refresher course at MDTS before getting the licenses renewed after 3 years. MDTS will be conducting suitable refreshers training programmes for which assistance will be provided under this scheme. A Budget Provision of ₹ 74 lakh has been kept for "Motor driving training school" in the year 2018-19.

#### 3. ROAD SAFETY & GIA to NGOS

Delhi has witnessed a phenomenal increase in both human and vehicular population during the past few decades. Ever-increasing number of road users competing for space on a road network has been the major threat for the safety on Delhi roads resulting into frequent road accidents, causing injuries and fatalities. The issues of managing traffic and ensuring safety on Delhi roads have become a major concern for all stakeholders. Road accidents create negative impact on the economy, public health and the general welfare of the people.

The Hon'ble Supreme Court has constituted the Committee on Road Safety on 22<sup>nd</sup> April, 2014 to monitor the steps taken by the Centre and State Governments to ensure road safety & to curb growing number of accidents. The Committee is monitoring the implementation of the road safety measures and compliance of its directions for the protection of commuters in the Country.

The State Road Safety Council was earlier constituted under the chairmanship of Commissioner (Transport) in 2005. However, on the directions of the Supreme Court Committee on Road Safety, the Government of NCT of Delhi has re-constituted the State Road Safety Council on 07.07.2017 under the Chairpersonship of Hon'ble Transport Minister, Govt. of Delhi to assure coordination among various agencies for safety of pedestrian, Non Motorized vehicles, Motorized vehicles & Road users, to assure safety measures for Road users and facilities for design for engineering, reengineering, repair etc. on technical standards and to assure placing of signages on exact and effective places.

The District Road Safety Committees have also been established vide notification dated 17.06.2014 in all the eleven revenue districts of Delhi headed by the Deputy Commissioner of each district comprising Deputy Commissioner of Police; Deputy Commissioner Police (Traffic); Superintending Engineer (PWD); Superintending Engineer (MCD/NDMC); Superintending Engineer (DDA); Additional CDMO (Health); Deputy Director (Education); Motor Licensing Officer (Transport) of each district concerned as its Members and Additional District Magistrate Convener/Member of each district concerned. The District Road Safety Committees are performing the functions related to Road safety measures at the district level.

The Govt. of Delhi is taking various initiatives & will make sincere efforts in ensuring safe and efficient flow of traffic on the roads of Delhi through road safety education, improvement in road infrastructure with strict enforcement of traffic rules &

regulations etc. in coordination with and association of all stakeholders and government agencies.

Under this scheme, Delhi Govt. has deputed Home Guards/Civil Defence Volunteers as "Marshals" in all DTC (evening and night shift) to allay the fear of crime and assure the safety and security of women commuters. The major portion of funds under the scheme on Road Safety is being utilized for the payment of their services. There is a proposal to deploy these Marshals in Cluster buses also.

Further for promoting and spreading the awareness of road safety in public, Road Safety Week is being celebrated by the GNCTD in the month of January every year as per the directions of MoRTH, Government of India. The events relating to participation in Perfect Health Mela and India International Trade Fair (IITF) are organized under this scheme.

A Budget Provision of ₹ 50.22 cr. has been kept for "Road Safety & GIA to NGOs" in the year 2018-19.

### 4. CONSTRUCTION / RENOVATION OF ZONAL OFFICE

At present, work related to issue of driving licenses and registration of vehicles is being done through all Zonal Offices. The construction/renovation work of Zonal offices is carried out under this scheme. Zonal office in Sukahdev Vihar has been constructed during previous year. CCTV cameras will be installed in all zonal offices. A Budget Provision of ₹ 10 cr has been kept for "Construction/Renovation of Zonal Office" in the year 2018-19.

### 5. INSTALLATION OF CCTV CAMERAS IN DTC & CLUSTER BUSES

A scheme for installation of CCTV cameras in DTC & Cluster Buses has been introduced to strengthen women safety and security in the buses. CCTV cameras in 200 DTC buses have already been installed on pilot basis. A provision of  $\stackrel{?}{\stackrel{?}{}}$  45 cr under State plan and  $\stackrel{?}{\stackrel{?}{}}$  5 cr under CSS has been kept for "installation of CCTV cameras in DTC & Cluster Buses" in the year 2018-19.

