Urban Planning and the Suburbs: Solutions for Sustainability from the Edges

Editor

Markus Moos

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Editorial

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Abstract

This thematic issue of *Urban Planning* includes five articles that engage critically with the debates regarding the sustainability of suburbs. Contributions include a long-term perspective of the persistence of automobile-based planning and culture in Canada; an assessment of transportation modes among high-rise condominium apartment residents in Toronto's outer suburbs; an evaluation of policy prescribed social-mix in France's banlieues; a study of hyper-diversity in Peel Region in the Greater Toronto Area, which positions suburbs as centers of diversity; and an analysis of how the implementation and governance of new urbanist designs in three US communities has generally failed to achieve social objectives. The articles put into question the common approach of implementing suburban sustainability policy via urbanization and social mix. Together, the contributions point to the need for more stringent restrictions on automobile use, enhanced transit service in the suburbs, emphasis on bottom-up, community-driven policy-making, recognition of multiple dimensions of diversity, and strong political leadership to drive sustainability policy forward.

Keywords

planning; solutions; suburbs; sustainability

1. Introduction

In this thematic issue of *Urban Planning* authors engage with the debates regarding the long-term sustainability of suburbs in a critical manner. Specifically, the authors examine the potential of contemporary planning solutions to suburban sustainability concerns. In North America and many parts of Europe, planners regularly depict suburbanization, here broadly defined as peripheral growth, as inherently problematic, or in need of a 'sustainability fix'.

Suburbanization is seen as problematic as it traditionally produced sprawling and fragmented development patterns that are more energy intensive to service and connect. Because it often unfolds in large swaths of similar kinds of developments, suburbanization is also commonly associated with increasing social segregation.

Planning solutions to date have largely focused on urbanizing the suburbs by adding density and public transit to reduce car reliance and land consumption, and by increasing social mix to enhance diversity. The question many of the articles in this thematic issue contemplate is whether, and how, these solutions have actually helped us make progress toward sustainability.

2. Content

In the first article, Pierre Filion (2018) tracks the enduring features of Canadian suburbs. He finds change in the form of new urban growth centers and densification but also consistency in terms of the influences of the automobile. The adaptations of the built form to the car, Filion argues, continue to influence all aspects of suburban life. Filion offers a somber yet important picture of the lack of influence planning for sustainability has had on aggregate metropolitan development and transportation patterns.

In Moos, Woodside, Vinodrai and Yan (2018) we consider one emerging form of suburban development, the

high-rise condominium tower, traditionally associated with downtown redevelopment. In the case of Toronto, we show that suburban high-rise condo residents do have less automobile intensive commute patterns than other suburban residents, partly due to demographic transitions. Although the impacts remain limited, we see potential for the high-rise condo to reduce automobile use, and its negative environmental impacts, by improving transit service in the suburbs.

Juliet Carpenter's (2018) article focuses on social mix as sustainability policy in the French suburbs, or banlieues, which have a history of being marginalized. The work highlights the importance of giving voice to local communities about the future of their neighbourhoods. Social mix as a top-down policy, Carpenter argues, actually enhances social segregation by contributing to marginalization and displacement. She advocates for a bottom-up approach that includes local community members in deciding the future of their neighbourhoods.

In Dean, Regier, Patel, Wilson and Ghassemi (2018) we continue on the theme of social diversity, arguing for the benefits of considering suburban sustainability through the lens of 'hyper diversity'. They position suburbs, using a specific example from Peel Region in the Greater Toronto Area, as evident 'centers' of diversity and cultural pluralism in the 21st century metropolis. Dean et al.'s work illustrates the importance of planning for diversity that goes beyond the binary of inside versus outside ethnic enclave living. People's lives, they find, are intertwined with various dimensions of metropolitan forms and structures that exist in and outside of ethnic neighbourhoods.

Finally, Dan Trudeau's (2018) article brings into tension both the environmental and social equity aspects of sustainability. He considers the specific case of three new urbanist developments in the US. Trudeau considers the ways municipalities govern the implementation of new urbanist communities, and in doing so reinforce 'utopian' ideals of traditional suburban forms and cultures. He shows that while there are gains made in terms of environmental sustainability due to higher density developments, social equity objectives fall aside due to the ways in which new urbanist communities are implemented and sold.

3. Further Development

Although there are many solutions to sustainability concerns, dominant themes in planning literature and practice are the promotion of higher density urban forms and social mix. Hence, it is not unexpected that the articles in this thematic issue focus on these themes. While the perspectives may provide broad insight, we must remember that this collection consists of articles only from the global north that focus on specific countries and cities. Still, there are overarching pragmatic insights to take away from these articles that I see as key implementation points for planning practitioners and researchers to consider in their work:

1. Automobile-based development is enduring. If we are to reduce carbon emissions, automobile use needs to be challenged head-on by restricting driving and offering real alternatives;
2. Communities need a voice. Top-down approaches to achieving social objectives can actually further contribute to marginalization and displacement;
3. Top-down leadership is required. Although local communities need a voice, implementation requires leadership from politicians and government officials;
4. People and places do not fit neatly into single categories. Diversity needs to be considered in all its forms.

Several articles in this issue demonstrate the limits of current policies aimed at densifying the suburbs. There is no question that some densification is required to use resources more efficiently. But the urbanization approach is problematic because, a) it overlooks the vast area that current low-density suburbs constitute, raising questions about the time required to densify such a large number of neighbourhoods, and b) the increase in density has in many instances contributed to gentrification, not necessarily slowed the pace of suburban expansion elsewhere, and not necessarily reduced car-dependence as the articles in this issue demonstrate.

4. Conclusion

Perhaps it is time for researchers and practitioners to change gears to study new plausible suburban futures that are environmentally sustainable and socially equitable that go beyond urbanizing the suburbs. What would a bottom-up, 'made in the suburbs' solution to environmental sustainability concerns look like? What opportunities do the vast neighbourhoods of cul-de-sacs, lawns, and open-space provide in terms of building affordable housing, sub(urban) agriculture, native plant rehabilitation, or bee keeping? What possibilities does the single-detached home offers in terms of multi-generational living, infill, home-based work, or local businesses?

Readers are invited to consider these and related questions that could have application and relevance in their local context. I hope that the contributions in this thematic issue stimulate thinking for new ideas for suburban sustainability solutions, appropriately contextualized and critically examined, around the globe.

Conflict of Interests

The author declares no conflict of interests.

References

Carpenter, J. (2018). 'Social mix' as 'sustainability fix'? Exploring social sustainability in the French suburbs. *Urban Planning*, *3*(4), 29–37.

Dean, J., Regier, K., Patel, A., Wilson, K., & Ghassemi, E. (2018). Beyond the cosmopolis: Sustaining hyperdiversity in the suburbs of Peel Region, Ontario. *Urban Planning*, *3*(4), 38–49.

Filion, P. (2018). Enduring features of the North American suburb: Built form, automobile orientation, suburban culture and political mobilization. *Urban Planning*, *3*(4), 4–14.

Moos, M., Woodside, J., Vinodrai, T., & Yan, C. (2018). Automobile commuting in suburban high-rise condominium apartments: Examining transitions toward suburban sustainability in Toronto. *Urban Planning*, *3*(4), 15–28.

Trudeau, D. (2018). Sustaining suburbia through New Urbanism: Toward growing, green, and just suburbs? *Urban Planning*, *3*(4), 50–60.

About the Author

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Article

Enduring Features of the North American Suburb: Built Form, Automobile Orientation, Suburban Culture and Political Mobilization

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Abstract

As any social phenomenon, the evolution of suburbs can be seen as at the confluence of two contradictory sets of forces. There are first forces of change, which propel suburbs in new directions. Much of the present literature on suburbs highlights suburban transitions in the form of social and economic diversification, and of new forms of development. The article attempts to rebalance the discourse on suburbs by emphasizing forces of durability. It does not deny the importance of observed suburban transitions, but argues that there is, at the heart of North American suburbs, an enduring automobility-induced transportation dynamic, which reverberates on most aspects of suburbs. The article explores the mechanisms undergirding suburban durability by linking the suburban transportation dynamic to the self-reproductive effects of a suburban lifestyle and culture and their political manifestations. These forces impede planning attempts to transform suburbs in ways that make them more environmentally sustainable. To empirically ground its argument, the article draws on two Toronto region case studies illustrating processes assuring the persistence of the durable features of North American suburbs: the layout of large suburban multifunctional centres and the themes raised by Rob Ford during his successful 2010 mayoralty electoral campaign.

Issue

This article is part of the issue "Urban Planning and the Suburbs: Solutions for Sustainability from the Edges", edited by Markus Moos (University of Waterloo, Canada).

1. Introduction

While most of the literature emphasizes the transformation and diversity of the North American suburb, the present article concentrates on enduring fundamental features present across these suburbs. The literature demonstrates how suburbs have become socially and functionally diversified, to the extent that some observers now use the expression "post-suburban" to connote the new suburban reality (Hayden, 2003; Kelly, 1993; Phelps, Wood, & Valler, 2010). The transformative theme also pervades a planning literature, often driven by environmental objectives, that calls for a radical change of suburbs. The article attempts to rebalance the discourse on North American suburbs by bringing to light factors of suburban stability. It concentrates

on the automobile-oriented transportation dynamic of these suburbs, contending that this dynamic reverberates on most dimensions of suburbs, including those the literature associates with their transformation. The suburban transportation dynamic therefore assures that, regardless of the extent to which the constituents of the suburb (income and ethnic/racial groups, economic activities, etc.) change, there is a fundamentally suburban dimension to the way people live and organizations operate in suburban areas. What is more, the influence of the land-use and transportation dynamic on behaviour gives rise to a suburban culture, which finds political expression. Once politicized, suburban culture becomes a further contributor to the endurance of prevailing suburban built forms and journey patterns. Not only are these fundamental features of suburbs factors of subur-

ban stability but they also contribute to a common suburban identity. Interest in suburban factors of stability is of particular relevance at a time when planning promotes suburban transformations intended to enhance environmental sustainability, largely by reducing suburban land consumption and reliance on the automobile. It is important for such planning strategies to be aware of the obstacles they will encounter. This is how the article contributes to the suburban sustainability theme of this special issue.

The exploration of the North American variant of the suburban phenomenon is illustrated by two brief case studies, both originating from the Toronto metropolitan region: 1) the difficulty for large suburban multifunctional centres to depart from the car-dominated nature of the suburban realm; 2) the themes raised during the 2010 electoral campaign of Mayor Rob Ford, representing a manifestation of suburban populism. The two cases contribute to the argument of the article by highlighting mechanisms perpetuating prevailing suburban land-use and transportation patterns.

2. Post-Suburbs: Diversification of the Suburb

The North American suburban form that has evolved since WWII constitutes the object of this article. If streetcar and subway suburbs can be perceived as extensions of the central-city morphology, this is not the case for the post-war automobile-dependent suburb. Any metropolitan-scale aerial imagery exposes the deep urban development transition that took place from the late 1940s. With the generalization of car use, accessibility improved, thereby allowing a more liberal consumption of space. Hence the association of the post-war suburb with low density and abundant greenspace (Carr & Whitehand, 2001; Rowe, 1991).

In the early post-WWII decades, suburban development was propelled by rapid population and household formation in prosperous economic times. Young families were attracted by spacious housing units (relative to central-city dwellings) and plentiful green space (Harris, 2004; Waldie, 1996). In the U.S., suburbanization was further fuelled by the white flight phenomenon (Boustan, 2010). Both in the U.S. and Canada, post-war suburbs were initially largely populated by young middle-class households.

The North American suburb experienced accelerating social diversification from the 1970s and 1980s. Several factors concurred to transform North American suburbs. There is first the fact that suburbs became the majority of the metropolitan region in terms of area, population and economic activity. It followed that most forms of development sought suburban rather than central-city locations (Weitz & Crawford, 2012). Moreover, the combination of aging in place and the suburban presence of most housing in the metropolitan region made for a more even age group distribution than in the early post-war decades (Lee, Hong, & Park, 2017).

Over time, inner suburbs often acquired the social characteristics of adjacent central-city areas, another factor of suburban diversification (Lo, Preston, Anisef, Basu, & Wang, 2015; Lucy & Phillips, 2000; Murphy, 2007; Short, Hanlon, & Vicino, 2007). Meanwhile, suburbs became ports of entry for immigrants, breaking with the traditional concentric social integration process described by the Chicago School of the 1920s (Park, Burgess, & McKenzie, 1925). In its view, immigrants first settled in central-city transitional neighbourhoods and gradually moved further out at a rate that coincided with their assimilation to mainstream society. Over the last decades, new clusters of immigrants transformed the retailing and institutional scene of suburbs, leading to the emergence of the "ethnoburb" phenomenon (Li, 2009; Li, Skop, & Yu, 2016). Meanwhile, suburbs became economically diversified as they attracted research and development as well as head offices (Bresnahan & Gambardella, 2004; Mozingo, 2011). The diversification of the suburb is also reflected in the different trajectories taken by suburbs, some prosperous, others in decline, some socially mixed, others stubbornly exclusionary. There are also the differences between U.S. and Canadian suburbs, expressing distinct political and planning regimes and attitudes towards race and public sector intervention (Adams, 2003).

Not surprisingly, such attention to suburban transformations has led researchers to conclude, some more categorically than others, that we are entering a post-suburban era, marking a radical break with the suburban reality that has evolved with some continuity since WWII (Keil & Addie, 2015; Mace, 2013; Phelps, 2015; Phelps & Wu, 2011; Teaford, 1997, 2011). The remainder of the article contends that, despite these transformations, there are durable automobility-related features at the heart of the North American suburban phenomenon, which are responsible for enduring and distinct suburban features pertaining to built form, journey patterns, lifestyle, culture and political expression.

3. Suburban Distinctiveness

3.1. The Super Grid and Automobile Dependence

All dimensions of suburban form and dynamics are impacted by heavy reliance on the car. For example, the presence of abundant green spaces in suburbs, would they be parks, natural areas or private lawns, was made possible by the relaxation of proximity requirements brought on by the generalization of car use. Plentiful accessible space in suburbs also caused a modification of built forms, as evidenced by the passage from central-city multi-storey to suburban single-storey manufacturing. In addition, the need to accommodate cars at every origin and destination, translated into an adaptation of buildings and the introduction of new architectural concepts: for example, single-family homes with garages and driveways, the shopping mall with its sea of parking, various forms of drive-in and drive-through formats.

Most impactful on behaviour in the suburb has been the mutual adaptation between land-use patterns and high levels of car use (Marshall, 2000). Generalized reliance on the automobile has made it possible to create large monofunctional zones, a distribution that results in a dispersion of origins and destinations (Hirt, 2014). Such dispersion, especially within large specialized zones, can only be served efficiently by the car (Bae, 2004; Pushkarev & Zupan, 1977). Not only does zonal functional segregation stimulate reliance of the car, but such a land-use configuration is made all the more pressing by the negative externalities generated by heavy car traffic generators.

In the North American context, the above-described land use–transportation relation translated into an urban form that rapidly became ubiquitous across the continent's suburban areas: the super grid. Early in the evolution of the post-WWII suburb, the super grid emerged as a response to the need to accommodate large traffic flows while preserving the safety and tranquility of (mostly low-density) residential areas. The super grid is made of arterials and, occasionally, expressways. It provides borderlines for super blocks. The super grid can be perceived as the land-use and transportation organizing principle of the North American suburb. While the essence of the super grid model is present in virtually all North American suburban areas, the super grid rarely adopts a symmetrical form, forced as it is to adjust to: topography; the presence of land uses, such as airports and marshalling yards, whose size far exceeds that of a super block; and municipal fragmentation when it prevents the integration of road, and thus super grid, networks.

The super grid configuration is adapted to the transportation and land-use requirements of the North American suburb. It provides a road network capable of absorbing the volume of traffic generated by near total dependence on the car (Southworth & Ben-Joseph, 1995; Southworth & Owens, 1993). As in this type of configuration car traffic circulates most fluidly when origins and destinations are dispersed in low-density built environments, concentrations of activities and high-density developments can be sources of congestion (Cervero, 2013). The super grid model also lends itself to the separation of land uses within suburbs, arterials and expressways being obvious dividers (Charmes, 2010; Dear & Flusty, 1998). It is indeed usual to find super blocks devoted to a single dominant land use.

In summary, from a transportation and land-use perspective, the North American suburban phenomenon is distinguished by near total dependence on the automobile and an adaptation of land use to this dependence in the form of functional specialization and relatively low density.[1] Most North American suburbs also share reliance on the super grid formula, which configures the relationship between transportation and land use. Common transportation and land-use structuring features provide a shared identity to North American suburbs, which are otherwise differentiated by their varied social and economic characteristics.

3.2. Daily Life, Suburban Culture and Political Expression

The combined effects of suburban land-use patterns and reliance on the automobile reverberate on behaviour taking place within the suburban realm. For example, specialized space, made possible by heavy automobile reliance, thus translates into programmed behaviour because of long distances between different types of suburban land uses (Badoe & Miller, 2000; Franck & Stevens, 2006; van Wee, 2002; Zhang, 2006). In addition, those who do not have access to a car (or whose access is limited), as is the case for the young, the old, the handicapped who cannot drive and the poor, are more spatially and activity constrained in suburbs than in higher density and more multifunctional settings (Blumenberg, 2004; Hu, 2015; Spinney, Scott, & Newbold, 2009; Walks & Tanter, 2014).

Common living conditions emanating from the transportation and land-use patterns present across North American suburbs give rise to a shared culture, which transcends their increased social and economic diversity. This suburban culture is a function of mutual lived experiences relating to the transportation and land-use patterns responsible for the distinct identity of the suburban realm. While generally seen as a manifestation of a broad consumerist societal culture, suburban daily life can itself be perceived as contributing to the formation of a distinct suburban culture (de Certeau, 1984; Highmore, 2002a, 2002b; Lefebvre, 1991). In the present understanding, suburban culture derives from daily life shaped by single-family homes with their plentiful indoor and outdoor space, other forms of housing also well provided with outdoor space, abundant green space and major suburban destinations such as shopping malls. Common suburban experiences also include time spent in the car, given the significant share of suburbanites' time automobile journeys take (e.g., Banham, 1971). Much of the world view of suburban residents is fashioned by what they see through the windshields of their cars (Walks, 2014). Irrespective of their age, income and ethnic/racial group, suburbanites share, albeit with varying levels of constraints and possibilities, similar spatial experiences and the need to rely on the automobile. Similarities in lived experiences, framed by suburban specialized and primarily low-density built environments and heavy dependence on the car, provide a common suburban culture to social groups otherwise segmented by age, income, ethnic/racial identity. It is important to acknowledge, however, that the existence of this shared culture does not mean that suburbanites have bought in all the

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[1] The Toronto metropolitan region illustrates the difference in reliance on the automobile between suburbs and the central city. Outer suburbs register 24-hours, all-destinations car driver and passenger 2011 modal shares ranging from 83% to 89%. Meanwhile in the part of the region originally developed before 1946, the equivalent figure is 50% (Data Management Group, 2018).

conditions leading to its existence. Whether supportive of automobility or not, they are locked in an environment and lifestyle that make dependence of the car a necessity (Sheller & Urry, 2006).

The shared suburban culture can transmute into political expression. Some of the most usual political manifestations of suburban culture take the form of mobilizations to preserve features of suburbs perceived to be under threat. One target of NIMBY movements is the defence of the low-density character of the suburb in the face of densification initiatives. Not unexpectedly, these movements mirror resistance to the increased circulation associated with densification, which can perturb the delicate traffic balance of the super grid. The introduction of social mixing in previously homogenous neighbourhoods also fans NIMBY sentiments.

Electoral geography studies point to the determining role suburban areas play in the election of federal and state/provincial governments, reflecting their demographic weight (Gordon & Janzen, 2013; Scott Thomas, 1998). They also note the conservativism of suburbs, which relates to the middle- and upper-class status of a large proportion of their population and, with direct relevance to their land-use and transportation patterns, to their tendency to rely on individual (notably single-family homes and the automobile) rather than collective forms of consumption (Kruse, 2005; Walks, 2004, 2006; Williamson, 2008). But electoral studies of suburbs acknowledge the existence of different voting patterns within the suburban realm and variations over time in these patterns. In the U.S., which party wins presidential elections is determined largely by how far the boundary between majority Democratic and Republican voters reaches out within the suburban realm. The further out it stretches, the stronger is the Democratic victory and vice versa for a Republican win (McKee & Shaw, 2003). Finally, as is the case for other social categories, when perceived as under threat suburban culture is not immune to populist-type political mobilization (Müller, 2016).

3.3. The Durability of the Suburban Land Use–Transportation Relationship

The article is about tensions between stability and change in the suburb. It shares this theme with a recent article by Moos et al. (2015), which used a principal component analysis to identify these tensions within the suburbs of large Canadian metropolitan regions. The importance the present article gives to the enduring influence of automobility and associated land uses agrees with the findings of Moos et al. (2015) but, unlike the latter, which associates suburban stasis with different features of the suburban reality, the present article emphasizes the effect of one such stabilizing feature, the relationship between car dependence and land use, on most aspects of suburban life.

The central argument of the article is that while the socioeconomic makeup and economic base of the North American suburb are in transition, one of its determining features, accounting for the enduring specificity of this urban environment, remains profoundly embedded. The article has identified the relationship between land-use patterns and automobile reliance as the defining durable characteristic of the North American suburb. The importance given to this feature stems from its influence on most activities taking place in suburban environments, and hence on most aspects of suburban life. The land use–transportation relationship mediates interactions taking place in suburbs: between home and work, home and retailing, home and workplaces, linkages between firms. In this perspective, it is premature to proclaim the emergence of a post-suburban phase. While the constituting parts of suburbs undergo transformation, the way these parts interact remains profoundly suburban. As the daily life of newcomers to the suburb adapts to the land-use patterns and journey dynamics of their new environment, they become suburbanized and partake in the suburban culture.

The article argues that the mutually reinforcing relationship between suburban land-use patterns and automobile dependency is likely to resist attempts at modifying the trajectory of suburban evolution, and thus be long-lasting. It has been present since early in the evolution of the post-WWII North American suburb and will in all probability persist in the foreseeable future. It constitutes the matrix wherein the suburb evolves, safeguarding some of its inherent features as it undergoes transformations.

This is not to deny the existence of transformative pressures on suburban land-use patterns. One driver of such pressures is the spatial expansion of metropolitan regions, which enhances the accessibility potential of inner suburbs and thus creates conditions favourable to their densification. Transformations of the suburb are also promoted by planning initiatives, inspired by smart growth and sustainable development, attempting to intensify the suburban realm and make it more walking- and public-transit conducive (Burchell, Downs, McCann, & Mukherji, 2005; Calthorpe & Fulton, 2001; Flint, 2006). A major theme present across North American metropolitan-scale plans is the recentralization of suburbs through the creation of hierarchies of multifunctional centres, from large centres, targeting as their catchment areas entire quadrants of metropolitan regions, to neighbourhood-scale centres of complete communities (Filion, Kramer, & Sands, 2016). There are, however, many obstacles in the way of planning attempts at modifying suburban land use–transportation dynamics. These obstacles are related to: limited financial capacity to fund public transit infrastructures within the suburban realm; resistance to the modification of a built environment developed in function of the car; and insufficient planning institutional capacity (Scheer, 2010).

Land use–transportation features of suburbs and their repercussions owe their durability to feedback loops consisting of decisions taking place at different

scales and impacting development and daily behaviour. These decisions concern transportation infrastructures and services, planning and development, choices of individuals regarding residential and work location as well as consumption options, and the political preferences of suburbanites. The next sections introduce two brief case studies intended to capture several scales at which such decisions are made. The selection of the case studies also purports to illustrate the wide range of mechanisms reinforcing the core features of North American suburbs. The first case study shows that even major suburban multifunctional centres, meant to disseminate public transit- and walking-oriented environments across the suburban realm, have difficulties breaking from the prevailing suburban built form and transportation patterns. The second case focusses on political resistance to transformative initiatives. It documents how the perception of threats to the suburban specificity can give rise to political expressions of suburban populism. Both case studies originate from the Toronto metropolitan region. Illustrating a continental-wide phenomenon may seem an excessive burden to place on a single metropolitan region. But while circumstances associated with mechanisms supporting core features of suburbs vary between metropolitan regions, and indeed from sector to sector within these regions, we can expect a degree of similarity among these mechanisms since they sustain identical features present across the continental suburban realm.

4. Methods: Recentralization's Failures and Suburban Populism

The first case study concentrates on four suburban multifunctional centres in the Toronto metropolitan region. It relies on a land-use analysis of these centres to verify the extent to which they provide a walkable and transit-oriented environment, which constitutes, as stated in planning objectives, an alternative to prevailing suburban development and transportation patterns. Measurements of the different land uses present in the four centres were made on Google Earth Pro™ aerial imagery. The second case study identifies the themes raised by Rob Ford during the 2010 City of Toronto mayoralty race, which he won thanks to overwhelming support from the suburban sectors of the city. The article concentrates on those themes that refer to the suburban lifestyle and to threats to this lifestyle from actual or intended policies stemming from alleged anti-suburban attitudes on the part of so-called downtown elites. The themes were identified through a search of two newspapers, the *Toronto Star* and the *Globe and Mail*, over the period covered by the 2010 electoral campaign, which ran from September 10, which marked the end of the candidates' nomination period, to October 25, election day (data from *The Sun*, a right-wing populist tabloid were not available). All articles over this period where the name of Rob Ford appeared were consulted, which led to the identification of 199 mentions of electoral campaign themes.

