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Public policy tools to implement transit-oriented development: The case of the Montreal city-region

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Abstract

Over the last 25 years, Transit-oriented development (TOD) has become one of the core models of planning in North American cities. However, the implementation of TOD is still hindered by various barriers (institutional, political, economical, etc.) leading cities to develop specific policy tools to support TOD. But while TOD has generated a substantial body of research, literature has paid little attention to its implementation processes, from metropolitan-scale planning to local urban development projects, and the policy tools designed by governments to support TOD. To fill this gap, this paper shifts the focus by analysing the public policy tools used to support TOD implementation, based on a case study of Montreal. It argues that the inclusion of TOD in metropolitan-scale planning has led metropolitan government to develop new public action tools to support the implementation of TOD. It proposes a typology of these tools (regulatory, informative, institutional, good practices and project-based) and examines their differentiated uses and implementation. It demonstrates that these instruments—mostly incentives—are both mirrors and vectors of changes in the planning and governance of the Montreal city-region, favoring collective learning about TOD, new inter-institutional cooperation and shifts in planning practices. This work thus provides empirical evidence of the renewal of planning strategies and the diversification of public policy tools associated with transit-oriented development in Montreal. These are consistent with similar ongoing processes in other Canadian cities.

Keywords: transit-oriented development, planning, implementation, public policy instruments, Montreal

Résumé

Au cours des 25 dernières années, le Transit-oriented development est devenu l'un des principaux modèles de planification dans les villes nord-américaines. Cependant, la mise en œuvre du TOD se heurte à différents obstacles (institutionnels, politiques, économiques, etc.) qui poussent les villes à développer des instruments d'action publique spécifiques pour accompagner les projets urbains de TOD. Si le TOD est l'objet d'un champ de recherche foisonnant,

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les travaux se sont encore peu intéressés à l'analyse des processus concrets de mise en œuvre du TOD, de la planification à l'échelle métropolitaine aux projets urbains locaux, ainsi qu'aux instruments conçus par les acteurs publics pour soutenir cette lacune, cet article analyse les instruments de politique publique utilisés pour accompagner la mise en œuvre du TOD dans la région métropolitaine de Montréal. L'article démontre que l'intégration du TOD dans la planification à l'échelle métropolitaine a conduit l'institution métropolitaine à développer de nouveaux outils d'action publique pour soutenir la mise en œuvre de son plan. L'article propose une typologie de ces outils (réglementaire, informatif, institutionnel, pédagogique et par projet) et examine leurs usages et leur mise en œuvre différenciés. Il démontre que ces instruments—essentiellement incitatifs—sont à la fois les miroirs et les vecteurs de changements dans la planification et la gouvernance de la région métropolitaine de Montréal, favorisant l'apprentissage collectif de la TOD, une nouvelle coopération interinstitutionnelle et des changements dans les pratiques d'aménagement. Ce travail fournit donc des preuves empiriques du renouvellement des stratégies de planification et la diversification des outils de politique publique associés au TOD à Montréal, de façon comparable à des processus similaires en cours dans d'autres villes canadiennes.

Mots-clés: développement axé sur le transport en commun, planification, mise en œuvre, instrument de politique publique, Montréal

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Introduction

Since the late 1990s, transit-oriented development (TOD) has become one of the core spatial planning models of North American cities (Cervero et al. 2004). Designed to curb urban sprawl and automobile dependence, TOD is generally defined as “dense, diverse, pedestrian-friendly land uses near transit stops” (Cervero et al. 2004, 6). This transportation and land-use integration strategy builds on the assumption that increased density, land-use mix and transit improvements decrease car mobility and increases sustainability. But while TOD has become a key model in the planning of North American cities, its local implementation faces many obstacles, whether institutional, economic, regulatory or structural, linked to local constraints (including: complexity and the financing of projects, land fragmentation, local resistance to density, etc.). To overcome these barriers, governments are thus developing various policy tools, according to their goals, interests and constraints. The diversification of public policy tools to implement TOD raises questions about their consequences on urban governance, local planning and urban development.

While the literature on TOD is highly extensive, many of the empirical studies deal with the model and its outcomes (projected or real) on urban transformations and mobility, the best practices and the success factors for TOD. However, few studies address local dynamics and public and private stakeholders' strategies regarding TOD. Research has thus only begun in explaining how TOD is implemented locally, especially in national and local contexts, and how it is changing the governance, planning and transformation of city-regions. Public policy instruments are also little-considered in the analysis of planning processes and the local implementation of TOD.

This article therefore offers an original perspective by analysing TOD implementation through the public policy instrument framework (developed by Lascoumes et Le Galès 2005). It explores how metropolitan-scale governments are developing (new) public policy instruments to overcome barriers to TOD implementation and scrutinises their conception, uses and outcomes. These tools are of different kinds, and we argue that they are key in understanding TOD implementation. The underlying hypothesis is that these tools are mirrors and vectors of changes in the governance, planning and development of city-regions.

To test this hypothesis, the paper focuses on the case of Montreal, Canada, which is particularly well-suited to this approach, given the weight of TOD in its metropolitan planning strategy, the exemplary scope of the public policy tools deployed for its implementation, and the links between the consolidation of the metropolitan institution and the recent renewal of metropolitan planning. The paper focuses on the analysis of the public policy tools for TOD developed by the metropolitan-scale planning institution, the *Communauté métropolitaine de Montréal* (CMM). We demonstrate that transit-oriented development is a catalyst for a diversification of spatial planning tools (from regulatory to more collaborative strategies) that have various outcomes on the spatial planning and the multi-level governance of Montreal. These tools are strategically used to strengthen metropolitan-scale institution's leadership,

improve collective action and reinforce the public regulation of spatial development. By bringing the key importance of public policy instruments for analyzing TOD implementation to the foreground, the paper offers an original and multi-level account for understanding planning processes, TOD strategies, and their outcomes on urban governance and the spatial transformations of city-regions.