Transport Department GNCTD has requested to Ministry of Women, Child & Development, Govt. of India (GOI) to grant funds under the "Nirbhaya Fund" for installation of CCTV devices in DTC and Cluster buses under the CSS during 2017-18. Government has decided vide cabinet decision no. 2483 dated 20/06/2017 to install CCTV cameras in 6350 buses by 3 CCTV cameras in every DTC and cluster buses for implementation of initiatives aimed at enhancing the safety and security for women. Consultant has been appointed by the Transport Department on 18.04.2018 for providing consultancy services for installation of IP based CCTV Surveillance Solution in buses of DTC & Cluster.

#### 6. MASS RAPID TRANSIT SYSTEM (MRTS)

A Budget Provision of ₹ 177.78 cr has been kept for "MRTS" in the year 2018-19.is as under:

(₹ in cr)

Details	Plan Outlay 2018-19
Equity	50.00
Sub. Debt for Land acquisition	50.00
Sub. Debt for Central Taxes	50.00
Sub. Debt for State Taxes	27.78
Total	177.78

The basic objective is to provide the much needed mass rapid transport infrastructure facility for entire Delhi areas and also to provide the interchange facility from peripheral routes to the radial metro routes.

The third phase of Delhi Metro would be completed by December, 2018 except for a small stretch from Mayur Vihar to Trilokpuri on Mukund Pur to Shiv Vihar line (about 1.5 km), Dwarka to Najafgarh (4.295 km) and Najafgarh to Dhansa Bus Stand (1.18 km). The total metro network in Delhi under Phase III as under:

#### **Phase III and Extensions**

Corridor	Total Length (km)	Cost (₹ /Cr. ) with taxes	Commissioning Date / Target Date for completion	
Original Phase III				
Jahangirpuri- Samaypur Badli	4.373	35523.78	Commissioned on 10.11.15	
Central Secretariat- Kashmere Gate	9.370		Commissioned on 28.05.17	
Majlis Park- Yamuna Vihar (Gokulpuri) – Shiv Vihar	58.596		Proposed to be commissioned in 5 stages as under- Stage1: Majlis Park to Durgabai Deshmukh South Campus (21.565 km) opened on 14.03.18  Stage2: Durgabai Deshmukh South Campus to Lajpat Nagar (about 8.10 km) July 2018  Stage 3: Trilokpuri to Gokulpuri to Shiv Vihar (about 18.40 km) Aug 2018	

Corridor	Total Length (km)	Cost (₹ /Cr. ) with taxes	Commissioning Date / Target Date for completion
			Stage 4: Lajpat Nagar to Mayur Vihar Pktl (about 9 km) Sept 2018
			Stage 5: Date for Mayur Vihar Pkt I to Trilokpuri (about 1.53 km) will be fixed after resolution of R&R issue at Trilokpuri
Janakpuri West- Kalindi Kunj	33.499		Stage 1: Kalindi Kunj to Kalkaji Mandir (8.679 km) opened on 25.12.17
			Stage 2: Janakpuri West to Kalkaji Mandir (about 24.82 km) to be opened on 28.05.18
Additional corridors			
Connection to Najafgarh	4.295	1070	Expected to be completed in June 2019
Extension to Dhansa Bus Stand	1.18	565	Expected to be completed by Dec 2020
Extensions to NCR			
Mundka – City Park, Bahadurgarh (Delhi Portion)	6.307	1079	Expected to be completed in May 2018 and commissioned in June 2018
Total	117.620	38237.78	

Out of the 117.620 km of Phase-III, 54.324 km is underground and 63.296 km is elevated/at grade. The capital cost of these corridors including taxes will be ₹ 38237.78/- crore for 117.620 km stretch. To strengthen last mile connectivity services in order to improve ridership a wholly owned subsidiary company of Delhi Metro under name "Delhi Metro Last Mile Services" has been established on 13.04.2018.

Delhi Metro Phase IV is under consideration of Government and is expected to be completed in the year 2022-23. The proposed Phase-IV corridors of Delhi Metro as per the updated Detailed Project Report (updated as per Metro Rail Policy, September 2017) are as below:-

