

## **CHAPTER 12**

# **TRANSPORT**

Public transport promotes the achievement of numerous social and economic objectives. It furthers regional and social equality in respect of transport and reduces reliance on private cars. As public transport replaces passenger car traffic, it improves road safety and reduces the adverse impacts of traffic on the environment. Public transport is particularly significant as regards opportunities for mobility, access to basic services, work and studying. Continued internal migration is giving rise to higher population densities in Delhi. Attention to the needs of an ageing population puts new demands on the quality of services, the rolling stock and vehicle fleet.

2. A proper, extensive and efficient Road Transport plays a major role in the progress of any nation which requires the robust road infrastructure. Road transport occupies a primary place in today's world as it provides a reach unparalleled by any other contemporary mode of transport. Delhi loses a large number of man-hours while commuting between home and office/working place through public transport by road due to the traffic congestion. Therefore, serious efforts, including a number of transport infrastructure projects, are underway at ring road and Outer Ring road to encourage uses of public transport in Delhi.
- 2.1 Public transport in Delhi has two major components viz. bus transport and metro rail. These two major transport systems are playing a vital role in facilitating public transport in Delhi. In fact, both the systems are the lifeline of the people of Delhi. At present, the daily ridership of Delhi Metro is 25 lakh. Ridership on Metro Rail is further expected to increase after completion of the final stage of construction of DMRC's Phase-III, additional corridors and NCR extensions. However, daily average passenger ridership on DTC and cluster buses is 43 lakh. Total 252 Km length of Metro line was completed under Phase-I, Phase-II and Phase-III in Delhi by 31.03.2018 and 327 km metro line is operational up to 31.12.2018. Another about 23 KM of Metro rail of Phase III including additional corridors with NCR extensions, being implemented concurrently, are expected to be opened by 2020 in stages, schedule of which is given in the Statement 12.6.

### **3. Motor Vehicles**

- 3.1 The total number of motor vehicles on road in NCT of Delhi as on 31<sup>st</sup> March 2018 was 109.86 lakh, showing the growth per cent of 5.81 to the previous

year. The category wise number of motor vehicles in Delhi is presented in Statement 12.1.

### Statement 12.1

#### VEHICLE POPULATION

S. No.	Details	Number of Vehicles		Growth Rate
		2016-17	2017-18	Per cent
1	Cars and Jeeps	3152710	3246637	2.98
2	Motor Cycles & Scooters	6607879	7078428	7.12
3	Ambulance	3059	3220	5.26
4	Auto Rickshaws (Passenger)	105399	113074	7.28
5	Taxis	118308	118060	-0.21
6	Buses	35206	35285	0.22
7	Other Passenger Vehicles*	59759	76231	27.56
8	Tractors, Goods Vehicles (All Type) & Others	300437	315080	4.87
	<b>Total</b>	<b>10382757</b>	<b>10986015</b>	<b>5.81</b>

\* Data include the e-rickshaws and maxi cabs etc.

3.2 It may be observed from Statement 12.1 that the growth rate of vehicles in Delhi during 2017-18 was recorded at 5.81 per cent. The highest growth of vehicles during the period was observed in other passenger vehicles at 27.56 % during 2017-18. Annual growth rate during 2017-18 in comparison to the previous year was observed in goods vehicles & others at 4.87 per cent. It is 5.26% for ambulances and 0.22% in the case of buses. However, negative growth of 0.21% is observed in taxis.

3.3 The details regarding the number of vehicles in Delhi and their annual growth rate are presented in statement 12.1 and 12.2 respectively.

- 3.4 The annual growth of vehicles in Delhi decreased from 8.13 per cent in 2005-06 to 5.81 per cent in 2017-18. During the same period, the number of vehicles per thousand population increased considerably from 317 to 598.

### Statement 12.2

#### GROWTH AND VEHICLES PER 1000 POPULATION

Sl. No.	Years	Vehicles		Annual Growth (Per cent)	No. of Vehicles Per 1000 Population
		Number	Increase		
1	2005-06	4830136	362982	8.13	317
2	2006-07	5232426	402290	8.33	337
3	2007-08	5627384	394958	7.55	356
4	2008-09	6026561	399177	7.09	374
5	2009-10	6466713	440152	7.30	393
6	2010-11	6947536	480823	7.44	415
7	2011-12	7452985	505449	7.27	436
8	2012-13	7785608	332783	4.46	446
9	2013-14	8258284	472676	6.07	465
10	2014-15	8827431	569147	6.89	491
11	2015-16	9704741	877310	9.94	530
12	2016-17	10382757	678016	6.99	556
13	2017-18	10986015	603258	5.81	598

- 3.5 Delhi is a hub for personal motorized vehicles in India. Total motorized vehicles in Delhi are 109.86 lakh. Car and jeeps accounted for around 30 per cent of the total registered motorized vehicles, whereas two wheelers are about 64% of total registered vehicles. Percentage of vehicles in Delhi during 2017-18 is depicted in Chart 12.1.

