

Transit Oriented Development

- TOD is a walkable, mixed-use form of development focused within 400m-800m radius of a Transit Station. 400m-800m radius is considered a comfortable 5-10 minute walking distance.
- Higher density, compact development forms are concentrated near the station to make transit convenient for a greater number of people and to encourage ridership.
- The intent of TOD is to utilize infrastructure investments, optimize use of the transit network and create mobility options for transit riders.



Guangming Hub, located on the high-speed rail connecting Hong Kong, Shenzhen, and Guangzhou, China

Transit Oriented Development

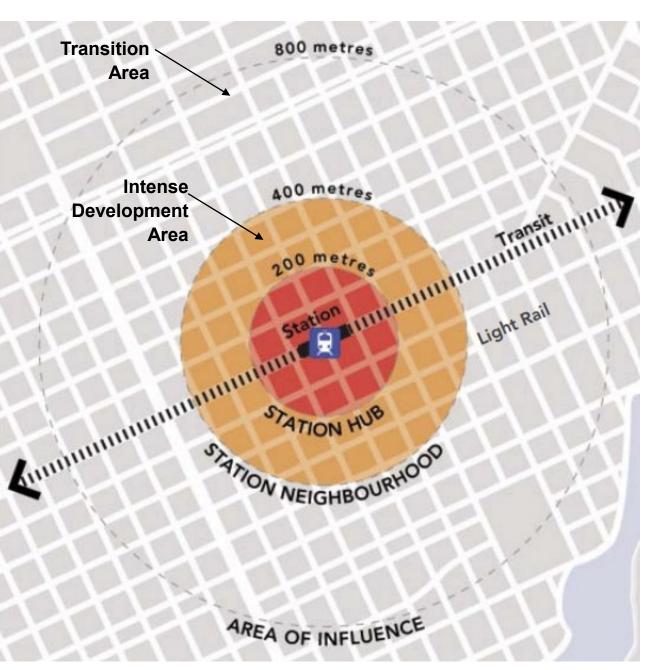
- Increasingly the cities around the world are making major public investment in transit infrastructure through Light Rail Transit (LRT) or Subway and Bus Rapid Transit (BRT).
- TOD is an innovative urban paradigm that leverages existing and future public transit infrastructure to ensure sustainable mobility choices.
- By optimizing the use of land around transit stations, the principles of smart growth are followed, and a 'Triple Bottom Line' approach helps to achieve some of its environmental, economic and social objectives.



Key Outcomes / TOD Policies

- Intensification and Diversification of Land Uses
- 2. Enhanced Public Realm
- 3. Multi-Modal Mobility Integration

1. Intensification and Diversification of Land Uses



- 400-800m radius from the Station, a comfortable 5–10 minute Walking distance, is the Zone or Area of Influence
- Development within the Zone of Influence is typically termed Influence Zone Plan or Station Area Plan
- 400m Radius is considered the Core or Intense Development Area;
- Beyond the 400m Radius is the Transition Area, where development steps down from higher to lower density to create a better interface with surrounding context

1. Intensification and Diversification of Land Uses



Source: Mixed-use TOD Zone in Bhopal, Smart City Plan Bhopal, 2015

Potential for TOD in India

- FAR (Floor Area Ratio) or FSI (Floor Space Index) and Mix of Uses within Intense Development Area is much greater than Transition Area
- FAR can range widely depending on the location (e.g. in Delhi it would be much greater than Chandigarh)
- Horizontal or Vertical Mix of uses vary with location (see Table on next slide)
- Intent is to have more Jobs and People within the Zone of Influence
- Policies may also include mixing in an Affordable Housing component
- Policies encourage Sustainable Building Envelopes within TOD areas