5. Attempts at Recentralization

The Ontario Provincial Government adopted in 2006 a comprehensive plan, the Growth Plan, for a large region focussed on Toronto (Ontario, 2013). The plan, which has been given power of law, is meant to reduce sprawl, increase reliance on public transit and protect natural and rural areas. One of its main proposals is the creation of a network of 25 urban growth centres (UGCs), intended to become high-density pedestrian- and public transit-hospitable multifunctional centres (Ryan & Frank, 2009). Relying on the further development and redesigning of existing concentrations of activities and the creation of new such concentrations, the UGC strategy purports to create walking- and public transit-conducive nodes within the otherwise car-oriented suburban realm. It also aims to provide a measure of high-density recentralization, a condition for effective public-transit services, in the low-density and spatially segregated suburban environment. Regional and municipal planning agencies have aligned their objectives regarding UGCs with those of the Growth Plan.

This section investigates the four most developed UGCs within the Toronto metropolitan region suburban realm. Three of these centres grew around regional shopping malls: Mississauga City Centre, Scarborough Town Centre and Pickering Town Centre. They all border an expressway and Scarborough Town Centre and Pickering Town Centre are served by rail transit, LRT in the first case and regular commuter train service in the second. Mississauga is served by a BRT route and is the site of a major bus terminal. The history of the fourth UGC, North York Centre, is different as is its accessibility. North York Centre is the outcome of the redevelopment of a low-rise 1940s and 1950s retail strip. Along with abutting an expressway, North York Centre is served by two subway lines and three subway stations. Without a regional mall, the retail component of North York Centre is much smaller than that of the other three UGCs. The number of residential units and the amount of office space are, however, much larger than in the three other centres (see Table 1).

The question is: how much do these centres depart from the prevailing suburban land-use and transportation patterns, in other words, how much do they conform to their transformative planning objectives? Do they bring a different land use–transportation dynamic to the suburb, which is favourable to walking and public transit, or do they reproduce in a higher density environment present suburban journey patterns? Land-use measurements presented in Table 2 provide an indication of the extent to which the four UGCs have achieved their planning objectives. Just as the conduciveness to walking of a tightly built environment has been widely documented, so has the walking inhospitality of wide arterials and surface parking lots (Gehl, 2011; Hess, Vernez Moudon, Snyder, & Stanilov, 1999; Saelens & Handy, 2008; Southworth, 2005; Vernez Moudon et al., 2006).

Table 1. General characteristics of the four main Toronto suburban UGCs.

UGC	Area (km^2)	Type of UGC	Highest order of public transit	Residential units	Office space (m^2)
Mississauga City Centre	2.22	Mall-focussed	BRT	16,473	396,202
Scarborough Town Centre	1.17	Mall-focussed	LRT	6,586	219,274
Pickering Town Centre	0.64	Mall-focussed	Commuter Train	1,032	35,867
North York Centre	1.42	Suburban Redevelopment	Subway	25,162	731,039

An important proportion of the area of UGCs catering to the automobile points to conformity to the suburban land use–transportation norm, while a high building footprint coverage suggests a pedestrian-conducive environment. Land-use conditions that are favourable to public transit are largely similar to those associated with a hospitable pedestrian environment. Indeed, most people walk to and from public-transit stations, and compact multifunctional environments encourage both public-transit use and walking. Another factor of walkability discussed in the literature is the presence of small blocks as gauged by a high number of intersections.

Relative to North York Centre, in the three mall-focussed UGCs, the proportion of the total area taken by building footprint is low, while that occupied by parking is elevated (Table 2). Likewise, the total area of the centres divided by the number of intersections is much larger in these three centres than it is in North York Centre, which suggests a predominance of large blocks. These measures indicate some similarity in the three mall-focussed UGCs with the land-use adaptation to the car and the poor walking conditions characterizing the suburb. On the other hand, North York Centre presents a configuration that is much less accommodating of the car and more hospitable to walking. Contrary to the other three UGCs, it brings to the suburban realm an alternative built environment providing land-use conditions that are more public transit- and walking-friendly.

One explanation for the different configurations and journey dynamics of the UGCs under study relates to their respective history. Their origins cast a long shadow. Mall-focussed centres have been developed from the start in a car-oriented fashion, that is, as a large shopping mall surrounded by a wide parking expanse. This legacy lives on as the important proportion of their area devoted to parking testifies. On the other hand, as North York Centre is the outcome of the piecemeal redevelopment of a low-density early suburban grid pattern, it devotes a lesser proportion of space to parking and registers a low area/intersections quotient.

There is another reason for the difference in the automobile orientation of the UGCs. The three mall-focussed UGCs act as retail centres for large suburban catchment areas. Given the car-oriented land use–transportation relationship of these areas, most people drive to shop in the three mall-focussed UGCs. In this sense, the journey pattern and the spatial structure of these UGCs are to a large extent determined by their surrounding suburban environment. In their case, it is ambient suburban areas that influence UGCs rather than the other way around. Their centrality role within the suburban realm takes place at the expense of their planning objectives calling for less reliance on the car and more public-transit use and walking. Findings from these three UGCs raise doubts about reliance on the development of large multifunctional centres as beachheads within the suburban realm meant to alter the suburban relationship between land-use patterns and automobile dependence.

The North York Centre situation is different. It is dominated by offices and high-rise housing rather than by retailing. Not only does its superior public-transit accessibility account for lower car modal shares, and hence less need for parking, but in North York Centre parking fees are a disincentive to driving. Parking fees also make it financially feasible to build underground and multi-storey parking facilities, thus limiting the footprint of parking. In the other three UGCs, intense competition from malls elsewhere within the suburban realm prevents the introduction of parking fees. Unlike the other UGCs, North York Centre presents a morphology and journey patterns that

Table 2. Building footprint, parking coverage and area/intersection quotient of the four Toronto suburban UGCs.

UGC	Building footprint (% of total area)	Parking coverage (% of total area)	Total area/intersections (m^2)
Mississauga City Centre	17.47	25.49	40,847
Scarborough Town Centre	15.58	28.60	40,152
Pickering Town Centre	21.87	38.25	65,982
North York Centre	36.48	11.57	20,719

contrast to a large extent with those of the surrounding suburban realm. It operates more like a downtown than a conventional suburban area. But it is important to acknowledge the exceptional circumstances of North York Centre. First, its redevelopment took place in an old suburban sector with a tight grid pattern, which is an unusual configuration in post-war suburban areas. Second, it is extraordinarily advantaged from a public transit perspective.

6. Suburban Populist Reactions

The present City of Toronto is the outcome of the 1997 amalgamation of six municipalities (including the former City of Toronto) federated into what was then Metro Toronto. The built environment of the former City of Toronto was developed before 1946 as was to some extend that of two small adjacent municipalities. The other former municipalities, which occupy most of the territory of the new City of Toronto and account for a majority of its population, were developed mostly between 1946 and 1971, therefore according to the car-oriented standards of the time.

From 2003 to 2010, the city was administered by a centre-left mayor, David Miller. Over these years, he was involved in some prestige initiatives such as the successful Toronto bid for the Pan Am Games and waterfront redevelopment projects. He strongly endorsed the Transit City plan, which consisted in the creation of six LRT lines, to take place mostly in City of Toronto suburban areas. The mandate of David Miller coincided with a rapid redevelopment of Downtown Toronto, which acquired an important residential dimension and became the site of many city-sponsored improvements. The transformation of Downtown Toronto projected the image of a city that was courting members of the creative class, the main occupants of mushrooming condo towers. A long garbage strike over the summer 2009 marred the second term of David Miller. In 2010, he announced that he would not to run for a third term. In the two elections he won, David Miller performed best in central wards, but also received a respectable proportion of votes from the suburbs, which explains his two city-wide electoral victories.

During the entire 2010 Toronto mayoralty campaign, polls were dominated by Rob Ford, a conservative council member since 2000. Consistent with his right-wing agenda, Rob Ford played heavily the fiscal responsibility card. He depicted city spending as out of control and, therefore, the taxpayers as unnecessarily burdened by escalating municipal taxes. A main slogan of his campaign was to get rid of the "gravy train" at City Hall. His attacks especially targeted "spendthrift" councillors. He promised to reduce the number of councillors by half and radically cut the budget of their offices. It follows that, as portrayed by Table 3, most of the references to his campaign themes reported in the *Toronto Star* and *Globe and Mail* pertained to these financial concerns.

But there were two other dimensions to the Rob Ford campaign, both of which more narrowly targeted at sub-

urban voters. A second Rob Ford slogan was "stopping the war on the car" (Walks, 2015). According to Rob Ford, car drivers were victimized by planning initiatives taking road space away from them, notably cycling lanes and LRT lines with their own right of way. His program committed to give road space back to the car by removing cycling lanes and even eliminating the existing streetcar system. It also pledged to prevent further incursions on automobile road space by cancelling the Transit City program. The only form of public transit that was acceptable to Rob Ford were tunnelled subways because they did not interfere with road traffic. He kept silent, however, on the fact that a given public transit budget would deliver much more LRT than subway coverage and that most suburban areas do not post sufficient density to justify the presence of subways. His public transit agenda clearly demonstrated that his transportation proposals were targeted more at automobile than public-transit users. These platforms resonated well with the suburban automobile-dependent constituency. It promised to prevent LRT rights of way and cycling lanes from reducing the car capacity of suburban arterials. Also, many saw the removal of streetcars as a means of accelerating the drive from the suburbs to Downtown Toronto, with little concern for the effect this would have on the nearly 300,000 daily streetcar users.

Table 3. Themes raised during the Rob Ford campaign (number of times mentioned). Source: articles mentioning Rob Ford in the *Toronto Star* (2010) and *Globe and Mail* (2010) published between September 10 and October 25, 2010.

Social agenda	
Anti-gay statements	3
Limit additional immigration	10
Financial agenda	
Tax and spending cuts	67
End the "gravy train"	15
Cut existing programs	4
Cut number and expenses of councillors	15
Dysfunctional City Hall	6
Law and order	
Hire 100 additional police	6
Transportation	
Build subways	21
Anti LRT and streetcar	20
End "war on cars"	15
Against elites and Central City	
Critique "downtown elites"	11
Privileged central areas	6
Total mentions of themes	**199**

The other facet of the Rob Ford message directed at the City of Toronto suburbs described as "downtown elites" the individuals he held responsible for the neglect of the

suburbs by the City of Toronto and for plans that transgressed the suburban car-oriented culture. As he defined it, the downtown elite category included the previous mayor, the 2010 mayoralty candidates he ran against, left-leaning councillors, planners, most of the media, environmentalists and even cyclists. In true populist form, he held external actors responsible for the woes facing the suburbs, setting the terms for an "us and them" political discourse: the "common folks of the suburbs" versus disconnected downtown elites. Rob Ford also contrasted the large sums (wasted in his view) lavished on central parts, especially the waterfront, with examples of suburban neglect.

The electoral results map matched the original period of development of the different wards within the city. Wards originally developed before 1946 voted against Rob Ford and those whose development took place after 1945 supported him. The lesson from the victorious Rob Ford electoral campaign is not that there is an inherent inclination in the suburbs for right-wing political themes. Previous and later City of Toronto suburban voting patterns indicate that suburbs can adopt other voting patterns. Also, there were other facets to the Rob Ford populist political message than the war on the car and suburban alienation (Kipfer & Saber, 2014). The case study does show, however, that when circumstances are favourable, suburbs can be electorally mobilized around a populist discourse emphasizing their common culture revolving around reliance on the car and associated land-use features. It deserves to be emphasized that suburban portions of the City of Toronto are highly diversified from an ethnic/racial and income perspective. Issues brought up by Rob Ford clearly transcended the social diversity of suburbs. The campaign also illustrates how what was pictured as challenges to the suburban culture provoked a political backlash, which prevented the implementation of the Transit City program. It probably helped the case Rob Ford was making that the provincial Growth Plan depicted conventional suburban development as a non-sustainable urban form in need of densification and increased public-transit reliance. Under the short-lived Rob Ford administration (due to scandals and then illness and his death) the transportation status quo was maintained in suburban areas (Doolittle, 2014).

As an epilogue to this story, in June 2018, Doug Ford, the brother of Rob Ford who shares his political values and electoral base, was elected Premier of Ontario. Like for his brother's campaign eight years earlier, the central plank of the electoral platform of Doug Ford was fiscal responsibility: controlling provincial spending and eliminating the deficit while reducing income tax. But the political promise that arguably best chimed with his supporters was to lower the provincial tax on gasoline by ten cents a litre. He won the provincial election by a wide margin, in large part thanks to the support of a large majority of Toronto-region suburban ridings (37 of 44), which are all highly dependent on driving.

7. Conclusion: Suburban Distinctiveness and Stability

The argument of the article has unfolded in three stages. First, while the article has acknowledged the existence of profound transformations over the past decades in the nature of the constituting parts of the North American suburb, it has also identified a great deal of consistency over time in how it operates. The social groups and activities present in suburbs have changed, but the structuring features of the built environment in which they live and operate, along with the mode of transportation mediating their interactions, have remained largely stable since the early post-WWII period. Therefore, the article refrained from proclaiming the mutation of the suburb into a new post-suburban entity. Second, the article contended that the characteristic that best captures the specificity of the North American suburb is the relationship between, on the one hand, a generally low-density built form that is functionally specialized and adapted to the car, and on the other, a nearly generalized dependence on the automobile. The reason for the concentration on this relationship is that it reverberates on most aspects of the suburb. It thereby undergirds daily life in the suburb and the suburban culture to which the everyday behaviour of suburbanites gives rise. Third, the article has identified mechanisms maintaining this relationship in place. These mechanisms account for the large measure of consistency in suburban land-use and transportation patterns from the early post-war era, as well as for their likely future durability. One such mechanism is the shaping by prevailing land use–transportation patterns of different scales of decision-making leading to a mutual adaptation between the built environment and predominant forms of transportation. Such decisions run the gamut from macro-scale planning and development decisions, determining the main orientations of suburban development, to daily journey choices made by residents. Another mechanism comprises the wide range of political actions in defence of the suburban lifestyle and of the built form and transportation patterns supporting it.

The two Toronto case studies cast light on how these mechanisms operate by focussing on a specific form of suburban development and a political event. The case studies thus focused on a narrow range of mechanisms, considered in their respective empirical context, preserving the identified specificity of the suburb. The UGCs case study has shown that in most instances these centres have been incapable of overcoming the car-orientation of the surrounding suburban environment, resulting in the important place taken by the car in their configuration. They have failed to break the mutual influence between UGC development decisions and journey choices bearing the mark of low-density car-dependent catchment areas. The second case has investigated the themes raised during a political campaign that mobilized suburbanites around the preservation of their suburban culture and lifestyle, portrayed as under treat from hos-

tile external forces. It has shown that this successful mobilization has indeed led to the overturning of policies that would have somewhat abated the dominance of the car within City of Toronto suburban areas.

The article raises concerns about the likely effectiveness of current planning efforts at transforming the suburb so as to make it more environmentally sustainable—the theme of this issue of *Urban Planning*. Its purpose is not to discourage such efforts but rather to make planners and policy-makers aware of the entrenched nature of the prevailing suburban land use–transportation dynamic and of the need to devise strategies capable of addressing and overcoming this dynamic.

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Conflict of Interests

The author declares no conflict of interests.

References

Adams, M. (2003). *Fire and ice: The United States, Canada and the myth of converging values*. Toronto: Penguin Canada.

Badoe, D. A., & Miller, E. J. (2000). Transportation–land use interaction: Empirical findings in North America, and their implications for modeling. *Transportation Research Part D: Transport and Environment*, *5*(4), 235–263.

Bae, C.-H. C. (2004). *Urban sprawl in Western Europe and the United States*. London: Routledge.

Banham, R. (1971). *Los Angeles: The architecture of four ecologies*. New York, NY: Harper and Row.

Blumenberg, E. (2004). En-gendering effective planning: Spatial mismatch, low-income women, and transportation policy. *Journal of the American Planning Association*, *70*(3), 269–281.

Boustan, L. P. (2010). Was postwar suburbanization 'white flight'? Evidence from the Black migration. *Quarterly Journal of Economics*, *125*(1), 417–443.

Bresnahan, T., & Gambardella, A. (Eds.). (2004). *Building high-tech clusters: Silicon Valley and beyond*. Cambridge: Cambridge University Press.

Burchell, R. D., Downs, A., McCann, B., & Mukherji, S. (2005). *Sprawl costs: Economic impacts of unchecked development*. Washington, DC: Island Press.

Calthorpe, P., & Fulton, W. (2001). *The regional city: Planning for the end of sprawl*. Washington, DC: Island Press.

Carr, C. M. R., & Whitehand, J. W. R. (2001). *Twentieth-century suburbs: A morphological approach*. London: Routledge.

Cervero, R. (2013). *Suburban gridlock*. New Brunswick, NJ: Transaction Books.

Charmes, E. (2010). Cul-de-sac, superblocks and environmental areas as supports of residential territorialisation. *Urban Design*, *15*(3), 357–374.

Data Management Group. (2018). TTS: Transportation tomorrow survey. *University of Toronto Transportation Research Institute*. Retrieved from dmg.utoronto.ca

de Certeau, M. (1984). *The practice of everyday life*. Berkeley, CA: University of California Press.

Dear, M., & Flusty, S. (1998). Postmodern urbanism. *Annals of the Association of American Geographers*, *88*(1), 50–72.

Doolittle, R. (2014). *Crazy town: The Rob Ford story*. Toronto: Penguin Canada.

Filion, P., Kramer, A., & Sands, G. (2016). Recentralization as an alternative to urban dispersion: Transformative planning in a neoliberal context. *International Journal of Urban and Regional Research*, *40*(3), 658–678.

Flint, A. (2006). *This land: The battle over sprawl and the future of America*. Baltimore, MD: Johns Hopkins University Press.

Franck, K., & Stevens, Q. (Eds.). (2006). *Loose space: Possibility and diversity in urban life*. London: Routledge.

Gehl, J. (2011). *Life between buildings: Using public space*. Washington, DC: Island Press.

Globe and Mail. (2010). *The Globe and Mail*.

Gordon, D. L. A., & Janzen, M. (2013). Suburban nation? Estimating the size of Canada's suburban population. *Journal of Architectural and Planning Research*, *30*(3), 197–220.

Harris, R. (2004). *Creeping conformity: How Canada became suburban 1900–1960*. Toronto: University of Toronto Press.

Hayden, D. (2003). *Building suburbia: Green fields and urban growth 1820–2000*. New York, NY: Vintage Books.

Hess, P. M., Vernez Moudon, A., Snyder, M. C., & Stanilov, K. (1999). Site design and pedestrian travel. *Transportation Research Record*, *1674*, 9–19.

Highmore, B. (Ed.). (2002a). *The everyday life reader*. London: Routledge.

Highmore, B. (2002b). *Everyday life and cultural theory: An introduction*. London: Routledge.

Hirt, S. A. (2014). *Zoning in the USA: The origins and implications of American land-use regulations*. Ithaca, NY: Cornell University Press.

Hu, L. (2015). Job accessibility of the poor in Los Angeles: Has suburbanization affected spatial mismatch? *Journal of the American Planning Association*, *81*(1), 30–45.

Keil, R., & Addie, J.-P. D. (2015). 'It's not going to be suburban, it's going to be all urban': Assembling post-suburbia in the Toronto and Chicago regions. *International Journal of Urban and Regional Research*, *39*(5),

892–911.

Kelly, B. M. (1993). *Expanding the American dream: Building and rebuilding Levittown*. Albany, NY: State University of New York Press.

Kipfer, S., & Saber, P. (2014). From "revolution" to farce? Hard-right populism in the making of Toronto. *Studies in Political Economy*, *93*, 127–151.

Kruse, K. M. (2005). *White flight: Atlanta and the making of modern conservatism*. Princeton, NJ: Princeton University Press.

Lee, J., Hong, S., & Park, V. (2017). Predictable surprise: The spatial and social morphology of aging suburbs in the U.S. metropolitan areas. *Sustainability*, *9*(3). https://doi.org/10.3390/su9030458

Lefebvre, H. (1991). *Critique of everyday life: Volume 1 Introduction*. London: Verso.

Li, W. (2009). *Ethnoburb: The new ethnic community in urban America*. Honolulu, HI: University of Hawai'i Press.

Li, W., Skop, E., & Yu, W. (2016). Enclaves, ethnoburbs, and new patterns of settlement among Asian immigrants. In M. Zhou & A. C. Ocampo (Eds.), *Contemporary Asian America: A multidisciplinary reader* (3rd ed., pp. 193–216). New York, NY: New York University Press.

Lo, L., Preston, V., Anisef, P., Basu, R., & Wang, S. (2015). *Social infrastructure and vulnerability in the suburbs*. Toronto: University of Toronto Press.

Lucy, W., & Phillips, D. L. (2000). *Confronting suburban decline: Strategic planning for metropolitan renewal*. Washington, DC: Island Press.

Mace, A. (2013). *City suburb: Placing suburbia in a post-suburban world*. London: Routledge.

Marshall, A. (2000). *How cities work: Suburbs, sprawl, and the roads not taken*. Austin, TX: University of Texas Press.

McKee, S. C., & Shaw, D. R. (2003). Suburban voting in presidential elections. *Presidential Studies Quarterly*, *33*(1), 125–144.

Moos, M., Mendez, P., McGuire, L., Wyly, E., Kramer, A., Walter-Joseph, A., & Williamson, M. (2015). More continuity than change? Re-evaluating the contemporary socio-economic and housing characteristics of suburbs. *Canadian Journal of Urban Research*, *24*(2), 64–90.

Mozingo, L. A. (2011). *Pastoral capitalism: A history of suburban corporate landscapes*. Cambridge, MA: MIT Press.

Müller, J.-W. (2016). *What is populism?* Philadelphia, PA: University of Pennsylvania Press.

Murphy, A. K. (2007). The suburban ghetto: The legacy of Herbert Gans in understanding the experience of poverty in recently impoverished American suburbs. *City and Community*, *6*(1), 21–37.

Ontario. (2013). *Growth plan for the Greater Golden Horseshoe 2006* (office consolidation June 2013). Toronto: Ministry of Infrastructure & Queen's Printer for Ontario.

Park, R. E., Burgess, E. W., & McKenzie, R. D. (1925). *The city*. Chicago, IL: University of Chicago Press.

Phelps, N. A. (2015). *Sequel to suburbia: Glimpses of America's post-suburban future*. Cambridge, MA: MIT Press.

Phelps, N. A., Wood, A. M., & Valler, D. C. (2010). A post-modern world? An outline of a research agenda. *Environment and Planning A: Economy and Space*, *42*(2), 366–383.

Phelps, N. A., & Wu, F. (2011). Introduction: International perspectives on suburbanization. A post-suburban world? In N. A. Phelps & F. Wu (Eds.), *International perspectives on suburbanization: A post-suburban world?* (pp. 1–11). London: Palgrave Macmillan.

Pushkarev, B., & Zupan, J. (1977). *Public transportation and land use policy*. Bloomington, IN: Indiana University Press.

Rowe, P. G. (1991). *Making a middle landscape*. Cambridge, MA: MIT Press.

Ryan, S., & Frank, L. F. (2009). Pedestrian environments and transit ridership. *Journal of Public Transportation*, *12*(1), 39–57.

Saelens, B. E., & Handy, S. L. (2008). Built environment correlates of walking: A review. *Medicine and Science in Sports and Exercise*, *40*(7), S550–S566.

Scheer, B. C. (2010). *The evolution of urban form: Typology for planners and architects*. Chicago, IL: Planners Press.

Scott Thomas, G. (1998). *The United States of suburbia: How the suburbs took control of America and what they plan to do with it*. Amherst, NY: Prometheus.

Sheller, M., & Urry, J. (2006). *Mobile technologies of the city*. London: Routledge.

Short, J. R., Hanlon, B., & Vicino, T. J. (2007). The decline of inner suburbs: The new suburban gothic in the United States. *Geography Compass*, *1*(3), 641–656.

Southworth, M. (2005). Designing the walkable city. *Journal of Urban Planning and Development*, *131*(1), 246–257.

Southworth, M., & Ben-Joseph, E. (1995). Street standards and the shaping of suburbia. *Journal of the American Planning Association*, *61*(1), 65–81.

Southworth, M., & Owens, P. M. (1993). The evolving metropolis: Studies of community neighborhood, and street form at the urban edge. *Journal of the American Planning Association*, *59*(3), 271–287.

Spinney, J. E. L., Scott, D. M., & Newbold, K. B. (2009). Transport mobility benefits and quality of life: A time-use perspective of elderly Canadians. *Transport Policy*, *16*(1), 1–11.

Teaford, J. (1997). *Post-suburbia: Government and politics in the edge cities*. Baltimore, MD: Johns Hopkins University Press.

Teaford, J. (2011). Suburbia and post-suburbia: A brief history. In N. A. Phelps & F. Wu (Eds.), *International perspectives on suburbanization: A post-suburban world?* (pp. 15–34). London: Palgrave Macmillan.

Toronto Star. (2010). *Toronto Star*.

van Wee, M. (2002). Land use and transport: Research and policy challenges. Journal of Transport Geography, 10(4), 259-271.

Vernez Moudon, A., Lee, C., Cheadle, A. D., Garvin, C., Johnson, D. B., Schmid, T. L., & Weathers, R. D. (2006). Attributes of environments supporting walking. *American Journal of Health Promotion*, *21*(5), 448–459.

Waldie, D. J. (1996). *Holy land: A suburban memoir*. New York, NY: Norton.

Walks, R. A. (2004). Suburbanization, the vote, and changes in federal and provincial representation and influence between inner cities and suburbs in large Canadian urban regions, 1945–1999. *Urban Affairs Review*, *39*(4), 411–440.

Walks, R. A. (2006). The causes of city-suburban political polarization? A Canadian case study. *Annals of the Association of American Geographers*, *96*(2), 390–414.

Walks, R. A. (2014). Driving the vote? Automobility, ideology, and political partisanship. In R. A. Walks (Ed.), *The urban political economy and ecology of automobility: Driving cities, driving inequality, driving politics*

(199–220). London: Routledge.

Walks, A. (2015). Stopping the 'war on the car': Neoliberalism, Fordism, and the politics of automobility in Toronto. *Mobilities*, *10*(3), 402–422.