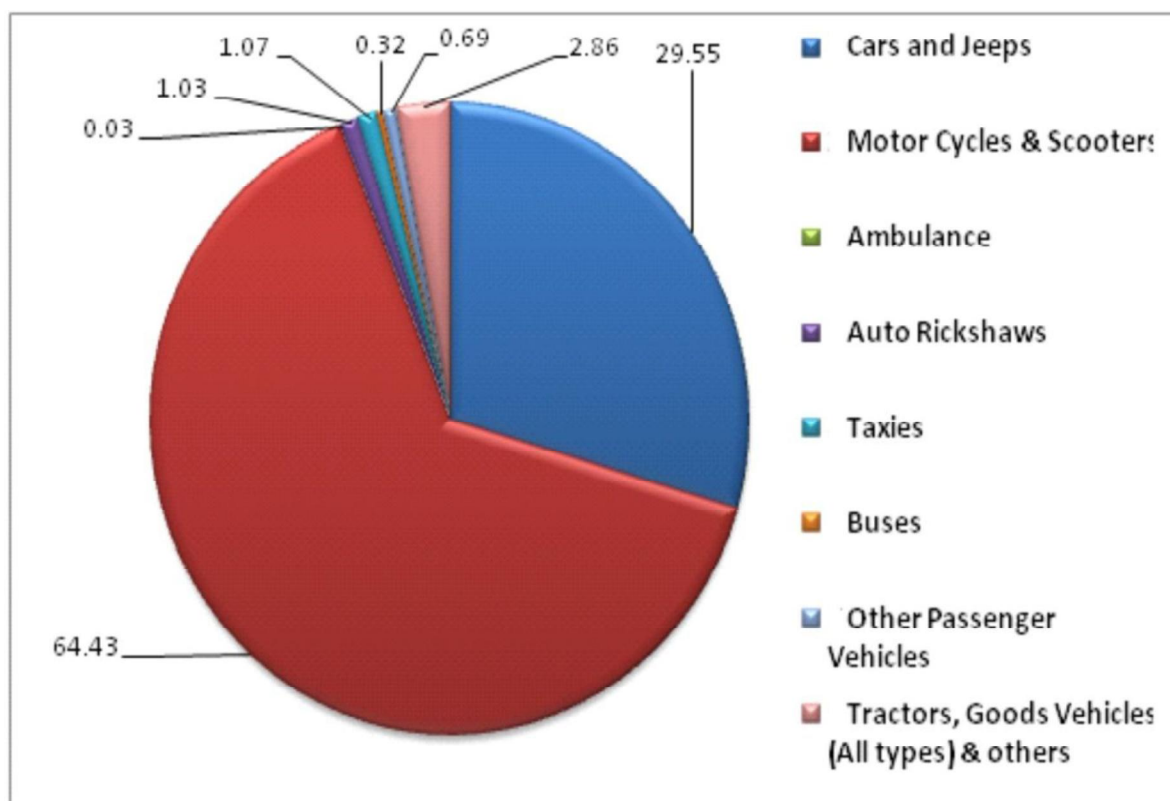
### Statement 12.3

Sl. No.	Details	Number of Vehicles	
		2017-18	Percentage
1	Cars and Jeeps	3246637	29.55
2	Motor Cycles & Scooters	7078428	64.43
3	Ambulance	3220	0.03
4	Auto Rickshaws	113074	1.03

Sl. No.	Details	Number of Vehicles	
		2017-18	Percentage
5	Taxies	118060	1.07
6	Buses	35285	0.32
7	Other Passenger Vehicles	76231	0.69
8	Tractors, Goods Vehicles (All Type) & Others	315080	2.86
	<b>Total</b>	<b>10986015</b>	<b>100.00</b>

**Chart 12.1**

**PERCENT OF VEHICLES POPULATION 2017-18**



3.6 There is a contradiction regarding the actual number of vehicles plying on Delhi's road as a large number of vehicles registered in Delhi are plying in NCR areas and vis-a-vis the vehicles registered in NCR are plying in Delhi. The transport department is making efforts to estimate the actual number of vehicles in Delhi

by taking into account vehicles that have outlived their life due to any reason, transferred to and from other states etc.

- 3.7 The information regarding the mode of transportation facilities in Delhi during the last two decade as per the Census of India is presented in statement 12.4.

#### **Statement 12.4**

#### **DISTRIBUTION OF HOUSEHOLDS ON THE BASIS OF THE MODE OF TRANSPORTATION IN DELHI: 2001 & 2011**

S. No	Mode of Transportation Facilities	2001			2011		
		Rural	Urban	Total	Rural	Urban	Total
I	No. of Households	169528	2384621	2554149	79115	3261423	3340538
1	Bicycle	48.70	36.80	37.60	44.20	30.30	30.60
2	Scooter/ Motor Cycles	20.70	28.50	28.00	38.50	38.90	38.90
3	Car/ Jeep/ Van	7.30	13.40	13.00	10.80	21.00	20.70
4	None of the Specified Mode of Transportation	38.90	43.40	43.10	34.70	37.20	37.10