Corridor	Length (km)			Station			Estimated Completion
	Total	Under Ground	Elevated	Total	Under Ground	Elevated / At Grade	Cost incl. taxes but excl. IDC (₹ /Cr.)
		Optic	n I – Three	corrido	rs		, ,
Aerocity Tughlakabad	20.201	14.619	5.582	15	10	5	10818.00
Janakpuri West – R.K. Ashram	28.920	7.740	21.180	25	7	18	13909.00
Mukundpur - Maujpur	12.558	0.000	12.558	6	0	6	4245.00
Total	61.679	22.359	39.320	46	17	29	28972.00
			ion II – Six d	corridor			
Aerocity Tughlakabad	20.201	14.619	5.582	15	10	5	10818.00
Lajpat Nagar – Saket G Block	7.957	2.070	5.887	7	1	6	2877.00
Inderlok - Indraprastha	12.576	12.576	0.000	10	10	0	8036.00
Janakpuri West – R.K. Ashram	28.920	7.740	21.180	25	7	18	13909.00
Rithala – Bawana - Narela	21.725	0	21.725	16	0	16	7490.00
Mukundpur - Maujpur	12.558	0.000	12.558	6	0	6	4245.00
Total	103.937	37.005	66.932	79	28	51	47375.00

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

Under the provisions of Motor Vehicle Act, 1988 all Commercial Transport Vehicles are required to carry a valid "Certificate of Fitness" for road worthiness of vehicles without which the registration of the vehicle is treated as invalid. This Certificate is required to be obtained annually from the Competent Authority. 3,00,353 Certificate of fitness have been issued during the year 2017-18. About 3,25,000 fitness certificates will be issued during the current financial year 2018-19. This intent to introduce more automated testing lanes so that every transport vehicle may be annually inspected on these automated lanes. The test data generated is automatically stored in computer without revealing test results to the operator to avoid subjective bias. All test equipments are networked. A Budget Provision of ₹ 44 Lakh in revenue and ₹ 100 Lakh in capital has been kept for "certification of road worthiness of vehicles" in the year 2018-19.

# 8. <u>CONTROL OF VEHICULAR POLLUTION FROM EXHAUST OF MOTOR VEHICLES</u>

This scheme is being implemented with the following objectives:

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

A Budget Provision of ₹ 172 Lakh has been kept for "control of vehicular pollution from exhaust of motor vehicles" in the year 2018-19.

#### 8.1 CREATION OF PUBLIC AWARENESS

Following mass awareness activities are proposed for complying with the aims and objectives mentioned above:

- Advertisement in newspapers
- Installation of boards/ panels/kiosks on buses, bus shelters, etc.
- Printing of hand bills and other educational materials
- Holding of educational talks, seminars, workshops, street plays, exhibitions etc.
- Any other activity connected with creation of mass awareness.

#### 8.2 AUTHORIZATION OF PUC CENTRES AND REGULATION THEREOF

Rule 115(1) of CMV Rules, 1989 requires that every vehicle shall be maintained and 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 authorised for this purpose by the State Govt. About 971 Petrol pumps and Workshops 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. Number of Pollution Under Control Certificate (PUCCs) issuing centres are targeted to be increased by 1000 during the year 2018-19.

# 9. RE-STRUCTURING / REVIVAL OF DTC (Purchase of DTC buses)

DTC is the largest public transport entity in the NCR transporting about 31 lakh passengers and covering 6.50 lakh km per day. DTC operates 31,341 (Average) trips per day on about 448 city routes and 08 NCR routes. DTC has world largest ecofriendly CNG based fleet operator and thus, has cleaning up the environment of pride of its active contribution towards the city.

In Delhi, DTC will continue to play pivotal role in the multi -modal transit system of public transport apart from metro-rail. It has existing infrastructure of 40 depots. DTC has a current fleet size of 3944 buses compressing 1275 AC low floor buses, 2506 Non-AC low floor buses and 163 are Standard buses. A Provision of ₹ 15000 lakh has been kept for "Purchase of new buses" in the year 2018-19.

### **Modernizing of the Fleet**

- In the fleet of 3944 buses, 163 are Standard buses which have almost completed their economic life cycle and are required to be scrapped in order to reduce the running expenditure.
- In order to maintain a healthy transport fleet, DTC has initiated the proposal for procurement of new 1000 buses.

# 10. <u>DEVELOPMENT OF ALTERNATIVE MODE OF TRANSPORT</u>

The only solution to tackle the present urban transport problems in Delhi is by creating sustainable multi-modal transport such as High Capacity Bus System (HCBS), Monorail and LRT to supplement the Metro Rail and the present DTC and other bus services. Accordingly a plan known as the Integrated Multi-Modal Transit Systems has been approved by the Delhi Govt. for implementation by 2021.

#### (i) BUS RAPID TRANSIT (BRT)/ REGIONAL RAPID TRANSIT SYSTEM (RRTS)

**BRTS**: Seven corridors have been identified under the scheme Bus Rapid Transit. For smooth operation of buses, such road stretches, that create bottlenecks in the running of buses, would be systematically improved through road re-engineering. Preferential traffic signalling for HCBS buses, at intersections, shall be provided to avoid delay at crossings.