Walks, R. A., & Tanter, P. (2014). Driving mobility, slowing down the poor: Effective speed and unequal mobility. In R. A. Walks (Ed.), *The urban political economy and ecology of automobility: Driving cities, driving inequality, driving politics* (pp. 129–151). London: Routledge.

Weitz, J., & Crawford, T. (2012). Where the jobs are going: Job sprawl in U.S. metropolitan regions, 2001–2006. *Journal of the American Planning Association*, *78*(1), 53–69.

Williamson, T. (2008). Sprawl, spatial location, and politics: How ideological identification tracks the built environment. *American Politics Research*, *36*(6), 903–933.

Zhang, M. (2006). Travel choice with no alternative: Can land use reduce automobile dependence? *Journal of Planning Education and Research*, *25*(3), 311–326.

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Article

Automobile Commuting in Suburban High-Rise Condominium Apartments: Examining Transitions toward Suburban Sustainability in Toronto

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Abstract

While North American suburbs remain largely dispersed and auto-dependent, they are also increasingly heterogeneous. Although some suburbs have long been punctuated with high-rise developments, for instance rental apartments in the Canadian context, there are now a growing number of new high-rise condominium developments in suburban settings in both the US and Canada. While much is known about downtown high-rise condominium developments, there has of yet been little to no analysis of this trend in the suburbs. We offer such an analysis using Statistics Canada census data from 2016 in the Toronto metropolitan area. We focus on commuting patterns as an indicator of auto-dependence to test whether suburbs with larger shares of new high-rise condominium apartments (high-rise condo clusters) exhibit lower shares of auto commuting. The focus on auto-dependence is important because development and land use plans commonly use environmental concerns arising from heavy automobile use as a rationale for high-rise development. Our findings suggest that in Toronto suburban high-rise condo clusters offer a less auto-intensive way of living in the suburbs than traditionally has been the case in the suburban ownership market. However, this seems to be limited to particular demographic groups, such as smaller households; and suburban high-rise condos are not an evident sign of a broader transition toward suburban sustainability among the population as a whole in the Toronto case. The potential for transitions toward suburban sustainability could be enhanced with greater investments in transit infrastructure and building higher density mid-rise and ground-oriented dwellings that accommodate larger households still commonly found in low-density, auto-dependent suburbs.

Issue

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1. Introduction

In the downtowns of several major North American metropolitan areas, an urban renaissance by middle- and upper-class households has contributed to a proliferation of homeownership in the form of high-rise condominium apartments. However, in the context of dispersed, low-rise development, the suburban high-rise condominium, or condo, remains less common. Set against the backdrop of climate change, the suburban high-rise condo may contribute part of an answer to how suburbs, traditionally defined by low-density development and associated automobile dependency, could justify investments in public transit in-

frastructure and thus transition to less carbon-intensive travel modes.

Although suburbs are no longer understood as homogeneous entities (Forsyth, 2012; Keil, 2017; Moos & Walter-Joseph, 2017), North American suburbs still largely remain associated with ways of living (or what are now commonly referred to as "suburbanisms") that prioritize homeownership, the single-family home, and automobility that produce dispersed urban forms (Moos & Mendez, 2015; Walks, 2013). This dispersion and the logic of automobility have led to important sustainability challenges, particularly related to climate change. For instance, transportation accounts for approximately 24% of Canada's total carbon emissions or 173 megatons of CO_2 equivalent, with approximately half of these emissions being produced by personal cars and light trucks (Environment and Climate Change Canada, 2016). It follows that reducing automobile dependence provides an important opportunity for reducing carbon emissions, thus enhancing suburban sustainability.

It is well understood that broader societal arrangements structure daily life and thus play an important role in achieving more sustainable development (Bijker, Hughes, & Pinch, 2012; Rotmans, Kemp, & Van Asselt, 2001). In the case of suburbs, wide arterial roads, dispersed destinations, land use patterns, and poor-quality transit are some of the factors that often come together to produce the daily ways of living of suburbanites. To many scholars, the structures produced by the interactions of various specific factors create path dependency and lock-in patterns once they emerge (Hughes, 2012; Moos & Mendez, 2015; Rip & Kemp, 1998). Change to such patterns is generally not expected to take place quickly without significant disruption, yet transitions can also occur incrementally (Rotmans et al., 2001).

In the context of climate change, a growing number of planners, and plans, have attempted to change development patterns by nudging residents toward more sustainable ways of living. In planning for sustainability, the high-rise condo has become an important tool. Combined with planning strategies that encourage neighbourhood walkability and transit use, the high-rise condo holds the potential to disassociate homeownership from single-detached housing and encourage ways of living that reduce car use in favour of more sustainable modes of transportation (Jabareen, 2006; Ministry of Infrastructure, 2006; Skaburskis, 2006).

In this study, we analyse the extent to which suburban high-rise condominium living, as one particular type of a diverse range of suburban ways of living (Moos & Mendez, 2015), has facilitated transitions toward sustainability, as measured by reduced shares of automobile-based commuting in the context of Toronto, Canada. To the best of our knowledge, no studies have explicitly asked about the sustainability gains realized from high-rise suburban condo living, and the ways in which the suburban high-rise ownership market can be thought of as an actual sustainability transition in practice. Our ar-

ticle begins by discussing how the suburban high-rise condominium has become associated with sustainability transitions in planning and land development discourse. We then introduce select literature from the field of sustainability transition management as a lens through which to interpret our discussion and empirical results (Markard, Raven, & Truffer, 2012).

Empirically, we consider the case of Toronto, Canada, where suburban high-rise condominiums occupy a small but nonetheless growing proportion of new development, a departure from previous development patterns where single-detached dwellings prevailed, particularly in the ownership market (Canada Mortgage and Housing Corporation [CMHC], 2014). Rental apartments have punctuated the otherwise dispersed suburban landscapes of Canada's largest metropolitan areas since the late 1960s. In Toronto, in particular, high-rise rental buildings contribute an important component to the affordable rental stock (Hulchanski, 2007). Due in part to its lower income demographic, many residents of these areas rely on walking and/or are transit-dependent despite the at-times limited availability of transit services and car-oriented street designs (Hess & Farrow, 2011).

However, our focus here is on the newly built high-rise suburban condominium (ownership) market as it has not received prior attention in the scholarly literature. We use Statistics Canada census data from 2016, the most recent available, to examine automobile dependence in areas with high shares of high-rise condominium apartments. We refer to these as 'high-rise condo clusters'. We highlight the changes in local and provincial policies and planning that encouraged high-rise condo development in the suburbs. The article concludes by drawing lessons for on-going transitions toward more sustainable suburban development. While findings are specific to the Toronto case, we discuss the broader implications of the results for the ways in which sustainability transitions unfold in North American suburbs more generally.

2. Suburbs and Sustainability

2.1. High-Rise Developments and Sustainability

Transitions to more sustainable forms of living and development have been pursued by a number of organizations at different scales (United Nations, 1993). Early calls for sustainable development were generally vague, bringing together diverse considerations in order to allow variations based on local conditions and cultures (De Roo & Porter, 2007). The high-rise condominium and the focus on increasing development density has provided one local interpretation of the sustainable development agenda (Moos & Walter-Joseph, 2017; Quastel, Moos, & Lynch, 2012).

A focus on density and high-rise development in sustainability discourse is often justified by scholarship that links high rates of per capita petroleum use to low pop-

ulation densities (Newman & Kenworthy, 1999). This literature has developed into a succinct argument among planners and politicians for increasing density in order to reduce automobile use and lower carbon emissions. This discourse, what Quastel et al. (2012) critically call "sustainability-as-density", has morphed into a set of policies and arguments that have been used to rally a range of diverse interest groups to lobby for rezoning policies and secure tax breaks that have contributed to

high-rise development in major North American cities, including Toronto (Gunder, 2006; Lehrer, Keil, & Kipfer, 2010; Lehrer & Milgrom, 1996; Quastel et al., 2012; see Figure 1).

The high-rise condo as an investment vehicle has also been linked to gentrification in Toronto that has resulted in the displacement of lower-income earners and loss of employment lands (Lehrer & Wieditz, 2009a, 2009b). Yet, continued investment in high-rise devel-

Figure 1. High-rise apartments in Toronto's suburban municipalities.

opments are often justified by public officials and developers alike on the basis of needing greater density for sustainability related reasons. In other words, the "sustainability-as-density" argument is that there are environmental gains from dense development due to the relative autonomy of "walkable" neighbourhoods where residents are able to pursue their daily routines as pedestrians or by using public transit (Roseland & Connelly, 2005). This view prioritizes a highly-concentrated mix of land uses that is accessible to pedestrians and transit users without dispersed long-distance travel associated with low density forms of housing (Filion, 2001; Jenks, Burton, & Williams, 2005; Moos & Mendez, 2015; Quastel et al., 2012; Skaburskis, 2006). The argument assumes that market forces, and structural factors, would guide buyers to smaller dwellings in concentrated, high-value downtown locations in order to reduce commute costs (Skaburskis & Moos, 2008).

The suburban high-rise condominium follows from this "sustainability-as-density" argument. But contrary to the case of downtown condos, market forces and structural factors are assumed to pull potential home-owners away from high-value central locations to find lower priced units that still match their household profiles and preferences for homeownership, which they cannot afford downtown (Quastel et al., 2012; Skaburskis & Moos, 2008). This suggests that the growth of suburban high-rise condos is partly due to demographic changes that contribute to the growth of and demand for smaller households, as well as the increase in downtown housing costs that disperse some of these households to relatively lower priced suburban locales.

High-rise condos are thus most often located in the polycentric nodes of larger metropolitan areas where high land values merit the rise in prices that sustain the development of smaller residences (Filion, 2001; Moos & Mendez, 2015; Quastel et al., 2012; Skaburskis, 2006). But these are not always developed in concert with transit expansions and/or investments in neighbourhood walkability. Thus, the factors encouraging the marketplace for high-rise suburban condos such as downtown price appreciations, demographic transitions, and growing polycentricism, may only be coincidently related and not contribute to sustainability transitions in practice. In other words, it remains an open (and empirical) question as to whether suburban high-rise condo developments actually contribute to a sustainability transition, even though they are often purposely positioned as such in planning and development discourse (Quastel et al., 2012).

2.2. Sustainability Transition Management

The literature on sustainability transition management is useful for our purposes as it provides heuristic tools and typologies to understand change in socio-technical systems, or what are called "regimes", over time (Geels et al., 2016; Smith, Stirling, & Berkhout, 2005). Transition management is a cross-disciplinary field of policy-oriented research that examines the inducement and management of transitions to more sustainable social and economic organizations. As an aggregate outcome of various institutional practices, governance arrangements, infrastructure investments, and other social and economic factors (Keil, 2017), we can view suburbs as a socio-technical regime with potential to transition to greater sustainability but only under certain conditions.

The transition management literature views socio-technical regimes as a selection environment for societal change where decisions about what changes are adopted are guided by a web of institutions, rules, practices, and artefacts oriented towards some social function (Geels, 2002; Geels et al., 2016). These regimes are critical for "locking-in" a development trajectory (Rip & Kemp, 1998). In our case, the urban planning regime of "sustainability-as-density" can be seen to "lock-in" a particular land development approach as a result of building and zoning codes, construction technologies, and for-profit business models; whereas traditional low-density trajectories had been locked-in for several decades and continue to exhibit path dependency. Different regimes do not have to be mutually exclusive, although one will most likely be most dominant at any given time.

Change is understood as occurring unevenly at the intersection of forces operating at multiple scales: broad social trends operating at the "landscape" level, emergent technologies or practices providing a "niche" alternative that threatens to disrupt the status quo, and a "regime" that attempts to manage these pressures to maintain the status quo (Geels, 2002; Geels et al., 2016; Rip & Kemp, 1998; Rotmans et al., 2001). While the actors operating within each of these three levels will vary between regimes and the limits of the of each level are still under debate, these concepts have been useful for distinguishing actors and actor roles in various settings (Geels et al., 2016; Smith et al., 2005). Multiple transition pathways have been identified using this analysis, including processes that bring about dramatically new regimes, as well as those that preserve the status quo by articulating pressure in ways that isolate "transformations" to a limited number of changes and leave the incumbent regime for the most part intact (Smith et al., 2005).

While such analysis has often discounted the role of cities, focusing instead on national policy, cities have emerged as an important scale of interaction among different kinds of actors such as groups promoting change and the public (Guy, Marvin, Medd, & Moss, 2011; Hodson & Marvin, 2011). Cities are also the site where policy measures are tested and scaled up to mass social practices through (sub)urban processes of agglomeration and the interaction between economic actors. This is particularly relevant in regards the nexus of land use development and transportation, where interactions between the built-form and social practices, such as the transportation mode, are the primary subject of concern (Whitmarsh, 2012).

3. Data and Methods

Transition studies tend to use long-term qualitative analyses due to the length of time over which transitions take place (Geels et al., 2016). In this study we take a complimentary, quantitative approach and contend that this is useful as we are able to measure the goal of one particular sustainability transition (see also Quastel et al., 2012). We analyse the progress towards low-carbon suburban ways of living, measured by the dependency on the automobile for commuting purposes. We examine the transition to suburban high-rise condos at the nexus between land use and transportation regimes in Toronto, Canada. While focusing on automobile use, as measured by dominant commute mode, restricts the analysis of sustainability, the automobile continues to be an important source of carbon emissions and is viewed by planning practitioners and academics as a barrier to more sustainable urban living (Moos & Walter-Joseph, 2017; Newman & Kenworthy, 1999). Reductions in automobile commuting are thus an important indicator of sustainability.

To examine the extent of a transition toward reduced auto-dependency, we draw on 2016 Canadian census data to compare the characteristics of dissemination areas (DAs) that are dominated by newly built high-rise condominium buildings to the rest of the nearby suburbs, and to the City of Toronto (the core municipality in the Toronto census metropolitan area [CMA]). The data provide an overview of the characteristics of DAs where high-rise condos are most likely the dominant housing form (i.e., high-rise condo clusters). While ideally, we would have household level data, the publicly available data does not include specific location information at this scale. We were thus challenged to devise a method that examines suburban high-rise condo residents by focusing on small statistical areal units instead (i.e., DAs).

To define suburbs, we adopt a place-based definition that refers to the City of Toronto as the inner city and the other four regional municipalities in the CMA (Durham, Halton, Peel, York) as the suburbs (see Figure 2). This geographically approximates Moos and Mendez' (2015) definition of "traditional" suburban ways of living, defined using the prevalence of the single-family dwellings, levels of homeownership, and automobile dependence.

Although traditional suburban ways of living can also be found in the inner city and the 'old', post-World-War II suburbs built within the current limits of the City of Toronto, these characteristics are most common in the outer, newer suburbs, which, in the Toronto region, are contained in the four regional municipalities. It has only been since the 1990s that the outer suburbs have been developed with high-rise housing stock, aligning them exclusively with the era of condominium development, unlike inner city neighbourhoods (including the 'old' suburbs), which experienced both periods of high-rise rental apartment building as well as high-rise condominium development (Rosen & Walks, 2014). The focus on outer suburbs is similar to previous studies (cf. Grant, 2009;

Young, Wood, & Keil, 2011). The approach has the advantage of being consistent with data collected by Statistics Canada; and because it is familiar to planners and policy makers it can be operationalized in future survey research, cross-referenced, and replicated.

Using DA level data, the smallest spatial scale at which Statistics Canada makes data publicly available, we identify high-rise condo clusters in the Toronto CMA (Figure 2). For DAs to be considered part of a suburban high-rise condo cluster they needed to be located outside of the City of Toronto. In addition, at least 60% or more of the DAs housing stock had to be constructed after 1990, since it is known that suburban condo construction in Toronto began to accelerate in the mid- to late-1990s (Rosen & Walks, 2014). Finally, at least 60% of the DAs housing stock had to consist of high-rise apartment dwellings, which Statistics Canada defines as dwellings in buildings with five or more storeys.

In our analysis, we compare the share of commuters travelling by car (as driver or passenger) in clusters to the rest of the suburban municipality within which the cluster is located. To account for other variables that influence commute mode, in addition to the high-rise setting, we build a multivariate linear regression model that predicts commute mode share at the DA level as a function of the DA's demographic and built form characteristics. While there are a large number of factors shaping commuting mode at the individual and household levels (Schwanen & Mokhtarian, 2005), we select four variables that relate most directly to socio-economic status and household composition and that are available and meaningful at the DA level. The variables we found most strongly related to commute mode at the DA level are home ownership, immigration status, household type, and household income.

As established in prior research (see, for instance, Mendez, Moos, & Osolen, 2015), areas with larger shares of homeowners and higher income earners are expected to have a higher share of car commuters as car ownership increases with income and homeownership remains associated with lower density developments that accommodate cars more readily. Immigrants have tended to be less reliant on cars for their commutes, partly as an outcome of cultural factors. Larger households with children have also been shown to be more reliant on cars than smaller, non-family households (Statistics Canada defines non-family households as those containing one person or several unrelated, uncoupled individuals).

Because the variables of interest interact in multiple ways, we use a principal component analysis to generate four new variables consisting of component scores (not shown for brevity). The four component variables capture areas with high-income owners, immigrants, high-income renters, and non-family household owners. These variables do not on their own capture all the reasons how and why people make location decisions, for instance the location of jobs, affordability constraints, or ethnic composition. Although we draw on in-
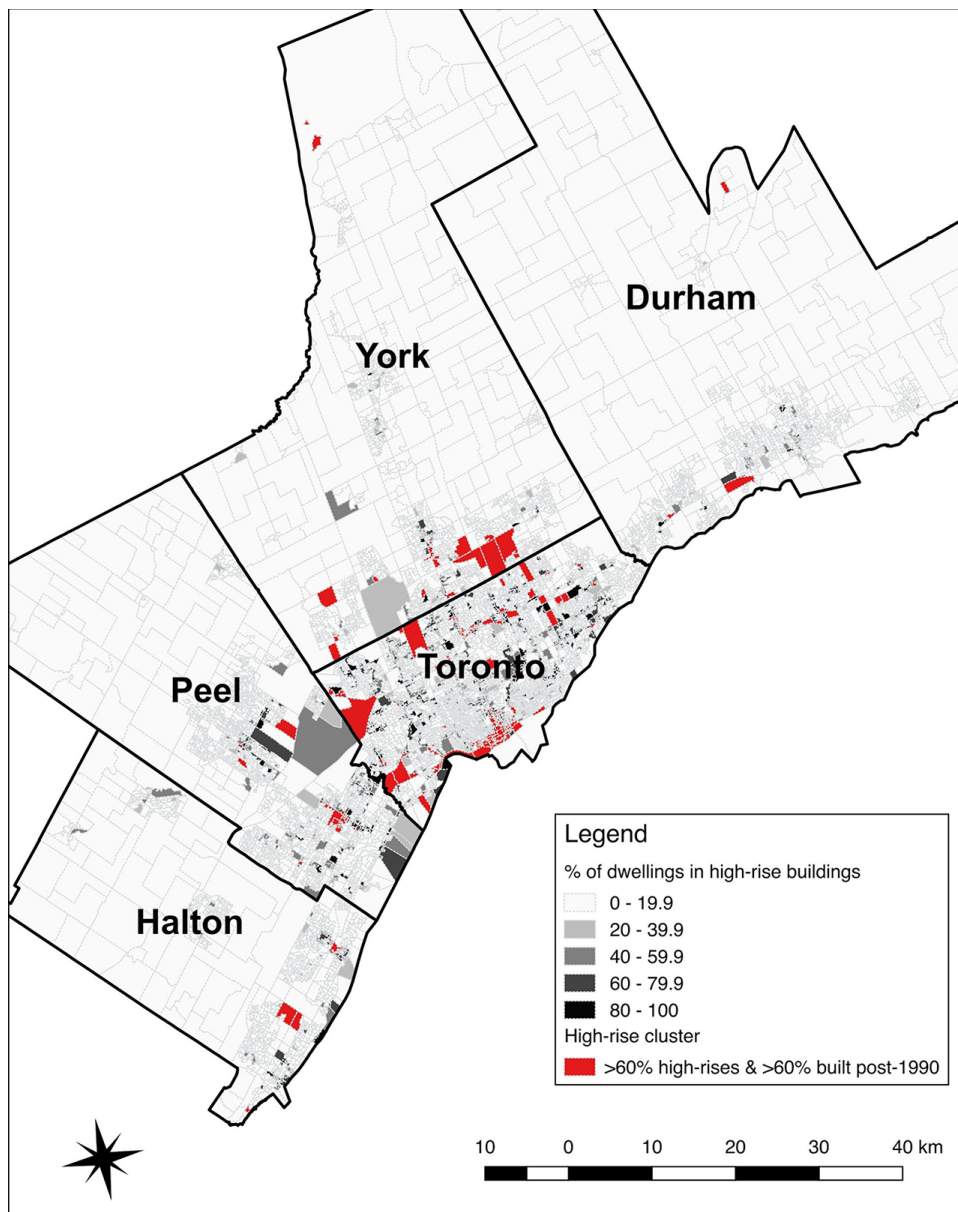
Figure 2. Toronto high-rises. Suburban high-rise clusters are the areas outside of the City of Toronto boundary with 60% to 100% of the housing stock high-rises and >60% constructed after 1990. Source: authors' calculations using 2016 Statistics Canada DA data.

sights from a prior survey in our discussion, we are still not able to get directly at the motivation of individuals living within the clusters or draw conclusions about individual commutes as our analysis is at the DA level. People may desire less carbon intensive commute modes but are not able to realize these due to the lack of transit infrastructure, for instance, in locations that are affordable to them (Quastel et al., 2012). We follow the perspective that households make location and commute decisions within the confines of multiple structural constraints, which can include the built form, regulatory, and social structures (Whitmarsh, 2012).

Our analysis sheds light on whether otherwise similar DAs are more or less auto-dependent based on whether they are in high-rise suburban condo clusters versus the rest of the suburban municipality. This geographically focused analysis, thus, provides a narrow window onto what is otherwise a large-scale change in social practice. We suggest that because the suburban high-rise condo is part of a larger development regime that structures households' behaviours in new ways, it is necessary to empirically assess its claims: we thus hope to test whether this regime lives up to its often publicly touted promise to help society transition toward lower carbon intensive commute modes.

4. The Toronto Context

The Toronto CMA, which is a Statistics Canada definition of the metropolitan area based on commuter flows,

consists of five regional municipalities. Durham, Halton, Peel, and York are two-tiered regional municipalities that contain several local municipal governments, while the City of Toronto is a single-tier municipality. The Toronto CMA has a population of 6.4 million as per 2016 census data, 58% of which resides in the four municipalities outside the City of Toronto (see Table 1). Automobile commutes are least common in the City of Toronto at 51% but remain the dominant mode in all four suburban municipalities.

The City of Toronto, which has its downtown located near Lake Ontario, expands outward in a semi-radial fashion. While geographically suburban in relation to the City of Toronto, and often referred to in these terms in political and popular discourse, the four regional municipalities are also characterized by town centres and numerous mid- and high-rise developments amongst sprawling single-detached housing developments (CMHC, 2014).

The resulting mixture of dispersion and concentration is characteristic of Canadian suburbs (Charney, 2005; Moos & Walter-Joseph, 2017). As early as the 1960s, provincial policies have promoted the high rise-built form in the suburbs, although these tended to be rental buildings. For example, in Toronto, the then Metropolitan Toronto Planning Board encouraged high-rise rental apartment buildings by enforcing minimum density requirements in order to reduce infrastructure costs and address housing shortages (Filion, 2012; White, 2007). With the dismissal of the Metro Toronto Planning Board in the 1980s, the suburban high-rise diminished in importance, replaced by largely sprawling development spilling out into surrounding municipalities (Sewell, 2009; White, 2007). When the suburban high-rise re-emerged in the 1990s, however, it was no longer monetized through rental stock, but sold as condominiums and marketed as affordable and amenity-rich for a new class of homebuyers (Lehrer et al., 2010; Rosen & Walks, 2014).

By 2006, with the introduction of the province's *Places to Grow Act*, select suburban municipalities took on greater importance when designated as urban growth centres (Ministry of Infrastructure, 2006). In these centres, local policies describe walkable neighbourhoods and dense mix of uses that reflect "sustainability-as-density" planning strategies. For instance, in York Region, the Town of Richmond Hill Official Plan promotes the de-

velopment of "a compact, mixed-use urban centre supported by high quality public realm, walkable streets, and transit-oriented development" (Town of Richmond Hill, 2010, p. 4). These policies require built up areas to accommodate a minimum of 40% of all residential development (York Region, 2010, section 1.2) and carry directives to focus major office, institutional and entertainment facilities within mixed-use corridors and regional centres (York Region, 2010, section 4.2).

Similar strategies laid out for Markham Centre, also located in York Region, aim to "integrate a balance and diversity of residential, retail, office and public uses, at transit supportive densities within a Regional Rapid Transit Corridor" (City of Markham, 2013, section 9.12.2). The co-location of high-density residential with jobs and amenities have provided the value increases that have improved the "neighbourhood quality" enough to maintain prices while decreasing unit sizes. As a result, Markham centre is targeted to provide 20,000 high-rise condominium and townhouse units, with capacity for 41,000 residents and 39,000 jobs (City of Markham, 2013, section 9.12.2).

These policies alone are not responsible for the emergence of suburban high-rise condos; and development contributing to low-density suburban ways of living continue simultaneously. For instance, local strategies like the 1994 Markham Centre Community Improvement Plan helped set the stage for subsequent clustering policies throughout the suburbs (White, 2007). Yet, previous investigation of suburban developments in Richmond Hill and Markham finds that suburban development continues to adapt "the built environment to the space requirements of the automobile and to car-induced reduction of accessibility gradients" (Filion, 2012, p. 116) showing consistent increases in the ratio of parking area to building footprints over time, despite the prioritization of density and walkability.