The article is divided into four parts. The first section combines two bodies of literature, on transit oriented development and public policy instruments, to establish an analytical framework that aims at embedding the TOD within the public policy instruments approach. The next two sections then examine TOD planning in Greater Montreal, the diversification of public policy instruments and their local uses; while the fourth section looks at their outcomes on planning, governance and the development of Montreal. The conclusion discusses the contribution of the public policy instrument approach to understanding the implementation of transit-oriented development.

Transit-oriented development, metropolitan planning and public policy tools

From metropolitan-scale planning to the local implementation of transit-oriented development

In a context of the international circulation of smart growth and sustainable planning guidelines (Marsden and Stead 2011; Pojani and Stead 2014b; Thomas and Bertolini 2015), transit-oriented development has become a central model of the spatial planning of North American cities, but also of cities in Europe (Staricco and Vitale Brovarone 2018), Asia (Suzuki, Cervero, and Luchi 2013) and Australia (Curtis 2012). While the popularity of TOD among planners indicates a change over time in the relationship between urban development and transportation, this urban model is embedded differently in metropolitan-scale plans, as shown by Filion and Kramer (2012) for large Canadian urban regions. These variations depend on the prevailing patterns of urban development, the singular histories of each metropolitan area, but also on institutional contexts, local governments strategies and planning processes. Thus in a context where “strategic” (Faludi 2000) and “collaborative” (Healey 1998; Innes 1995) approaches are being promoted, planning has become a key instrument of urban governance, and the content of metropolitan-scale plans results from interactions and transactions between various public and private stakeholders (mostly governments, economic players and civil society). These negotiations lead in some city-regions to the strengthening of sustainable development objectives and guidelines in metropolitan-scale plans, and to their weakening in others.

Beyond metropolitan planning, the local implementation of TOD raises many issues. As this question has been under-researched, some recent works in the United States (Boarnet and Compin 1999) and Canada (Grant 2009; Dorsey and Mulder 2013; Dushina, Paulhiac-Scherrer, and Scherrer 2015) have informed TOD implementation processes from metropolitan planning to local projects. They stress the importance of existing urban contexts, institutional frameworks and the resources and constraints of public actors in the implementation of TOD. They also explain how trade-offs between governments, private developers and civil society explain the differentiation of TOD’s urban development projects in terms of density, public spaces, functions, amenities, etc. Literature also precisely informs the many obstacles encountered in the implementation of TOD, which are of different natures (institutional, economic, regulatory, political, structural, etc.) (Cervero, Ferrell, and Murphy 2002; Dittmar and Ohland 2003; Hess and Lombardi 2004). While some are common to all urban planning projects, others are specific to TOD projects: tensions between transport and urban development interests, sectoral and institutional barriers (Stead and Meijers 2009; Pojani and Stead 2014a; Tan, Bertolini, and Janssen-Jansen 2014), higher operational risk for developers (Feldman, Lewis, and Schiff 2012), residents’ oppositions to densification (Cervero, Ferrell, et al. 2004), etc.

Facing these challenges, metropolitan and local governments are developing various public policy instruments to promote the implementation of TOD (Cervero et al. 2004). At the metropolitan level, several studies highlight the importance of formal and informal incentive tools (Tan, Janssen-Jansen, and Bertolini 2014) developed to foster the implementation of TOD and to assist municipalities (Curtis, Renne, and Bertolini 2009). For example, regional planning authorities are developing planning guides to provide examples and methods to support TOD implementation (Cervero et al. 2004). Another example is governance instruments which are used to strengthen cooperation between institutions as well as the “inter-actor” trust (Switzer, Janssen-Jansen, and Bertolini 2013). In Denver, the setting up of arenas for discussions among private developers, governments and elected officials has thus promoted compliance with regional TOD guidelines and foster their implementation (Goetz 2013). Several studies also point to the importance of regulatory and financial incentives. For example, in the United States, regulatory tools allowing

transport authorities to develop their land for uses other than transportation have been key factors in the implementation of TOD projects (Dumbaugh 2004). Other instruments can also promote the implementation of TOD, such as the growth perimeters set by the regional governments of Toronto or Portland (Tan, Janssen-Jansen and Bertolini 2014). These measures reduce the areas to be urbanised, create land scarcity and thus favor densification. At the local level, many public policy instruments are also deployed by municipalities to support TOD implementation: favorable zoning (Thomas and Bertolini 2017), direct financial support (building infrastructures, funding new public spaces, etc.) or indirect (tax exemption for developers, etc.), or tools to support real estate developments.

The literature on TOD thus underlines the diversity of tools developed to support the implementation of regional planning guidelines at the local level. However, this literature remains sparse. First, it lacks multi-level analyses of TOD adoption and implementation. Second, there is little work that specifically examines these instruments associated with TOD. They are often considered in research on TOD implementation but without any specific analysis of their design and uses. Yet, instrument choices and calibrations depend strongly on the objectives and interests of regional and local governments, but also on their resources and constraints. As such, they provide relevant prisms for analysing the strategies of public and private actors involved in TOD. Third, this raises the question of the outcome of those instruments on urban transformations and metropolitan governance, which remains also under-researched.

Analysing the planning and implementation of TOD through the public policy instruments approach

To study the planning and implementation of the TOD in Greater Montreal, we apply the public policy instruments approach. While a classic of political science research, this framework was redefined in the mid-2000s by Lascoumes and Le Galès (2005). In a context of increasing instrumentation of public action, state restructuring and renewal of new urban governance systems, this conceptual framework considers instruments as social institutions and as “tracers” of change in public action. Instruments of public action are defined as “devices that are both technical and social, that organize specific social relations between the public authority and its recipients according to the representations and meanings it carries” (Lascoumes and Le Galès 2005, 13). This approach has been applied to various fields of public action research and has led to the production of several typologies. Among the most popular, we can point to the distinction by Bemelmans-Videc et al. (2011) of “stick”, “carrot” and “sermon” instruments; or to the work of Lascoumes and Le Galès (2005) which distinguishes instruments that are legislative and regulatory instruments; economic and social; conventional and incentive; informational and communicative; as well as norms and standards.

