City description

The City of Vishakhapatnam, commonly known as Vizag, is Andhra Pradesh's largest city, both in terms of population and economy. Located on the southeastern part of India, it is one of the largest municipal corporations with a population of around 1.7 million, spreading across 515 square kilometers (km²) of land area.

This hilly coastal city is connected by different transport modes: east coast railway, national highway, airport and sea port. Visakhapatnam Port is one of the largest ports in the country and has the only natural harbor on the east coast. The geographical advantage coupled with a myriad of infrastructural facilities positioned the city on the international market as the financial and industrial capital. The rapid pace of growth made the city the fifth-fastest growing industrial city in the Asian subcontinent. It has also attracted in-migration from the surrounding sub-urban areas and villages.

However, the high population growth is not met with the supply of efficient public transport system while the better economic situation of the population resulted in higher automobile ownership. Like in any other cities in India, Visakhapatnam faces an all too familiar problem: the increasing motorization rate resulted in traffic congestion and air pollution.

Sustainable profile

**Visakhapatnam Smart City**

As part of the Smart Cities Mission under the Ministry of Urban Development (MoUD), Visakhapatnam is selected amongst the top 20 cities (ranked 8th). As set out in the Smart City Proposal (SCP), the vision of Visakhapatnam is to create “A Resilient and Healthy Metropolis for People”. Its strategic focus revolves around becoming a leader in sustainability, livability and healthy living. Currently, Visakhapatnam is working on implementing the SCP and has taken up various sustainable initiatives, beginning with retrofitting designated areas in the city. Aligned with the vision, the city strives to revitalize public spaces, improve street designs, enhance safety conditions, especially making streets safe for pedestrians and cyclists, and providing more mobility options for its residents.

**Low Carbon Comprehensive Mobility Plan**

Visakhapatnam was one of the three cities selected by the United Nations Environment Programme (UNEP) for Low Carbon Comprehensive Mobility Plan (LCMP) in India. The LCMP articulates the path to develop sustainable and low-carbon urban mobility systems and suggests integrated transport solutions.

**Thematic areas**

Current mode shares in Visakhapatnam comprises: 52% of walking, 18% of bus trips, whilst cars and 2 wheelers contribute to 17% of the total trips. According to an analysis on business-as-usual (BAU) scenario for 2030, the share of walking will shrink from 52% to 36%, whilst cars and two-wheelers will increase from 17% to 33%. The increase of vehicles will result in severe congestions on many corridors within the city. Considering these drawbacks, various interventions were identified including building a Bus Rapid Transit (BRT) system and
infrastructure for active mobility.

**Active mobility**

According to the LCMP, although most people walk (52% of modal share for walking), there are only 78 kilometers of footpaths. 41 Kilometers of priority corridors for footpaths and safe crossings are identified for further development. Aligning with the ‘Urban Road Design Guidelines’ which was released by the Ministry of Urban Development, Visakhapatnam aims to upgrade the footpaths by making it continuous and more universally accessible.

Cycling currently accounts for only 3% of the total trips in the city. One of the major reasons is that there is a lack of cycling infrastructure and cycling conditions are poor. Thus, Visakhapatnam has plans to install better cycling infrastructure: bicycle parking, crossing facilities, vehicle-free zones, free bicycles, dedicated and shared cycling lanes. A public bike sharing system is piloted along the beach front road and it has garnered much support from the residents, particularly the residents under 40 (68% favoured it based on a 2011 census).

**Public transport system**

Public bus is the key public transport mode with a modal share of 18% in Visakhapatnam, with a fleet of 670 buses catering 50,000 trips everyday. There is lack of information at the bus stops in terms of the time, routes, delays, real time information on accidents as well as a lack of automated fare system. In order to reduce the travel time for people using buses and improve the network connectivity, the city is currently exploring two Bus Rapid Transit (BRT) corridors (Pendurthi Transit Corridor and Simhachalam Transit Corridor) with a length of 43 kilometres. Furthermore, the city has planned to upgrade the existing public bus system by retrofitting intersections with priority signalization for buses, upgrading docking and boarding system at the stations as well as improving queue bypass lanes at intersections.

**Informal transport**

Auto rickshaws form an efficient mode of first and last mile connectivity in Visakhapatnam’s urban road transport system. It caters to an estimated 15% of the travel demand with a total of 25,000 registered vehicles plying on the roads in the city. According to a survey in the LCMP, around 80% of the auto rickshaws in Visakhapatnam are privately owned while 20% are rented by the drivers.

Under the Smart City Proposal, Visakhapatnam plans to replace the diesel auto rickshaws with e-rickshaws. New “E-Zones” will be set up, where vehicle charging stations will be installed and electrical substations will be upgraded. The city hopes to increase the use of electrified 2 wheelers and 3 wheelers with the aim of reducing air pollution. In order to improve the operations of auto rickshaws, other measures have also been planned in terms of policies and infrastructure (e.g. stopping and boarding facilities in sync with bus-stops).