**RRTS**: National Capital Region Transport Corporation (NCRTC) was established on 29.06.2011 for implementation of RRTS Corridors through a Memorandum of Understanding signed between Central Government and participating State Governments (including GNCTD) with the objective to strengthen the urban/sub-urban rail infrastructure to improve the connectivity in NCR supported by necessary multi modal integration.

In the First phase, the following three corridors have been recommended for implementation:-

Delhi –Sonipat-Panipat Delhi-Ghaziabad-Meerut Delhi-Rewari-Alwar

A DPR regarding the Delhi-Ghaziabad-Meerut corridor has been submitted by NCRTC. (The Project cost ₹ 32,598.60 Crores.)

A Provision of ₹ 500 Lakh has been kept for "Alternative mode of transport/RRTS" in the year 2018-19.

#### (ii) MONO RAIL

It has been decided by GNCT Delhi that DMRC will execute the first monorail project in Delhi.

DMRC has prepared DPR of the mono rail project for the proposed corridor from Shastri park metro station to Trilokpuri. DMRC has reviewed both the options i.e. (i) Shastri Park to Trilokpuri with Depot at Sanjay lake (11 km) (ii) Shastri Park −Trilokpuri to Mayur Vihar with Depot at Mayur Vihar (15.18 km). The completion cost of option (i) and option (ii) comes to ₹ 2222/- crore and ₹ 2850/-crore respectively. Both the options of funding of this project i.e. DMRC's pattern of funding as well as PPP/BOT mode of execution of this project have been mentioned in DPR. A token Provision of ₹ 1 Lakh has been kept for "Monorail" in the year 2018-19.

# 11. <u>DELHI UNIFIED METROPOLITAN TRANSPORT AUTHORITY</u> (DUMTA)

In Delhi, there is a multiplicity of authorities dealing with transport like PWD, MCD, NDMC, DDA, Traffic Police, Railways, Delhi Metro Rail Corporation, NHAI, Transport Department and DTC etc. They are engaged in different activities like construction and maintenance of roads, subways, over bridges, providing of traffic signals, road furniture, enforcement of the Motor Vehicles Act, 1988 and the Rules framed there under etc. In order to bring forth effective coordination amongst various agencies the Central Government in the Ministry of Urban Development has proposed the setting up of a Unified Metropolitan Transport Authority to be called the Delhi Metropolitan Transport Authority through legislation. A draft bill was sent to Ministry of Home Affairs after approval of the Council of Ministers, Delhi. Ministry of Home Affairs took the comments from Ministry of Urban Development, Govt. of India and submitted back to the Transport Department, GNCTD with their suggestions. A Budget Provision of ₹ 1 Lakh has been kept for "DUMTA" in the year 2018-19.

#### 12. STUDIES AND CONSULTANCY SERVICES

For the implementation of MPD 2021, Restructuring of DTC and planning for integration of roads and study of transport demand forecast and development of an integrated multi modal public transport network for NCT of Delhi, number of studies and consultancies will have to be awarded. These studies will be funded under this scheme.

The study is being conducted on route plan for optimum utilization of public transport having last mile connectivity in Dwarka Sub-city under this scheme. The work

has been awarded to M/s DIMTS Ltd. A Budget Provision of ₹ 1 Lakh has been kept for "studies and consultancy services" in the year 2018-19.

# 13. <u>DEVELOPMENT OF BUS TERMINALS AND DEPOTS</u>

The objectives of the scheme are to create bus transport infrastructure for the benefit of the bus commuters. The scheme envisages purchase of land for bus terminals & bus depots and construction of terminals & depots over there. With the new acquisition of bus fleet under cluster scheme (DTC and private entities), Transport Department will require additional bus depots. Due to scarcity of land, the statutory authorities are pressing hard to have multi-level bus depots in place of the conventional bus depots. Improvement of existing depots and terminals are also supported under the scheme. Bus Depots at Dichauon Kalan-II, Bawana Sector-I, Rani Khera-I,II & III, Dwarka Sector-22 have been constructed. EFC has approved the construction of bus depots at East Vinod Nagar, Bawana Sector-5, Burari, Ghumanhera, Mundela Kalan and Rohini Sector-37 - I & II.

A Budget Provision of ₹ 80 cr. has been kept for "Development of Bus Terminals and Depots" in the year 2018-19.