Beyond the diversity of instruments, this framework sheds light on the instrumentation of public action, defined as “the set of problems raised by the choice and use of tools (techniques, means of operation, devices) that make it possible to materialise and operationalise government action” (Lascoumes and Galès 2005, 12). The choice of instruments is not neutral (Hood 2007) and their calibration depends on policy objectives and the interests of stakeholders (Howlett 2011). Thus, the analysis of public action through its instruments requires considering the context in which they are designed and implemented, and their political dimension (Halpern, Lascoumes, and Galès 2014). This political dimension should be considered both in the process of “choice and selection of instruments” (instrumentation), but also in the analysis of their uses and their outcomes, which are highly dependent on the political and institutional contexts.

The public policy instrument framework, recently applied to the analysis of TOD (Dushina, Paulhiac-Scherrer, and Scherrer 2015; Maulat, Paulhiac-Scherrer, and Scherrer, 2018), is particularly relevant to studying the processes of TOD implementation in Greater Montreal. First of all, it provides a useful prism for examining the planning and implementation of TOD, from metropolitan-scale plans to local urban development projects. Second, it provides new perspectives on TOD by looking at implementation processes that rely on negotiations between public and private stakeholders with different—and sometimes conflicting—interests. Finally, this framework allows discussion of the changes in Montreal metropolitan planning, governance and urban development policies in relation to TOD.

Research questions and method

Thus, the paper examines three research questions related to policy instruments for TOD implementation. First, it looks at the kinds of instruments developed to support the implementation of TOD (from metropolitan planning to local urban development projects). Our hypothesis is that bringing TOD onto the metropolitan planning agenda leads metropolitan-scale institutions to diversify and strengthen their policy instruments to support TOD implementation at the local level, as this urban planning model is a counterpoint to the extensive development of Canadian cities. Our

second question concerns the choice of instruments and their uses. These instruments are different in nature; some are old, some newer; some are incentives while others are more constraining. Their choice and calibration depends on the interests, resources and constraints of the regional, metropolitan and local governments that carry them. This raises the question of what factors guide the choice of these instruments by metropolitan and local governments. We argue that institutional context and the constraints of the metropolitan government are important explanatory factors in understanding the choice of instruments. Finally, we discuss the outcomes of these instruments. Our hypothesis is that they have consequences not only on the implementation of the TOD and planning policies, but also on urban governance and relations between stakeholders and institutions.

To address these hypotheses, we chose to study metropolitan planning in Greater Montreal and the TOD implementation instruments developed by the metropolitan government. The choice of Greater Montreal is justified by the strong weight of TOD orientations in the metropolitan-scale plan and by the scope of the public policy instruments developed to support implementation. While Greater Montreal shares common features with the major North American cities, it presents territorial singularities—with higher density and a substantial public transit network—and institutional characteristics. At the same time, there is fragmentation between the planning and transportation authorities and the metropolitan-level government has been restructured very recently.

Our study of TOD planning and implementation instruments in Greater Montreal crosses two scales of analysis—from the metropolitan to the local. We examine the design of the metropolitan-scale plan (the PMAD) and the instruments deployed at the metropolitan level for the implementation of TOD. We also study the uses of these instruments and their local reception. This method, which is mainly qualitative, gathers diversified research material comprising 24 semi-directed interviews conducted in 2016 with the main stakeholders of the Montreal TOD: professionals of the metropolitan government (*Communauté métropolitaine de Montréal* or CMM), elected officials and professionals of some suburban municipalities, departments of the Regional County Municipalities (MRC), the Quebec Ministries of Transportation (MTQ) and Planning (MAMOT), the Metropolitan Transportation Authority, local transportation organizing authorities (Inter-Municipal Transportation Councils) and urban planning firms. This corpus of interviews was complemented by the analysis of territorial data from various documents (press, regulatory documents, urban studies, public communications, etc.) and observations of metropolitan events about TOD (the Agora 2016, and seminars of the Urban Forum 2015).

Transit-oriented development in the metropolitan-scale planning of Greater Montreal

The metropolitan context, governance system and planning of Greater Montreal

Greater Montreal hosts nearly half of Quebec's population, but is experiencing low demographic growth. Its compact centre is criss-crossed by a dense public transit network of subways and buses, while the suburbs are experiencing significant urban sprawl, car-dependency and poor public transit service, despite recent improvements of the commuter rail services. Car use is still growing (AMT 2015), and the metropolitan area is facing major challenges in terms of mobility, congestion and control of urban sprawl.

Montreal presents, as elsewhere, a complex governance system. The *Communauté métropolitaine de Montréal* (CMM) was created in 2001. It covers 82 municipalities grouped into 11 regional county municipalities (MRCs), as well as one city (Laval) and two agglomerations (Longueuil and Montréal) with the same powers as these MRCs. It is a planning, coordination and financing organization steered by a council of representatives of its members. The establishment of this metropolitan institution, which was decided by the provincial government, was not easy and encountered opposition from the municipalities. Particularly in the 2000s, the sharing of planning prerogatives at the metropolitan level gave rise to major conflicts. The province intended to transfer planning powers from the RCMs to the CMM, following the adoption of a first metropolitan plan. Resistance from municipal elected officials was strong, forcing the provincial government to change this definition of metropolitan interest. In 2010, a new law decided on another split of powers between the CMM, municipalities and MRC: the latter is superimposed on the MRCs' plans, in view of concordance rather than replacement. This allowed support to come from the municipalities in the design of a Metropolitan Plan. The CMM is thus responsible for drawing up the Metropolitan Plan (PMAD) and also has expertise in economic development, social housing, public transit planning, etc. This has however been offset by a reduced budget (\$135 million in 2020).