Among the suburban municipalities, the share of residential dwellings that are high-rise units is highest in Peel Region (19%), compared to 44% in the City of Toronto (Table 1). As expected, in the high-rise condo clusters, the share of high-rise units is substantially higher, ranging from 78% in Durham Region to 92% in Peel Region. The high share of high-rises in Peel Region is attributable in part to the development of Mississauga town centre, an expanding suburban office and residential node.

Table 1. Characteristics of the Five Municipalities in the Toronto CMA. Source: authors' calculations using 2016 Statistics Canada census data.

Municipality	2016 Population	2016 Dwelling Count	% of Dwellings in High-Rises		% Automobile Commutes
			Overall	Condo Clusters	
Durham Region	645,862	227,995	7%	78%	84%
Halton Region	548,435	193,010	11%	70%	84%
Peel Region	1,381,739	430,155	19%	92%	81%
York Region	1,109,909	1,112,645	10%	80%	84%
City of Toronto	2,731,571	357,135	44%	92%	51%

The demand for suburban high-rise development across all suburban municipalities may be attributed to new markets for residential development that tie the suburban fringe to development patterns normally associated with downtowns. Among consumers, the demand for small format residences has strengthened in part as a result of shrinking household sizes, persistently low fertility rates and expected long-term rises in Ontario energy rates (Ministry of Finance, 2013). At the same time, international consumers have been attracted to the strength and stability of Canadian real estate markets (PwC & Urban Land Institute, 2014), and developers continue to leverage the high-rise building form for profit-related motives. The stylistic connections between suburban and inner-city high-rise development forms in Toronto, reflect the dynamics of growing socio-economic polarization found in Canadian metropolitan regions, where growth has been pushed to the gentrifying downtown core and the outer suburban edge, while the inner, older, suburbs decline (Hulchanski, 2007; Moos & Walter-Joseph, 2017).

The emergence of the suburban condo, therefore, appears more connected in time and style to the condo development of Toronto's downtown than it does to former suburban (rental) high-rise developments. This is an example of a transition being introduced by developers into an incumbent planning regime that has been receptive to the concept through its embrace and promotion of "sustainability-as-density". At the same time, investments in public transit and walking/cycling infrastructure remains limited in the suburban context despite increasing densities. As a result, it remains quite difficult not to drive even in high-rise condo clusters, as they remain surrounded by low-density suburban environments.

5. Commute Modes in High-Rise Condo Clusters

To assess the neighbourhood scale transitions to suburban high-rise condo living, we analyse DAs where we find a relatively large share of suburban high-rises developed since the 1990s, a period known for high levels of condo development (Rosen & Walks, 2014). These condominium developments have mostly been built adjacent to or involved redevelopment in neighbourhoods previously dominated by single-detached housing leading to stark demographic changes.

An earlier analysis, not shown for brevity, showed that over time the clusters saw increases in non-family households, those in managerial occupations, and those with university degrees. Clusters also saw a slight decrease in homeownership rates, which is perhaps not too surprising given that high-rise apartments condos are more easily and commonly rented than traditional single-detached dwellings in the suburbs. Unfortunately, we are not able to directly distinguish between those renting versus owning a high-rise condo unit due to data limitations; however, we are able to account for the share of renters at the DA level in our regression analysis.

The DAs in high-rise condo clusters show lower shares of automobile-based commutes than the rest of the DAs in their respective municipalities (see Table 2). Although commuting by automobile still constitutes between 74% and 80% of commutes in suburban high-rise condo clusters, the shares are between 4% and 10% lower than in the remainder of the suburban municipalities.

Overall, auto commutes are lowest in the City of Toronto, where transit use, cycling and walking are more prevalent. The relatively higher reliance on the automobile in high-rise suburbs compared to the City of Toronto may be partially explained by the lack of integration between land-uses and public transport—the public transit system does have suburban coverage in the Toronto CMA but remains focused and most frequent in the City, particularly the downtown. Despite limited transit networks, the decreases in automobile commutes are for the most part absorbed by increases in public transit usage in suburban high-rise condo clusters (see Table 2). Cycling and walking remain relatively small shares of overall commuting modes; although notable is the 23% share of walking in high-rise condo clusters in the City of Toronto. This cluster (not included as one of our suburban cluster, of course) encompasses some of the highest density areas in the City adjacent and within the central business district.

5.1. The Determinants of Automobile Commuting

We develop five regression models to demonstrate the determinants of automobile commuting, in particular the influence of high-rise condo clusters. Table 3 shows a summary of the variables used in the regression analysis.

Table 2. Commute mode in new high-rise condo clusters vs. rest of the municipality. Source: authors' calculations using 2016 Statistics Canada DA data.

Municipality	Automobile		Public Transit		Cycling		Walking	
	Cluster	*Rest*	*Cluster*	*Rest*	*Cluster*	*Rest*	*Cluster*	*Rest*
Durham Region	75%	85%	21%	11%	0.0%	0.3%	3%	3%
Halton Region	80%	84%	14%	11%	0.5%	0.6%	3%	3%
Peel Region	74%	81%	21%	15%	0.1%	0.3%	4%	2%
York Region	78%	84%	17%	13%	0.3%	0.3%	4%	2%
City of Toronto	38%	52%	35%	37%	2.6%	2.7%	23%	6%

Table 3. Variable summary for DAs in suburban municipalities. Source: authors' calculations using 2016 Statistics Canada DA data.

Variable	Minimum	Maximum	Mean	Standard Deviation
Population density (people per square km)	5.8	482,273	8,124	14,160
Dwellings in high-rises	0%	100%	28%	39%
Built after 1990	0%	100%	39%	38%
Owners	0%	100%	67%	30%
Immigrants	0%	99%	44%	18%
Non-family	0%	93%	28%	19%
Household income	$12,432	$598,016	$85,565	$36,964

Note: Suburban municipalities include Durham, Halton, Peel, and York.

It is expected that by virtue of their higher densities, high-rise condo clusters would have lower automobile-based commutes. However, whether density increases translate into gains in public transit use, cycling, or walking depends on several other factors aside from density alone, not least the availability and frequency of public transit as well as the location of jobs. For instance, 55%, 49%, 63%, 81%, and 53% of commuters work in the same municipality as their place of residence in Durham, Halton, Peel, Toronto, and York respectively.

Thus, commutes are most localized in the City of Toronto, which facilitates lower automobile use since shorter commutes are more likely to be made using modes other than the automobile (Mendez et al., 2015). We use dummy variables in the regression to account for differences in job availability among the municipalities; a variable which also captures other municipality-specific factors impacting commute mode shares. Importantly, we do not include data for the City of Toronto at all in the regression analysis since we are interested in how high-rise living in the suburbs changes commute mode shares in comparison to the rest of the suburbs.

Our first regression model shown in Table 4 includes the dummy variables for three suburban municipalities, using Durham as the base. As expected, density correlates positively with lower automobile use; and areas with high-income owners have higher shares of automobile commutes, whereas areas with higher shares of immigrants, high-income renters, and non-family owners have lower shares of automobile commutes (these are our composite variables generated using the aforementioned principal component analysis). The difference between high-income renters and owners may in part reveal underlying age differences, with younger persons more likely to rent and less likely to use automobiles compared to older adults.

The second regression shown in Table 4 includes the two variables used to construct the cluster dummy variable as well as the variables differentiating the suburban municipalities and the demographic factors. In this case, the high-rise variable captures the density dimension, showing a negative association with automobile-based commutes. Areas with a larger share of dwellings built af-

ter the 1990s are associated with higher automobile use, which is not unexpected given the auto-oriented land use patterns associated with newer suburban developments (Moos & Mendez, 2015).

The third regression shown in Table 4 includes the dummy variable identifying the suburban high-rise condo clusters. It shows a negative association with automobile-base commuting. The fourth regression model also adds the demographic variables. Interestingly, once the demographic variables are included, the effect of high-rise cluster living is no longer statistically significant. In other words, high-rise condo clusters appear to be associated with lower automobile-based commuting patterns because of their higher share of immigrants, high-income renters, and non-family owners as compared to the rest of the suburbs. The fifth regression puts all the variables together and confirms that effects of density hold even when demography is included in the model but there is no additional sustainability gain from high-rise condo cluster living.

Although severely limited by its small sample size (N = 62) and geographic coverage, an earlier 2012 survey of high-rise condo residents in Markham and Richmond Hill, in York Region, had quite similar findings to our quantitative analysis here (Yan, 2016). The survey included a similar share of non-family households, owners, and immigrants as found in high-rise clusters here using the 2016 data.

In the survey data, almost 45% of respondents reported living alone and only 20% reported living with at least one child under 18 years old. In fact, many participants did not consider high-rise condos a suitable dwelling for raising children, with 36% of participants identifying having children as a potential reason for moving out of their current high-rise dwellings in the future. This at least partly supports the view that the high-rise condo market is fuelled by the increase in empty nesters and young professionals (Fincher, 2007; Lasner, 2012; Lehrer et al., 2010; Rosen & Walks, 2014). At least for younger populations, the survey found, the high-rise condo appears to be a temporary housing arrangement, also consistent with findings from Skaburskis' (2006) analysis.

Table 4. Automobile commuting in suburban municipalities as a function of built form and demographic characteristics. Source: authors' calculations using 2016 Statistics Canada DA data.

Variable	Regression 1		Regression 2		Regression 3		Regression 4		Regression 5	
	Coef.	P-Value	Coef.	P-Value	Coef.	P-Value	Coef.	P-Value	Coef.	P-Value
Population density (1,000 people per sq. km)	−0.002	***							−0.002	***
High-rises			−0.028	***					−0.015	
Built after 1990			0.034	***					0.034	***
Suburban high-rise condo cluster					−0.077	***	0.019		0.015	
High-income owners	0.029	***	0.025	***			0.031	***	0.025	***
Immigrants	−0.019	***	−0.027	***			−0.022	***	−0.024	***
High-income renters	−0.056	***	−0.057	***			−0.057	***	−0.057	***
Non-family owners	−0.008	**	−0.004				−0.007	**	−0.007	*
York Region	0.028	***	0.036	***	−0.010	**	0.030	***	0.034	***
Peel Region	0.024	***	0.031	***	−0.034	***	0.025	***	0.031	***
Halton Region	0.013	***	0.014	***	−0.006		0.012	***	0.015	***
Constant	0.795	***	0.774	***	0.848	***	0.786	***	0.781	***
R-squared	0.328		0.341		0.035		0.322		0.348	
N-Cases	4,561		4,561		4,584		4,561		4,561	

Note: Suburban municipalities include Durham, Halton, Peel, and York. Durham is the base in the regression.

The share of automobile commuters among high-rise condo residents in the survey (72%) is similar but somewhat lower than findings from the census analysis (75% in the York region clusters where Markham and Richmond Hill are located). The survey findings were highly correlated with age. While automobile use was prevalent among all age groups, no respondents over the age of 40 reported commuting to work by any means other than automobile. Among those aged 20 to 39, 27% reported public transit as a primary mode of transport and 23% reported taking it to work. Other modes such as walking and cycling or even alternative ways of accessing a car, such as through car sharing, were reported by no more than two respondents (similar as in the census data).

6. Concluding Discussion

Part of the rationale given by planners and developers for prioritizing the high-rise building type in development and planning discourse is the effects it is hoped to have on automobile usage and sustainability in an era of looming climate change (Quastel et al., 2012). Some sustainability gains may be directly tied to the built form in terms of land-use efficiency/unit and energy usage;

however, even those gains are partly subject to the capacity of the suburban high-rise condo to reduce automobile dependency. We have presented evidence from the Toronto case that the suburban high-rise there has contributed to a reduction in automobile dependency amongst suburban high-rise condo residents.

Yet suburban high-rise form in the Toronto region does not seem to have played a particularly large role in this reduction, rather high-rise condos seem to be catering to an emergent market niche that is more likely than other suburban residents to commute by transit. A 2012 survey suggests this market is composed primarily of non-family households, including largely empty-nesters and young professionals who seek affordable homeownership; and who view condo living as a stage towards ownership of a more traditional single-family dwelling (Yan, 2016). This corroborates the literature on the high-rise condo in general which describes this "boom" as a result of the growth of childless or single-child households of young professionals seeking more-affordable housing both in urban and suburban contexts (Lasner, 2012; Lehrer et al., 2010).

It is thus difficult to judge, at this stage, whether we are seeing a meaningful transition to sustainability in

the Toronto case. Pineda and Jorgensen (2016) note that transitions are never complete, and we may look back to understand that we have concluded a transition, but we are, in a sense, always in the middle. To this point our study suggests we have seen a transformation of an existing regime as directed by the regime itself (Smith et al., 2005). In so far as the planning regime has been able to channel the pressures faced by the system into a coordinated system that acknowledges new niches while maintaining old structures, the regime has effectively coordinated these various pressures.

This transformation can be recognized as much for what has changed as what has not. Existing systems of dispersed suburbanisms have been left nearly unchallenged. In his analysis of suburban development patterns over time, Filion (2012) has demonstrated that despite increasing density, there remains a commitment to automobility that demands wide spaces for cars that necessarily undermine walkability in North American suburbs in general. A complete transition could be expected to entail a more conflict-ridden process due to the contradictions between dispersed suburbanism and regimes associated with "sustainability-by-density". This conflict is epitomized by the rhetoric bound up in the discourse over the "war on the car" (Walks, 2015). As added density push roads to full capacity, they cease to be viewed as non-rivalrous infrastructure, and become seen as rivalrous and zero-sum. Any development that adds to this concentration as opposed to dispersal further tests the political schism between constituencies (Filion, 2012, 2018).

While a regime transformation may be taking place in regard to building and zoning, residents remain largely tied to old commute patterns. Even if people choose not to drive it remains quite difficult, time consuming, and in some cases even unsafe to do so in most suburban environments. There are also always multiple constraints acting on households' mode and housing decisions ranging from household level to broader structural forces. In large part this demonstrates the critical role the public plays in the selection environment for transit as well as the complexity of daily living (Whitmarsh, 2012). As Brugmann (2009) describes, the morning rush might push high-rise condo owners across the paths of the ground floor business owners, but the increasing specialization of the work force and the speed at which people move between jobs and contracts, means that there are few opportunities for people to integrate workplace and household, making the logic of mixed-use a theoretical rather than a real-life efficiency. Mixed-use developments and walkable areas also come with price premiums that not all households will be able to afford (Moos, Vinodrai, Revington, & Seasons, 2018; Quastel et al., 2012).

Although suburban high-rise condo clusters have lower automobile commutes than surrounding suburbs, they are still predominantly car oriented in the Toronto case. This is may be the result of a development regime that has not integrated alternative transportation networks across regions or with large employers or employment districts. However, strategies to improve this integration have begun. For instance, today, Toronto's suburban municipalities have made considerable effort toward expanding the volume and reliability of transit options, through the development of a bus rapid transit system along the core spines of the region. York region has also gained a subway connection to the Toronto Transit Commission's main subway line that now connects to the York region bus rapid transit system. Given the integration of transportation and land-use regimes described here, re-evaluation of this study in the future may see further decreases in automobile-based commutes in these specific suburban high-rise condo clusters.

We conclude by reiterating that the present state of a sustainability transition in Toronto and elsewhere is always also a commercial transition—it is the profitability of investment in real estate that is sold to the growing market niche of non-family households whom may be priced out of the downtown market that the suburban condo captures. This is not unique to suburbs, however; it is also the case with high-rise condo development in the inner city. Regardless, if transitions towards more sustainable ways of living are to include a broader set of households, it must recognize the importance of providing a novel development regime that accommodates a broader demographic segment, including larger households with children. In this vein, recent planning discourse has emphasized the importance of providing ground-oriented yet higher-density housing near transit and cycling/walking infrastructure. Future research and planning practice ought to look beyond the narrow market segment the high-rise condo currently serves if planning and urban development are to be meaningful tools to accelerate sustainability transitions.

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Conflict of Interests

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References

Bijker, W. E., Hughes, T. P., & Pinch, T. (Eds.). (2012). *The social construction of technological systems: New directions in the sociology and history of technology*. Cambridge, MA: MIT Press.

Brugmann, J. (2009). *Welcome to the urban revolution: How cities are changing the world*. New York, NY: Bloomsbury Press.

Canada Mortgage and Housing Corporation. (2014). *Housing now: Greater Toronto area*. Toronto: Canada Mortgage and Housing Corporation.

Charney, I. (2005). Re-examining suburban dispersal: Evidence from suburban Toronto. *Journal of Urban Affairs*, *27*(5), 467–484.

City of Markham. (2013). *Markham official plan*. Markham: City of Markham.

De Roo, G., & Porter, G. (Eds.). (2007). *Fuzzy planning: The role of actors in a fuzzy governance environment*. Hampshire: Ashgate Publishing, Ltd.

Environment and Climate Change Canada. (2016). Greenhouse gas emissions by economic sector. *Environment and Climate Change Canada*. Retrieved from www.ec.gc.ca/indicateurs-indicators/default. asp?lang=en&n=F60DB708-1

Filion, P. (2001). Suburban mixed-use centres and urban dispersion: What difference do they make? *Environment and Planning A*, *33*, 141–160.

Filion, P. (2012). Evolving suburban form: Dispersion or recentralization? *Urban Morphology*, *16*(2), 101–119.

Filion, P. (2018). Enduring features of the North American suburb: Built form, automobile orientation, suburban culture and political mobilization. *Urban Planning*, *3*(4), 4–14.

Fincher, R. (2007). Is high-rise housing innovative? Developers' contradictory narratives of high-rise housing in Melbourne. *Urban Studies*, *44*(3), 631–649.

Forsyth, A. (2012). Defining suburbs. *Journal of Planning Literature*, *27*(3), 270–281.

Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy*, *31*, 1257–1274.

Geels, F. W., Kern, F., Fuchs, G., Hinderer, N., Kungl, G., Mylan, J., . . . Wasserman, S. (2016). The enactment of socio-technical transition pathways: A reformulated typology and a comparative multi-level analysis of the German and UK low-carbon electricity transitions (1990–2014). *Research Policy*, *45*, 896–913.

Grant, J. L. (2009). Theory and practice in planning the suburbs: Challenges to implementing new urbanism, smart growth, and sustainability principles. *Planning Theory & Practice*, *10*(1), 11–33.

Gunder, M. (2006). Sustainability: Planning's saving grace or road to perdition? *Journal of Planning Education and Research*, *26*, 208–221.

Guy, S., Marvin, S., Medd, W., & T. Moss. (Eds.). (2011). *Shaping urban infrastructures: Intermediaries and the governance of socio-technical networks*. London: Earthscan.

Hess, P., & Farrow, J. (2011). *Walkability in Toronto's high-rise neighbourhoods*. Toronto: Cities Centre, University of Toronto.

Hodson, M., & Marvin, S. (2011). Can cities shape socio-technical transitions and how would we know if they were? In H. V. Bulkeley, V. Castan Broto, M. Hodson, & S. Marvin (Eds.), *Cities and low carbon transitions* (pp. 54–70). London: Routledge.

Hughes, T. P. (2012). The evolution of large technological systems. In W. Bijker, T. Hughes, & T. Pinch (Eds.), *The social construction of technological systems: New directions in the sociology and history of technology* (pp. 51–82). Cambridge: MIT Press.

Hulchanski, D. (2007). *The three cities within Toronto: Income polarization among Toronto's neighbourhoods, 1970–2005*. Toronto: Cities Centre Press.

Jabareen, Y. (2006). Sustainable urban forms: Their typologies, models and concepts. *Journal of Planning Education and Research*, *6*, 38–52.

Jenks, M., Burton, E., & Williams, K. (Eds.). (2005). *The compact city: A sustainable urban form?* Abingdon-on-Thames: Taylor & Francis.

Keil, R. (2017). *Suburban planet: Making the world urban from the outside in*. Cambridge: Polity Press.

Lasner, M. G. (2012). *High life: Condo living in the suburban century*. New Haven: Yale University Press.

Lehrer, U., Keil, R., & Kipfer, S. (2010). Reurbanization in Toronto: Condominium boom and social housing revitalization. *DISP: The Planning Review*, *180*, 81–90.

Lehrer, U., & Milgrom, R. (1996). New (sub)urbanism: Countersprawl or repackaging the product. *Capitalism Nature Socialism*, *7*(2), 49–64.

Lehrer, U., & Wieditz, T. (2009a). Gentrification and the loss of employment lands: Toronto's studio district. *Critical Planning*, *16*, 138–160.

Lehrer, U., & Wieditz, T. (2009b). Condominium development and gentrification: The relationship between policies, building activities and socio-economic development in Toronto. *Canadian Journal of Urban Research*, *18*(1), 140–161.

Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, *41*, 955–967.

Mendez, P., Moos, M., & Osolen, R. (2015). Driving the commute. In A. Walks (Ed.), *The urban political economy and ecology of automobility: Driving cities, driving inequality, driving politics* (pp. 103–128). New York, NY: Routledge.

Ministry of Finance. (2013). *Ontario population projections update: 2012–2036*. Toronto: Ministry of Finance.

Ministry of Infrastructure. (2006). *Growth plan for the greater Golden Horseshoe 2006*. Toronto: Ministry of Infrastructure.

Moos, M., & Mendez, P. (2015). Suburban ways of living and the geography of income: How homeownership, single-family dwellings and automobile use define the metropolitan social space. *Urban Studies*, *52*(10), 1864–1882.

Moos, M., & Walter-Joseph, R. (Eds.). (2017). *Still detached and subdivided: Suburban ways of living in 21st century North America*. Berlin: Jovis.

Moos, M., Vinodrai, T., Revington, N., & Seasons, M. (2018). Planning for mixed use: Affordable for whom? *Journal of the American Planning Association*, *84*(1), 7–20.

Newman, P., & Kenworthy, J. R. (1999). *Sustainability and cities: Overcoming automobile dependence*. Washington, DC: Island Press.

Pineda, A. F. V., & Jorgensen, U. (2016). Creating Copenhagen's metro: On the role of protected spaces in arenas of development. *Environmental Innovation and Societal Transitions*, *18*, 201–214.

PwC & Urban Land Institute. (2014). *Emerging trends in real estate 2014*. Washington, DC: PwC & Urban Land Institute.

Quastel, N., Moos, M., & Lynch, N. (2012). Sustainability-as-density and the return of the social: The case of Vancouver, British Columbia. *Urban Geography*, *33*, 1055–1084.

Rip, A., & Kemp, R. (1998). Technological change. In S. Rayner & E. L. Malone (Eds.), *Human choice and climate change* (vol. 2, pp. 327–399). Columbus, OH: Battelle Press.

Roseland, M., & Connelly, S. (Eds.). (2005). *Toward sustainable communities' resources for citizens and their governments*. Gabriola Island: New Society.

Rosen, G., & Walks, A. (2014). Castles in Toronto's sky: Condo-ism as urban transformation. *Journal of Urban Affairs*, *37*(3), 289–310.

Rotmans, J., Kemp, R., & Van Asselt, M. (2001). More evolution than revolution: Transition management in public policy. *The Journal of Futures Studies, Strategic Thinking and Policy*, *3*(1), 15–31.

Schwanen, T., & Mokhtarian, P. L. (2005). What affects commute mode choice: Neighborhood physical structure or preferences toward neighborhoods? *Journal of Transport Geography*, *13*(1), 83–99.

Sewell, J. (2009). *The shape of the suburbs: Understanding Toronto's sprawl*. Toronto: University of Toronto Press.

Skaburskis, A. (2006). New urbanism and sprawl: A Toronto case study. *Journal of Planning Education and Research*, *25*(3), 233–248.

Skaburskis, A., & Moos, M. (2008). The redistribution of residential property values in Montreal, Toronto, and Vancouver: Examining neoclassical and Marxist views on changing investment patterns. *Environment and Planning A*, *40*, 905–927.

Smith, A., Stirling, A., & Berkhout, F. (2005). The governance of sustainable socio-technical transitions. *Research Policy*, *34*, 1491–1510.

Town of Richmond Hill. (2010). *Richmond Hill official plan*. Richmond Hill: Town of Richmond Hill.

United Nations. (1993). *Earth summit agenda 21: The UN programme of action from Rio*. New York, NY: United Nations.

Walks, A. (2013). Suburbanism as a way of life, slight return. *Urban Studies*, *50*, 1471–1488.

Walks, A. (2015). Stopping the 'war on the car': Neoliberalism, Fordism, and the politics of automobility in Toronto. *Mobilities*, *10*(3), 402–422.

White, R. (2007). *The Growth Plan for the greater Golden Horseshoe in historical perspective*. Toronto: Neptis Foundation. Retrieved from www.neptis.org/sites/default/files/historical_commentary/historical comm_web_200711291.pdf

Whitmarsh, L. (2012). How useful is the multi-level perspective for transport and sustainability research? *Journal of Transport Geography*, *24*, 483–487.

Yan, C. (2016). *Condos in the suburb: What are the drivers behind the decision to move into suburban condominiums?* (Master's thesis). University of Waterloo, Canada.

York Region. (2010). *York Region official plan 2010*. York Region: The Regional Municipality of York.

Young, D., Wood, P., & Keil, R. (Eds.). (2011). *In-between infrastructure: Urban connectivity in an age of vulnerability*. Kelowna: Praxis (e)Press.

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Article

'Social Mix' as 'Sustainability Fix'? Exploring Social Sustainability in the French Suburbs

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Abstract

The French suburbs, or *banlieues*, have long been associated with marginalization and peripheralization, characterized by unemployment, a high proportion of ethnic minority populations and low education attainment levels. Since 2000, the 'crisis' of the *banlieue* has been addressed through a policy of 'social mixing' which aims to promote mixed communities in certain neighbourhoods, to dilute the 'problematic elements' of the suburbs. This 'social sustainability fix' however has had mixed results. Questions can be raised over whether a policy based on increasing a neighbourhood's social mix is an appropriate sustainability fix for the suburbs, and whether it has actually resulted in the outcomes that were intended. Rather than encouraging social integration, it is argued here that the policy of social mixing reinforces segregation and has done little to tackle inequalities and social exclusion. We suggest that there are alternative solutions to the challenges of fostering social sustainability in the suburbs, which could be implemented in partnership with citizens and neighbourhood-based groups (*associations*) that would be more effective in addressing social sustainability solutions in the future.

