

TRANSIT-ORIENTED DEVELOPMENT: WHAT CAN CANADIAN PLANNERS LEARN FROM OTHERS?

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SUMMARY

Transit-oriented development (TOD) describes compact, pedestrian-oriented, mixed-use communities that are centred around high-quality transit. It is a complex concept that many cities have found difficult to implement, particularly at a regional scale. Based on findings from a study of international case studies in TOD, this article discusses ways in which Canadian planners and policy makers can use ideas from other cities to develop their own solutions to TOD implementation.

RÉSUMÉ

Le développement axé sur le transport en commun (DATC) décrit des collectivités qui se caractérisent par un certain degré de densification, un aménagement axé sur la circulation piétonnière et une mixité d'utilisations, le tout à proximité de services de transport en commun de haute qualité. Il s'agit d'un concept complexe que bon nombre de villes ont trouvé ardu d'implanter, surtout à l'échelle régionale. En se basant sur les résultats d'études de cas du DATC à l'échelle internationale, cet article décrit comment les urbanistes et décideurs peuvent s'inspirer d'idées appliquées dans d'autres villes pour élaborer leurs propres méthodes de mise en œuvre du DATC.



INTRODUCTION

"TOD can be described as land use and transportation planning that makes walking, cycling, and transit use convenient and desirable, and that maximizes the efficiency of existing public transit services by focusing development around public transit stations, stops, and exchanges. Successful TOD can be defined as implementation of this type of development at a regional scale."¹

TOD is usually considered to benefit cities and regions in a number of ways, including decreased emissions and pollution, increased health and wellbeing for residents, increased property values, and prevention of sprawl. Politicians, planners, and 'city boosters' have adopted TOD as a redevelopment strategy, while some communities and activists have fought it because of its effects on the displacement of local residents, the loss of affordable housing in newly developed areas close to transit stations and stops, and the disruption of local business operations.

TOD remains a "complex policy concept whose implementation involves multiple stakeholders and levels of government over extensive time periods."² This complicates its adoption, particularly

for cities that would like to use it as a regional growth management approach to improve sustainability. For example, in Amsterdam, TOD is mainly confined to rail station areas rather than urban corridors, and it lacks many of the design and mixed-use elements that American cities have integrated to encourage walking (e.g. Amsterdam Sloterdijk station has limited mixed-use elements). But in cities like Naples and Tokyo, the TOD approach reaches beyond stations toward a network approach to realign entire urban regions around rail-based transportation.³ In Naples, redevelopment of stations and lines extended to the entire Campania region, and in Tokyo, railway companies develop land at the same time as the infrastructure to ensure all-day usage along the length of the line.

Canadian cities have struggled with inconsistent policies supporting TOD, lack of government support/funding for transportation infrastructure and lack of public acceptance of the increased densities and displacement that come along with TOD. These barriers are not unique to our cities – in fact they are common to cities around the world. Canadian cities can learn from other cities in order to overcome these barriers to successful TOD implementation. The lessons discussed in the following are