While the establishment of the CMM in 2001 gave the metropolitan area an institution, planning and transportation competences remain split between many institutions. The provincial government plays an important role in planning at the metropolitan-scale, by setting out orientations for Montreal's development. At the metropolitan scale, the CMM is responsible for spatial planning, while transport planning is the responsibility of the Metropolitan Transport Authority (created in 2017). Finally, the municipalities also have strong planning powers: the eleven Regional County Municipalities (MRCs), the agglomerations of Montreal and Longueuil, and the cities of Laval and Mirabel draw up plans and development schemes, while the municipalities can adopt Master Plans and Special Urban Development Programs to frame and shape urban development.

Thus powers are fragmented across levels and sectors of action. However, the recent creation of the metropolitan government (CMM) and the design and adoption (through the vote of municipal councils) of a first-ever metropolitan-scale plan (the PMAD) have transformed the planning and governance of Greater Montreal (Douay and Roy-Baillargeon 2015). This planning process has involved a plurality of stakeholders and was open to civil society following collaborative planning approaches. Adopted in 2012, this metropolitan-scale plan had strengthened the metropolitan institution and contributed to the acknowledgment of the metropolitan area as a relevant political space for guiding development and defining strategic urban policies (Roy-Baillargeon 2017).

The adoption and adaptation of transit-oriented development in the metropolitan-scale plan of Greater Montreal

The TOD is a central element of the PMAD. This plan recommends that 40% of development be concentrated in 155 TOD areas by 2031, located around public transit stations. TOD is defined as having medium-to high-density housing, employment and a commercial (re)development project structured around a high-capacity transit station, designed to facilitate the use of public and active transportation without excluding automobiles. Through TOD, the aim of the CMM is to densify the existing urban area, in order to limit urban sprawl, but also to pursue development, while respecting the urban growth boundary set by the provincial government.

Although the plan remains rather conceptual and leaves municipalities responsible to translating area-wide policies into their local plans, the CMM managed to establish residential density minima for each of the region's 155 existing and projected TOD station areas, according to their location and the type of transit mode (bus services, suburban railway services, metro lines, etc.). The density targets are the result of a spatial analysis, launched by the CMM in partnership with the MRCs, in 2008. This work—both quantitative and qualitative—has aimed to draw up a report on the organization of the metropolitan area, on land opportunities and on current urban development projects. It helped to “get to know the territory” (Interview CMM No 1), and so inform the design of the metropolitan plan.

The content of the blueprint also results from political negotiations between the suburban mayors, the regional county municipalities and the provincial government. For example, some suburban mayors (afraid of losing growth opportunities) have tried to lower density minima, attempted to extend TOD area radiuses, or demanded additional TOD zones (around non-existing but requested commuter rail stations, or around existing or requested park-and-ride stations, even on protected farmland) (Roy-Baillargeon 2015). While previous attempts to adopt a metropolitan-scale plan had failed, the adoption of this plan depended on political and technical consensus-building, enabled by the softening of the provincial government's initial expectations. Thus the density minima and reduction of car facilities in TOD areas were lowered: “Sometimes, I will not hide the fact that the government has found that some densities are lower than it would have liked, but that is the principle of working with partners...[...]. There was a conciliation process.” (Interview CMM, No 2).

A controversial plan and a tricky implementation

The content of the plan has been the subject of criticisms by civil society, the political and media spheres, as well as from research and expert communities. A first set of criticisms concerns the plan's contents: for example, the very large number of TOD areas (155); the lack of ranking and selection of priority zones also being pointed out as a major weakness of the plan, leading to a dispersal of densification objectives, and reducing the plan's potential outcomes on reducing sprawl. Second, criticisms have related to the planning process. The planning process has been described as giving too much room to political negotiations leading to the adoption of an over-ambitious and consensual plan. Some of the interviewees also noted that the planning exercise was not co-constructed by the planning (CMM) and

the former public transport authorities (AMT). This led to the adoption of contradictory guidelines, such as the designation of TOD objectives in areas with no public transport. Third, other criticisms have related to the feasibility and implementation of the plan, several factors hindering the implementation of TOD around suburban stations: lack of public transport services, scarcity of available land, reluctance of municipalities to densify, parking lot footprints, etc. Thus, one of the main limitations has been the lack of public transit supply linked to the limited financial resources of the transport authority, but also to the strategies of the private railway companies (Canadian National and Canadian Pacific), which give priority to freight transport rather than commuting.

Table 1
Classification of public policy instruments for TOD at the metropolitan-scale

