

What is Transit-Oriented Development?

January 12, 2021

In news

Recently, the CEO of NITI Aayog suggested that Indian cities need to embrace the new paradigm of 'transit-oriented development' where public transport is the backbone

What is Transit-Oriented Development?

- TOD integrates land use and transport planning and aims to develop planned sustainable urban growth centers, having walkable and livable communes with high density mixed land-use.
- Citizens have access to open green and public spaces and at the same time transit facilities are efficiently utilized
- TOD increases the accessibility of the transit stations by creating pedestrian and Non-Motorised Transport (NMT) friendly infrastructure that benefits a large number of people, thereby increasing the ridership of the transit facility and improving the economic and financial viability of the system.

What does a TOD include?

A TOD typically includes a central transit stop (such as a train station, or light rail or bus stop) surrounded by a high-density mixed-use area, with lower-density areas spreading out from this center. A TOD is also typically designed to be more walkable than other built-up areas, through using smaller block sizes and reducing the land area dedicated to automobiles



What are the factors which drive towards Transit Oriented Development?

Factors such as Rapidly growing population, Urbanization, migration to cities, and traffic congestion are the drivers for TOD

Benefits of TOD

Following are some of the benefits of TOD;

- Higher quality of life with better places to live, work, and play
- Greater mobility with ease of moving around
- Increased transit ridership
- Reduced traffic congestion, car accidents and injuries
- Reduced household spending on transportation, resulting in more affordable housing

Transit-Oriented Development policy in India

The vision of the policy is three-fold:

- **Enable Transformation:** to assist in transformation of cities from private vehicle dependent city to public transport oriented development
- **Accessible Public Transport:** to promote the usage of public transport by making it accessible, encourage green mobility by encouraging people to walk and cycle and at the same time curb pollution and other negative impacts of motorization.
- **Compact Walkable Communities:** to create livable and affordable communities, which are compact and walkable

Objectives of TOD Policy

TOD integrates land use and transport planning to develop compact growth centers within the influence zone of 500-800 m on either side of the transit stations i.e. areas within walking distance, to achieve the following objectives:

- To promote the use of public transport by developing high density zones in the influence area, which would increase the share of transit and walk trips made by the residents/ workers to meet the daily needs and also result in reduction in pollution and congestion in the influence area.
- To provide all the basic needs of work/ job, shopping, public amenities, entertainment in the influence zone with mixed land-use development which would reduce the need for travel.
- To establish a dense road network within the development area for safe and easy movement and connectivity of NMT and pedestrians between various uses as well as to transit stations.
- To achieve reduction in the private vehicle ownership, traffic and associated parking demand.
- To develop inclusive habitat in the influence area so that the people dependent on public transport can live in the livable communities within the walkable distance of transit stations

- To integrate the Economically Weaker Sections (EWS) and affordable housing in the influence zone by allocating a prescribed proportion of built-up area for them in the total housing supply.
- To provide all kinds of recreational/entertainment/ open spaces, required for a good quality of life in the influence area.
- To ensure development of safe society with special attention to safety of women, children, senior citizen and differently abled by making necessary amendments to the building bye laws.
- To prevent urban sprawl by accommodating the growing population in a compact area with access to the transit corridor, which would also consolidate investments and bring down the infrastructure cost for development.
- To reduce carbon footprints by shifting towards environmentally friendly travel options for the line haul as well as for access and egress trips.

Bengaluru Suburban Rail Project Project (BSRP)

The government of India had approved the Ministry of Railways' proposal for construction of the Bengaluru Suburban Rail Project Project (BSRP) in Bangalore City in the month of October.2020.

Key features

- The project envisages the construction of 4 suburban rail corridors with a total route length of 148.17 kms.
- It will be implemented by Rail Infrastructure Development Company (Karnataka) Limited (KRIDE), a joint venture company set up by the Ministry of Railways with the government of Karnataka as a special purpose vehicle.
- The project is proposed to be completed in 6 years at an estimated cost of Rs. 15,767 crores.
- It envisions the creation of a dedicated Suburban Railway system in Bengaluru city to provide a safe, accessible and comfortable mode of public transport.
 - It will ease traffic congestion, enhance rural-urban connectivity and provide a cleaner mobility solution to lakhs of daily commuters.
- It will provide an economic, efficient and eco-friendly transit alternative to the Garden City of Bengaluru.
- It will alleviate the massive transport problem of Bengaluru and link all parts of the city in a seamless fashion.
- By providing rapid connectivity to Bangalore International Airport, IT Hubs and the commercial centres, the rail-based network will boost productivity and growth by reducing commuting time.
- It will integrate multiple modes of transport like the metro, railways and bus transport by constructing interchange hubs.
- The project is expected to benefit the people by providing a safe, efficient and environmentally friendly transport system, Reduction in commuting time, Reduced fuel consumption, Reduction in capex on road infrastructure, Reduction in pollution and accident, Enhanced Transit-Oriented Development (TOD) , Increase in value of land bank in the corridor and generate additional revenue and Creation of jobs etc.
 - The project is expected to be completed by 2026.