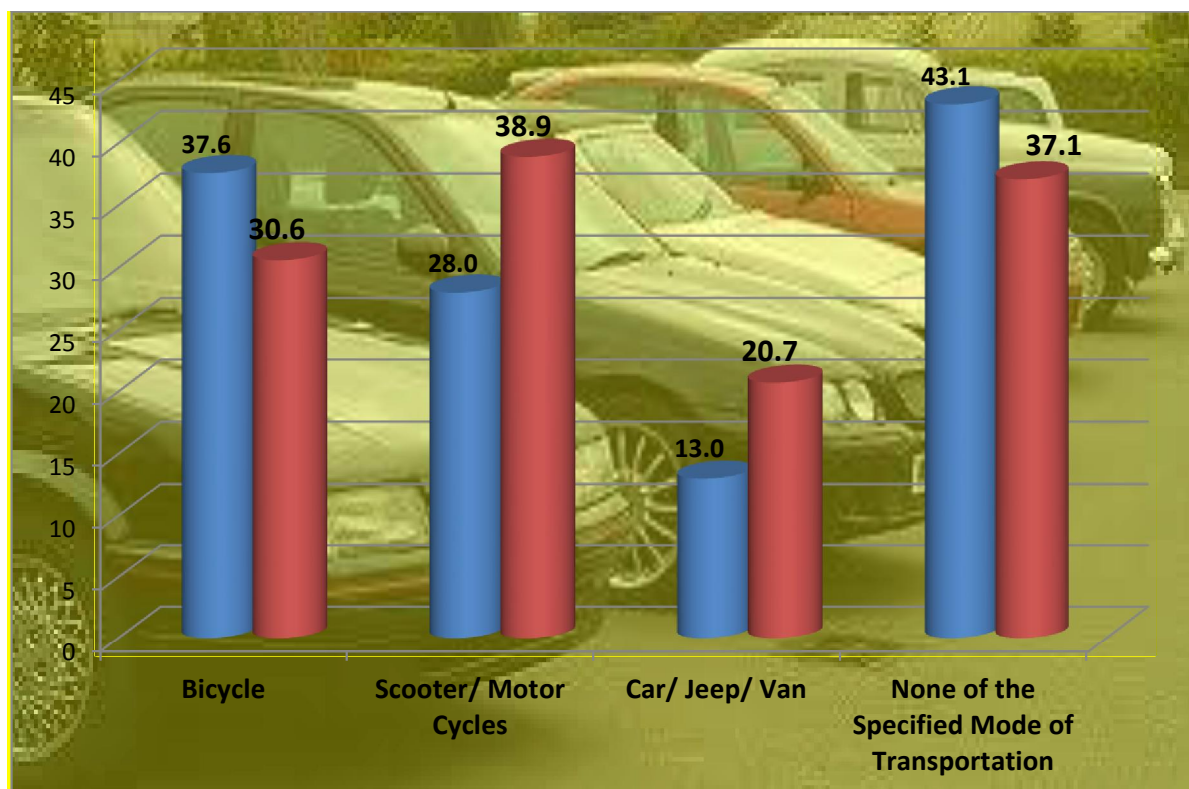
Source: - Census of India, 2011, Houses, Household Amenities and Assets.

- 3.8 It may be inferred from Statement 12.4 that during the last decade the percentage of households using scooters/motorcycles has increased from 28 per cent in 2001 to 38.90 per cent in 2011. During the same period, the percentage of household using car/jeep/van as the mode of transportation in Delhi has also increased from 13 per cent to 20.7 per cent. Contrary to this, the percentage of household using a bicycle as the mode of transport has declined from 37.6 per cent in 2001 to 30.6 per cent in 2011. Besides these, the above statement also indicates the reduction in the percentage of none of the specified mode of transportation from 43.10 per cent in 2001 to 37.10 per cent

in 2011. The information regarding the distribution of households in Delhi on the basis of the mode of transportation facilities in Delhi during the last decade is depicted in Chart 12.2.

**Chart 12.2**

**DISTRIBUTION OF HOUSEHOLDS ON THE BASIS OF THE MODE OF TRANSPORTATION IN DELHI: 2001 & 2011**



**4. Road Network**

4.1 The road network in Delhi is being developed and maintained by National Highway Authority of India (NHAI), Public Works Department (PWD), Municipal Corporations of Delhi, New Delhi Municipal Council (NDMC), Delhi Cantonment Board (DCB) and Delhi Development Authority (DDA).

4.2 The road network is increasing day by day in NCT of Delhi. A revised outlay of 1098 crore was approved for Road and Bridges and an expenditure of 959 crore was incurred during 2017-18. Further, an outlay of 1302 crore has been kept in R.E. 2018-19 for development of roads & bridges in NCT of Delhi. The road length maintained by different agencies in NCT of Delhi is presented in Statement 12.5.

**Statement 12.5**  
**GROWTH OF ROAD NETWORK IN DELHI-AGENCY-WISE**

(In Lane KM)  
(As on 31<sup>st</sup> March)

Sl. No.	Agency	2017-18
1	East DMC	512.46
2	South DMC	9592
3	North DMC	3272.65
4	New Delhi Municipal Council	1290
5	Public Works Deptt. (Delhi Govt.)	
	a. National Highway	430
	b. Other Roads	6308*
6	DSIIDC	1536.77
7	I&FC	294
8	DDA	435

\* Flyovers of a length of 62 Kms is included

#### 5. Inter State Bus Terminals (ISBTs)

Master Plan of Delhi- 2021 suggested five ISBTs for Delhi. With the setting up of two new ISBTs at Sarai Kale Khan and Anand Vihar, three ISBTs are functioning at present. Two more ISBTs are proposed to be constructed at Dwarka and Narela. ISBT, Kashmere Gate has been renovated and made operational with state of the art facilities in May' 2013. Regarding ISBT at Dwarka, the architect has been appointed. Process for the renovation of ISBTs at Anand Vihar and Sarai Kale Khan will be initiated by PWD. The work of Sarai Kale Khan ISBT is proposed to be undertaken in two phases. LOP and conceptual drawings based on TOD concept have been developed for Phase I and approval from local bodies is being perused.