Type of instrument	Instrument	Date of implementation	"Innovative" nature	Leading stakeholder	Stakeholders and institutions involved	Level of action	Content	Objectives
Legislative and regulatory	Master plans	In progress	Dated and mandatory instrument	MRC	CMM, Municipalities	Regional	<ul style="list-style-type: none"> Development strategy Development guidelines 	<ul style="list-style-type: none"> Translate metropolitan guidelines into regional plans Adoption of regional strategies favorable to TOD
	Local development plans and special planning programs	In progress	Dated and mandatory instrument	Municipalities	CMM, MRC	Local	<ul style="list-style-type: none"> Development strategy Zoning by-laws Specific guidelines for projects 	<ul style="list-style-type: none"> Translate metropolitan guidelines into local urban plan Adoption of local plan favorable to densification and TOD
Institutional and political	Agora métropolitaine	Since 2015 (Bi-annual)	Recent instrument	CMM	Provincial government, MRC, municipalities, AMC, civil society, etc.	Metropolitan	<ul style="list-style-type: none"> Development strategy Development guidelines 	<ul style="list-style-type: none"> Foster coalition on the PMAD Reinforce the "metropolitan identity" Share good practices Strengthen the CMM institution
Informational and communicative	TOD fact sheets	Since 2010	Recent instrument	CMM	RCMs, municipalities	Local	<ul style="list-style-type: none"> Territorial assessment Analysis of practices Identification of development potential 	<ul style="list-style-type: none"> Help the development of TOD projects by the characterisation of local contexts and identification of the potential of each station Contribute to the definition of the PMAD goals Provide data needed for the development of TOD projects
	Observatoire métropolitain	Since 2015	Recent instrument	CMM	RCMs, municipalities	Metropolitan	<ul style="list-style-type: none"> Territorial data Indicators Project monitoring 	<ul style="list-style-type: none"> Support decision-making Provide data for the creation of TOD projects Monitor and assess the implementation of the PMAD
	Metropolitan reporting	Annual	Recent and mandatory instrument	CMM	Government departments, RCMs, municipalities	Metropolitan	<ul style="list-style-type: none"> Territorial data Indicators Examples of "good practices" 	<ul style="list-style-type: none"> Provide updates on the territory's changes Monitor and assess the implementation of the PMAD Share good practices
Standards and good practices	Washington visit	2012	New instrument based on outside experiences	CMM	Government departments, elected municipal officials, urban planning firms	Local	<ul style="list-style-type: none"> TOD project visits Meetings with local actors Collective restitution 	<ul style="list-style-type: none"> Share the appropriation of the PMAD Share good practices Help municipalities to develop TOD projects
	2015 Forum Urbain	2012, 2015	Dated instrument	UQAM-CMM	Government departments, MRC, municipalities, transportation actors, urban planning firms, promoters, civil society, etc.	Metropolitan	<ul style="list-style-type: none"> Seminars and conferences Presentations by researchers Feedback from the experiences of practitioners 	<ul style="list-style-type: none"> Share knowledge about TOD Share good practices Identify barriers and incentives to TOD implementation
	Research Chair In.Situ	Since 2015	New instrument	UQAM-CMM	Government departments, MRCs, municipalities, transportation actors, urban planning firms, promoters, civil society, etc.	Metropolitan	<ul style="list-style-type: none"> Platforms for practitioner-researcher exchanges Regular meetings 	<ul style="list-style-type: none"> Share knowledge of transport and development challenges Share case-studies and good practices Identify barriers and incentives to TOD implementation
Operational and project-based	TOD area guide	2011	New instrument based on outside experiences	CMM	MRC, municipalities, AECOM	Local	<ul style="list-style-type: none"> Development principles Guide by type of project Presentation of references 	<ul style="list-style-type: none"> Help guiding the design of urban TOD projects Help municipalities to design TOD projects adapted to their local contexts Share good practices
	Innovative projects	Since 2012	New instrument based on outside experiences	CMM and provincial government	Municipalities, MRC, AMT, urban planning firms, civil society, etc.	Local	<ul style="list-style-type: none"> Financial assistance to municipalities CMM-municipality agreement Urban studies Project office 	<ul style="list-style-type: none"> Help municipalities design TOD projects adapted to their local contexts Foster cooperation between institutions and stakeholders Create "flagship" projects Identify barriers and incentives to TOD implementation

A classification of public policy instruments implementing transit-oriented development

Facing these criticisms and implementation issues, the metropolitan government has, since 2014, been deploying various policy instruments to support the implementation of the metropolitan plan. This section outlines the public policy instruments deployed by the metropolitan institution (the CMM) to support the implementation of the metropolitan-scale plan and the TOD strategy. The classification is based on the typology of instruments provided by Lascoumes and Le Galès, adjusted to this urban planning issue and to the TOD. These instruments are classified according to the kinds of drivers on which they rely. Their development is either due to legal constraints, or to endogenous initiatives of the metropolitan authority, in response to particular challenges. The analysis demonstrates the significant development, by the metropolitan-scale authority, of new incentive instruments to support the implementation of the plan and to address the barriers to the realization of TOD urban development projects.

Regulatory planning instruments

A first set of public policy tools corresponds to the regulatory instruments imposed by the Land Use Planning and Development Act (LAU 1979) to translate the orientations of the metropolitan plan into regional and local development plans: respectively regional county municipality (RCM) plans, and local land use plans. The MRCs must integrate the guidelines of the PMAD into their land use and development plans (SAD). Municipalities must then adjust their urban plans to the MRCs' plans within six months. In 2018, 12 MRCs and agglomerations out of 13 had adopted plans that comply with the PMAD. Given the principle of subsidiarity, municipalities have significant latitude when transposing the Plan's orientations. However, stakeholders interviewed noted a change in the content of the regional plans concerning the Roussillon and Richelieu Valley MRC plans' compliance with PMAD guidelines on: the concentration of housing development in TOD areas, densification, pedestrian-friendly measures, reduced car facilities, etc.

Informational and communicative instruments

A second type of instrument refers to territorial knowledge tools to support implementation. On the one hand, data sheets have been developed by the CMM based on territorial characterization work carried out prior to the development of the PMAD, by the CMM and the MRCs¹. These data sheets, which are regularly updated by the CMM and shared through its website, provide detailed information on each TOD area (population, land use, number of dwellings, employment, density, public spaces, residential development potential, car ownership rate, etc.). They are illustrated by maps (of land use, accessibility, walkability) and coupled with a census of ongoing urban development projects. They are used by MRCs and municipalities as a tool for preliminary studies prior to the design of TOD projects, but are also used by the CMM to monitor spatial development in Greater Montreal. On the other hand, in accordance with the LAU, the CMM must draw up a monitoring report on the PMAD every two years, the first of which was published in 2015. This report uses precise data from the *Observatoire métropolitain* and provides an account of changes in the territory in relation to the targets of the PMAD. Beyond the objective of assessing public policies, this report is also an opportunity for the CMM to share "good practices", whether they concern how best to translate TOD and densification goals in regional development plans, the design of TOD urban development projects or the development of affordable housing in TOD areas (CMM 2015).

