

TOD – Transit-Oriented Development

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Abstract

Transit-oriented development (TOD) is a planning strategy that emphasizes the development of compact, walkable, mixed-use communities centered around high-quality public transit systems, such as buses, light rail, and commuter trains. The goal of TOD is to create communities that are less reliant on cars and more supportive of sustainable transportation options, while also promoting economic development and social equity.

TOD typically involves the creation of higher-density, mixed-use development near transit stations or along transit corridors. This can include a mix of residential, commercial, and retail spaces, as well as public spaces such as parks and plazas. By locating development near transit, TOD can help to reduce the amount of time and money that residents spend on transportation, while also reducing traffic congestion and air pollution.

TOD has gained popularity in recent years as a way to address a range of urban challenges, from climate change to social inequality. However, implementing TOD can be challenging, as it often requires coordination between multiple stakeholders, including transit agencies, developers, and community members. Success also depends on factors such as the quality and frequency of transit service, the availability of affordable housing, and the design of the built environment.

Despite these challenges, TOD has the potential to offer a range of benefits to communities, including increased mobility, reduced greenhouse gas emissions, improved public health, and greater economic opportunity. As cities around the world continue to grow and change, TOD is likely to remain an important tool for creating more sustainable, livable communities.

Introduction

Transit-oriented development is a planning and design approach that focuses on creating compact, mixed-use developments that are centered around public transportation. TOD aims to encourage the use of public transportation, walking, and cycling, while reducing the dependence on private vehicles.

The benefits of TOD are many, including reducing traffic congestion and pollution, improving access to jobs and services, increasing economic development, and promoting more sustainable and liveable communities.

To achieve these goals, TOD typically involves a combination of land use planning, transportation planning, and urban design strategies. Some common strategies used in TOD include:

Designing transit stations as focal points for development, with a mix of commercial, residential, and other uses located nearby.

Prioritizing pedestrian and bicycle infrastructure, such as sidewalks, bike lanes, and crosswalks, to make it easier and safer for people to get around without a car.

Creating compact, walkable, and mixed-use neighborhoods that include a variety of housing types, such as apartments, townhomes, and single-family homes.

Providing incentives for developers to include affordable housing in TOD projects, to promote economic diversity and prevent displacement of low-income residents.

Need for a National TOD Policy

As the cities are experiencing rapid growth, transit systems like metro rail, BRTS, etc. are being implemented to cater to the growing travel demand. It has thus become inevitable to have TOD for all such cities which have existing mass transit systems or are planning to do so.

It is the responsibility of the state government to manage the urban spaces, however, a National TOD policy would serve as guidelines and play a catalytic role in formulating state/city-level policies for the promotion of transit-oriented development.

It is important for community-based organizations, practitioners, urban local bodies, state/ union territory (UT) governments, Central Government ministries/ departments/ agencies, and all other stakeholders involved in the development of the city, to understand TOD, its benefits, and implementation strategy.

National TOD policy shall be a guiding document for the Central Government ministries/ departments/ agencies to ensure that their schemes, policies, etc. encourage TOD in cities, especially those with upcoming mass transit systems.

This shall support states and cities to recognize public transport infrastructure as the core around which the future expansion of urban areas should be planned and the investments in public transport be directed accordingly.

This shall help all state/ UT governments and urban local bodies in the formulation of TOD planning strategies.

The vision of the TOD Policy

Enable Transformation: to assist in the transformation of cities from private vehicle-dependent cities 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.

Managed Parking

To discourage the use of private vehicles and to manage parking in TOD, the supply of parking must be reduced and made expensive within the influence zone.

On-street parking should be prohibited within 100 m of the transit station, except for freight delivery and pickup or drop-off of the differently abled.

The use of parking spaces within the influence zone can be maximized by sharing spaces between users that have demand during different times of the day. For example, parking requirements for office/work can be shared with the parking spaces for residences as their hours for demands do not coincide with each other.

TOD aims to promote NMT which includes the use of a bicycle. Therefore, bicycle parking facilities should be provided at regular intervals and in suitable locations within the influence zone. Public bicycle-sharing systems may also be planned to promote the use of bicycles.

Parking should not be allowed in a manner wherein the aesthetics of the city is lost. The neighborhood is generally adversely affected by parking of vehicles in front of the buildings on the primary streets, therefore, on-street parking should be avoided. In case, if on-street parking is needed, it should be provided in a manner, wherein it acts as a buffer for pedestrians and cyclists from motorized traffic.

To restrict unauthorized parking and to avoid congestion caused due to on-street parking, it is important to have an enforcement mechanism in place. Cities should have a parking policy with a heavy penalty for unregulated parking in the influence zone and ensure that the same is implemented. Also, the parking should have price variations according to the time of day and duration of parking.

Road Widths and Transportation Networks

Due to the lack of transportation facilities during that period and narrow road widths and poorly constructed roads, people didn't prefer traveling to those areas and hence the development was confined to one particular area.

Case Study

Indore is a rapidly growing city in central India and has been recognized as a model city for its urban development initiatives. Transit-Oriented Development (TOD) has been a key focus area of the city's development plans in recent years.

Indore's BRTS (Bus Rapid Transit System) has been a major catalyst for TOD in the city. The BRTS covers a network of over 110 km and connects various parts of the city with dedicated bus lanes, which have significantly reduced travel times and improved public transportation options. In addition, the city has also launched a bike-sharing program, and pedestrianization initiatives to encourage walking and cycling.

One of the key TOD projects in Indore is the development of the Super Corridor, a 12 km stretch of land along the BRTS corridor. The Super Corridor is being developed as a mixed-use development with commercial, residential, and recreational facilities. The development is

planned to be high-density and walkable, with a focus on creating a vibrant and inclusive community.

TOD project in Indore is the redevelopment of the Rajwada area, a historic neighborhood in the city center. The project aims to improve pedestrian and public transportation connectivity, create more public spaces, and preserve the heritage character of the area while also allowing for modern amenities.

The Indore Development Authority (IDA) has been the driving force behind TOD in the city and has been working closely with stakeholders, including the private sector, to ensure the successful implementation of these projects. The IDA has also launched various initiatives to promote affordable housing and incentivize developers to include affordable housing in their projects.

Mindset of People

The residents of old Indore always wanted to live close to their workplace (shops) and they were always skeptical about the distances. Whereas, immigrants from other cities had no such mental barrier of distance. They kept on opting for albeit distant but economical land parcels.