#### 6. Development of Bus Terminals and Depots.

The objective of the project is to create a 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 a bus fleet under the cluster scheme and purchase of new buses by DTC, the Transport Department will require additional bus depots. Due to the scarcity of land, the statutory authorities are pressing hard to have multi-level bus depots in place of the conventional bus depots. Bus Depots at Dichaun Kalan, Bawana Sector 1, Rani khera 1, 2, 3 and Dwarka Sector 22 have been constructed. Bus Depot at Rewla Khanpur and Kharkhri Nahar is also almost completed. Further bus depots at East Vinod Nagar, Bawana



sector 5, Gumanhera, Mundela Kalan, Rohini Sector-37 and Burari are under progress.

## 7. Rail Network

Delhi is a major junction on the rail map of India linked with the entire major metropolitan cities directly. There are five main railway stations viz. at New Delhi, Old Delhi, Hazrat Nizamuddin, Sarai Rohila and Anand Vihar, besides Container Depots at Patparganj and Tuglakabad.

## 8. Mass Rapid Transit System (MRTS)

- 8.1 The Mass Rapid Transit System (MRTS) is an ambitious project that aims at providing a non-polluting and efficient rail-based transport system, properly integrated with the road transport system. The Delhi Metro is being built in phases. Phase-I completed 59 stations (including interchange stations) and 65.1 km of route length of which 13.17 km is underground and 51.93 km surface or elevated. The inauguration of the Barakhamba Road-Indraprastha corridor of the Blue Line marked the completion of Phase-I in November 2006. Phase-II of the network comprises 124.93 km of route length with 86 stations (including interchange stations) having 16.62 Km of route length with 13 stations in NCR and is fully completed with the first section opened in June 2008 and the last line opened in August 2011. Phase-III, additional corridors and NCR extensions of 160 km route length with 109 stations (including 42.337 Km of route length with 30 stations of NCR) were planned to be completed by Dec. 2018 (except extension to Dhansa is scheduled to be completed in December 2020). Najafgarh connection is targeted to be completed in September 2019 and date for Mayur Vihar Pocket I to Trilokpuri stretch will be fixed after resolution of the land issue involving R&R at Trilokpuri. The remaining portion of Delhi has been completed by December 2018. In NCR, the corridor from Dilshad Garden to New Bus Adda Ghaziabad is ready for CMRS inspection, but Gol sanction is yet to be accorded. Noida City Centre to Noida Electronic City expected to be completed by February 2019. Remaining portion in NCR has been completed by December 2018. Phase IV (103.93 km) project has been approved by Govt. of NCT of Delhi and is under consideration of the Government of India. Daily ridership of Delhi Metro is 25 lakh which is expected to increase with the completion of Phase-III. In Delhi, the Metro Trains run from 6.00 AM in the morning till about 11.00 PM in the night. The train frequency varies from 2 minutes 30 seconds in peak time up to 10 minutes in non-peak hours.
- 8.2 **MRTS Phase-III:** The approved corridors of MRTS Phase III of new metro lines and extensions of its corridors are presented in statement 12.6 and year wise fund released by GNCTD in statement 12.7:



**Statement 12.6**  
**MRTS PHASE III - APPROVED BY CABINET**

Sl. No.	Corridors	Length(KM)			No. of stations			Expected time to be started/completed
		Under ground	Elevated	Total	Under ground	Elevated	Total	
A	In NCT of Delhi							
1.	Line-7: Majlis Park- Shiv Vihar	19.117	39.479	58.596	12	26	38	Proposed to be commissioned in 5 stages as under- Stage 1: Majlis Park to Durgabai Deshmukh South Campus (21.565 km) opened on 14.03.2018 Stage 2: Durgabai Deshmukh South Campus to Lajpat Nagar (8.534 km) opened on 06.08.18 Stage 3: Trilokpuri Sanjay Lake to Shiv Vihar (17.864 km) opened on 31.10.18 Stage 4: Lajpat Nagar to Mayur Vihar Pkt I (9.63 km) opened on 31.12.18. Stage 5: Date for Mayur Vihar Pkt I to Trilokpuri (about 1.0 km) will be fixed after resolution of R&R issue at Trilokpuri
2.	Line-8: Janakpuri West-Kalindikunj	23.116	10.383	33.499	15	8	23	Stage 1: Kalindi Kunj to Kalkaji Mandir (8.679 km) opened on 25.12.17 Stage 2: Janakpuri West to Kalkaji Mandir (24.820 km) opened on 28.05.18
3.	Line 6 Ext: Central Sectt.-Kashmere Gate	9.370	-	9.370	7	-	7	Commissioned in May 2017
4.	Line 2 Ext.: Jahangirpuri-Badli	-	4.373	4.373	-	3	3	Commissioned on 10.11.2015
5.	Line 5 Extn.:Mundka-Tikri Border	-	6.307	6.307	-	4	4	Commissioned on 25.06.2018
6.	Dwarka-Najafgarh	1.541	2.754	4.295	1	2	3	September 2019
7.	Extension to Dhansa Bus Stand	1.180	-	1.180	1	-	1	2020
	<b>Sub-Total</b>	<b>54.324</b>	<b>63.296</b>	<b>117.62</b>	<b>36</b>	<b>43</b>	<b>79</b>	
B	In NCR							
8.	Line 6 Extn: Badarpur-Faridabad	-	13.875	13.875	-	9	9	Commissioned on 06.09.2015
9.	Line 5 Extn.: Tikri Border- Bahadurgarh	-	4.875	4.875	-	3	3	Commissioned on 25.06.2018
10.	Escorts Mujesar - Ballabgarh	-	3.350	3.350	-	2	2	Commissioned on 19.11.2018
11.	Kalindi Kunj – Botanical Garden	-	3.962	3.962	-	2	2	Commissioned on 25.12.2017
12.	Dilshad Garden to New Bus Adda Ghaziabad *	-	9.600	9.600	-	8	8	Ready for CMRS inspection, but Gol sanction is yet to be accorded
13	Noida City Centre to Noida Sector 62 *	-	6.675	6.675	-	6	6	February 2019
	<b>Total</b>	<b>54.324</b>	<b>105.633</b>	<b>159.957</b>	<b>36</b>	<b>73</b>	<b>109</b>	