Institutional and political instruments

A third type corresponds to institutional and political instruments developed by the CMM to involve stakeholders around the implementation of the PMAD. One of these tools is the Metropolitan Agora, which takes place every two years. Open to civil society, this conference day brings together experts and elected officials from the CMM, the MRC, the provincial government, the municipalities, but also from civil society, consulting firms and other private actors (developers, investors, etc.). The goal is to allow "stakeholders to become informed, exchange, debate and propose ideas on the implementation of the PMAD" (CMM 2016) and also to "develop pride in belonging to Greater Montreal, highlight success stories and remove obstacles to the implementation of the PMAD" (CMM 2016). In 2015, the Agora was used to present the first assessment of the PMAD implementation (CMM 2015) and to outline, through an exhibition, local initiatives and innovations towards TOD. Beyond the monitoring and assessment of the PMAD, this day is also designed by the CMM as a way to share information and "good practices" on TOD but also

as a tool of consensus-building, legitimization, and institutional affirmation of the metropolitan-scale institution.

Standards and good practice instruments

A fourth type corresponds to instruments based on standards and good practices that have aimed at getting stakeholders to support the PMAD, share implementation experiences and deepen collective knowledge on TOD. Among these tools, CMM organized a visit to Washington, D.C. in 2012 with *Vivre en ville* (a non-profit organization promoting sustainable urban planning issues) to raise awareness of TOD and identify the “conditions for success” in such urban development projects (Interview CMM No 2). About thirty people participated including mayors, municipal officials, representatives of the Quebec government, experts, etc. They discovered seven TOD neighborhoods in the Washington suburbs and met with local stakeholders. The objective was to show examples of achieved TOD projects, to provide ideas for the development of such projects and also to counter “negative” views of the density associated with TOD: “Density is sometimes misunderstood. The aim was to show examples of completed projects that allowed for densities while respecting the surrounding environment. It was to demystify the question of density.” (Interview provincial government No 1). The elected officials who took part in the meeting consider that the experience allowed them not only to get new “ideas” and see “good examples”, but also to meet and share ideas with other elected municipal officials from the Montreal city-region: “I wanted to go absolutely and it was very, very good, I was happy to see that. I came back with a lot of ideas. And then... I met people from Laval, people from Longueuil, people from municipalities on the South Shore, Candiac, etc. [...] I came back here with ideas.” (Interview Deux-Montagnes, former mayor).

Other events set up by the CMM have targeted these collective learning issues and the sharing of good practices. For example, a workshop on TOD was organized in 2012 as part of a partnership between Forum URBA 2015, UQAM and the CMM to “share information on the principles of TOD neighborhood planning”, present the findings of the Washington mission and the first on-going TOD projects in the Greater Montreal area to encourage “feedback”. The CMM has also participated in meetings on sustainable urban planning and TOD issues to communicate on the PMAD, convince stakeholders of its relevancy and capitalize on examples from Quebec and abroad. In 2013, the CMM organized, with *Vivre en Ville*, a symposium on the retro-fitting of suburbs to share “best practices”. The CMM also participates in other meetings, led by UQAM, which provide opportunities for exchanges between experts, researchers and elected officials on issues related to the PMAD and TOD. In 2016, a day organized by Forum Urba 2015 and the In.SITU Chair addressed the obstacles to TOD implementation and the solutions to overcome them.

Project-based tools

Finally, a last set of policy tools corresponds to more operational and project-based instruments. Their main purpose is to guide local urban planning and promote the design and implementation of urban development projects consistent with the orientations of the PMAD, at local level.

A first example of these instruments is the *Guide to TOD-Area Planning (Guide d'aménagement des aires de TOD)* developed by the CMM with AECOM (CMM 2011). This guide was drafted while the CMM was seeking to obtain a consensus around the PMAD to allow its adoption, while also anticipating its implementation (Interview expert, AECOM). Based on many similar North American guides, it presents the TOD urban model (density, mix, urban design), proposes a typology of the TOD areas of Montreal and sets out guidelines for the development of each of these areas. According to the CMM, the objective was, on the one hand, to guide the “implementation” of TOD orientations into the MRC’s plans and municipalities urban plans, and on the other hand, to help shape the urban development projects close to stations, according to the TOD model (Interview CMM, No 1). Other more specific guides have been developed by the CMM to support the implementation of the PMAD, such as a compendium of good practices on parking-lots in TOD urban development projects (CMM 2013).

In addition to these guides, the CMM has developed a specific new tool to support municipalities in the implementation of the PMAD: the innovative TOD projects. The CMM and the provincial government provide C\$100,000 to municipalities to fund the studies needed to develop a master plan for their TOD area, which are completed by a private urban planning firm. In exchange for the grant, the municipalities undertake to comply with a standard planning method defined by the CMM, to consult residents and to set up a steering group (named *bureau de projet*) that is responsible for monitoring the studies and contributing to the design of the master plan. The

steering group involves various stakeholders: municipalities, MRC, the provincial government, etc. The objective is to help municipalities to design urban projects that comply with the PMAD, “test the implementation of the TOD” and “learn lessons” about the incentives and barriers to TOD (Interview CMM No 1). The steering group must also “create synergy between the partners” (Interview CMM No 1) to support PMAD implementation.

This system has been set up from 2013 onwards, first in six areas and then, from 2015 onwards in eleven other areas. The areas concerned were chosen according to their opportunities, the support of elected municipal officials, and their location (at least one innovative project per MRC). These first two programs have been completed. A new call for projects was put out in early 2018, and 18 new projects were concerned. A new phase was launched in 2020. The CMM has produced reports on the first innovative projects (CMM, 2017) and seeks to encourage the sharing of these experiences (annual meetings, exchanges between project offices, etc.). These (ongoing) innovative projects are very heterogeneous in terms of processes and the content of master plans, depending on the choices of municipalities, their capacities and also the urban contexts (land opportunities, existing urban fabric, quality of public transport services etc.) (Maulat, Paulhiac-Scherrer et Scherrer, 2018).