Critical Success Factor	Successful cases showed...	Positive Case Example
Plans and Policies		
Policy Consistency	Very consistent policy supporting TOD over many years vs. inconsistent	Copenhagen
Vision Stability	A well-developed and stable vision for the region vs. frequent changes	Vancouver
Government Support	Very good support from the higher levels of government vs. no policies or funding	Naples
Political Stability (National)	A very stable national political agenda supporting TOD vs. frequent changes	Perth
Political Stability (Local)	A very stable national political agenda supporting TOD vs. frequent changes	Tokyo
Actors		
Actor Relationships	Very good relationships between municipal actors at a regional scale vs. poor or no relationships	Rotterdam-The Hague
Regional Land Use-Transportation Body	Presence of a regulatory regional land use-transportation planning body vs. absence of such an organization	Arnhem-Nijmegen
Inter-Municipal Competition	No competition among municipalities for new developments and funding vs. intense competition	Tokyo
Multidisciplinary Implementation Teams	Widespread presence of multidisciplinary teams implementing TOD vs. sector-specific teams (e.g., engineering)	Naples
Public Participation	Very high public participation in land use-transportation planning processes vs. no participation or engagement	Perth
Public Acceptance	Very high public acceptance of high densities and public transit vs. no acceptance	Arnhem-Nijmegen
Key Visionaries	Many influential key visionaries over time vs. none	Montreal
Implementation		
Site-Specific Planning Tools	Widespread use of site-specific planning tools vs. no use	Vancouver
Regional Level TOD Planning	Corridor-level planning vs. none	Toronto
Certainty for Developers	High degree of certainty for developers on policies, tools, and sites for TOD vs. uncertainty or lack of awareness	Tokyo
Willingness to Experiment	Actors are very willing to experiment with policies, practices, and tools vs. unwilling	Rotterdam-Den Haag

Table 1. Critical success factors in TOD implementation.

Critical Success Factor	1	2	3	4	5
Inter-Municipal Competition	Very intense competition/Very unequal distribution of new developments/funding	Intense competition/unequal distribution of new developments/funding	Some competition/unequal distribution of new developments/funding	Little competition/equal distribution of new developments/funding	No competition/very equal distribution of new developments/funding

Table 2. Sample five-point scale for Inter-Municipal Competition.

based on a two-year study of TOD, conducted at the University of Amsterdam, that focused on the actors, institutions, and policies that contributed to successful implementation in city-regions around the world.⁴

The study included a systematic comparison of case studies (meta-analysis), rough set analysis, and policy learning workshops with local planners. The goals of the study were to understand the actors, institutions, and policies used in other international city-regions and to determine whether they could be applied in the Netherlands, a country that has

struggled with TOD implementation. The case city-regions were: Tokyo, Perth, Melbourne, Montreal, Vancouver, Toronto, Naples, Copenhagen, Amsterdam, Rotterdam-The Hague, and Arnhem-Nijmegen. They were chosen because there were existing case study reports and publications on TOD in each city-region, they had all had been attempting TOD for at least 20 years, and there were three local experts in each city-region available to assist with the research.

The study identified factors that led to success, or failure, of implementation of TOD

at the regional scale in the case city-regions. While factors and policy lessons from each case were used as learning or inspiration for Dutch planners, Canadian planners trying to implement TOD can take the same approach by learning from international city-regions.

POLICY LESSONS FROM INTERNATIONAL CASE STUDIES

Using case reports developed for each city-region, and a meta-analysis of the qualitative data from these reports, the researchers identified similarities and differences between the cases. We found

16 factors that contributed to successful TOD implementation (see **Table 1**). Each factor is accompanied by the characteristic of successful cases and an example, e.g., for Government Support, successful cases had a very good support from the higher levels of government versus no supporting policies or funding in unsuccessful cases. A positive case example is Naples, which had not only national support but also support from the European Union.

After the three experts in each city helped rank each of the cases in these 16 critical success factors, a quantitative approach called rough set analysis was used to further understand how the factors contributed to success. Each case was found to have its strengths and weaknesses, and each took a different path to success; clearly, success or failure in TOD implementation depends on multiple factors. Completely successful TOD implementation at the regional scale is rare, as is outright failure. In fact, because TOD is such a complicated long-term approach to (re)development involving multiple levels of government, funding, and planning tools and policies, strengthening even a few critical success factors in a city-region is likely to have some effect on the successful implementation of TOD.

POLICY WORKSHOPS: RANKING CITY-REGIONS AND STRENGTHENING THE WEAKNESSES

The final part of the study concerned how to bring the critical success factors to local planners so that they could use them as learning or inspiration to develop their own approaches to TOD implementation. During policy workshops, Dutch planners used a five-point scale to rank the critical success factors for their own city-region (see example in **Table 2**).