1. Intensification and Diversification of Land Uses

Land use/ use premise

Table 20.1: Mix of Uses/ Distribution of FAR in TOD

Permissible Mix of Uses (distribution of FAR in TOD Scheme)

of plot as per ZDP/ Layout Plan				
	Minimum FAR for Residential uses	Minimum FAR for Commercial uses	Minimum FAR for PSP and/or utilities	
Residential	50%	10%	20%	Other uses* are permitted up to 20%.
Commercial	30%	50%	10%	Other uses* are permitted up to 10%.
Industrial	30%	10%	10%	Remaining 50% of FAR to be for Industrial use.
Government	30%	10%	10%	Remaining 50% of FAR may be for any Government use.
Transportation	30%	10%	10%	Remaining 50% of FAR may be for any use* after meeting all operational requirements for transportation facilities.
PSP(only housing and neighbourhood level PSP plots allowed as per Clause 20.4.ii)	The FAR for such Scheme.	plots shall be entir	rely utilised for PSPs	s and/or utilities in the TOD

^{*} This remaining FAR can be utilised as a mix of residential, commercial and PSP in any proportion as per project requirement.

Source:

TOD Policies, Ministry of Housing and Urban Affairs, Delhi.

2. Enhanced Public Realm

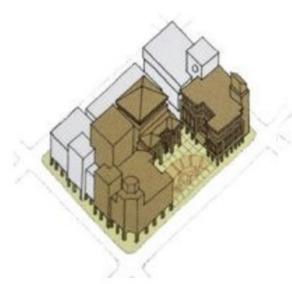


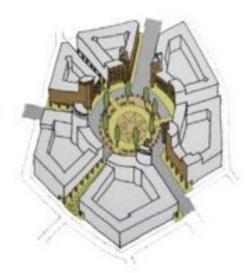




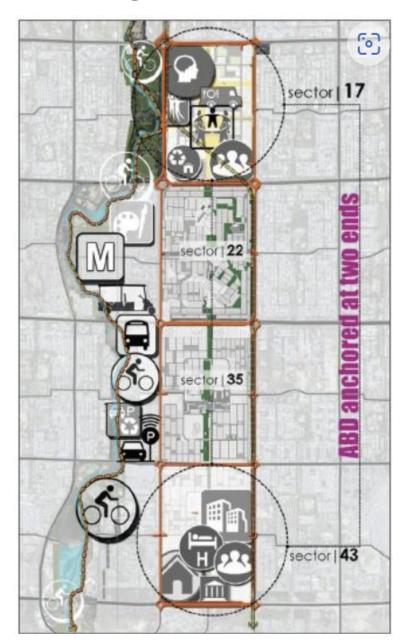


- Placemaking
- Access to Green Public Space and Amenities (plazas, Tot Lots)
- Enhanced Pedestrian Environment –
 Convenient and comfortable connections
 through Pathways, Broad Sidewalks, Arcades
 and Awnings Direct, barrier-free, safe,
 designed for local climate





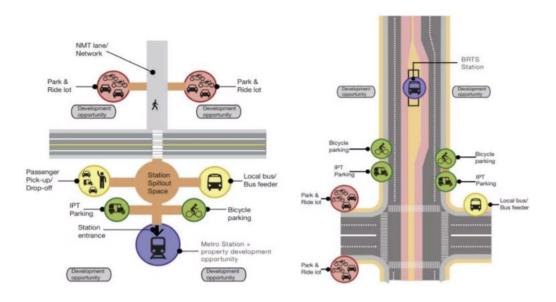
3. Multi-Modal Integration



Intervention in Chandigarh, Smart City Plan Chandigarh, 2016 Potential for TOD in India

Source: TOD

- Integration with Non Motorized
 Transportation Modes: Walking, cycling
- Transit Supportive: Feedermain Buses, parking for Park n'Ride,



Source: Bachelor of Planning Assignment Bhopal

TOD Examples Calgary – Anderson Station

Illustrative
Plan:
High
Intensity
Mixed-Use





Aerial
Perspective:
Multimodal
integration







TOD Examples Calgary – Midfield Heights

Higher Intensity Mixed-Use Development in close proximity to MAX Orange Station Street-Oriented
Pedestrian Precinct will
enhance public realm
and placemaking

Diverse Housing types including Affordable Housing with varying FAR

An extensive pathway network enhances multimodal connectivity including walking and cycling Point Park located at the tip provides open space and iconic landmark features



TOD Examples Calgary – Midfield Heights

Public Realm and Placemaking





Aerial Perspective:
Addressing the Context