Issue

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1. Introduction

In May 2018, France's President Macron launched a new programme to tackle disadvantage and deprivation in the French suburbs, or *banlieue*. The *banlieues* have long been depicted as problematic, associated with marginalization and peripheralization, and characterized in the public imagination by high unemployment, low educational attainment and persistently high levels of poverty (Kokoreff & Lapeyronnie, 2013). Successive governments have consistently attempted to 'fix' the problem of the *banlieue* with a variety of policies and programmes, not least resulting from the fact that the *banlieue* have been the scene of waves of social unrest that have broken out sporadically during the 1980s, 1990s and most recently in 2005 (Jobard, 2013).

One of the cornerstone policies to address the crisis of the *banlieue* dates back to the year 2000 and has focused on a policy of 'social mixing' (*mixité sociale*), which

aims to promote mixed communities in certain 'problematic' neighbourhoods through diversifying the housing stock. This has involved a programme of housing demolition and rebuilding, replacing older public sector housing with a range of housing tenure types, to encourage a greater diversity of social groups in certain neighbourhoods. However, 18 years on, questions can be raised over whether a policy based on increasing a neighbourhood's social mix is an appropriate sustainability fix for the French suburbs, and whether it has actually resulted in the outcomes that were intended.

In the context of debates around a 'sustainability fix' for the suburbs (While, Jonas, & Gibbs, 2004), it is interesting to explore the notion of social sustainability and how the policy of social mixing might respond to the calls for a 'fix' from a social perspective. If sustainability is a poorly-understood term, 'social sustainability' is even more so. Shirazi and Keivani (2017) highlight the diverse meanings and conceptualizations of the term so-

cial sustainability, including identifying seven key aspects that studies of social sustainability focus upon: cultural development and diversity (e.g., Polèse & Stren, 2000), procedural quality (Koning, 2002), urban policy (City of Vancouver, 2005), physical/non-physical aggregation (Dempsey, Brown, & Bramley, 2012), well-being (Bacon, Cochrane, & Woodcraft, 2012), equity and democracy (Murphy, 2012), and capacity building (Colantonio, 2009). Of these seven themes, cultural development and diversity aligns most closely with the policy objective of creating mixed communities, integrating diverse groups in a just and equitable way, with Polèse and Stren (2000, pp. 15–16) defining social sustainability as:

> Development (and/or growth) that is compatible with harmonious evolution of civil society, fostering an environment conducive to compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration.

This article argues that the policy of social mixing has not in fact resulted in more mixed neighbourhoods that address the challenges of the *banlieue*. This 'social sustainability' fix has failed to achieve its objectives, due to a range of factors, both political, structural and cultural. Rather than encouraging social integration, it is argued here that the policy of social mixing reinforces segregation and has done little to tackle inequalities and social exclusion. Here, however, we suggest that there are alternative solutions to the challenges of fostering social sustainability in the suburbs, which could be implemented in partnership with citizens and neighbourhood-based groups, that would be more effective in addressing social sustainability solutions in the future.

The article is based on research carried out in the Lyon agglomeration, France's second city (population 1.4 million) during the period 2012–2014, that explored urban renewal policies, community consultation and rehousing in the working-class suburb of Vaulx-en-Velin, which is located on the eastern edge of the Greater Lyon agglomeration. The area was developed during the first wave of post-war urbanization and grew from a population of around 10,000 in 1959, to over 20,000 in 1968. The population peaked around 44,000 in 1982, housed mainly in *grands ensembles*, housing estates of towers and high-rise blocks of flats that characterize many of the peripheries of French cities. However, during the 1990s, gradual population decline due to the outmigration of better-off households meant that the population stagnated, fluctuating at around 40,000 inhabitants during much of the 2000s. Since 2010, the population has risen steadily again, mainly due to new-build housing in the town centre and on brownfield land, with the population in 2015 rising to over 47,000. The article here draws on a selection of semi-structured interviews carried out with key actors and stakeholders, explored here from the perspective of social sustainability and social mixing, complemented by an analysis of public policy documents and other literature. The article therefore provides original analysis of interview material interpreted through a lens of social sustainability, as well as providing a synthesis of original findings from the initial research project.

It is important to note that the suburbs are an extremely diverse landscape, with multiple spatial manifestations across time and space (Keil, 2013). Here, we focus on the peripheral high-rise estates located on the edge of French cities, but there are many varieties of suburban and post-suburban regimes in France (Charmes & Keil, 2015), including examples of the North American model of low density peri-urbanization that brings with it issues of environmental sustainability, due to sprawl, car-dependence and the implications for service provision (Touati-Morel, 2015). Our interest here is in the 'inner- and middle-ring' suburbs populated by a mainly precarious, immigrant population, where the dominant policy has been "urban renewal through partial demolition" (Charmes & Keil, 2015, p. 595).

The article begins with an overview of the history of the French suburbs to contextualize the propos, as well as details of the policies that have focused on these areas through the national *Politique de la Ville*—or the Urban Policy for Disadvantaged Neighbourhoods. The next section critically examines the policy of social mixing, exploring its underlying premises and resultant impacts. The following section explores alternatives to this 'sustainability fix' related to social sustainability, while the conclusions draw out lessons from the French case for the North American context.

2. The *Banlieues*: Growth and Decline

The *banlieues* occupy a particular place in the history of urbanization in France. As a response to the post-war housing crisis from the mid-1950s, large-scale social housing estates were developed on the edge of many French cities. The scale and speed of construction were unprecedented, with monumental housing blocks being erected rapidly on the periphery of urban areas, but often with poor quality building materials and a lack of integrated planning. Between 1954 and 1973, 6 million new homes were built in social housing estates, the equivalent of 20% of France's current housing stock (Charmes & Keil, 2015). Many new families were attracted by these housing projects, as a welcome alternative to the inner-city or rural housing they were moving from. These *cités* (estates) were seen as a symbol of the importance of the welfare state within French society, in facilitating access to social housing, but also in promoting economic growth through a mass housing construction programme that was government subsidized.

However, perceptions of the *banlieue* began to shift in the 1970s due to three factors, which help to explain current circumstances (Tissot, 2007). Up until the 1970s, non-French nationals had almost no access to social housing, due to the discriminatory practices of social housing landlords. The significant waves of migrants in the 1960s

from France's former colonies in North and West Africa mainly found accommodation in substandard housing in the inner city, or in *bidonvilles*, the informal shantytowns on the city's edge. In the early 1970s, the government launched a major slum clearance programme, following which, social housing landlords were subsequently obliged to accept immigrants as tenants, which began to shift the ethnic mix of the cités. Secondly, the early 1970s saw a shift in housing policy, with a move away from construction of social housing, to state incentives for homeownership through low-interest loans. So as middle-class families moved out of social housing into the owner-occupied sector, migrant families were moving into the public housing estates in their place. Thirdly, the socio-economic status of the *banlieue* residents was also shifting. Many were employed as low-skilled manual workers but following the global oil crisis of 1973 and subsequent economic restructuring, many *cité* residents were made redundant, with foreign workers often among the first to lose their jobs. This history of the *banlieue* helps to contextualize the current situation, where the *cités* are seen as places of "advanced marginality" (Wacquant, 1996), characterized by deprivation and segregation, with a high ethnic minority population, and significant economic and social exclusion. Such stark inequalities in French society sparked a wave of civil disturbance in the early 1980s, due to the growing resentment among young *banlieusards*, many of ethnic minority origin, who felt excluded from mainstream French society (Dikeç, 2007).

The issue of ethnicity in France is a complex one, a situation rooted in the ideals embedded within the Republican values of *liberté*, *égalité*, *fraternité*. The underlying principles relate to the primacy of the universal citizen, rather than citizens being defined by their ethnicity or religion. Historically therefore, policies formulated to address poverty have been 'colour-blind', with no reference to the role of ethnicity in reinforcing inequalities. However, during the 1980s, in reaction to the social unrest in the *banlieues*, the issue of ethnicity began to be woven into the discourse around tackling the 'social problems' of the *banlieue*. Links were made by both politicians and the media between the disturbances in the *banlieue* and high immigration levels (Tissot, 2007). The resultant Urban Policy for Disadvantaged Neighbourhoods was introduced in the late 1980s, and had a strong emphasis on social regeneration, with measures to address local development, strengthen social ties, promote community links and civic participation (Busquet, Hérouard, & Saint-Macary, 2016). There was little emphasis at the time on physical refurbishment or demolition (Tissot, 2008).

However, a shift in approach came in the late 1990s, as it was increasingly felt within policy circles that previous 'soft' approaches had failed to solve the growing urban crisis of the *banlieues* (Lelévrier, 2004). This change in approach was linked to the discourse of anti-ghettoism that emerged during the 1990s, with fears that concentrations of poverty (and by association, ethnic mi-

norities) could lead to ghettos in the suburbs. A narrative around destigmatization through demolishing tower blocks was also used to reinforce the need to change the image of the *banlieues*, in order to attract a more diverse (read: 'middle-class') population. Remodelling space through the demolition of housing estates was therefore seen as a way of preventing the consolidation of ghettos and encouraging mixed neighbourhoods (Deboulet & Abram, 2017).

3. Social Mix: Sustainability Fix?

Encouraging mixed communities has been central to French urban policy since 2000, on the one hand by obliging a minimum proportion of social housing in all municipalities in large metropolitan areas, and on the other, through demolishing social housing in certain neighbourhoods and replacing it with mixed tenure dwellings. In 2000, the Socialist Government introduced the Law on Solidarity and Urban Renewal (*Loi Relative à la Solidarité et au Renouvellement Urbain*, hereafter SRU). This law required every municipality above a given population in large metropolitan areas—above 3,500 inhabitants or, in the Greater Paris area, above 1,500 inhabitants, included in a metropolitan area of more than 50,000—to either provide at least 20% of their housing stock as social housing by 2020 or face fines (Desponds, 2010). In 2014, this minimum requirement rose to 25% in areas of severe housing shortage, with fines increasing for individual municipalities in line with the local social housing deficit. This approach was supplemented after 2002, following a change in government from left to right.

Under Chirac's right-wing administration, the Borloo Act of 2003 was introduced, with an explicit agenda to demolish considerable swathes of social housing and replace them with mixed-tenure dwellings, through a comprehensive national urban renewal programme launched in 2005, the *Program National de Rénovation Urbaine* (PNRU). While the first policy, the SRU, aims to redistribute social housing into wealthier municipalities, the Borloo Act aims to introduce mixed communities into mono-tenure social housing areas through demolition of mostly tower and high-rise blocks, i.e., "deverticalization" (Veschambre, 2018) and reconstruction of mixed-tenure developments. Although ostensibly, the policy aimed to demolish housing that was substandard, Deboulet and Abram (2017, p. 145) suggest that:

> It is possible to argue that the level of demolition follows the prevalence of poverty rather than the quality of building structures, and most probably the highest degree of demolition mirrors the concentration of immigrant families from both the French ex-colonies and eastern European countries.[1]

Private developers were incentivized using tax rebates, with new build programmes subsidizing social landlords,

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[1] This cannot be corroborated due to the lack of data on ethnic origin in France.

and incentives to rebuild the same amount of social housing one-for-one, although there was no requirement to replace demolished blocks with the same housing standards or price brackets (Deboulet & Abram, 2017).

Both policies are promoted under the banner of 'social mixing', whereby the concentration of poverty is seen as one of the main drivers of neighbourhood problems, through so-called 'neighbourhood effects' (Buck, 2001), i.e. the premise that living in a deprived area can reinforce and reproduce disadvantage. There are two main underlying rationales implicit in an urban policy that encourages mixed communities. Firstly, it implies that new middle-class households moving into disadvantaged areas will act as a positive influence for local residents, in relation to good citizenship and in particular through more conducive learning conditions at schools. Secondly, it implies that the presence of a more socio-economically diverse population that is more likely to be in employment, will offer existing residents a range of different opportunities through exchanges of social capital that enhance local capacity (Provan, 2017). However, from studies carried out on both sides of the Atlantic, it is unclear whether the economic opportunities of poorer households are indeed greater after moving to wealthier neighbourhoods, or when more middle-class households move into disadvantaged areas (Musterd, Andersson, Galster, & Kauppinen, 2008; Oreopoulos, 2003). Similarly, the evidence for peer effects at school is mixed. Around half of studies that analyse the effect of socio-economic background on children's learning outcomes find no impact. The other half show a small, positive effect (Brandt, 2018; Sacerdote, 2014). Therefore, the assumption that mixed communities result in positive outcomes for communities living in disadvantaged neighbourhoods has not been clearly substantiated.

Evidence suggests that the SRU policy has made a small contribution to increasing the social housing stock in municipalities that started with a low share (Bono, Davidson, & Trannoy, 2012), although there are some key municipalities that consistently miss their targets, such as St Didier au Mont d'Or in the wealthy west of the Lyon agglomeration, which registers just 3.6% of its housing stock as social housing. However, the effects of demolition in disadvantaged areas on social mixing overall are questionable. There are issues of displacement of the poorest tenants, as highlighted by one NGO actor:

> Of course, when you show them [the residents] what it'll look like in the future, many of them say, 'yes, we'd like that', but they don't realise what's going to happen. They aren't told that some of these residents aren't going to live there anymore, because at the same time, they were sorting, selecting those who had paid [their rent]. They'd be rehoused. Those who had problems paying their rent, they would go in front of the selection committee. They don't tell them that. (Mechmache, 2014, author's translation)

These most vulnerable residents are often displaced to low-cost poor quality housing in other neighbourhoods without addressing the underlying social issues affecting such populations (Kirszbaum & Epstein, 2010; Posthumus, Bolt, & Van Kempen, 2013). Those rehoused in the neighbourhood often face higher rents than previously, and significantly increased charges (the communal monthly charges to upkeep the building), resulting in significantly higher outgoings. Thus, previously affordable housing is being replaced with housing that is out of reach of the most precarious in the neighbourhood.

This 'sorting' is confirmed by Rousseau (2015), who found that municipalities in the Greater Lyon area carefully assess the profile of potential residents when allocating new housing units, to examine their 'fit' with the neighbourhood. Comparing the wealthier western communes in Lyon with the working-class eastern communes, Rousseau found that in the west, priority was given to those already living in the municipality, while in the east, housing was more likely to be allocated to middle-class households from the eastern part of the agglomeration. A 'politicization' of densification as well as regulations at the intercommunal level limit the possibilities for redistributing populations across the agglomeration, which would contribute to greater social mixing (Rousseau, 2017).

However, the creation of new mixed tenure developments does not necessarily encourage greater social interaction between social groups. Rather than creating mixed communities, new households that arrive in renewal areas often do not integrate with the social housing tenants, unless they have experience of living in high-poverty social housing elsewhere. Demolition has also been found to accelerate the departure of more wealthy tenants from renewal areas, further fracturing the neighbourhood (Lelévrier, 2010). Those tenants that do remain, particularly from younger generations, see demolition as an attack, and an attempt to evict them for their neighbourhoods (Observatoire national des zones urbaines sensibles, 2013), further undermining public acceptance of the renewal programme (Kirszbaum, 2010). So, from its original objectives to foster social mixing, these policies have shown to be ineffective in addressing underlying issues of poverty or in improving the housing conditions of the most disadvantaged households.

4. Social Sustainability Solutions 'Made in the Banlieue'

A damning report from the *Cour des Comptes* (2012) reviewing 10 years of the *Politique de la Ville*, showed that significant inequalities persisted between neighbourhoods, despite a decade of intervention including social mixing policies, and that the number of areas qualifying for priority assistance increased during the same period. President Macron's recent announcement of a new programme of interventions to address the crisis in the *banlieue* could be seen as a response to this criticism, but de-

tails of the proposed programme at the time of writing are limited, and commentators suggest that there is little of substance to tackle concrete barriers that address poverty and social sustainability, such as the lack of crèche provision for pre-school children (Coulevaire, 2018).

So what form would a 'made in the *banlieue*' solution to concerns about social sustainability take? A starting point for thinking about solutions to social sustainability 'made in the *banlieue*' would be to rethink the priority given to demolition, in cases where rehabilitation or renovation may be possible and preferable. Existing communities contain latent energy, with relationships built over years of shared experiences in the neighbourhood. Housing demolition has been shown to have detrimental impacts on those affected (Veschambre, 2008). Communities fractured by demolition and the displacement of neighbours, friends and families, can have serious implications for social sustainability in precarious neighbourhoods, while at the same time, those displaced and rehoused elsewhere can be traumatized by feelings of isolation, dispossession and the severing of daily contact with friends and support networks. A 'made in the *banlieue*' solution would put demolition plans to a referendum of the local community, with sufficient provision of rehousing options within the neighbourhood to implement the 'right to return' and avoid forced dislocation and rehousing elsewhere.

A further solution that avoids demolition and its negative consequences would see initiatives that involve tenants collaborating together with renovation companies in the upgrading of their buildings (Brandt, 2018). With professional assistance, training and the provision of materials, locally-based associations (groups of residents) could collaborate on self-directed rehabilitation projects, possibly through apprenticeships and other training programmes. This would contribute to social sustainability on a number of levels, through involvement in the renovation project, personal investment in the neighbourhood, building social and professional networks, and possibly resulting in employment in the construction sector through upskilling. Such schemes have been successful in Germany (Blanc, 2013) and the US (Kirszbaum, 2013), but require political support to encourage training providers and local companies to buy into the scheme.

Another possible approach to enhance social sustainability would be to embed consultation into a renewal project from the very beginning. The *Cour des Comptes* report (2012) was critical of the lack of meaningful consultation in the *Politique de la Ville*, with residents merely being informed of major renewal projects that were already in train, without opportunities to influence the foundations of the project. There is considerable resistance on the part of elected councillors in France to participatory democracy due to the strongly-embedded attachment to representative democracy within French institutions. This relates to the notion of the 'general interest' in France, that is defined by a centralised, devolved state or by its local representatives. By contrast, in an Anglo-Saxon context, the equivalent concept is 'the collective interest', related to the 'common good' (*bien commun*), that is closely linked to the idea of shared responsibilities. While in the Anglo-Saxon tradition, the 'common good' is determined through negotiation of different points of view, the 'general interest' in France is seen as being maintained by French public officials, elected by universal suffrage to take control of decision-making (Rosanvallon & Goldhammer, 2008). Thus, as Gardesse and Zetlaoui-Léger (2017, p. 200) argue, "a deep hierarchical gap has evolved between elected officials and their constituents, as well as between publicly mandated planning experts and residents", through which participatory processes threaten the legitimacy of elected and administrative actors. As a Green Party councillor elected to the Rhone-Alpes Regional Government commented in interview:

> We talk about it [community consultation], but when it comes to actually doing something, we hide because we're afraid of citizen participation. We're afraid to hear, to be listening to citizens, and we are afraid of being upset by the discourse of citizens. (Personal communication, 17th April 2013, author's translation)

Gardesse and Zetlaoui-Léger (2017, p. 205) suggest that "political initiatives to regulate resident involvement in urban development [are] more concerned by potential risk to the representative French democratic system than a real political desire to change the decision-making process".

To respond to this agenda, citizens committees (*conseils citoyens*) were created in 2014 to engage with communities at an earlier stage in the process through the co-production of strategic documents for urban projects, but initial results of their impact are mixed (Martinais, Daquin, & Martinez, 2018). To be successful, these consultation exercises would need to build trust between communities and city councils, to reassure communities that their voices would actually be heard and acted upon, rather than just listened to and then subsequently ignored. In their report to the Ministry for Urban Affairs, Bacqué and Mechmache (2013) advocated an approach that provides financial support for residents' initiatives proposed through consultation exercises, but the French Parliament has been reluctant to adopt their recommendations, partly through concerns about the emergence of religious or ethnic-based opposition groups (Gardesse & Zetlaoui-Léger, 2017). There needs to be a "new governmentality of the suburbs" (Deboulet & Abram, 2017, p. 151) that integrates the voices of residents with respect and consideration.

The crisis in the *banlieue* has endured for so many decades due to the failure of public policy to address the underlining structural issues affecting people and place in the *banlieue*, including long term unemployment, a lack of education and skills, and limited local employment opportunities. Another solution to issues of social

sustainability would focus not on housing tenure to encourage mixed communities, but on a wider programme that looks at structural issues in the *banlieue*, including links to jobs and services, in what are often physically isolated neighbourhoods. One approach would be to improve connections with transport infrastructure, in order to increase access to jobs, services and other facilities. This would likely result in greater social mixing, as local residents would have greater access to employment opportunities and those with rising incomes would choose to remain in the area rather than relocate elsewhere. As one NGO actor noted of the renewal programme in a disadvantaged area in an eastern suburbs of Paris:

> The human and social side hadn't been planned at all. The transport issue…we're a neighbourhood that's disconnected. No business would come and set up here because, if there aren't the transport links, I don't see how they're going to get established. Mixing hasn't happened because schools weren't built, so who would come and live here when there isn't the infrastructure. People won't come and live in a place where you can't find a way to get around, or the jobs and schools that you need. (Mechmache, 2014, author's translation)

Social sustainability would also be enhanced through a 'whole neighbourhood' approach, opening up the area to access opportunities elsewhere. A successful approach would also need to work with local employers to assess skills needs, as well as providing bespoke training, basic workplace skills and language training if necessary. On renovation projects, local employment clauses could be included that require companies to hire local residents initially for a set number of hours a week. This 'whole neighbourhood' or 'integrated approach' that combines issues of accessibility, employment and training has been advocated by the European Union in their policy of sustainable urban development and has been shown to be successful in a number of contexts, in opening up opportunities for marginalized communities (Carpenter, 2011).

Lastly, in neighbourhoods affected by population growth through new housing development, with or without demolition, the social integration of new households is an issue affecting social sustainability. This can be facilitated by neighbourhood events, a 'made in the *banlieue*' solution to the social sustainability question arising from the influx of new residents. Shared community events, such as a street party, yard sale, or communal gardens/allotments, have been shown to bring different social groups together around a common event, and help to create connections between new and original residents (Stevenson, 2016).

5. Conclusion

President Macron's grand plan for the suburbs aims to address disadvantage in the *banlieue* where others over

the last 20 years have failed. Since 2000, a policy of social mixing has been in place, encouraging social housing to be built in wealthy municipalities where there is a dearth, and implementing a policy of demolition in disadvantaged areas, with rebuilding of mixed tenancy housing, to encourage mixed communities and social integration. This policy can be interpreted as a 'social sustainability fix' to the persistent problem of disadvantage in the suburbs. However, as argued here, the policy of social mixing has done little to tackle inequalities and social exclusion in the *banlieues*, while wealthy suburbs on the edges of French cities prefer to pay fines, rather than increase the proportion of social housing on their territory.

Given the political will, however, there are certainly solutions to address social sustainability in the *banlieue* which present a plausible future for the disadvantaged suburbs. These are based on a critical questioning of the supremacy of demolition over rehabilitation, and an engagement with residents through consultation about the future of their neighbourhood, giving a voice to those that were previously unheard in the urban arena. As argued by Gardesse and Zetlaoui-Léger (2017, p. 211), "there is a growing awareness that the spaces of our daily lives must be the product of cooperation between the different actors using and sharing them". These 'made in the *banlieue*' approaches put citizens at the heart of policy, prioritizing citizens' visions for their area, and building integrated strategies to present opportunities for the future.

This problematic of the *banlieues* in France lies in stark contrast to the classic image of suburban landscapes in North America, with low-density, single-family dwellings sprawling out from the edge of cities. But as Charmes and Keil (2015) observe, Canada is characterized by a variety of suburban landscapes, and shares with France a not-dissimilar pattern of peripheral high-rise housing estates, albeit built later than in France, but often characterized by concentrations of poor, ethnic minority tenant populations. Given these are more recent constructions in Canada, the spectre of demolition is not generally hanging over them. But there are similar issues to the French *banlieues* related to isolation, concentrations of disadvantage and a lack of employment opportunities, that would also benefit from a 'sustainability fix' from a social perspective. Bottom-up initiatives to engage with local communities about the future of their neighbourhood can contribute to the social pillar of sustainability, through dialogue, empowerment and building a community based on social equity. These transatlantic lessons offer political choices that can contribute to building more socially sustainable suburban futures.

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Conflict of Interests

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References

Bacon, N., Cochrane, D., & Woodcraft, S. (2012). *Creating strong communities. How to measure the social sustainability of new housing developments*. London: The Berkeley Group.

Bacqué, M. H., & Mechmache, M. (2013). *Pour une réforme radicale de la politique de la ville. Ca ne se fera plus sans nous. Citoyenneté et pouvoir d'agir dans les quartiers populaires*. [For a radical reform of urban policy. It won't be done without us. Citizenship and the power to take action] (Report to the Ministre délégué chargé de la Ville). Paris: Ministére de L'Égalité des Territoires et du Logement. Retrieved from www.cohesion-territoires.gouv.fr/IMG/pdf/Rapport-participation-habitants_ok.pdf

Blanc, M. (2013). *La gouvernance participative et la rénovation urbaine en France et en Allemagne*. [Participatory governance and urban renewal in France and Germany]. Strasbourg: Observatoire régional de l'intégration et de la ville. Retrieved from www.oriv.org/wp-content/uploads/article_m_blanc_gouvernance_participative_france_allemagne.pdf

Bono, P., Davidson, R., & Trannoy, A. (2012). *Analyse contrefactuelle de l'article 55 de la loi SRU sur la production de logements sociaux* [Counterfactual analysis of article 55 of the SRU Act on the production of social housing] (Working Paper). Marseille: Aix Marseille School of Economics. Retrieved from halshs.archives-ouvertes.fr/halshs-00796192/document

Brandt, N. (2018). *France: Promoting economic opportunities and well-being in poor neighbourhoods* (Working Paper 1454). Paris: OECD Publishing.