This exercise allowed them to identify regional strengths and weaknesses. Then they worked in groups to figure out how they would improve upon any weaknesses they had identified, using example policy lessons and ideas from the cases. For example, they could try to strengthen actor relationships, reducing the 'silo' mentality that can occur in planning. One way to do this might be to invite land use and transportation planners to sit on an informal committee on TOD; this was a policy lesson from Arnhem-Nijmegen. Or, to increase public participation, they could draw from Perth's regional planning process,

which involved a planning game and scenarios for future growth. It was up to them to decide whether the example policy lesson/idea was transferable to their context, or whether it required adaptation. Perhaps the type of scenarios used in Perth would not work in their city, and another technique could be used to engage residents.

LEARNING AND INSPIRATION FOR CANADIAN PLANNERS

The most crucial lesson from this study was that the best way to use policy lessons and ideas from other places is as learning and inspiration, rather than copying ideas directly. That way, the unique policy, cultural, geographic or other characteristics of the 'borrowing' city are kept in mind when developing solutions. While there may not be anything municipal planners can do about some of the critical success factors, such as Government Support or Key Visionaries, they can work towards strengthening those under their control. The following are some suggestions for Canadian planners who want to learn from the international city-regions.

- Developing consistent policy, so that official plans, housing strategies, and transportation plans align with each other to support denser development across corridors, is important in facilitating TOD.
- Developing a vision for the city-region that is clear and stays consistent over time is critical – a vision has to be unique to your place and population, and specific enough to monitor progress over time.
- Strengthening the relationships between land use, transportation, and housing planners is always of benefit to a region. Often these professionals work in different municipal departments or organizations, and they use different language and methods to achieve outcomes. Meeting on a regular basis to share news about projects, discuss common problems and develop solutions is useful, even if a formal land use-transportation body does not and cannot work in your city. Regular conversations could help planners and policy makers articulate ways in which their organizations' goals overlap.
- Developing a strategy for (re)development of key sites and corridors, which is agreed upon by different agencies and levels of government, has been key in many of the case city-regions because it increased clarity for developers.

- Being willing to experiment with key projects or concepts, and evaluate their success or failure, can be difficult for municipal governments. Pilot projects are increasingly popular as cities test concepts to see whether they can be successful enough to be applied more broadly across a region.

While there is no magic combination of the 16 factors that leads to success, politicians, planners, and transportation advocates can work towards developing more consistent policies; building and maintaining relationships between various agencies and various departments involved in transportation and land use planning; and involving residents and professionals from multiple disciplines in implementing a long term vision for the region.

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ENDNOTES

- ¹ Ren Thomas and Luca Bertolini, "Beyond the Case Study Dilemma in Urban Planning: Using a Meta-matrix to Distil Critical Success Factors in Transit-Oriented Development," *Urban Policy and Research*, 32, no. 2 (2014): 225, DOI: 10.1080/08111146.2014.882256
- ² Ren Thomas, Dorina Pojani, Sander Lenferink, Luca Bertolini, Dominic Stead, and Erwin van der Krabben, "Is Transit-Oriented Development (TOD) an Internationally Transferable Policy Concept?" *Regional Studies* (2018), DOI: <https://doi.org/10.1080/00343404.2018.1428740>.
- ³ R. D. Knowles, "Transit oriented development in Copenhagen, Denmark: From the finger plan to Ørestad," *Journal of Transport Geography*, 22 (2012): 251-261, doi:10.1016/j.jtrangeo.2012.01.009.
- ⁴ Luca Bertolini and Ren Thomas at the University of Amsterdam conducted Part 1 of iTOD (Implementing TOD) study, assisted by three experts in each city who ranked their own city-region. Part 2 of the study involved financial tools to facilitate TOD (Erwin van der Krabben and Sander Lenferink at Radboud University) and Part 3 involved urban design of TODs (Dominic Stead and Dorina Pojani at the Technical University of Delft).