Discussion: The choice of public policy instruments and the outcomes of implementing TOD

Thus, the classification demonstrates that the inclusion of TOD in metropolitan-scale planning has led metropolitan institutions to develop new public action tools to support the implementation of TOD which are of different kinds (regulatory, informative, institutional, pedagogical and project-based). This also reflects the evolution of governance and planning in Montreal with the affirmation and consolidation of the metropolitan-scale institution. However, these tools remain mostly incentives, which raises the question of their outcomes on planning practices and urban development.

The choice of incentive public policy instruments

The analysis of the public policy tools deployed by the metropolitan authority of Greater Montreal highlights several results related to the design and choice of public policy instruments for TOD implementation.

First, the study demonstrates a diversification of the public policy tools deployed by the CMM to address the challenges associated with the implementation of the TOD strategy. While some instruments are traditional and existed already (particularly regulatory tools), others are new and were deployed specifically to support the implementation of the PMAD and TOD. They are based on sources of local inspiration (as for innovative projects) or external (such as the guide to TOD areas, based on other North American experiments). The adoption of these instruments reflects a broadening of the metropolitan institution’s field of intervention and a rescaling of public action through the strengthening of the metropolitan level as a legitimate planning institution.

Second, the study also highlights the weight of incentive instruments chosen by the CMM to guide and support municipalities in implementing TOD. This preference is displayed and advocated by CMM staff, who emphasize a commitment to collaborative and incentive planning methods. However, this choice of incentive instruments can also be explained by the CMM’s limited resources and constraints. The legal constraints and the principle of subsidiarity limit CMM’s ability to intervene in municipal affairs. The organization of the CMM also explains the choice of these instruments. In particular, the metropolitan council is made up of the mayors of the various municipalities in the territory. This body operates on a consensus-building principle, with the objective of adopting decisions unanimously. This bias favors the choice of incentive instruments. The CMM’s action is also constrained by its limited financial resources that make it heavily dependent on other sources of funding (from the provincial government and municipalities). This explains especially why the CMM limits its financial support to the innovative projects program, open only to a few municipalities.

The diversification of policy instruments to reinforce the CMM and implement the metropolitan-scale plan

Besides choosing mostly incentive instruments, what are the CMM’s goals for those policy instruments designed to overcome barriers to TOD implementation? Firstly, through these instruments, the CMM aims to favor consensus-building on the PMAD and to improve collective knowledge about TOD implementation. While the PMAD design process has led to conflicts, the CMM’s staff has tried since 2015 to encourage municipalities, residents, but also real estate developers to endorse the PMAD’s targets. These objectives underlie various instruments, such as the

metropolitan Agora, the TOD areas guide, the visit to Washington but also innovative projects. Beyond the “pedagogical” challenge of building a coalition around TOD, the objective is to widen knowledge of the various difficulties raised by the local implementation of TOD. Several tools deployed by the CMM thus aim to strengthen collective knowledge of TOD, particularly through information sharing, guides, or experimentation to overcome these barriers.

Secondly, the CMM pursues governance goals. Several tools, such as the metropolitan Agora or innovative projects have been designed to favor coordination between stakeholders. The CMM seeks to strengthen cooperation between public institutions (planning and transport) around TOD. It also seeks to strengthen municipalities’ resources to regulate urban development (particularly concerning developers) to favor the implementation of TOD. The CMM also intends to change planning practices and give more place to citizens. For example, several instruments rely on a civil society association, such as the Agora or innovative projects. This public participation is identified at the metropolitan level as a condition for the acceptability of urban TOD projects, but also to ensure that these projects meet the needs of the inhabitants

Thirdly, these instruments respond to the CMM’s objectives in terms of urban planning and transformation. The aim is to support the realization of the PMAD and the emergence of urban projects that meet metropolitan objectives, while being adapted to local realities, as far as the innovative projects are concerned. The Guide to TOD Areas as well as innovative projects have also been designed to find solutions for the technical and financial set-up of TOD projects. By “gathering different resources” and technical expertise, the purpose is to promote the implementation of the PMAD and to help municipalities, which are often under-equipped to implement such projects.

In addition to these three objectives, the instruments deployed by the CMM also respond to issues of institutional consolidation and territorial marketing within the Greater Montreal area and abroad (Roy-Baillargeon 2015). The metropolitan Agora or innovative projects have also been designed to reinforce the CMM and strengthen the visibility of Greater Montreal through the development and promotion of “flagships” of sustainable urban development projects.

Policy instrument outcomes on TOD implementation

What are the effects of these instruments? First of all, the institutional, pedagogical and knowledge tools contribute, in particular, to strengthening collective knowledge on the conditions for carrying out these projects. They contribute to the evolution of the stakeholders’ view on TOD, from opposition to increasing support. These evolutions concern in particular the elected officials of the municipalities: if many were opposed to TOD and densification when the PMAD was drawn up, these standards now seem more shared, as one summarizes: “It worked because now all these mayors, these elected municipal officials talk about density, which was not the case ten years ago. At that level, I think it’s a great success.” (Interview AMT No 1). Beyond supporting the orientations of the PMAD, these instruments promote the circulation of knowledge, collective learning processes and they strengthen the municipalities’ capacity for action. For example, the stakeholders involved in the innovative TOD projects (municipalities, CMMs, urban planning firms, etc.) capitalize on these experiences and develop new expertise on the TOD implementation process (how to involve residents and citizens, how to manage car and parking constraints, how to overcome redevelopment issues, etc.). This learning process results from the development of TOD projects and exchanges between actors within the Montreal region, but although from the translation of innovations from elsewhere (Quebec, Canada, US and Europe). They constitute resources for implementation and sometimes have concrete consequences for urban projects. For example, according to the former mayor of Deux-Montagnes, the trip to Washington was central to his support the PMAD. This experience also directly inspired the program and the architectural form of a residential densification operation carried out by the municipality.