Buck, N. (2001). Identifying neighbourhood effects on social exclusion. *Urban Studies*, *38*(12), 2251–2275.

Busquet, G., Hérouard, F., & Saint-Macary, E. (2016). *La politique de la ville. Idéologies, acteurs et territoires* [Urban policy. Ideologies, actors and territories]. Paris: l'Harmattan.

Carpenter, J. (2011). Integrated urban regeneration and sustainability: Approaches from the European Union. In A. Colantonio & T. Dixon (Eds.), *Social sustainability and urban regeneration: Best practice from European cities* (pp. 81–100). London: Wiley.

Charmes, E., & Keil, R. (2015). The politics of post-suburban densification in Canada and France. *International Journal of Urban and Regional Research*, *39*(3), 581–602.

City of Vancouver. (2005). *Social development*. Vancouver: Director of Social Planning.

Colantonio, A. (2009). Social sustainability: A review and critique of traditional versus emerging themes and assessment methods. In H. Malcolm (Ed.), *Second international conference on whole life urban sustainability and its assessment* (pp. 865–885). Loughborough: Loughborough University.

Coulevaire, L. (2018, May 30). Macron, Borloo et les banlieues: Histoire d'un revirement [Macron, Borloo and the suburbs: The story of a turnaround]. *Le Monde*. Retrieved from www.lemonde.fr/societe/article/2018/05/30/macron-borloo-et-les-banlieues-histoire-d-un-revirement_5306700_3224.html

Cour des Comptes. (2012). *La politique de la ville: Une décennie de réformes* [Urban policy: A decade of reforms]. Paris: Cour des Comptes.

Deboulet, A., & Abram, S. (2017). Are social mix and participation compatible? Conflicts and claims in urban renewal in France and England. In P. Wall & P. Smets (Eds.), *Social housing and urban renewal: A cross-national perspective* (pp. 141-177). Bingley: Emerald Publishing Limited.

Dempsey, N., Brown, C., & Bramley, G. (2012). The key to sustainable urban development in UK cities? The influence of density on social sustainability. *Progress in Planning*, *77*(3), 89–141.

Desponds, D. (2010). Effets paradoxaux de la loi Solidarité et Renouvellement Urbains (SRU) et profil des acquéreurs de biens immobiliers en Île-de-France [Paradoxical effects of the Solidarity and Urban Renewal Act (SRU) and the profile of real estate buyers in the Paris Region]. *Espaces et Sociétés*, *1*(140/141), 37–58.

Dikeç, M. (2007). *Badlands of the republic: Space, politics and urban policy*. Oxford: Blackwell.

Gardesse, C., & Zetlaoui-Léger, J. (2017). Citizen participation: An essential lever for urban transformation in France? In S. Brownill & Q. Bradley (Eds.), *Localism and neighbourhood planning: Power to the people?* (pp. 199–214). Bristol: Policy Press.

Jobard, F. (2013). An overview of French riots: 1981–2004. In D. Waddington, F. Jobard, & King, M. (Eds.), *Rioting in the UK and France* (pp. 48–59). London: Routledge.

Keil, R. (Ed.). (2013). *Suburban constellations: Governance, land and infrastructure in the 21st century*. Berlin: Jovis.

Kirszbaum, T. (2010). *Articuler l'urbain et le social. Enquête sur onze sites "historiques" en rénovation urbaine* [Articulating the urban and the social: A study of 11 "historic" urban renewal sites] (Research Report). Paris: l'ANRU.

Kirszbaum, T. (2013). *Rénovation urbaine et équité sociale: Choice neighborhoods aux Etats-Unis* [Urban renewal and social equity: Choice neighbourhoods in the United States] (Research Report). Paris: Secrétariat général du Comité interministériel des villes. Retrieved from halshs.archives-ouvertes.fr/halshs-01265144/document

Kirszbaum, T., & Epstein, R. (2010). *Synthèse de travaux universitaires et d'évaluation de la politique de la ville* [A synthesis of university research and evaluation of urban policy] (Research Report). Paris: Comité d'évaluation et de contrôle des politiques publiques de l'Assemblée nationale.

Kokoreff, M., & Lapeyronnie, D. (2013). *Refaire la cité: L'avenir des banlieues* [Remaking the city: The future of the suburbs]. Paris: Seuil.

Koning, J. (2002). Social sustainability in a globalizing world: Context, theory and methodology explored. In H. J. van Rinsum (Ed.), *More on MOST: Proceedings of an expert meeting* (pp. 63–89). Amsterdam: UNESCO Centre.

Lelévrier, C. (2004). Que reste-t-il du projet social de la politique de la ville? [What remains of the social project of the urban city policy?]. *Espirit*, *303*, 65–78.

Lelévrier, C. (2010). La mixité dans la rénovation urbaine: Dispersion ou re-concentration? [Mixing in urban renewal: Dispersal or re-concentration?]. *Espaces et Sociétés*, *140*(1/2), 59–74.

Martinais, E., Daquin, A., & Martinez, C. (2018). *Des conseils citoyens inadaptés à la participation des jeunes. Retour sur trois expérimentations dans les quartiers populaires de la périphérie lyonnaise* [Citizen councils unsuitable for youth participation. Findings from three experiments in working-class neighborhoods of the Lyon periphery]. Paper presented at Les Conseils Citoyens, Paris.

Mechmache, M. (2014). *La démocratie ne se fera plus sans nous: La participation des habitants dans la politique de la ville* [Democracy won't be done without us: The participation of residents in urban policy]. Paper presented at the International Banlieue Network Conference: The Banlieue Far from the Clichés, Oxford.

Murphy, K. (2012). The social pillar of sustainable development: A literature review and framework for policy analysis. *Sustainability: Science, Practice, & Policy*, *8*(1), 15–29.

Musterd, S., Andersson, R., Galster, G., & Kauppinen, T. (2008). Are immigrants' earnings influenced by the characteristics of their neighbours? *Environment and Planning A*, *40*(4), 785–805.

Observatoire national des zones urbaines sensibles. (2013). *Dix ans de programme national de rénovation urbaine: Bilan et perspectives* [Ten years of the national programme of urban renewal: Assessment and prospects]. Paris: ONZUS.

Oreopoulos, P. (2003). The long-run consequences of living in a poor neighbourhood. *Quarterly Journal of Economics*, *118*(4), 1533–1575.

Polèse, M., & Stren, R. (Eds.). (2000). *The social sustainability of cities: Diversity and the management of change*. Toronto: University of Toronto Press.

Posthumus, H., Bolt, G., & Van Kempen, R. (2013). Why do displaced residents move to socioeconomically disadvantaged neighbourhoods? *Housing Studies*, *28*(2), 272–293.

Provan, B. (2017). Mixing communities? Riots, regeneration and renewal on problem estates in France and England. *The Political Quarterly*, *88*(3), 452–464.

Rosanvallon, P., & Goldhammer, A. (2008). *Counter-democracy: Politics in an age of distrust* (Vol. 7), Cambridge: Cambridge University Press.

Rousseau, M. (2015). 'Many rivers to cross': Suburban densification and the social status quo in Greater Lyon. *International Journal of Urban and Regional Research*, *39*(3), 622–632.

Rousseau, M. (2017). La densité fait-elle la mixité? Politiques de densification et inégalités territoriales dans l'agglomération de Lyon [Does density make diversity? Densification policies and territorial inequalities in Greater Lyon. *Sociétés Contemporaines*, *107*, 23–50.

Sacerdote, B. (2014). Experimental and quasi-experimental analysis of peer effects: Two steps forward. *Annual Review of Economics*, *6*, 253–272.

Shirazi, M. R., & Keivani, R. (2017). Critical reflections on the theory and practice of social sustainability in the built environment—A meta-analysis. *Local Environment*, *22*(12), 1526–1545.

Stevenson, N. (2016). Local festivals, social capital and sustainable destination development: Experiences in East London. *Journal of Sustainable Tourism*, *24*(7), 990–1006.

Tissot, S. (2007). *L'Etat et les quartiers. Genèse d'une catégorie d'action publique* [The State and the neighborhoods. The genesis of a category of public policy]. Paris: Le Seuil.

Tissot, S. (2008). *"French Suburbs": A new problem or a new approach to social exclusion?* (CES Working Papers Series no 160). Retrieved from aei.pitt.edu/11792

Touati-Morel, A. (2015). Hard and soft densification policies in the Paris city-region. *International Journal of Urban and Regional Research*, *39*(3), 603–612.

Veschambre, V. (2008). *Traces et mémoires urbaines, enjeux sociaux de la patrimonialisation et de la démolition* [Traces and urban memories, social issues of patrimonialization and demolition]. Rennes: Presses universitaires de Rennes.

Veschambre, V. (2018). Renewal and 'deverticalization' in French social housing: The emblematic case of the Rhône-Alpes Region. *Built Environment*, *43*(4), 620–636.

Wacquant, L. (1996). The rise of advanced marginality: Notes on its nature and implications. *Acta Sociologica*, *39*, 121–139.

While, A., Jonas, A. E., & Gibbs, D. (2004). The environment and the entrepreneurial city: Searching for the urban 'sustainability fix' in Manchester and Leeds. *International Journal of Urban and Regional Research*, *28*(3), 549–569.

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Article

Beyond the Cosmopolis: Sustaining Hyper-Diversity in the Suburbs of Peel Region, Ontario

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Abstract

Globalization has increased the flow of transnational migrants into many European and North American cities. These shifting socio-demographic patterns have resulted in the rapid development of 'cosmopolitan' urban centres where difference and diversity are ubiquitous (Sandercock, 2003). However, as ethnic enclaves form outside the urban core in suburban communities, there is uncertainty about whether cultural homogeneity is desirable or sustainable in a multicultural country. Indeed, planning communities for increasing diversity and difference will remain, what Leonie Sandercock (2004) calls, "one of the greatest tasks for planners of the 21st century". Thus, this article uses the theory of hyper-diversity to illuminate how immigrants' interactions with their local suburban community represents cultural pluralism and diversity beyond ethnicity. Specifically, this study explores differing attitudes, activities and lifestyles among diverse immigrant populations in the Region of Peel, one of the fastest growing and most culturally diverse areas in Canada. Focus groups with 60 immigrant youth and 55 immigrant adults were conducted to qualitatively capture perspectives and experiences in ethnic enclaves. The findings highlight the existence of attitudes in favor of multicultural lifestyles, activities that take newcomers beyond the borders of their enclaves, and lifestyles that require additional infrastructure to support sustainability of immigration in the suburbs. In conclusion, this article adds to the debate on cultural pluralism and 'homogeneous' ethnic enclaves by using the emergent concept of hyper-diversity as a way to think about the future sustainability of suburbs in an era of global migration.

Issue

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1. Introduction

Globalization has increased the flow and diversity of transnational migrants into many European and North American cities (Castles, de Haas, & Miller, 2013). In Canada, immigrants currently account for 22% of the total population and are expected to be the nation's sole-source of population growth by 2040 (Statistics Canada, 2017a). The vast majority of these immigrants continue to make urban centres their destination of choice with over two-thirds first settling in the three largest cities of Montreal, Vancouver and Toronto (Statistics Canada, 2017b). These transnational migration patterns coupled with 'planetary urbanization' (Brenner, 2014) have resulted in the rapid development of 'cosmopolitan' urban centres where difference and diversity are ubiquitous

(Sandercock, 2003). In fact, the rapid ethnic diversification of many European cities is evidence that we are now in an era of 'super-diversity' (Vertovec, 2007). Planning communities for this increasing diversity is what planning scholar Leonie Sandercock (2004) calls, 'one of the greatest tasks for planners of the 21st century'. More than a decade later, Sandercock's statement seems rather foreboding as anti-immigration and post-multicultural political events in the USA and Europe make headlines.

Despite the centrality of urban spaces in much of the above literature, the reality is that diversity is actually increasing in the suburbs across Canada (Addie, Fiedler, & Keil, 2015; Qadeer, Agrawal, & Lovell, 2010). Recent Canadian Census data indicates that among the 63% of newcomers who settle in the Toronto Census Metropolitan Area, over half were in suburban municipalities. This is a 10% increase from the past decade (Statistics Canada, 2017b). Similarly, the suburbanization rate of immigrants is increasing in Montreal (up 5% to 33%) and Vancouver (up 8% to 72%; Statistics Canada, 2017b). These trends are not unique to Canada; the majority of US immigrants (61%) live in suburbs (Wilson & Singer, 2011), and as a result have dramatically shaped the social, political, physical and cultural landscapes of the suburbs within the United States (Hanlon, Vicino, & Short, 2006; Johnson, 2015; Lung-Amam, 2017; Singer, Hardwick, & Brettell, 2008; Vicino, 2013). In their work in Amsterdam, Tzaninis and Boterman (2018, p. 46) suggest that suburbs are "increasingly entry points for international migrants, pointing towards the consistent manifestation of suburban multicultural spaces". This supports claims that the rapid urbanization of the 21st century will actually occur on the peripheries of urban centres, creating what Keil (2018) calls a 'suburban planet'.

In this article, we aim to explore social diversity in an era of global migration and suburbanization in order to provide a new lens through which to tackle the century problem Sandercock warns us of. Indeed, the reality of growing suburban settlement of ethnically diverse immigrants seems incongruent with the dominant (and persistent) narratives of suburban landscapes as socially homogeneous and physically isolating (Forsyth, 2012; Hanlon et al., 2006; Keil, 2018; Walks, 2013). This article interrogates literature on social diversity in the suburbs and builds on theories of planning for diversity by considering how to interpret new forms of diversity outside of cosmopolitan cities. In light of the projected and required rise in immigration, planning suburban communities that can socially sustain Canada's diverse populations of today and the future is a crucial priority.

1.1. Beyond Cosmopolis: Social Diversity in the Suburbs

Our understanding of the suburbs has changed significantly since the term was first introduced in the mid-twentieth century (Fava, 1956). The suburban prototype of the late 1940s was indeed socially and economically homogeneous. Fava's original notion was that suburbs were 'a way of life' among the largely young, middle-class, married families with children who valued the privacy of detached homes and supported the sense of neighbourliness and social cohesion that the suburbs were designed to create (Fava, 1956, p. 34). Retrospective work on the suburbs argued that it was the lack of cohesion, plurality, interaction and co-existence that came to dominate the narrative of the suburban experience (see Nicolaides & Weise, 2006, in Forsyth, 2012). While the North American suburbs of today have been cast in the same light as their 1940s predecessor, the reality is quite the opposite. The North American suburbs of the past half century have increasingly become places of socio-cultural, economic, and political diversity (Forsyth, 2012; Hanlon et al., 2006; Walks, 2013). Appropriately, there is no longer a singular definition of what constitutes a suburb, rather a recognition of a range of global suburbanisms (Keil, 2018; Walks, 2013) that vary by physical, social, functional and other dimensions (Forsyth, 2012; Walks, 2013).

Although several suburban scholars reject that a homogeneous suburb ever existed (Forsyth, 2012; Harris, 2015; Keil, 2018; Walks, 2013), the notion of socio-cultural and ethnic clustering outside urban core sparked the focus on 'ethnoburbs' (Li, 1998, 2009). Geographer Wei Li (1998) first introduced the term ethnoburb 20 years ago, when she described the prevalence of suburban clusters of ethnic minorities that form outside of major metropolitan areas. These communities offer ethno-cultural amenities that support a sense of community including places of worship, shopping centres and other services such as ethnic businesses that cater to the ethnic-minority population (Li, 2009; Qadeer, 2016).

These changing settlement patterns contradict the dominant 'spatial assimilation model' of immigrant mobility that suggests that newcomers first settle in inner-city neighbourhoods drawn by the housing affordability, employment opportunities and existing concentrations of immigrants (Park, Burgess, & Mckenzie, 1925). These early ethnic enclaves of the inner-city core were seen as merely 'zones of transition' for newcomer populations who, through the assimilation process, would eventually move into neighbourhoods on the periphery of the city populated by the ethnic majority (Park et al., 1925). More recent waves of immigrants in the USA (Alba, Logan, Stults, Marzan, & Zhang, 1999; Hanlon et al., 2006; Johnson, 2015; Li, 2009; Lung-Amam, 2017; Singer et al., 2008), Canada (Hiebert, Schuurman, & Smith, 2007) and New Zealand (Johnston, Gendall, Trlin, & Spoonley, 2010), have opted to directly settle in existing ethnic enclaves within the suburbs. The 'suburbanization of enclaves' is a result of increased homeownership opportunities, access to emergent job markets and larger dwelling sizes (Qadeer et al., 2010) in comparison to contemporary urban areas where the proliferation of high-rise condominiums and soaring house prices have displaced low income residents, including immigrants and ethnic-minorities, to the periphery (Keil, 2018).

1.2. Planning for Difference and Hyper-Diversity

The primary critique of ethnoburbs and the allied political ideology of multiculturalism is that they dissipate 'common ground' or the shared experiences and ideologies that promote national identity (Qadeer, 2016; Tasan-Kok, van Kempen, Raco, & Bolt, 2014). The rhetoric of immigrants leading 'parallel lives' has been pervasive in political discussions of multiculturalism across the globe. The existence and growth of ethnic enclaves are often used as evidence of the self-segregation patterns of more recent waves of immigrants and ethnic-minorities (Tyler, 2017). There has been a significant body of urban research over the past decade examining the settings of inter-group encounters and whether segregated ethnic-minority communities erode social cohesion and national identity (Costa & Kahn, 2003; Piekut & Valentine, 2017; Pratsinakis, Hatziprokopiou, Labrianidis, & Vogiatzis, 2017; Putnam, 2007; Tyler, 2017). These debates have been obvious in planning literature through the focus on social mix (Arthurson, 2012; Bacqué, Fijalkow, Launay, & Vermeersch, 2011) and the promotion of cultural pluralism as a way to integrate difference and build a sense of community (Qadeer, 2016; Talen, 2008). The concept of ethnic enclaves as relatively homogeneous spaces would then appear to be neither supportive of social cohesion nor sustainable in an era of increasing ethno-cultural diversity. Thus far, this widespread assumption has been challenged using two arguments about exposure to diversity for residents of ethnic enclaves.

The first position argues that the relative homogeneity of an enclave is irrelevant to concerns about social cohesion due to the level of diversity that exists outside the enclave. For instance, Qadeer's (2016) work on multiculturalism in Toronto, Los Angeles and New York concludes that the vast majority of residents leave their local community to access health and social services and attend school or work. In an era of super-diversity, encountering difference and learning national values happens beyond neighbourhood boundaries through major institutions and mass media (Qadeer & Kumar, 2006). This is akin to Werbner's (2013) concept of 'everyday multiculturalism' that "works as a cohesive force which resists and transcends fragmentation and division" (Pratsinakis et al., 2017, p. 104). This position thus laments that diversity within an ethnoburb is not required in order to encounter difference and appreciate national values.

The second argument posits that diversity does, in fact, exist within ethnic enclaves. Historically, enclaves in the Greater Toronto Area (GTA) have been secondary in nature, meaning the largest ethnic-minority population did not exceed 50% of the total population, which implies that ethnic heterogeneity exists within the space (Qadeer et al., 2010). Further, enclaves have additional forms of internal diversity beyond ethnicity that are based on residents' gender, age, migration status and sexuality among other characteristics (Qadeer et al., 2010; Li, 2005; Pitter & Lorinc, 2016).

The rhetoric of parallel lives, however, has persisted. In 2016, ethnic-minority concentrations had intensified in GTA suburbs resulting in the rise of primary enclaves where one ethnic group comprises the majority of the population (Qadeer & Agrawal, 2018). This sparked widespread concern over the social changes and new homogeneity in these communities as is made evident by the tone of media coverage, such as: "Brampton suffers identity crisis as newcomers swell city's population" (Grewal, 2013) and "How Brampton, a town in suburban Ontario, was dubbed a ghetto" (Ahmed-Ullah, 2017). With this rise in arguments against demographic change and homogeneous suburbs, comes wider concerns about the desirablity of ethnic enclaves in an era of super-diversity and multiculturalism.

This article contributes to the debate over social cohesion and ethnic enclaves by offering an alternative reading of diversity. Specifically, we align with scholars who look beyond ethno-cultural differences prominent in 'super-diversity' analyses, citing them as too simplistic to capture the reality of socio-spatial interactions (Kraftl, Bolt, & Van Kempen, 2018). Rather, we take up the concept of 'hyper-diversity' defined as "an intense diversification of the population in socio-economic, social and ethnic terms, but also with respect to lifestyles, attitudes and activities" (Tasan-Kok et al., 2014, p. 6). This emerging concept is increasingly used to understand aspects beyond represented identities such as gender, age and ethnicity, in addition to everyday behaviours, sub/urban lifestyles, and performances in/of place (i.e., non-representational), that influence life in multicultural contexts. For instance, a recent special issue of *Social & Cultural Geography* used hyper-diversity as concept to "push at the boundaries of definitions of 'super-diversity'" by challenging its common use "in ways that are fairly static, as uncontested (even a-political) matters of fact" (Kraftl et al., 2018). Hyper-diversity then, can be used to understand how hyper-diverse spaces are experienced 'on the ground' (Peterson, 2017), as well as how non-representational aspects of being also contribute to the diversity of spaces (Wilkinson, 2018). To date, the concept of hyper-diversity has not been applied in Canada's multicultural context (but see Pitter & Lorinc, 2016) nor has it been used to interpret the existence and realities of ethnic enclaves.

The objective of this article is twofold. First, we critique existing notions of suburban ethnoburbs as homogeneous spaces that limit opportunities for encountering difference and inhibit social cohesion. Secondly, we use a hyper-diversity lens to examine non-representational aspects of diversity that influence immigrant populations living in ethnoburbs. To these ends, we analyze qualitative data from immigrants settling in one of Canada's most diverse suburban regions and conclude by recommending how the urban planning profession can create inclusive suburban spaces that sustain future hyper-diverse populations.

2. Research Design and Methods

This exploratory study was part of a larger qualitative project that examined social inclusion, settlement and integration experiences of newcomers in Peel Region, Ontario, Canada, which is part of the GTA.

There is ample evidence of the increasing suburbanization of immigrants in the GTA and the growing presence of primary and secondary ethnic enclaves (see Figure 1). A recent study highlights that the 'territorial sectoralization' of most visible minority enclaves has increased between 2006 and 2016, and ethnic-minority enclaves exist almost exclusively outside the urban core of Toronto (Qadeer & Agrawal, 2018). This is due in large part to the relative affordability and suitability of larger single-detached homes in new developments that make these neighbourhoods attractive to newcomer families (Qadeer & Agrawal, 2018; Qadeer & Kumar, 2006). In the Cities of Brampton and Markham, for example, most of the ethnic enclaves are on former greenfield sites that have been developed over the past three decades. The predominantly South Asian and Chinese immigrant populations have been major drivers of the population growth

in these areas, and the clustering of these groups has resulted in communities with ethnic economies, urban services, and land-uses tailored to these populations.

The Region of Peel is a large regional municipality located directly west of Toronto, Canada. It is comprised of three municipalities, the Town of Caledon, the City of Brampton, and the City of Mississauga. As of 2016, the Region of Peel is home to nearly 1.4 million people (Statistics Canada, 2017a). Overall, the Region is rapidly growing and increasingly diverse; it is acknowledged as one of the most diverse regions in Canada (Bascaramurty, 2013; Pitter & Lorinc, 2016). This diversity is exemplified by the fact that 51.5% of the Region's population is comprised of immigrants, and 62.3% of the total population are visible minorities. The City of Brampton has even higher rates, with 73.3% visible minorities and certain neighbourhoods containing above 90% (Statistics Canada, 2017a).

Mississauga is the most urban city within the Region, containing the highest total population (~722,000) and density (2,467.6 people per km^2; Statistics Canada, 2017a). With no room for greenfield development, the City has prioritized infill development and now has 78.1%
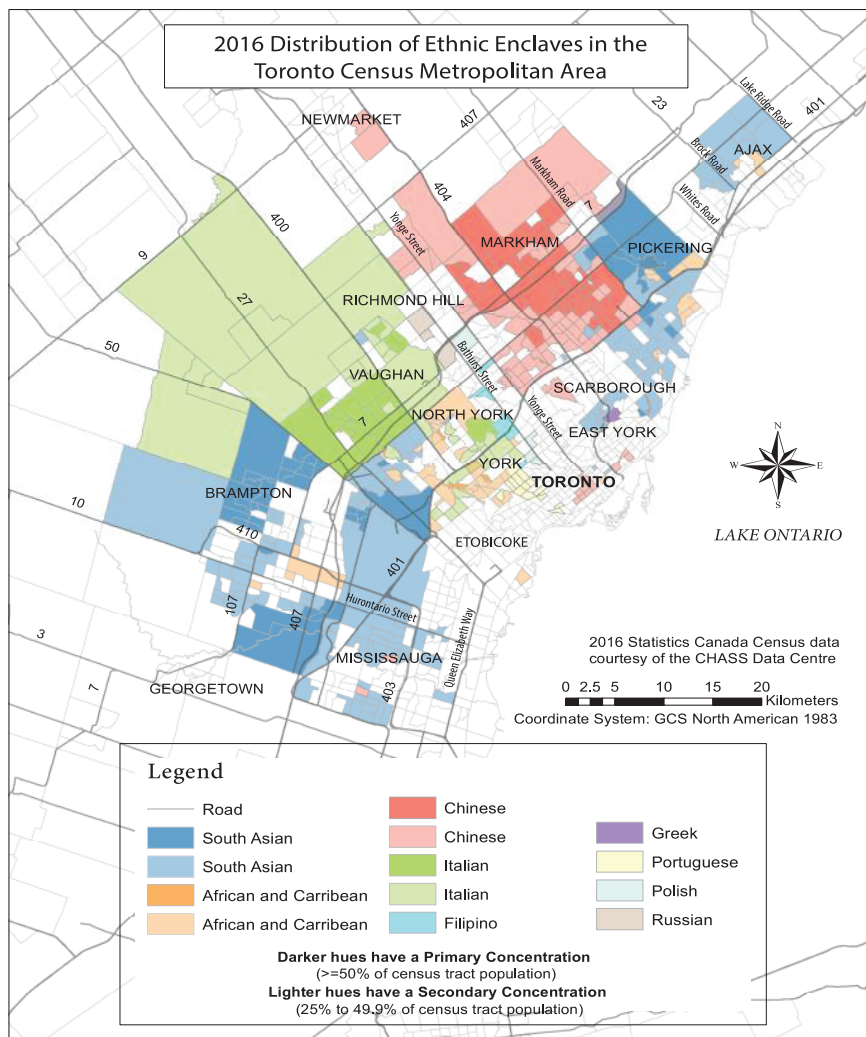

Figure 1. Primary and secondary ethnic enclaves in the GTA (Qadeer & Agrawal, 2018).

of Peel's high-rise buildings (Statistics Canada, 2017a). While it is the largest and most dense municipality in the Region, its growth has slowed. The City of Mississauga grew only 1.1% between 2011–2016 (Statistics Canada, 2017a). Mississauga is home to several distinct ethnic communities including Chinese (13.2%), Arab (8.8%) and Filipino (8.9%).

