

Transit Oriented Development

Definitions

A mixed-use residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership.

Context and Policies

Transit oriented development (TOD) refers to development activity located along or within walking distance to public transport routes that "mixes residential, retail, office, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, or foot." ¹ The main purpose of TOD is enhancing mobility by decreasing reliance on the automobile and by encouraging use of alternate modes of transportation such as public transport, walking, and biking ². Transit Oriented Developments comprise high-density developments located within walking distance (400 to 800 metres) of public transport centres (train station, metro station, light rail or tram station, bus rapid transit or bus station) with lower-density development spreading progressively outwards.

The Transit Oriented Development: Best Practices Handbook, published by the City of Calgary (see "Documents"), presents a review of practices from cities across North America. This review indicates that although TOD is a unique form of urban development, the following key components are commonly found to be critical to the success of any Transit Oriented Development:

- Get the Land Uses Right
- Promote Density
- Create Convenient Pedestrian Connections
- Ensure Good Urban Design
- Create Compact Development Patterns
- Manage Parking
- Make Each Public Transport Centre a "Place".

Issues

While TOD has gained popularity over the last decade, it is still not commonly practiced. The report "Building Transit Oriented Development in Established Communities" (see "Documents") lists the following challenges:

- **Financial Risk to Developer:** Although TOD is gradually gaining more acceptance in the development community, it is still often hard to convince developers and financiers that TOD can be profitable. Many developers and investors believe that TOD involves higher risks and costs than other types of development.
- **High Initial Public Investment Costs:** It is widely viewed that TOD can lower infrastructure costs in the long run but the initial TOD infrastructure needs can be considerable and can require extensive public investment. There is no single source of funds for TOD; instead, a number of funding sources are needed. Other municipal infrastructure development often competes with TOD for the same funding

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Resources

Documents

- **Building Transit Oriented Development in Established Communities**, 2002, Sara J. Hendricks and Julie Goodwill, National Center for Transit Research, Center for Urban Transportation Research, University of South Florida (USA)
- **Co-ordinated land-use and transportation planning - Norwegian style**, 2005, Tor Medalen, the Norwegian University of Science and Technology, Trondheim (Norway)
- **Creating livable communities: a case study of the Heartland site Somerset West**, 2007, Andre Frieslaar, John Jones and Tony Marks, HHO Africa Infrastructure Engineers (South Africa)
- **Effective Bus-Based Transit Oriented Development**, 2005, Wendy Adam and Dick Fleming, Parsons Brinckerhoff (Australia)
- **Promoting transit oriented development in the Atlantis Corridor, Cape Town: towards an implementable model**, 2007, Peter Wilkinson and Antony Marks, School of Architecture, Planning & Geomatics, University of Cape Town (South Africa)
- **Strengths and Weakness of Bus in Relation to Transit Oriented Development**, 2005, Professor Graham Currie, Chair of Public Transport, Institute of Transport Studies, Monash University (Australia)
- **Transit Oriented Development in America: Strategies, Issues, Policy Directions**, 2005, Robert Cervero, Professor and Chair Department of City and Regional Planning, Institute of Urban and Regional Development, University of California, Berkeley (USA)
- **Transit Oriented Development: Moving from Rhetoric to Reality**, 2002, Dena Belzer and Gerald Autler, The Brookings Institution Center on Urban and Metropolitan Policy (USA)
- **Transit Oriented Development' : a strategic instrument for spatial restructuring and public transport system enhancement in South African cities?**, 2006, Peter Wilkinson
- Organization: School of Architecture, Planning & Geomatics, University of Cape Town (South Africa)

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sources.

- **Unsupportive Regulatory Framework:** One of the biggest challenges is that the regulatory framework of most municipalities is not supportive of TOD. It is common for cities to have zoning ordinances and land development codes designed for automobile oriented, single-purpose, suburban-scale development.
- **Community Resistance:** Resistance from the local neighbourhood can pose a challenge to the implementation of TOD. Residents often have concerns that TOD will take away from the character of the neighbourhood, create localized traffic congestion or lower property values.

Actions

The following principles serve as an action guide and provide an understanding of the essential elements and characteristics of a TOD³ :

- Create a compact development within an easy walk of public transit and with sufficient density to support ridership.
- Make the pedestrian the focus of the development strategy without excluding the auto.
- Create active places and liveable communities that service daily needs and where people feel a sense of belonging and ownership.
- Include engaging, high quality civic spaces (e.g. small parks or plazas) as organizing features and gathering places for the neighbourhood.
- Encourage a variety of housing types near transit facilities available to a wide range of ages and incomes.
- Incorporate retail into the development if it is a viable use at the location without the transit component, ideally drawing customers from both the TOD and a major street.
- Ensure compatibility and connectivity with surrounding neighbourhoods.
- Introduce creative parking strategies that integrate, rather than divide the site and reduce the sense of auto domination.
- Create TOD plans that are flexible so they can respond to changing conditions.
- Strive to make TODs realistic yet economically viable and valuable from a diversity of perspectives (city, transit agency, developer, resident, employer).
- Recognize that all TODs are not the same; each development is located within its own unique context and serves a specific purpose in the larger context.

¹ Michael Davidson and Fay Dolnick, "A Glossary of Zoning, Development, and Planning Terms," American Planning Association, Planning Advisory Service Report Number 491/492 (USA)

² Building Transit Oriented Development in Established Communities, 2002, Sara J. Hendricks and Julie Goodwill, National Center for Transit Research, Center for Urban Transportation Research, University of South Florida (USA)

³ Transit-Oriented Development (TOD) Guidebook, 2006, City of Austin Neighborhood Planning and Zoning Department, Austin TX (USA)

Presentations

- **Innovations in TOD: A National Perspective**, 2008, Shelley Poticha, Reconnecting America, Washington DC (USA)
- **Transit oriented development strategies in Europe**, 2005, Luca Bertolini, University of Amsterdam (Holland)

Recommended Links

- **California Transit-Oriented Development (TOD) Searchable Database** (USA)
- **The Center for Transit-Oriented Development** (USA)
- **Transit Oriented Development (TOD): City of Calgary** (Canada)
- **Transit Oriented Development** (USA)

For further information

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