Second, the instruments deployed by the CMM have organized new relationships between actors and have had an impact on the governance of the Greater Montreal. Some of these instruments strengthen vertical cooperation between levels of government. For example, the offices of innovative projects are places where representatives of municipalities, MRCs, the CMM and the province can dialogue. These co-operations can promote the fulfilment of projects: for example, in some *project offices*, the participation of the provincial government has allowed for the adjustment of provincial and local standards, for instance concerning the preservation of wetlands, thus facilitating the further implementation of the urban development project. These instruments also contribute to new, horizontal cooperation between municipalities. For example, the survey showed that, for municipalities involved in innovative projects, these experiences have given rise to new exchanges between them. The trip to Washington and other special TOD-related events have been opportunities for municipalities to discuss TOD problems and solutions. These

instruments also support new forms of cooperation between transport and planning stakeholders. Indeed, if during the design of the PMAD, the dialogue between the CMM and the transport actors (the former AMT) was relatively weak. The implementation phase appears, on the contrary, as an opportunity for a dialogue between these actors (within the innovative project offices). Although the reconciliation of interests remains complex, these exchanges make it possible to bring together skills, facilitate information sharing and help identify certain issues, or even solve problems. These instruments also support the building and consolidation of a network between municipalities at the metropolitan level around the TOD.

Finally, these instruments, in particular the regulatory and operational tools, have concrete effects on the implementation of the PMAD and the TOD. The consolidation of links between levels of government strengthens the coherence between local urban planning, regional schemes and the PMAD. Several mechanisms, such as innovative projects, allow the deployment of additional resources to support municipalities in the design of these complex urban projects. The survey shows that these programs facilitate the local translation of metropolitan objectives, strengthen municipalities' capacities for action, and promote the emergence of local urban development projects focusing on densification, functional mix, treatment of public spaces and reduction of automobile facilities. The first assessments of the implementation of the PMAD confirm these changes. For example, in 2015, the assessment of the PMAD pointed out that about 30% of new housing built between 2010 and 2013 was built in TOD areas. This figure was still below the objectives of the PMAD. However, the density of new residential projects has been higher than the objectives of the PMAD (CMM 2015, 60). The CMM evaluation report on innovative projects for the 2015–2016 period also reveals that 26,000 new housing units were planned in these 11 TOD areas, five times more than the potential initially estimated (CMM 2017, 34).

However, these changes appear to be differentiated from case to case, and certain issues—such as urban renewal, the restriction of the car facilities or social housing—have been poorly addressed in some projects. While it is too soon to assess the urban effects of these policy instruments, several barriers still seem to have hindered the implementation of TOD, and have not been addressed by the policy instruments of the CMM, including: the low level of suburban rail supply, financing problems, limited land availability, etc. The implementation of innovative projects thus seems uncertain, depending much on the municipalities' ability to control land use, invest in facilities or public spaces, and to regulate real estate projects. Municipalities' capacities to regulate development are uneven and make the implementation of planned projects uncertain. While they have received financial and technical support from the CMM and benefit from the expertise of a consulting firm to draw up their master plan, they have subsequently been on their own to implement plans. Findings thus highlight shortcomings in the instruments developed to support municipalities, particularly with regard to financial issues or land control. During the interviews, many experts (especially from municipalities) indicated a desire for the further improvement of public policy instruments, developed by the CMM to foster TOD implementation.

Conclusion

This paper demonstrates how the inclusion of TOD in metropolitan-scale planning of Greater Montreal has led the metropolitan institution to develop new policy tools to support TOD implementation. The typology of the tools (regulatory, informative, institutional, good practices and project-based) highlights the weight of new and mostly incentive-based tools. By choosing an incentive-based strategy, the metropolitan government intends to support municipalities in implementing the metropolitan-scale plan, but also aims to legitimize its role, promote the PMAD and favor coalition support for TOD. This choice of an incentive-strategy is also linked to its limited resources, the local political and regulatory context, as well as the CMM's institutional history. The paper thus demonstrates that the choice of policy instruments to overcome barriers to TOD implementation strongly depends on the capacity of action by the metropolitan government, on its resources and constraints, and on the local context.

The paper also explains how these instruments contribute to changes in planning practices, metropolitan governance and urban development in Greater Montreal. These instruments supported new cooperative measures between levels of government and institutions and have participated in changing local planning practices by strengthening municipalities' capacity to implement TOD and by reinforcing the CMM. The study of the innovative projects thus emphasizes that it has contributed to the visibility of the metropolitan institution, the construction of new cooperation between planning and transport stakeholders, and the strengthening of relations between municipalities and the CMM. But, while these instruments have had impacts on collective learning and cooperation between institutions,

their outcomes on planning practices and urban transformations (especially in suburban areas) remain much difficult to assess, due to the lack of hindsight over time.

This case-study proves however the relevance of the policy instruments approach to study the multi-level implementation of TOD. It provides empirical evidence of the renewal of planning strategies and the diversification of public policy tools associated with transit-oriented development in Montreal. These are consistent with similar ongoing processes in other North American and Canadian cities. The case study thus opens up two sets of perspectives. On the one hand, the instruments approach and the proposed typology can provide a useful analytical framework to compare the implementation of TOD in other metropolitan contexts. On the other hand, the results call for continuing and deepening the study of the outcomes of these instruments on planning practices, governance and urban transformations, through a long-term analysis. Our conclusions call for further study of the multi-level processes of TOD implementation in differentiated contexts, in order to discuss the impact of this planning model on the transformation of Canadian metropolitan areas.

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Notes

¹ These data are available on the CMM Observatory website at this link: <http://observatoire.cmm.qc.ca/observatoire-grand-montreal/produits-cartographiques/cartes-interactives/projets-novateurs-tod/>

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