\*yet to be sanctioned by Gol

In addition, Noida to Greater Noida metro line having a length of 29.7 km and serving 21 stations is ready for operation.

### Statement 12.7

#### YEAR-WISE FUND RELEASED FOR MRTS PHASE -III BY GNCTD

(₹ in Crore)

S. No.	Year	Equity	Subordinate Debt for Land acquisition	Reimbursement/ Subordinate debt towards sales tax on works contract Act to DMRC	Loan to MRTS for reimbursement of Central Taxes	Total
1.	2011-12	749.70	216.00	-	294.00	1259.7
2.	2012-13	749.70	216.00	-	294.00	1259.7
3.	2013-14	672.20	200.00	-	170.00	1042.2
4.	2014-15	600.00	40.51	-	-	640.51
5.	2015-16	827.00	40.00	577.00	-	1444
6.	2016-17	323.27	39.50	300.00	671.00	1333.77
	2017-18	240.00	5.50	660.00	424.00	1329.5
	<b>Total</b>	<b>4161.87</b>	<b>757.51</b>	<b>1537</b>	<b>1853</b>	<b>8309.38</b>

8.3 The estimated cost of Phase-III is ₹ 39784.56 crore out of which GNCTD share is ₹ 8407.38 crore. GNCTD has release ₹ 1329.50 cr. (₹ 240.00 crore equity, ₹ 5.50 crore against subordinate debt for land acquisition, ₹ 660.00 crore as reimbursement of sales tax on works contract Act and ₹ 424.00 crore as loan to MRTS for reimbursement of Central Taxes to DMRC during 2017-18 towards MRTS Phase- III. A total amount of ₹ 8309.38 cr has been released up to 2017-18 towards MRTS Phase-III project. The remaining amount of ₹ 98 crore has also been released during the current financial year.

8.4 **MRTS Phase- IV:** DMRC has prepared and submitted the Detailed Project Report (DPR) for Phase -IV of Delhi Metro, consisting of six corridors as given below, to Govt. of Delhi and Ministry of Housing & Urban Affairs, Govt. of India for approval. Proposed six corridors for phase-IV are presented in statement 12.8

8.4.1 Estimated completion cost with all taxes & IDC for proposed Phase-IV is ₹ 46,845 crore, which also includes the cost of 334 additional rolling stock coaches required for meeting the increased traffic in the existing corridors of Phase-I, Phase-II & Phase-III during FY 2021-22. The government of NCT of Delhi has approved the metro phase-IV project vide Cabinet decision 2666 dated 19.12.2018 at the cost of ₹ 46845 crore wherein GNCTD share will be ₹

9707.50 crore. Phase- IV project is under consideration of the Government of India.

8.4.2 The proposed corridors of MRTS phase-IV are presented in statement 12.8.

### Statement 12.8

#### MRTS Phase IV\*

S.No.	Corridors	Length (km)	No. of stations
i	R.K.Ashram-Janakpuri (West)	28.92	25
ii	Inderlok-Delhi Gate- Indraprastha	12.58	10
iii	Aerocity-Saket-Tughlakabad	20.20	15
iv	Lajpat Nagar-ChiragDelhi-Saket G Block	7.96	07
v	Mukundpur-Burari-Mauzpur	12.55	06
vi	Rithala-Bawana-Narela	21.72	16
	<b>Total</b>	<b>103.93</b>	<b>79</b>

\*Phase- IV project is under consideration of the Government of India.

8.5 The details regarding year-wise Average Daily Ridership is presented in Statement 12.9

### Statement 12.9

#### AVERAGE DAILY RIDERSHIP AND ROLLING STOCK

Year	Ridership	Operational Route (Km) Excluding Airport Express line	Rolling Stock (No. of Cars)
2007-08	625,000	65.10	280
2008-09	722,000	74.55	280
2009-10	919,000	95.79	376
2010-11	1259,000	161.45	844
2011-12	1660,000	167.33	1022
2012-13	1926,000	167.33	1094
2013-14	2190,000	167.33	1282
2014-15	2386,000	170.56	1306
2015-16	2600,000	189.747	1392
2016-17	2761,342	194.844	1426
2017-18	2537,175*	228.78	1818

\*Except Airport Line.