In contrast, Brampton is a more distinct suburban municipality with a growing population (∼594,000) evidenced by 36.8% positive growth between 2011–2016 (Statistics Canada, 2017a). Compared to Mississauga, Brampton is more sprawled with an average population density of 2,228.7 people per km^2, and the majority (52.1%) of its housing stock comprised of single-detached dwellings (Statistics Canada, 2017a). Brampton has many ethnic communities within its borders but is widely known as a large South Asian ethnoburb, due to the prominence of the South Asian population (44.3% of the total) and the plethora of places of worship, shops and services that cater to the South Asian community. These trends are reflected in the unofficial renaming of Brampton to 'Bramladesh' and the Springdale neighbourhood to 'Singhdale'.

As part of a collaborative community engaged research project (Van de Ven, 2007), we gathered information about immigrants' broad perceptions and experiences of settlement, integration and inclusion in Peel Region. In total, there were 115 participants who took part in one of 11 focus groups across the Region. Our sample included both youth and adult immigrants from 31 different countries, most of whom had recently arrived in Canada (less than 5 years in the country) and who were part of sponsorship or skilled worked immigration categories. For participant details see Table 1.

Participants were recruited primarily with the assistance of Settlement Service Providers (SSPs) within the Region of Peel who circulated recruitment flyers and offered space on-site for data collection. Community research assistants from SSPs were hired to recruit potential participants and, in few cases, acted as interpreters during focus groups. Other recruitment strategies included information booths and the posting of flyers at community centres and local libraries. Locations were chosen strategically to recruit youth who attended nearby high schools, or adults who frequented libraries. At these venues, information booths were set up where potential participants were informed about the research including where and when the focus group would be conducted. Participants received a $15 gift card as an honorarium for their time in the 60–90-minute focus group. This research study was approved by the University of Toronto Research Ethics Board.

The focus groups were audio recorded and then transcribed verbatim. Data for this study were analyzed using Corbin and Strauss' (2014) tripartite coding process. After completing open coding of the 11 focus group transcripts, data on settlement choices and experiences in Peel's suburbs were connected using the axial coding strategy. The final analysis phase used selective coding (Corbin & Strauss, 2014) to identify three interconnected examples of hyper-diversity.

3. Immigrants and Hyper-Diversity in the Suburbs

We theoretically and empirically critique the presumption of ethnic enclaves as homogeneous spaces based on empirical evidence from our qualitative data. Our sample was diverse in many ways including gender, ethnicity, age and migration history (see Table 1) but our findings also suggest that non-representational aspects of being—the attitudes, lifestyles and behaviours of our newcomer participants—are important yet overlooked examples of diversity in the suburbs. In this section, we focus on ways in which the settlement experiences in Peel ethnoburbs can be read through a lens of hyper-diversity that highlights the differing attitudes and activities of immigrants in the suburbs.

3.1. Constructing Ethnic Enclaves

In this section, we challenge the fundamental premise underlying the 'problem' with ethnic enclaves: that spatial segregation of homogeneous populations interferes with ideals of cultural pluralism and integration. Ethnic enclaves are defined based on the perception of a common ethnic background of inhabitants; however, the measurement of ethnic enclaves is based on categories of ethnicity constructed for administrative convenience. This is particularly concerning in the case of Brampton's enclaves where South Asians are both the majority-minority in the city while also comprising the majority of the total population in some neighbourhoods (Statistics Canada, 2017a). Constructions of 'South Asian' as a homogeneous ethno-cultural category—or even a well-defined world region—is inherently problematic as argued by geographer Sutama Ghosh (2013). Ghosh highlights that the term was institutionalized by the Canadian government in order to facilitate the collection of immigration and census data from a group of non-white immigrants who were physically similar according to the state (Ghosh, 2013). Ghosh (2013, p. 49) concludes: "Given the heterogeneity among and within 'South Asians'—history, politics, society, economy and culture—it is important to question whether there can ever be a 'South Asian' diasporic identity?" This line of reasoning can be extended to the social and spatial construction of an 'ethnoburb'.

Almost a majority of our sample migrated from India, Pakistan and Sri Lanka, countries that are typically included in the South Asian region. Yet, many participants were quick to distinguish themselves from others with the same ethnic category whether by country of origin, city/village of birth or religious-background. Students in particular reacted to the informal labeling of their community as part of 'Bramladesh' and their high school as 'Little India':

Table 1. Socio-demographic profile of participants.

	Total	Percent of Total (%)
Population		
Total	115	100%
Male	47	40.8%
No answer	1	0.9%
Age		
>18	42	36.5%
18–24	18	15.7%
25–34	12	10.4%
35–44	26	22.6%
45–54	10	8.7%
55–64	4	3.5%
65+	2	1.8%
No answer	1	0.9%
Country of Birth		
India	34	29.6%
Pakistan	14	12.2%
Iraq	10	8.7%
China	8	6.9%
Columbia	6	5.2%
Other	43	37.4%
Length of Residency in Canada		
<3 months	4	3.5%
3–6 months	9	7.8%
7–12 months	15	13.0%
1–2 years	32	27.8%
3–5 years	41	35.7%
6–9 years	6	5.2%
> 9 years	7	6.1%
Immigration Category		
Economic/Skilled Worker Program	34	29.6%
Family/Sponsorship Program	47	40.9%
Temporary Residency (Student Visa, Temporary Worker Program)	3	2.6%
Refugee Program	5	4.3%
Other	21	18.3%
No answer	5	4.3%

I mean, our school is like the goddam United Nations....Yes, students from India [are here], and also [from] other places: the West Indies, Pakistan, Bangladesh, Iraq, Afghanistan...Iran...and probably more places.

Similarly, adult participants from India noted that there was rich cultural heterogeneity in the diaspora. To illustrate, one participant acknowledged the religious differences (and tensions) among other Indian participants in her focus group: "Back home, we would never be together in the same room...She is Muslim and I am Hindu....[Being together] isn't [common]". Thus, the appropriateness of using administratively-defined categories of ethnicity for the study of enclaves ignores the reality of ethno-cultural heterogeneity, and erroneously creates spatial-boundaries around a diverse population

in order to illustrate their constructed sameness. This practice demonstrates very little interest in exploring the distinctions within minority populations beyond the fact that they are not the white majority. Here we see that Ghosh's question above is an important one for planning practitioners and scholars who perpetuate the 'othering' of non-white populations in their uncritical use of the 'South Asian' category in discussions of ethnic enclaves. This emphasis on ethnicity overlooks other important sources of difference that exist in the hyper-diverse reality of suburbs.

3.2. Performing Belonging in/out of Enclaves

While past research has acknowledged the social and economic benefits of living in enclaves (Li, 2005; Qadeer, 2016; Qadeer & Kumar, 2006), the rhetoric of parallel

lives suggests that immigrants make settlement choices based primarily on community social structure (i.e., homogeneity). In this study, participants shared a deep appreciation for both the existence of multiple ethnic enclaves in the GTA and the quality of ethnoburbs in Peel. For instance, many of the South Asian participants who lived in Brampton were "feeling very good about this place…it is much like my home", and especially found the Mandirs and Gurdawaras in Canada to be "very high quality", with other participants feeling positively about their new communities, "roti, sari, even the [eye-brow] threading is here!" Indeed, some participants were content within enclaves and found that Peel ethnoburbs met all their needs. Further, the familiarity with many of the socio-cultural practices and services within enclaves resulted in a strong sense of belonging and feelings of comfort for some participants. However, this common narrative was challenged by the majority of the participants.

Almost all of the youth and about half of the adult participants in this study expressed their reservations about living exclusively among people with similar cultural backgrounds. This group often discussed the desire for a typically 'Canadian experience' of living in multicultural communities:

A lot of people from India, they choose to live in Brampton….Now I thought if I wish to integrate into Canadian society, I should not go to my own community. Otherwise what is the difference between living in Mississauga or living in Bombay or Karachi? So, I deliberately chose this neighbourhood, it is a very nice neighbourhood, very nice community…we have a wonderful diversity of people from Poland, Ukraine, China, Mississippi, Native Canadians, and only two, three families from India.

Parents spoke about wanting their kids to have the benefits of 'multicultural Canada' right in their community or school, and youth stated that were eager to learn and experience new cultures. In most cases, diversity was described in ethno-cultural terms, and also regularly perceived as homogeneous by participants, though there was some discussion of sexuality, educational background, age, religion, and migration history as desired sources of community diversity.

The dissonance between wanting to live outside of an enclave while simultaneously enjoying the social and economic benefits generated by the existence of those enclaves was neither acknowledged nor reconciled by the participants who held this view. Indeed, this epitomizes the challenge of social integration for immigrants: how to delicately balance the personal ethno-cultural and other representational differences within the private domain, with the desire to be part of the common ground in the shared public domain (e.g., multiculturalism and social mixing; Qadeer, 2016). This is ultimately about belonging and feelings of inclusion (Omidvar & Richmond, 2003), and how the process of belonging for

these newcomers is performed in space (Lung-Amam, 2017). For participants, the desire to live outside of enclaves can be read as performing a 'Canadian lifestyle'. The choice to reside in a multicultural space was a crucial aspect of belonging for these participants. Here we have evidence of hyper-diversity based on participants' performances of belonging, which determined their desire and decision to reside within or outside enclaves.

3.3. The Role of Networks and Mobilities in Suburban Settlement

Decisions about where to reside were also largely influenced by the socio-spatial structure of the GTA. Many participants argued that living anywhere in GTA would provide enough access to cultural-specific amenities while also benefiting from the diversity of the region. The frequency and proximity of ethnic enclaves in the GTA, particularly for those of Indian, Pakistani and Sri Lankan descent, and those of Chinese, Korean, and Vietnamese descent, allowed participants to easily frequent enclaves in neighbouring cities (usually by private automobile). Several participants described how they would regularly travel from one ethnoburb to another to attend a religious service, go shopping, or connect with family or friends. This is exemplified by Iris, a Chinese-Korean teenager who migrated with her parents two years ago:

We live here in [Mississauga] and go to Mississauga Chinese Centre, shop at [the Asian supermarket] and go to [Korean church], there are lots of things here for Asians….We still like to go to Markham every weekend and eat at real Korean restaurants and stop at Pacific Mall….My parents have friends there from back home that we meet with.

Peel was a preferred destination by many participants because of its affordability, proximity to Toronto, and connections to surrounding cities with established or growing enclaves like Markham, Richmond Hill, Milton, and for some Eastern European immigrants, Hamilton. For many participants, the enclave boundaries were fluid and the close proximity to other enclaves encouraged mobility. In this sense, Peel enclaves were not destinations in and of themselves but instead represented nodes in a network of communities in the GTA and beyond.

This finding suggests that we can think of enclaves as not just dynamic spaces (Qadeer et al., 2010) but also as relational spaces (Graham & Healey, 1999). Such an approach requires us to think beyond the (albeit changing) borders of an enclave towards the fluidity of boundaries, the connectivity of multiple spaces, and the relevance of socio-relational determinants of activity space and mobility. This also supports arguments that residents encounter diversity outside their communities as they are not exclusively bound by the invisible borders of their neighbourhoods. Further, a relational approach to un-

derstanding space is inherently complementary to a focus on hyper-diversity. For instance, rather than focus on ethnic congregation as a determinant of settlement in the suburbs, we can focus of the role of mobility in a networked region when determining how/why some ethnic minorities move through space during the settlement process. Once again, considering hyper-diversity in this way poses a distinct challenge to the parallel lives narrative commonly used to critique ethnic enclaves and immigrant settlement in segregated communities.

3.4. Considering Housing Trajectories and Settlement Experiences in the Suburbs

Immigrants' performance of belonging in and around the GTA's networked enclaves was largely influenced by their housing trajectory. Home ownership is a desired outcome for the vast majority of newcomers in Canada (Simone & Newbold, 2014) and is an important marker of spatial and temporal permanence and belonging (Lung-Amam, 2017). In this study, property ownership of single-detached homes was necessary to support the multi-generational living preferred by many participants, and the affordability of housing in the suburbs was a major draw to Peel Region. Yet, achieving home ownership was a challenge in an era of employment precarity and housing unaffordability that affects populations more broadly (Moos, Wilkin, Seasons, & Chase, 2015; Worth, 2016). The reality of delayed home ownership slowed the settlement process for many newcomers and impacted a sense of belonging for immigrants like Raj:

> I know I will be belonging when I get a job in my line [of work]....Then I can get a house, a good house for my children, and the parents. Then I will have BBQs and be Canadian.

The need for multi-generational housing and its impact on current growth-plans and sustainability priorities is an important consideration for planners working in an age of hyper-diversity, as this lifestyle deviates from that of the residents in past suburbs (Lung-Amam, 2017). However, there was considerable variety in the lifestyle of newcomers in this study that influenced their housing needs in the suburbs.

For many, like Raj, home ownership was often delayed or not possible in a climate of rising housing prices and increasing employment precarity. This meant a reliance on short-term and temporary housing options such as hotels, rental (and often crowded) apartments for years longer than expected. Further, the shortage of adequate housing also meant that plans for family reunification were delayed, which can have significant health and social impacts for newcomers like Raj (Dean & Wilson, 2009). Other newcomers who arrived as a family unit or who were sponsored by family members who had already settled, had very different housing trajectories upon arriving. Their relative financial stability en-

sured that they could make intentional decisions about whether to live in, near or outsider of an ethnic enclave.

Here we acknowledge that the individual settlement circumstances—arriving alone, arriving with family, ability to secure employment—are important non-representational factors that influence the experiences of newcomers within and round ethnic enclaves. Theses housing trajectories and accompanying lifestyles become relevant to understanding social diversity in the suburbs when we use a hyper-diverse lens.

4. Conclusions: A Hyper-Diversity Agenda in Planning

This study contributes to the bodies of literature on social diversity in the suburbs and the growth of ethnic enclaves by addressing recent concerns about cultural pluralism in an era of increasing immigration. To date, scholarship on immigration, diversity and encountering difference has largely prioritized urban settings. This privileging of 'cosmopolis' as the reigning site of inter-ethnic and cultural encounter, negates the reality of growing cultural pluralism in the suburbs (Keil, 2018; Tyler, 2017). Suburbs are now the central site of immigrant hyper-diversity largely guided by new housing developments that attract immigrants, thus increasing the growth of ethnic enclaves (Qadeer et al., 2010). Much of the planning narrative on immigrant suburbanization has emphasized the 'threat' that emerging ethnoburbs pose to social cohesion, immigrant integration, and the very notion of national identity (Costa & Kahn, 2003; Piekut & Valentine, 2017; Pratsinakis et al., 2017; Putnam, 2007; Qadeer, 2016; Qadeer & Agrawal, 2018; Tyler, 2017). In this article, we challenge the perception of homogeneity that has long plagued the suburbs, including the more recent emergence of ethnoburbs.

This study was exploratory and relied on perceptional and self-reported experiential data to shed light on the ways in which hyper-diversity influences life in suburban ethnic enclaves. As a qualitative study, it is not intended to be representative or generalizable to all immigrants in all suburban communities across the GTA. Rather, it has generated new ways of considering experiences in ethnic enclaves beyond ethno-cultural identity and practices, and highlights areas for future exploration. For instance, we did not ask participants to confirm their residence in an ethnic enclave, nor did we confirm their circumstances of immigration. Future research should examine residents' conceptualizations of ethnic enclaves and delve more deeply into the specific community features (e.g., population demographics versus built form) that attract hyper-diverse residents. Secondly, while participants discussed their mobility patterns and activity spaces between ethnic enclaves, we did not measure this directly. Mobile methodologies using personal GPS devices now allow researchers to track actual activity space, which is worth examining in the future to more systematically assess mobility within the fluid boundaries of ethnic enclaves in the GTA. Finally, our sample was limited to

recent and mid-term immigrants. Future research should analyze the suburban experiences of those who migrated in childhood as well as second-generation immigrants in ethnic enclaves (see, Kataure & Walton-Roberts, 2013) using the lens of hyper-diversity.

It is clear that immigration is now a suburban phenomenon, and one that is projected to continue in the future. Our findings conclude that there is a need for planning scholars and practitioners to critically assess the concept and construction of ethnic enclaves. Specifically, the use of arbitrarily defined categories of ethnicity to condense distinct populations does not acknowledge nor sustain social diversity. Rather, it creates false assumptions about who is leading parallel lives from whom, and inherently problematizes ethnic-minorities in enclaves for not mixing with the white majority. Concerns about social cohesion in an era of growing ethnic enclaves in the GTA perpetuates white-majority fears of being displaced and overrun by visible/ethnic/linguistic/religious-minority 'others' (Johnson, 2015; Lung-Amam, 2017). Particularly in the GTA where visible minorities now comprise the majority of the population, researchers and policy-makers must think about planning for ethnic diversity and social cohesion beyond the white versus non-white binary.

Sustaining social diversity in the suburbs requires that planning scholars and practitioners adopt the concept of hyper-diversity in order to think beyond the representational markers of difference, and towards non-representational aspects of difference. This approach, in fact, is much more in line with what planners do best: plan for how people live (i.e., lifestyles and activities) rather than who they are (i.e., ethnic, religious, linguistic identities). Our findings promote three readings of hyper-diversity in Peel's suburbs that more aptly describe the differences in attitudes, behaviours, and lifestyles of recent immigrants. While these cannot be separated from participants' identity as visible/ethnic/linguistic/religious minorities in Canada, they provide alternative ways of understanding immigrants' agency. In particular, immigrants' interests in settling within the borders of an ethnic enclave were shaped by their sense of belonging, and their decision of where to live—within or outside an enclave—was the performance of that belonging. Secondly, the ability to perform for some ethnic-minority participants was made possible by the network of enclaves in the GTA, which shaped their mobility patterns. Finally, there was significant diversity in the migration and settlement experiences of participants which dramatically shaped their housing trajectory and settlement destinations.

This research provides evidence that challenges the assumption of the homogeneous ethnoburb by providing a broader understanding of what constitutes 'diversity' in the growing suburbs. Hyper-diversity is an emerging perspective globally and even more novel in the Canadian context but its potential for influencing the design of more inclusive suburbs is great.

Conflict of Interests

The authors declare no conflict of interests.

References

Addie, J.-P. D., Fiedler, R. S., & Keil, R. (2015). Cities on the edge: Emerging constellations in Canada. In P. Filion, M. Moos, & T. Vinodrai (Eds.), *Canadian cities in transition: Perspectives for an urban age* (pp. 415–432). New York, NY: Oxford University Press.

Ahmed-Ullah, N. (2017, June 5). How Brampton, a town in southern Ontario was dubbed a ghetto. *The Globe and Mail*. Retrieved from www.theglobeandmail.com/news/toronto/brampton-a-story-of-political-importance-power-and-ethnic-enclaves/article30273820

Alba, R., Logan, J., Stults, B., Marzan, G., & Zhang, W. (1999). Immigrant groups in the suburbs: A reexamination of suburbanization and spatial assimilation. *American Sociological Review*, *64*(3), 446–460. Retrieved from www.jstor.org/stable/2657495

Arthurson, K. (2012). *Social mix and the city: Challenging the mixed communities consensus in housing and urban planning policies*. Collingwood: CSIRO Publishing.

Bacqué, M., Fijalkow, Y., Launay, L., & Vermeersch, S. (2011). Social mix policies in Paris: Discourses, policies and social effects. *International Journal of Urban and Regional Research*, *35*(2), 256–273. https://doi.org/10.1111/j.1468-2427.2010.00995.x

Bascaramurty, D. (2013, June 15). How Brampton demonstrates the new vision of Canada. *The Globe and Mail*. Retrieved from www.theglobeandmail.com/news/national/how-brampton-demonstrates-the-new-vision-of-canada/article12581170

Brenner, N. (2014). *Implosions/explosions. Towards a study of planetary urbanization*. Berlin: Jovis.

Castles, S., de Haas, H., & Miller, M. J. (2013). *The age of migration: International population movements in the modern world*. London: Macmillan International Higher Education.

Corbin, J., & Strauss, A. L. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Los Angeles, CA: Sage Publications.

Costa, D., & Kahn, M. (2003). Civic engagement and community heterogeneity: An economist's perspective. *Perspectives on Politics*, *1*(1), 103–111. https://doi.org/10.1017/S1537592703000082

Dean, J. A., & Wilson, K. (2009). 'Education? It is irrelevant to my job now. It makes me very depressed…': Exploring the health impacts of under/unemploy-

ment among highly skilled recent immigrants in Canada. *Ethnicity & Health*, *14*(2), 185–204.

Fava, S. F. (1956). Suburbanism as a way of life. *American Sociological Review*, *21*(1), 34–37.

Forsyth, A. (2012). Defining suburbs. *Journal of Planning Literature*, *27*(3), 270–281. https://doi.org/10.1177/0885412212448101

Ghosh, S. (2013). 'Am I a South Asian, really?' Constructing 'South Asians' in Canada and being South Asian in Toronto. *South Asian Diaspora*, *5*(1), 35–55.

Graham, S., & Healey, P. (1999). Relational concepts of space and place: Issues for planning theory and practice. *European Planning Studies*, *7*(5), 623–646.

Grewal, S. (2013, May 24). Brampton suffers identity crisis as newcomers swell city's population. *The Toronto Star*. Retrieved from www.thestar.com/news/gta/2013/05/24/brampton_suffers_identity_crisis_as_newcomers_swell_citys_population.html

Hanlon, B. F., Vicino, T. J., & Short, J. R. (2006). The new metropolitan reality in the US: Rethinking the traditional model. *Urban Studies*, *43*(12), 2129–2143.

Harris, R. (2015). Using Toronto to explore three suburban stereotypes, and vice versa. *Environment and Planning A*, *47*(1), 30–49.

Hiebert, D., Schuurman, N., & Smith, H. (2007). *Multiculturalism "on the ground": The social geography of immigrant and visible minority populations in Montreal, Toronto and Vancouver, projected to 2017* (Working Paper Series no. 07-12). Vancouver: Metropolis British Columbia Centre of Excellence for Research on Immigration and Settlement.

Johnson, M. (2015). *The new Bostonians: How immigrants have transformed the Metro Area since the 1960s*. Amherst, MA: University of Massachusetts Press.

Johnston, R., Gendall, P., Trlin, A., & Spoonley, P. (2010). Immigration, multiculturalism and geography: Intergroup contact and attitudes to immigrants and cultural diversity in New Zealand. *Asian and Pacific Migration Journal*, *19*(3), 343–369.

Kataure, V., & Walton-Roberts, M. (2013). The housing preferences and location choices of second-generation South Asians living in ethnic enclaves. *South Asian Diaspora*, *5*(1), 57–76.

Keil, R. (2018). Extended urbanization, "disjunct fragments" and global suburbanisms. *Environment and Planning D: Society and Space*, *36*(3), 494–511. https://doi.org/10.1177/0263775817749594

Kraftl, P., Bolt, G., & Van Kempen, R. (2018). Hyper-diversity in/and geographies of childhood and youth. *Social & Cultural Geography*, *18*(8), 1–9. https://doi.org/10.1080/14649365.2018.1491619

Li, W. (1998). Anatomy of a new ethnic settlement: The chinese ethnoburb in Los Angeles. *Urban Studies*, *35*(3), 479–501. https://doi.org/10.1080/0042098984871

Li, W. (2005). Beyond chinatown, beyond enclave: Reconceptualizing contemporary chinese settle-

ments in the United States. *GeoJournal*, *64*(1), 31–40. https://doi.org/10.1007/s10708-005-3921-6

Li, W. (2009). *Ethnoburb: The new ethnic community in urban America*. Hawai: University of Hawai'i Press.

Lung-Amam, W. S. (2017). *Tresspassers? Asian americans and the battle for suburbia*. Oakland, CA: University of California Press.

Moos, M., Wilkin, T., Seasons, M., & Chase, G. (2015). Planning for housing in a time of growing employment precarity. *Plan Canada*, *Spring*, 12–17.

Omidvar, R., & Richmond, T. (2003). *Immigrant settlement and social inclusion in Canada*. Toronto: Laidlaw Foundation.

Park, R. E., Burgess, E. W., & McKenzie, R. D. (1925). *The city*. Chicago, IL: University of Chicago Press.

Peterson, M. (2017). Living with difference in hyper-diverse areas: How important are encounters in semi-public spaces? *Social & Cultural Geography*, *18*(8), 1067–1085.

Piekut, A., & Valentine, G. (2017). Spaces of encounter and attitudes towards difference: A comparative study of two European cities. *Social Science Research*, *62*, 175–188.

