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Transit-Oriented Development

Learning from International Case Studies

Ren Thomas
Luca Bertolini

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ISBN 978-3-030-48469-9 ISBN 978-3-030-48470-5 (eBook)
<https://doi.org/10.1007/978-3-030-48470-5>

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The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

CONTENTS

1	Introduction to Transit-Oriented Development	1
	<i>What Is TOD and Why Do Cities Use It?</i>	2
	<i>Why Do Cities Want to Adopt TOD?</i>	4
	<i>What Are Cities and Regions Doing to Implement TOD?</i>	7
	<i>Barriers to TOD</i>	9
	<i>Zoning and Other Regulatory Issues</i>	9
	<i>Policy Consistency and Planning Coordination</i>	11
	<i>Cost</i>	12
	<i>Public Opposition</i>	12
	<i>Loss of Affordable Housing</i>	13
	<i>Conclusion</i>	15
	<i>The Structure of This Volume</i>	16
	<i>References</i>	18
2	Policy Learning: How Planners Learn from Each Other	21
	<i>Learning from Case Studies</i>	22
	<i>Single-Case Studies and Policy Learning</i>	24
	<i>Case Study Comparison and Cross-Case Techniques</i>	25
	<i>Learning from Successes and Failures Elsewhere</i>	28
	<i>Policy Transfer in Transit-Oriented Development</i>	30
	<i>Concerns About Policy Transfer</i>	31

<i>Meaningful Learning from Other Contexts</i>	34
<i>Using Case Selection to Shape Learning</i>	34
<i>Decontextualizing and Recontextualizing</i>	35
<i>What, if Anything, Can We Learn from Other Places?</i>	37
<i>References</i>	38
 3 International Case Studies in TOD	 43
<i>Choosing the Case Studies</i>	44
<i>City-Region Profiles</i>	46
<i>Tokyo</i>	46
<i>Perth</i>	46
<i>Melbourne</i>	47
<i>Montreal</i>	47
<i>Vancouver</i>	48
<i>Toronto</i>	48
<i>Naples</i>	49
<i>Copenhagen</i>	49
<i>Amsterdam-Utrecht</i>	50
<i>Rotterdam-The Hague</i>	50
<i>Arnhem-Nijmegen</i>	51
<i>Meta-analysis: Decontextualizing</i>	51
<i>Critical Success Factors</i>	52
<i>Policy Learning: Recontextualizing</i>	57
<i>Identifying Weaknesses</i>	58
<i>Weak Actor Relationships</i>	59
<i>Unwillingness to Experiment</i>	61
<i>Lack of Public Participation</i>	61
<i>Strengthening the Weaknesses</i>	62
<i>Actor Relationships</i>	62
<i>Public Participation</i>	63
<i>Were Policy Ideas/Lessons Transferred?</i>	63
<i>Reflections on the Approach</i>	66
<i>Conclusion</i>	67
<i>References</i>	68

4	Persistent Challenges and Potential Solutions:	
	Equitable TOD	73
	<i>Persistent Equity Challenges</i>	<i>75</i>
	<i>Loss of Affordable Housing in Station Areas and Corridors</i>	<i>75</i>
	<i>Impacts on Local Businesses</i>	<i>77</i>
	<i>Equity Concerns = Equitable Solutions</i>	<i>78</i>
	<i>Tools and Strategies to Enable More Equitable TOD</i>	<i>79</i>
	<i>Evaluating the Impact of Transportation Investments</i>	<i>79</i>
	<i>Buying/Holding Properties Near Transit Infrastructure</i>	<i>80</i>
	<i>Loans/Programs Addressing the Loss of Affordable Housing and Local Businesses</i>	<i>82</i>
	<i>Planning Regulations Encouraging Equitable Development</i>	<i>84</i>
	<i>Addressing Public Opposition: Building a Collaborative Practice</i>	<i>86</i>
	<i>Generating Support from Higher Levels of Government</i>	<i>89</i>
	<i>Conclusions</i>	<i>91</i>
	<i>References</i>	<i>91</i>
5	Conclusion	95
	Index	101

LIST OF FIGURES

Fig. 3.1	The process of developing the critical success factors (CSFs)	52
Fig. 3.2	Critical success factors (CSFs) with case examples showing what increases success	53
Fig. 3.3	Critical success factors ranking scale used to determine the strengths and weaknesses of each case	55
Fig. 3.4	Pre- and post-workshop survey results	64



CHAPTER 1

Introduction to Transit-Oriented Development

Abstract Transit-oriented development has quickly become a popular concept: it is a complex process and strategy that can contribute to more sustainable transportation patterns, decreased emissions, and enhanced regional connectivity. A significant percentage of households would like to live in high-density housing near transit. However, TOD has also contributed to 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. It has been marred by overly complex development processes, financial and construction challenges, and unrealistic expectations for civic renewal. In this chapter, we discuss the characteristics of TOD, the current state of practice in cities around the world, and barriers to its implementation. At the end of the chapter, we present more detail on our two-year study on TOD implementation and outline the remaining chapters of this volume.