## 8.6 DMRC Feeder Bus Service.

Feeder Bus Services is a special provision made by DMRC to facilitate the commuters to reach or depart from the number of metro stations situated in Delhi. As on date, 174 Non-AC metro feeder buses are in service which are being utilised on 32 routes. With the objective to strengthen the feeder services, DMRC is planning to induct 427 Air-Conditioned Battery Operated low floor buses conforming to UBS-II specifications on 48 routes on Cluster Model. In this regard, bids of 2 clusters are under-evaluation and DMRC is going to float tenders for other three clusters soon.

## 9. Flyovers and Bridges:

A number of transport infrastructure projects at Ring Road and Outer Ring Road were made to encourage uses of public transport in Delhi. Flyovers at Madhuban Chowk to Mukerba Chowk, Vikas Puri to Meera Bagh, Mangolpuri to Madhuban Chowk, Wazirabad to Mukerba Chowk has been opened for public. At present there are 85 numbers of flyovers including Barapullah Phase-II and Signature Bridge and RUB/ ROB has been completed at various places in Delhi.

### 9.1 Major Projects:-

1. **C/o Signature Bridge at Wazirabad, Delhi:-** Due to the tremendous increase in the population of Trans-Yamuna Area, there was pressing demand for additional East-West corridors over River Yamuna. Therefore, a new bridge was proposed on the down-stream of existing bridge-cum-barrage at Wazirabad. The objective of this project was to have a signal free approach from NH-1 (Road No. 45) on the western bank and Wazirabad Road (Road No. 59 Khajuri Khas intersection) on the Eastern bank for entry & exit of traffic in two directions. Planning of the project was started on 27.4.2004 which was approved by DDA's Technical Committee on 14.06.06 and by DUAC on 20.10.06. Modified recast estimated cost of the project for ₹ 1518.37crore was approved by Govt. of NCT of Delhi in the year 2018. Work on approach roads on both the eastern & western ends was taken up earlier against the previous sanction and are completed. The main bridge has also been opened to traffic and other allied works are likely to be completed by March 2019.
2. **Elevated Road over Barapullah Nallah Phase-II:-** The project aimed to provide efficient connectivity for the general public by passing through busy Lala Lajpat Rai Path & Mathura road and connecting ring road. It was an exclusive corridor for the sports personnel between the Games village and Jawahar Lal Nehru Stadium during CWG-2010. The work involves the 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 been completed and further connectivity from

JLN stadium to INA market in Barapullah Phase-II. Two connectivity with this elevated road has also been provided. One descending to Lala Lajpat Rai Marg commissioned in March-2012 and the other ascending from Sunheri Nallah is completed by June-2015. Execution of work in Phase-II i.e. Jawahar Lal Nehru Stadium to Aurobindo Marg is completed in July 2018.

3. **Barapullah Phase-III :-** Barapullah, Phase-III stretch from Sarai Kale Khan to Mayur Vihar Phase-I has been sanctioned for ₹ 1260.63 crore and the work is in progress and about 65% work has been done in this project. The provision for Barapullah Nallah Ph-III of ₹ 175.00 crore has been kept under this project for the year 2018-19 and it is not the part of the JNNURM. The progress of work is held up in 750-metre length (land area 8.5 acre). The land is to be acquired under Land Acquisition Act-2013 by the Land and Building Department. The project will take approx. 18 months after land is handed over to PWD.
4. **Corridor improvement of outer Ring Road from IIT to NH-8:-** The project of Construction of (Part-A) Flyover on portal structure linking existing Munirka Flyover in the east to the point beyond Army RR Hospital in the west on the Outer Ring Road and (Part-B) Underpass at junction of BJ Marg and Inner Ring road has been approved at the cost of ₹ 364 crore. 80% of project work has been completed. The provision of ₹ 135.00 crore has been kept under this project for the year 2018-19. The work has been started in the year 2015-16 and it will be completed by March 2019.
5. **Construction of skywalk and FOB at “W” point at ITO Junction:** - The project has been completed and opened for public. This will provide safe and easy mobility for pedestrians.

#### 10. **Pedestrian Facilities - Foot Over Bridges (FOBs)**

Traffic regulation and road construction in Delhi have to take care of cyclists and pedestrians including bus commuters. On main arterial roads, there are very few pedestrian crossing and a few over bridges or subways. Approximately 83 numbers of footover Bridges have also been completed at various places in Delhi by end of 2018. The work of 6 FOBs is in progress and likely to be completed by 31.03.2019. An evaluation study on footover bridge and subways in delhi was carried out to get feedback on utilization pattern and to take remedial measures to eradicate bottlenecks for improving utilization of FOBs and subways.

## 11. Delhi Transport Infrastructure Development Corporation (DTIDC).

The government of Delhi has established Delhi Transport Infrastructure Development Corporation. The Corporation has been created with the objectives of development, implementation, operation and maintenance of urban transport infrastructure and funding of the expenses associated with transport planning, project development expenses for specific projects, capital expenditure support for specific projects and operations and maintenance expenditure for providing sustainable public services, external infrastructure for all ISBTs.