#### 14. LOAN TO DTIDC

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

The Anand Vihar ISBT will be rebuilt as per new norms integrating the Bus Stand with Rail and Metro. The old ISBT at Sarai Kale Khan is being rebuilt as a modern ISBT with the change in the development control norms in MPD 2021. The lay out transport integration plan is under consideration of UTTIPEC. Two more new ISBTs, on modern lines, are proposed to be constructed (i) in South-West at Dwarka and (ii) in North Delhi at Narela on PPP mode. Land for both the new ISBT's has been allotted by the DDA. 25% of total expenditure on up-gradation of ISBT Anand Vihar and Sarai Kale Khan has to be met by the Company and 75% loan. The Anand Vihar ISBT and Sarai Kale Khan ISBT are under taken by PWD. A token Provision of ₹ 1 lakh has been kept for "Loan to DTIDC" in the year 2018-19.

#### 15. OPERATION AND CONTROL CENTRE - PRIVATE BUS CLUSTERS & PIS

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

will be traced immediately. A Budget Provision of ₹ 1 lakh has been kept for "operation and control centre-private bus cluster & PIS" in the year 2018-19.

# 16. <u>VIABILITY GAP FUNDING TOWARDS CLUSTER BUSES</u>:

The Government of NCT of Delhi initiated the Scheme for Corporatization of Private Stage Carriage Service to substitute the Blue line private stage carriage system under Public Private Partnership (PPP) model. Under this scheme, 657 stage carriage bus routes of Delhi have been divided into 17 distinct clusters. Presently 1758 cluster buses are operational in 9 clusters and there is a proposal to procure of the 1000 new buses under cluster scheme subject to the outcome of Hon'ble Supreme Court / Hon'ble High Court's decision.

The cluster system is based on a gross-cost model where fleet owners are remunerated on the basis of operational parameters irrespective of the fare box inflow. At the same time, the contract has in-built mechanisms to apply performance deductions in case of non-adherence to clearly enunciated performance benchmarks and also to reward efficiencies above clearly defined levels of performance.

Operational efficiencies and observance of performance benchmarks are monitored by DIMTS as the State Government's IM (Integrated Mechanism) at the depots, on the street and at the Operations Control Centre with real-time data from the GPS/GPRS enabled AVLS (Automatic Vehicle Location System) on the location, speed, bus-stop dwell-time etc. of the buses. A Budget Provision of ₹ 450 cr. has been kept for "viability Gap funding towards cluster buses" in the year 2018-19.

# 17. <u>ENCOURAGEMENT OF PEDESTRIAN & NON MOTORISED VEHICLES</u>

A sustainable transport system must provide mobility and accessibility to all urban residents in a safe and environment-friendly mode of transport. This is a complex and difficult task as the needs and demands of people belonging to various income groups are not only different but also often conflicting. The pedestrians, bicyclists and non-motorized rickshaws are the most critical elements in mixed traffic. If the infrastructure design does not meet the requirements of these elements all 99 modes of transport operate in sub-optimal conditions, it is possible to redesign the existing roads to provide a safe and convenient environment to non-motorized modes. This also results in improved efficiency of public transport vehicles and enhanced capacity of the corridor when measured in number of passengers per hour per lane. A token Provision of ₹ 1 lakh has been kept for "encouragement of pedestrian & Non motorised vehicles" in the year 2018-19.

#### 18. CAR FREE DAY

To decongest the traffic as well as to minimize the vehicular pollution in Delhi, the Government of NCT of Delhi is making efforts to control the situation and to minimize the pollution. Govt of NCT of Delhi had decided to observe a Car Free Day on every 22nd day of the every month on various stretches of Delhi to encourage the

citizen of Delhi to use the Public Transport Vehicles to minimize the vehicular Pollution. A token Provision of ₹ 1 lakh has been kept for "Car free day" in the year 2018-19

#### 19. POLLUTION ANPR

Automatic Number Plate Recognition (ANPR) is a technology used for law enforcement purposes by the enforcement division of Transport Department, GNCTD. A token Provision of ₹ 1 lakh has been kept for "Pollution ANPR" in the year 2018-19

### 20. FEEDER BUS SERVICE/ ELECTRONIC VEHICLE

To promote the use of electric vehicles, the Government will give exemption from payment of road tax on registration of electric vehicles. Govt. of NCT of Delhi has decided to introduce / regularize e-rickshaws and feeder service for ensuring the last mile connectivity. A token Provision of ₹ 1 Lakh has been kept for "feeder bus service/electronic vehicle" in the year 2018-19