Keywords High density • Transportation • Mixed use • Neighborhoods • Walkable

Transit-oriented development has quickly become a popular concept among planners, developers, and engineers because it combines mass transit technology, efficient transportation, and high-density development. Politicians 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.

Like most planning concepts, TOD is neither a savior nor a villain. It is a complex process and strategy that can contribute to more sustainable transportation patterns, decreased emissions, and enhanced regional connectivity, but has also been marred by overly complex development processes, financial and construction challenges, and unrealistic expectations for civic renewal. This book explores TOD as a policy concept and is based in part on an in-depth study conducted at the University of Amsterdam (2012–2014). The goal was to study how TOD has been implemented in a range of international case studies with the intent of spurring a breakthrough in TOD in the Dutch context.

In this chapter, we discuss the characteristics of TOD, the current state of practice in cities around the world, and barriers to its implementation. At the end of the chapter, we present more detail on the study and outline the remaining chapters of this volume.

WHAT IS TOD AND WHY DO CITIES USE IT?

While most readers of this volume may have some understanding of transit-oriented development and would like to learn more, we would like to ensure everyone has the same understanding of the term.

TOD includes high-density, mixed-use developments located within close proximity to public transportation infrastructure. The term “transit-oriented development” was coined by Peter Calthorpe and detailed in his seminal volume *The Next American Metropolis: Ecology, Community, and the American Dream* (1993). The US-based Center for Transit-Oriented Development, a national clearinghouse on the topic, is the result of a collaboration with the Center for Neighbourhood Technology and Strategic Economics and is funded by the US government. The CTOD definition of the concept is:

a type of community development that includes a mixture of housing, office, retail and/or other commercial development and amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation. (CTOD 2019)

If this sounds familiar, it is because many cities around the world used to be built this way before the advent of the car. Developing pedestrian-oriented, small-scale urban neighborhoods and streets was commonplace until the 1950s, and these places can be experienced in many historic neighborhoods around the world. For this reason, Calthorpe considers himself “a reviver rather than an originator of ideas” (Newman 1991). As a reaction to decades of car-oriented development, the modern vision of TOD began as a rail-based concept with development focused around station areas, with the basic premise that re-orienting urban development toward more dense corridors had the potential to preserve land, decrease car use, curb urban sprawl, and accommodate regional growth.

CTOD (2007) suggests that demographic shifts, and accompanying shifts in housing preferences, are another reason that cities might invest in TOD: the fastest-growing household type is no longer the two-parent, two-child household, which is now just 25 percent of the total number of households in the US and in Canada. More rapid growth in households made up of couples without children, single parents, people living alone, seniors, and immigrants has resulted in a vastly increased demand for public transit; historically, all of these household types have taken public transit at higher rates than the two-parent, two-child household. A national study showed that by 2030, 40 percent of households in the US were looking for high-density housing near transit (CTOD 2007). People living in areas close to TOD have lower car ownership and smaller household sizes (Ewing and Cervero 2010).

TOD has now evolved to include small-scale developments such as walking paths, cycling parking and trails, and public spaces supporting not just high-capacity metropolitan railway use but also local buses, streetcars, and non-motorized travel modes such as walking and cycling (TransLink 2012). TransLink, the transportation authority in Vancouver, Canada, has broadened the term to “transit-oriented communities” to signify that higher densities, mixed use, high-quality urban design and other characteristics need not be attached to large-scale station area developments, but can in fact be integrated at a variety of scales across a region. TOD “has evolved into a regional or ‘network’ approach in Europe, relying on the regional services rather than Light Rail” (Conesa 2018, 120). In some cities and countries, TOD is part of a regional approach to growth management and transportation demand management, which aim to concentrate growth in areas with existing infrastructure, rather than sprawl outward.