## 12. Delhi Transport Corporation (DTC).

12.1 DTC is the largest public transport entity in the NCR. DTC operates 3951 buses on 453 city routes and 8 NCR routes. DTC has also been operating International Bus Service on Delhi – Lahore & Delhi – Kathmandu. Daily average passenger is about 30 lakh during 2017-18. Common Mobility Cards have been implemented in all DTC Buses. Automated fare collection system through electronic ticketing machines is being rolled out. The performance of DTC during 2005-06 to 2017-18 is presented in Statement 12.10 and the activity of DTC is presented in Statement 12.11.

### Statement 12.10

#### PERFORMANCE OF DELHI TRANSPORT CORPORATION (DTC)

S. No.	Years	Fleet (In No's)	Fleet Utilization (In %)	Vehicle Utilization (Km/Bus/Day)	Load Factor (In %)	Passenger Carried per bus daily (In No's)	Daily Average Passengers (In Lakh)
1.	2005-06	3469	90.51	226	74.42	973	30.52
2.	2006-07	3444	81.47	199	77.18	951	26.77
3.	2007-08	3537	82.47	177	87.82	848	24.04
4.	2008-09	3804	77.03	171	68.83	772	22.62
5.	2009-10	4725	80.99	184	69.84	776	24.16
6.	2010-11	6204	75.03	185	71.43	700	30.32
7.	2011-12	5892	84.27	199	77.75	863	44.2
8.	2012-13	5445	85.77	202	92.90	973	46.77
9.	2013-14	5223	85.51	190	86.63	952	43.47
10.	2014-15	4712	83.99	188	85.02	930	38.87
11.	2015-16	4352	83.63	191	82.00	927	35.37
12.	2016-17	4027	85.12	199	81.36	890	31.55
13.	2017-18	3951	85.69	191	83.83	878	29.86

Source: - Operational Statistics of DTC

**Statement 12.11**  
**ACTIVITIES OF DELHI TRANSPORT CORPORATION: 2015-16 to 2017-18**

S. No	Details	2015-16				2016-17				2017-18			
		Non-AC	AC	Std.	Total	Non-AC	AC	Std.	Total	Non-AC	AC	Std.	Total
1.	Total Buses in the Fleet (At the end)	2506	1276	570	4352	2506	1275	246	4027	2506	1275	170	3951
2.	Buses on Road (Daily Average)	2206	1056	555	3817	2238	1065	244	3547	2232	1078	92	3402
3.	Passengers (in Crore)	89.82	24.76	14.87	129.44	87.96	20.63	6.57	115.16	84.86	21.77	2.35	108.98
4.	Daily Average Passengers (in Lakh)	24.54	6.77	4.06	35.37	24.13	5.65	1.80	31.58	23.25	5.97	0.64	29.86
5.	K. metres operated (in Crore)	16.07	7.42	3.25	26.73	16.60	7.64	1.54	25.78	15.78	7.41	0.54	23.73
6.	K. meters operated Daily Average (in lakh)	4.39	2.03	0.89	7.31	4.55	2.10	0.42	7.07	4.32	2.03	0.15	6.50
7.	Break-down per 10000 buses	825	1154	453	862	706	952	461	763	713	923	730	780
8.	Accidents	89	44	20	153	82	35	11	128	75	43	3	121
9.	Inter-State Bus Route covered by D.T.C.	-	-	-	11	-	-	-	9	-	-	-	8
10.	D.T.C. Workshop	-	-	-	2	-	-	-	2	-	-	-	2
11.	D.T.C. Depots	-	-	-	43	-	-	-	39	-	-	-	39

12.2 DTC is providing various types of concessions in the bus fares to students, senior citizens, Disabled, freedom fighters etc. The concession amount is reimbursed by GNCTD. The Govt. of NCT of Delhi has reimbursed an amount of Rs.100.00 crore for concessional passes during 2017-18.

12.3 Comparative detail regarding the number of DTC buses & bus routes in the city, NCR and International Bus Service and daily average passenger ridership for the years 2016-17 and 2017-18 is presented in Statement 12.12:



### Statement 12.12

#### DTC buses & Bus routes on the city, NCR and International Bus Service: 2016-17 & 2017-18

Details	2016-17	2017-18
No. of Buses	4027	3951
No. of city routes	474	453
No. of NCR routes	9	8
No. of International Bus Service	Delhi-Lahore and Delhi-Kathmandu	Delhi-Lahore and Delhi-Kathmandu
Daily average passenger ridership	31.55 lakh	29.86 lakh

- 13. Cluster Buses:** - The Government of NCT of Delhi initiated the Scheme in 2011-12 for Corporatization of Private Stage Carriage Service to substitute the Blue line private stage carriage system under the Public Private Partnership (PPP) model. Under this scheme, 657 stage carriage bus routes of Delhi have been divided into 17 distinct clusters. Presently, approximate 1789 cluster buses (including reserve fleet) are operating in 08 clusters in the NCT of Delhi. Electronic Ticketing Machine based Automatic Fare Collection System in Cluster Buses has been fully implemented. Further, Common Mobility Card (Delhi Metro Smart Card) has been successfully implemented in all the cluster buses to promote digital transaction in fare collection from passengers. The performance data of the cluster buses is given below:

### Statement 12.13

#### PERFORMANCE OF CLUSTER BUSES

S. No.	Years	Fleet (No)	Fleet Utilization (In %)	Vehicle Utilization (Km/Bus/Day)	Load Factor* (In %)	Passenger Carried per bus daily	Daily Average Passengers (In Lakh)
1.	2013-14	1090	93.49	218.43	81	950	6.36
2.	2014-15	1402	97.30	217.61	78	899	9.95
3.	2015-16	1490	98.84	214.52	74	831	10.61
4.	2016-17	1651	98.10	210.02	78	755	10.25
5.	2017-18	1744	97.16	205.15	81	753	11.65

\*LF is calculated using CIRT Formula  
Source: DIMTS Ltd.

