



**tumi**  
E-Bus Mission



Deep Dive City  
**Delhi**  
**India**

 [ebus.transformative-mobility.org](http://ebus.transformative-mobility.org)  
 @TUMInitiative  
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 Transformativ Urban Mobility Initiative

## General information about the city<sup>1</sup>

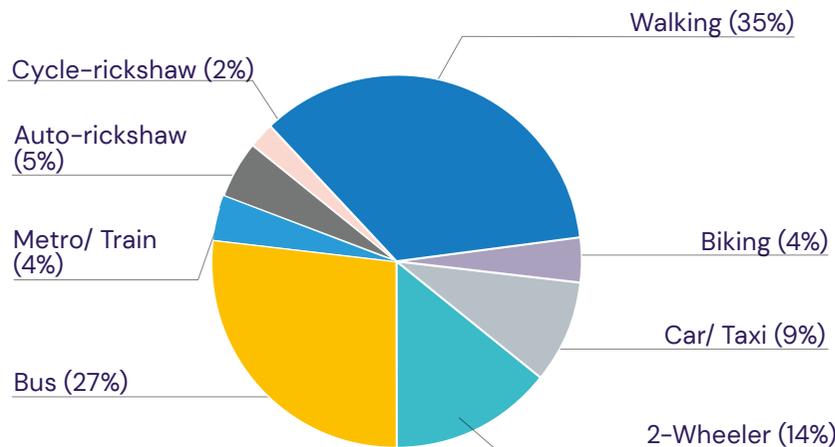
 <b>Population</b> 16.8 million (2011) 20.5 million (2021)	 <b>Annual rainfall</b> 617 mm (annual) 119.3mm (highest)
 <b>Average temperature</b> 24 °C	 <b>City area</b> 1484 km <sup>2</sup>
 <b>Number of car ownership</b> 157 vehicles per 1,000 people	 <b>GDP (US Dollars)</b> 293 billion
 <b>Renewable energy share (in MW) (MOSPI)</b> 0.2%	



-  **Climate risks**
- High risk of earthquakes
  - Floods
  - Fire outbreaks
  - Air Quality Index - Satisfactory

## Urban Mobility System<sup>2</sup>

### Modal split



### Public transport modes

- City buses operated by Delhi Transport Corporation (DTC) and Delhi Integrated Multi-Modal Transit System (DIMTS) Ltd
- Autorickshaws
- Metro
- Cycle-rikshaws

### Avg distance travelled per day by bus

218 km cluster buses  
190 km DTC buses

### Fleet utilisation

86.69%



### Carried passengers

Avg Daily Bus Ridership: 2.4 million  
Delhi Transport Corporation-1.5 million  
and Cluster buses operated by DIMTS-900,000

### Total no. of routes

650

### Avg. fleet age

7 years

# Climate and Urban Mobility Policies

## Vision for net zero urban mobility



Delhi has a policy to have 25% of all new vehicle registrations to be electric by 2024. The vision is to bring down transport emissions by ensuring early success in the electrification of city bus services and establishing a durable foundation for faster mobility adoption.

## Experiences

- 2018: Delhi Govt presented its 'Green Budget' for procuring 1,000 e-buses;
- 2019: Issued a global tender for 375 e-buses;
- DIMTS completed a feasibility study on e-buses;
- 2020: Another 575 buses were tendered out in clusters;
- Delhi receives its first (12 m) AC low floor prototype buses;
- 2021: Delhi with a demand of 1,500 (12 m) low floor AC e-buses, participated in the Grand Challenge floated by Convergence Energy Services Limited (CESL);
- In 2022, Delhi subscribed 1,500 (12 m) low floor AC and 100 (9.5m) AC double decker e-buses through the Grand Challenge floated by CESL.

## Electrification model

DTC takes the major role to manage the e-bus network and the operator consortium (OEM + bus operators + energy service providers) carries out the operation and maintenance of the e-buses. The operator consortium receives a payment from DTC on passenger km travelled by e-buses.

References:  
1. <https://www.indiatimes.com/trending/social-relevance/top-10-richest-cities-in-india-2021-552132.html?picid=2181871>  
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2. CTS Study of Delhi, 2018  
Delhi Transport Corporation (DTC) & Delhi Integrated Multi-modal Transit Systems (DIMTS)

# Electric Buses

## Targets for electric bus adaption

- 1 610 e-buses by 2022
- 2 50% electrification by 2027

## Procurement and planned projects

- Aug 2022: 152 (12 m) AC low-floor e-buses have been procured;
- 3 depots have been electrified.

## Planned projects

- Aug-Sept 2022: 300 (12 m) AC e-buses;
- 2023: procure 100 (9.5 m) e-buses & to electrify 26 depots;
- Grand Challenge tender: receive 1,500 (12 m) low floor AC e-buses.

## Political commitments

- Developing a city-wide framework for timely electrification of depots, Taking note of all envisaged external challenges;
- Using cleaner and zero emission fuels to increase accessibility and reliability on public transport.

## Bus technology share



7,141  
ICE – Buses

152  
E-Buses

## Published by TUMI Management

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Status  
June 2022