## 14. Road Safety.

- 14.1 Delhi Traffic Police established a Road Safety Cell in 1972 to generate awareness among road user. It is an educational wing of the Delhi Traffic Police and its main function is to educate the road users about the proper and safe use of roads as well as to develop the human resources who are responsive to the public and are technically competent. The government of NCT of Delhi is taking various initiatives such as the construction of pedestrian lanes, foot over bridges at traffic intersections, conducting Road Safety campaigns at schools and college level, educating the general public about the road safety and other measures.
- 14.2 **State Road Safety Council:** 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 for political commitment to assure coordination among various agencies for safety of pedestrian, non-motorized vehicles & road users, to assure safety measures for Road users and facilities for design for engineering, re-engineering, repair etc. on technical standards etc.
- 14.3 **District Road Safety Committees:** The District Road Safety Committees have also been established vide notification dated 17.06.2014 in all the eleven revenue districts of NCT of Delhi headed by the Deputy Commissioner of each district and Deputy Commissioner of Police; Deputy Commissioner Police (Traffic); Superintending Engineer (PWD); Superintending Engineer (MCD/NDMC); Superintending Engineer (DDA); Additional CDMO (Health); Deputy Director (Education) and 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.
- 14.4 **Road Safety Policy:** Delhi Road Safety Policy has been notified on 13.07.2018. Objective of road safety policy is to ensure road safety for all road users in the NCT of Delhi, with priority to pedestrians and cyclists, to achieve zero fatalities due to road accidents in the long run It includes awareness regarding road safety, strengthening institutional arrangements, establish road safety management information system, ensure safe road infrastructure, planning & designing of roads, safer motor vehicles, safe divers, safety for vulnerable road users, road safety education and training etc.

## 15 Measures were taken for Safe Public Transport.

- 15.1 Installation of CCTV Cameras in Buses:** CCTV video surveillance system has been installed in 200 buses of DTC i.e. 100 buses of Sarojini Nagar Depot and 100 buses of Rajghat Depot-I. DTC has installed these CCTV cameras with its own resources. The government has decided to install CCTV cameras in all DTC & Cluster buses.
- 15.2 Augmentation of DTC's Night Bus Service (11 PM – 5 AM):** Gender Sensitization Program for bus crew undertaken by DTC is being conducted on a regular basis for the safety of women passengers. The number of buses has been increased to 86 buses on 26 routes. 28 Ladies Special Buses are also being plied during peak hours on 26 routes. 25% of seats have been reserved for women in stage carriage buses. (Low floor buses-10 seats & standard floor buses -12 seats).
- 15.3 Deployment of Marshals in Buses:** 2153 Marshals were deployed in DTC buses during 2017-18 including 1600 Civil Defence Marshal, 90 DTC Marshals and 463 Home Guards for the safety/security of women passengers. Comparative details for the years 2016-17 and 2017-18 is presented in Statement 12.14.

### Statement 12.14

#### PERFORMANCE OF CLUSTER BUSES

Details	2016-17	2017-18
No. of Buses in Night Bus Service	85	86
No. of routes of Night Bus Service	24	26
No. of Civil Defence Marshals	1643	1600
No. of DTC Marshals	115	90
No. of Home Guards	120	463
No. of Ladies Special bus routes	28	28
Percentage of seats reserved for ladies	25	25

## 16. New Initiatives Under Green Budget:-

The air pollution has emerged as a significant issue risking the health and well being of residents in cities across India and especially Delhi. GNCTD has undertaken a Green Budgeting initiative in 2018-19 to implement several long term measures to combat air pollution in Delhi. Some of the initiatives are as under:-

- 16.1 **Electric Vehicle Policy:-** To replacement of old vehicles and to encourage the electric vehicles, the Transport Department has prepared a Draft Electric Vehicle Policy and same has been released on 28/11/2018. The same will be finalized very soon.
- 16.2 **Electric Buses:-**GNCTD has decided to engage pure electric buses in Delhi which will go a long way to reduce overall vehicular emissions in Delhi. A proposal of 1000 fully-electric buses for augmenting environment-friendly public transport system is under process.
- 16.3 **Installation of Weigh Bridges:** To ensure stringent action on over-loaded trucks causing pollution, the Transport Department is strengthening the enforcement wing of the Transport department. Weigh Bridges at three impounding pits in Burari, Sarai Kale Khan and Dwarka have been installed. New vehicles, body-worn cameras and E-challaning tabs have also been purchased.
- 16.4 **landscaping of PWD Roads:-** Government of NCT of Delhi has initiated a new scheme for edge-to-edge paving/greening and beautification of PWD roads. About 500 km of major road stretches will be re-developed by the plantation of shrubs/hedges & other plants etc. on central verges and other soft areas alongside the footpath. The Government of Delhi is emphasizing for uniform/single species/varieties plantation on the stretch for aesthetic appearance.