Pitter, J., & Lorinc, J. (Eds.). (2016). *Subdivided: City-building in an age of hyper-diversity*. Toronto: Coach House Books.

Pratsinakis, M., Hatziprokopiou, P., Labrianidis, L., & Vogiatzis, N. (2017). Living together in multi-ethnic cities: People of migrant background, their interethnic friendships and the neighbourhood. *Urban Studies*, *54*(1), 102–118. https://doi.org/10.1177/0042098015615756

Putnam, R. D. (2007). E pluribus unum: Diversity and community in the twenty-first century the 2006 Johan Skytte Prize lecture. *Scandinavian Political Studies*, *30*(2), 137–174. https://doi.org/10.1111/j.1467-9477.2007.00176.x

Qadeer, M. (2016). *Multicultural cities: Toronto, New York, and Los Angeles*. Toronto: University of Toronto Press.

Qadeer, M., & Agrawal, S. (2018). Adjusting to Toronto's new reality. *Plan Canada*, *Summer*, 40–42.

Qadeer, M., Agrawal, S., & Lovell, A. (2010). Evolution of ethnic enclaves in the Toronto Metropolitan Area 2001–2006. *Journal of International Migration and Integration*, *11*(3), 315–339. https://doi.org/10.1007/s12134-010-0142-8

Qadeer, M., & Kumar, S. (2006). Ethnic enclaves and social cohesion. *Canadian Journal of Urban Research*, *15*(2), 1–17. Retrieved from www.jstor.org/stable/26192499

Sandercock, L. (2003). Planning in the ethno-culturally diverse city: A comment. *Planning Theory & Practice*, *4*(3), 319–323. https://doi.org/10.1080/1464935032000118661

Sandercock, L. (2004). Towards a planning imagination for the 21st century. *Journal of the American Planning Association*, *70*(2), 133–141. https://doi.org/

10.1080/01944360408976368

Simone, D., & Newbold, K. B. (2014). Housing trajectories across the urban hierarchy: Analysis of the longitudinal survey of immigrants to Canada, 2001–2005. *Housing Studies*, *29*(8), 1096–1116.

Singer, A., Hardwick, S. W., & Brettell, C. B. (2008). *Twenty-first century gateways: Immigrant incorporation in suburban America*. Washington, DC: Brookings Institution Press.

Statistics Canada. (2017a). *Census Profile, 2016 Census* (Catalogue no. 98-316-X2016001). Ottawa: Statistics Canada. Retrieved from www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

Statistics Canada. (2017b). *Population growth: Migratory increase overtakes natural increase*. Ottawa: Statistics Canada. Retrieved from www.statcan.gc.ca/pub/11-630-x/11-630-x2014001-eng.htm

Talen, E. (2008). *Design for diversity: Exploring socially mixed neighbourhoods*. London: Architectural Press.

Tasan-Kok, T., van Kempen, R., Raco, M., & Bolt, G. (2014). *Towards hyper-diversified European cities: A critical literature review*. Utrecht: Utrecht University.

Tyler, K. (2017). The suburban paradox of conviviality and racism in postcolonial Britain. *Journal of Ethnic and Migration Studies*, *43*(11), 1890–1906. https://doi.org/10.1080/1369183X.2016.1245607

Tzaninis, Y., & Boterman, W. (2018). Beyond the urban–suburban dichotomy. *City*, *22*(1), 43–62. https://doi.org/10.1080/13604813.2018.1432143

Van de Ven, A. H. (2007). *Engaged scholarship: A guide for organizational and social research*. New York, NY: Oxford University Press.

Vertovec, S. (2007). Super-diversity and its implications. *Ethnic and Racial Studies*, *30*(6), 1024–1054.

Vicino, T. J. (2013). *Suburban crossroads: The fight for local control of immigration policy*. Lanham, MD: Lexington Books.

Walks, A. (2013). Suburbanism as a way of life, slight return. *Urban Studies*, *50*(8), 1471–1488. https://doi.org/10.1177/0042098012462610

Werbner, P. (2013). Everyday multiculturalism: Theorising the difference between 'intersectionality' and 'multiple identities'. *Ethnicities*, *13*(4), 401–419. https://doi.org/10.1177/1468796813483728

Wilkinson, S. (2018). Young people's drinking spaces and im/mobilities: A case of 'hyper-diversity'? *Journal of Youth Studies*, *21*(6), 799–815.

Wilson, J. H., & Singer, A. (2011). *Immigrants in 2010 Metropolitan America: A decade of change* (Metropolitan Policy Program). Washington, DC: Brookings. Retrieved from www.brookings.edu/wp-content/uploads/2016/06/1013_immigration_wilson_singer.pdf

Worth, N. (2016). Feeling precarious: Millennial women and work. *Environment and Planning D: Society and Space*, *34*(4), 601–616.

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COGITATIO

Article

Sustaining Suburbia through New Urbanism: Toward Growing, Green, and Just Suburbs?

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Abstract

This article examines the governance dynamics surrounding the development of sustainable neighborhoods in United States metropolitan contexts characterized as suburban sprawl. Drawing on original case study research of three distinct applications of New Urbanism design principles, the article argues for understanding the relative power of municipal authorities to incorporate social justice imperatives into the practice of sustainable development in suburban contexts. Moreover, key to prioritizing social imperatives is the way in which development processes respond to the "suburban ideal", which is a view of suburbs as an exclusive bourgeois utopia that constrains the ability to connect so-called sustainable development with social justice. Case study research shows how deference to the suburban ideal limits sustainable development to embracing growth and greening interests only and peripheralizing or denying social justice. The article discusses how sustainable development endeavors can address such constraints in the effort to create alternatives to suburban sprawl that integrate the pursuit of social justice with environmental protection and economic growth.

Issue

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1. Introduction

American suburbs are the posterchildren of unsustainability. So goes the common perception of such places. The *End of Suburbia* (Greene, Silverthorn, Zwicker, & Electric Wallpaper Company, 2004), a film about peak oil, captures this view well. It casts post-World War II suburban sprawl as the ultimate expression of an extractive system that cannot continue indefinitely. Overburdened by an insatiable demand for oil and stressed by a way of life that is alienating people from nature and community, *End of Suburbia* predicts the collapse of suburban lifestyles and the decline of suburban places. Against this current of thought, there are a variety of efforts to promote more sustainable environments through innovative development strategies in U.S. suburbs. Acknowledging this promotes a reckoning of the narrative that casts suburbs as unsustainable. Moreover, studying the actually-existing practices pro-

moting sustainability in suburban contexts offers crucial insight into the progress—and remaining challenges—of sustainable development.

In this article I begin to investigate strategies for promoting sustainability in contexts of the U.S. that are dominated by suburban sprawl. My investigation is part of a larger project examining the implementation of New Urbanism, an urban design movement promoting compact, pedestrian-oriented, and mixed-use development. Drawing on case study research of three New Urbanist projects, I trace efforts to promote sustainability in suburban contexts in order to inquire about what can be expected from this movement's efforts to promote sustainable development. Results of my inquiry offer a picture of what a "made in the suburbs" strategy for sustainability looks like. This picture is framed by a view that sees sustainability as an effort to simultaneously advance economic growth, environmental protection, and social justice. The case studies confirm some of the ex-

tant critiques of New Urbanism as a movement that ultimately fails to advance sustainability. This occurs, I argue, because developers and city officials mobilize New Urbanism to wrap a green veneer around development that ultimately reproduces the "suburban ideal" of access to middle-class community, property, and nature. At the same time, incorporating social justice into sustainable development in the suburbs is possible. Drawing on lessons learned from the case studies, I argue that seeing the relative power of municipal authorities to frame social justice concerns as a necessary part of sustainable development improves our ability to understand when and how New Urbanism can be used to promote growing, green, and just suburbs. Furthermore, a key part of municipal authorities' ability to promote social justice, I argue, hinges on mobilizing a vision of sustainable development that displaces the suburban ideal. In advancing this argument, I first define its key terms: the suburban ideal, sustainability, and suburbs.

The suburban ideal refers to a geographic imaginary of a place that is designed for the enactment of class privilege in a setting insulated from the textures of city life. This term draws on Teaford's work (1997, p. 9), which describes how the U.S. suburban ideal has been reinforced through advertising, which has persistently defined suburbia as "a residential environment where nature and the best people mingled to the benefit of anyone fortunate enough to purchase a homesite". Kotkin (2007) argues that the popular appeal of the suburban ideal in the U.S. has, for decades, sparked growth at the metropolitan periphery in the form of low-density, automobile-oriented built environments. Hayden (2003) traces the emergence, change, and stability of the suburban ideal through the history of suburbanization in the U.S., underscoring how suburban sprawl is generated precisely because people see peripheral suburban places as locations where individuals ought to go to realize dreams of property ownership, access to nature, and community involvement. Fishman (1987) further clarifies that such dreaming is particular to middle- and upper-class interests and practically elusive, despite its widespread appeal. However, some have claimed that there are ways to promote economic growth, environmental protection, and social justice through New Urbanism (e.g., Farr, 2008; Kim & Larsen, 2017), which hold promise for promoting sustainability in suburbs more generally.

Sustainability is a term fraught with ambiguity. The Bruntland Report (World Commission on Environment and Development, 1987) introduced "sustainability" to highlight the ways that economic, social, and environmental systems are interlinked, bringing awareness to the future effects of contemporary action. Bruntland also posited "sustainable development" as an on-the-ground endeavor to create settlements that move toward sustainability. Discourse around sustainable development has drifted from this specific meaning. Popular use of the term has led to a focus on environmental concerns. Commonsense usage simplifies it to mean an activity that can

be continued indefinitely. Efforts to appropriate sustainability for radical change have nevertheless emerged in the past decade (e.g., Agyeman, 2013). Toward that end, I follow Dale and Newman's (2009, p. 670) conceptualization of sustainable development as a project to reconcile three imperatives:

(i) the ecological imperative to live within global biophysical carrying capacity and maintain biodiversity; (ii) the social imperative to ensure the development of democratic systems of governance to effectively propagate and sustain the values that people wish to live by; and (iii) the economic imperative to ensure that basic needs are met worldwide.

This article thus relates discussion of solutions for sustainability in suburbs to a specific concern for generating settlements that promote social justice, economic prosperity, and adhere to the ecological imperative of sustainability. Following Campbell's (1996) conceptualization of sustainable development, this means shaping development such that it simultaneously contributes to economic growth, is accessible to groups across the continuum of social differentiation, and impacts the natural environment in ways that can be supported indefinitely.

In this article, I focus on efforts to promote sustainability in contexts that are characteristic of suburban sprawl. In defining "suburban sprawl", I follow Forsyth's (2012, p. 273) strategy of describing suburban places along three dimensions: physical qualities, including situation and built environment; functional attributes, such as how inhabitants travel in and through them and the range of activities they support; and sociocultural character concerning demographics, "level of exclusivity, and cultural heritage and tastes". The particular places I examine have each been built up in the postwar period, oriented around automobility, characterized by low-density, low-rise built environments, are planned to separate out residential landscapes from other land uses and segregate income groups by creating distinct areas for particular housing types. Such places are not without employment and consumption activities, but these are located in sites that are apart from residential landscapes.

2. Sustainability and New Urbanism

New Urbanism has a principal aim of changing built environments in order to foster a different way of life. The movement began as an environmental and aesthetic critique of suburban sprawl (White & Ellis, 2007). It has since evolved to promote its design principles as a sustainability fix for problems associated with contemporary urbanization in the U.S. and beyond (Congress for the New Urbanism [CNU], 2008). The most tangible and widespread products of New Urbanism are neighborhood-level projects, which typify the movement, including the Stapleton Redevelopment Project, in Denver, and the Mueller Development, in Austin. These

are also some of the most visible efforts of New Urbanism to promote sustainability, which ultimately take shape in a variety of ways, including suburban densification, such as Mizner Park in Boca Raton (Dunham-Jones & Williamson, 2009), and conservation design communities, as seen in Prairie Crossing, Illinois (Zimmerman, 2001).

New Urbanism's turn toward sustainability appears in several moves. It is evident in efforts to frame New Urbanism as a strategy for generating Smart Growth, a broader effort in the U.S. to manage metropolitan growth such that investment is focused on the redevelopment of older areas and away from the periphery and generates denser forms of settlement (Knaap & Talen, 2005). It is also apparent in CNU's partnership with the U.S. Green Building Council and the National Resource Defense Council to create the LEED-ND rating system (CNU, 2007). While these efforts are most obviously attuned to managing the tensions between environmental and economic imperatives of sustainability there has been ongoing, though tepid, interest to promote social equity through the movement. This has generated critiques about New Urbanism's asserted connection to the social imperatives of sustainability.

One of the longstanding critiques about New Urbanism's unsustainability is that it merely repackages suburban sprawl. Through his detailed critique of the Kentlands neighborhood in suburban Maryland, Marshall (2001) frames the broader movement as a weak attempt to alter suburban lifestyles. He argues that New Urbanism produces built environments where residents enjoy the pretense of urban places—denser settlement patterns, pedestrian-oriented streets, and interaction with neighbors—but still experience life in an exclusive bubble, insulated from social diversity and dependent on automobiles. This line of criticism sees that New Urbanism may change the look and feel of sprawl, but it does not change how it functions (Lehrer & Milgrom, 1996). Other scholars build on this critique. Sweeney and Hanlon (2016) describe how built-out suburban municipalities facing fiscal decline are drawn to New Urbanism in order to intensify land use and attract new residents in an increasingly competitive metropolitan economy. Grant (2007) sees New Urbanism as generating neighborhoods that are like gated communities: disconnected from the larger metropolis, but without the physical walls. Cabrera and Najarian's (2013) examination of social interaction in Civano, Arizona acknowledges that New Urbanist neighborhood populations may be socially diverse, yet this has not translated into interaction amongst people from different age, sex, and income groups. In their analysis of Seaside, Florida, Al-Hindi and Staddon (1997) discuss how the project's antebellum nostalgia constructs the place as celebrating white bourgeois subjectivities, which alienates others and hamstrings the movement's aspiration for fostering social diversity. Arguments about New Urbanism's exclusivity are further developed by González and Lejano (2009), who see New Urbanism as a vehicle for normalizing white middle-class aesthetics in the redevelopment and gentrification of downtown Santa Ana. This point is extended in Markley's (2018) study of suburban Atlanta, where he finds that New Urbanism projects are sited in gentrifying neighborhoods where Latinx populations are decreasing and white populations are concomitantly on the rise. Zimmerman's (2001, p. 251) study of the conservation community at Prairie Crossing, Illinois, encapsulates a number of these critiques about New Urbanism as ultimately recreating sprawl:

> Behind the façade of sustainable development, Prairie Crossing is in fact a resurrection of, and defense of, the suburban ideal—the exclusive residential retreat physically removed and insulated from the city, that, when viewed within its broader-metropolitan context, should be understood as contributing to sprawl and its concomitant environmental harm.

These critiques cast New Urbanism as a movement that adds a green veneer to business-as-usual approaches to developing socially exclusive places.

But how far can these specific examples be applied to the broader movement? New Urbanism may appear as a single coherent movement, yet it is highly differentiated in practice. Recent scholarship has shown how there are multiple New Urbanisms (Grant, 2006; Moore, 2010; Trudeau, 2013). Such work underscores McCann's (1995) argument that the discourse of New Urbanism is selectively and strategically deployed in ways that relate particular interests that resonate in time and place. Consequently, the time is now right for closer examination of the ways New Urbanism is deployed to advance sustainable development in U.S. suburban contexts.

3. Developing Differently? Analyzing Sustainability in Suburbia

In light of extant variation of New Urbanism in practice, this article asks: how far can the critiques about New Urbanism as generating sprawl and failing to advance sustainability be applied? What insights for advancing sustainable suburban development generally can be realized from studying decidedly different instances of New Urbanism? Engaging these questions provides a way to think critically about what can be expected from New Urbanism and its avowed interest in sustainability as it is deployed on the suburban frontier. In this inquiry, I draw on research about the processes that generated three different types of New Urbanist settlements in contexts defined by suburban sprawl. My focus here is to examine the governance dynamics surrounding what I have elsewhere termed "development communities" (Trudeau, 2017), which use, to varying degrees, the tools, ideas, and geographic imaginaries associated with New Urbanism to generate sustainable development.

Development communities refer to the constellation of actors involved in development projects. Each

is distinct, but generally speaking, these communities are composed of land developers, municipal authorities (e.g., elected officials, planners), consultants, financiers, and residents, among other actors, who define the goals of a project and shape its implementation. Close examination of how development communities define sustainability, envision projects, and commit resources to its implementation yields valuable insight into the processes that generate sustainable development. Following Yin (2014), case study research is particularly well suited to generate new understanding about how processes operate.

The three case studies I discuss in this article draw on a larger research project focused on processes driving the creation of nine neighborhood-level New Urbanist projects distributed across three metropolitan areas. Here, I examine case studies from just two areas, Denver and Minneapolis-St. Paul, in order to illustrate three distinct processes generating sustainable development amidst suburban sprawl. I profile how the development community associated with each case operated to produce a distinct built environment—green single-family neighborhoods, new suburban downtowns, and socially inclusive neighborhoods—which is explicitly connected with New Urbanism and framed as either Smart Growth or contributing to sustainability, or both. In total, I conducted 16 semi-structured interviews with actors in each development community, collected news stories and gray literature on each project, and gathered official documents, such as draft plans and land use ordinances, where available. Reflecting on this data, I discuss each case in order to theorize how leadership arrangements in each development community matters for the depth of engagement with all three logics of sustainable development (i.e., economic, environmental, and social). I follow Stone's (1993) description of leadership in urban governance as the ability to generate a vision for change and mobilize others to provide material and discursive support. To be sure, this is not an exhaustive account of the processes through which suburban sustainable development manifest. Nevertheless, analysis offers insight into the ways that development communities approach sustainability in suburban contexts through application of New Urbanism principles to neighborhood-level projects and the successes and continuing challenges this entails.

I analyze each case using a framework that considers movement towards sustainability across different facets of suburbia, as described by Forsyth (2012): physical, functional, and sociocultural. Campbell's articulation of "the planner's triangle" helpfully frames sustainable development as the convergence of interests promoting environmental protection, economic growth, and social equity. While the planner's triangle correctly conceptualizes sustainability as the combination of these distinct interests, it still presents these as inherently divergent and posing fundamental conflicts. In Campbell's (1996, p. 299) account, "business resists the regulation of its exploitation of nature, but at the same time needs

regulation to conserve those resources for present and future demands". This tension between environmental and economic sustainability creates a "resource conflict", the likes of which must ultimately be resolved through conflict management and trade-offs. Campbell acknowledges that there is, to a degree, inherent complementarity around the different points of interest in the planner's triangle. However, he frames sustainable development as the hard work of gaining compromise among the conflicts that develop between these interests.

Others have pushed back against the trade-off thinking inherent in Campbell's approach to sustainable development. Agyeman's (2013) "just sustainabilities", for instance, shows how gains in environmental protection that lighten developments' ecological footprint are actually achieved as a matter of promoting income equality. Agyeman posits achieving sustainability as resulting from the synthesis of the economic, environmental, and social justice interests. Dale and Newman (2009) frame such a view as fostering reconciliation, or the integration, of distinct logics. Following Dale and Newman, I pay particular attention to the ways in which the social imperative of sustainability can be bedeviled by polarizing concerns. As Vallance, Perkins and Dixon (2011) show, "social sustainability" must tend to concerns for equity and inclusion, on the one hand, and interests in community continuity and the continuation of established values and ways of life in a place, on the other. In the following sections, I discuss how relative positioning of municipal authorities in development communities matter to on-the-ground practices of sustainable development in suburban contexts.

3.1. Green Single-Family Neighborhoods

Bradburn, in suburban Denver, illustrates how a developer can wield New Urbanism to re-package the suburban status quo as a green single-family neighborhood that protects property values and offers affluent residents access to environmental amenities. Located in Westminster, Colorado, Bradburn is a 125-acre Traditional Neighborhood Design (TND) neighborhood that breaks from established development patterns in this second-ring suburb. As one of New Urbanism's signature forms, TND is an interpretation of early 20th century urban villages that envisions a compact and walkable neighborhood of single-family homes oriented around a commercial core or main street and includes low-rise multi-family housing. New Urbanist luminaries Andres Duany and Elizabeth Plater-Zyberk (1991) framed this approach as "the second coming of the American small town". Bradburn's adherence to the TND concept is evident in its street grid system, sidewalks, orientation around a main street, and incorporation of schools, churches, and retail businesses into the development. This form interrupts the uniformity of post-war suburban subdivisions and strip malls that predominate in Westminster. Opened in 2003, Bradburn conforms to the low-rise landscape in

Westminster, but its compact form—achieved through smaller lot sizes, short setbacks from the street, accessory dwelling units, and incorporation of multi-family buildings—makes it noticeably denser.

Living in Bradburn comes at a premium, however. Single-family homes there were produced by custom builders and offered at prices affordable to households earning at least 100% of the area median income (AMI). According to the developer's project manager for Bradburn (personal communication, May 15, 2013), some of the multi-family units were offered initially at prices that were affordable to households at 70% AMI, but there are no measures to keep this pricing in place. Rental housing in Bradburn is likewise marketed as offering luxury accommodation, adding to its exclusive image. One of the reasons why residents may be willing to pay this premium is because of Bradburn's proximity to the picturesque grassy foothill landscape in the open space maintained by the city, which border half of Bradburn's perimeter. Orientation toward the natural environment is mirrored in the green building standards of all residential structures in Bradburn and the solar panels that wreathe many roofs. Pedestrian-oriented neighborhood design, exposure to open space, and conspicuous use of green building help confer Bradburn with a distinctive character, which was part of the original plan for the project (Collins, 2007).

Bradburn took shape through the pursuit of two distinct, yet complementary land development agendas. The City of Westminster was interested in creating denser subdivisions to maximize development of its remaining land (City of Westminster, 2008). Westminster implemented a growth management program in 1978, which has provided considerable leverage over development. According to the Westminster planning manager (personal communication, May 21, 2013), planners had realized by the mid-1990s that denser development would help the city continue its growth as the city was running out of developable land. In 1997, Continuum Partners, a Denver-based developer, saw in Westminster an opportunity to demonstrate its capacity to build TNDs and contribute to the Smart Growth movement taking shape at that time in the Denver region (Continuum president, personal communication, May 16, 2013). The TND ultimately fit well with the city's land development plan, yet it was not legally permitted. In response, Continuum worked with Duany and Plater-Zyberk to generate a TND ordinance for Westminster (City of Westminster, 2006), which would ultimately authorize the paradigm shift entailed in Bradburn.

Changing land use law in the city was only part of the challenge. The proposed street system raised concern that trash haulers and fire trucks would be unable to move their vehicles through the development. Continuum responded by bringing city officials, planners, and public works managers to visit an established suburban TND in the Kentlands, Maryland (Westminster planning manager, personal communication, May 21, 2013). This helped establish a proof of concept, yet

uncertainty still lingered. Ultimately, Westminster officials and planners were encouraged by Continuum's effort to make Bradburn an exemplar of New Urbanism and Smart Growth, which promised to raise Westminster's profile in the wider region as a place where sustainable development takes shape (former Westminster planning manager, personal communication, May 13, 2013). In addition to working with experts in Duany and Plater-Zyberk, Continuum set lofty—and expensive—standards in the architectural pattern book generated for Bradburn. To complement this, the City supported Continuum's effort to create a brand identity for Bradburn (Continuum project manager, personal communication, May 15, 2013). The subdivision has street signs that are a different color from others in the city and feature a unique font and symbol that appear on signage throughout the project. As Continuum's project manager (personal communication, May 15, 2013) for Bradburn explained, the incorporation of green building practices and solar panels was part of this strategy to mark Bradburn as a high-end development that was a clear "departure from suburban sprawl and ecologically responsible in its land plan". This strategy helped create Bradburn as a place wherein residency would confer status as a participant in fostering green development.

Green single-family neighborhoods like Bradburn represent a visible departure from automobile-oriented landscapes that predominate in the postwar suburban sprawl of Westminster. The story of Bradburn's creation illustrates how challenging it can be to make such a change because underneath the surface of how the built environment appears is a network of social and governmental institutions that normalize suburban sprawl. Continuum partners led the way in mobilizing the development community of Bradburn and the city inflected this charge with equal parts encouragement for a focus on social distinction through design and enforcement of standards for services and infrastructure that ultimately integrate Bradburn into the wider city. On this point, the experience of building Bradburn did impact such institutions in Westminster. The TND ordinance Bradburn introduced was incorporated into the City of Westminster's (2008) comprehensive plan. Moreover, the residences and businesses filled quickly, signaling Bradburn's market appeal. Yet, Bradburn is likely attractive because it repackages the suburban ideal, not because it offers an alternative to it. Green single-family neighborhoods such as Bradburn are rightly critiqued as limited or weakly supporting sustainability, because the natural environment that is conserved through such development is ultimately framed as an amenity for residents and a device that supports property values and exclusivity (Lehrer & Milgrom, 1996; Zimmerman, 2001).

3.2. New Suburban Downtowns

Belmar, also in suburban Denver, shows how developers leverage financial and legal support from municipal

authorities and use the ideas and imaginaries of New Urbanism to provide a sustainability fix for cities experiencing fiscal stress with little remaining undeveloped land. Located in Lakewood, Colorado, Belmar is built on the site of the Villa Italia Mall and is one of the featured cases of "suburban retrofit" profiled by Dunham-Jones and Williamson (2009). The mall was built in 1966, a few years before several scattered nodes of residential and commercial development incorporated as the City of Lakewood. These areas incorporated pre-emptively to avoid exposure to a court-ordered desegregation busing program affecting nearby Denver. As municipal incorporation connected these nodes, the Villa Italia Mall emerged as Lakewood's third place. More than just a shopping center, the mall served for decades as a social hub, hosting events like high school prom and wedding receptions and providing a meeting place for family dining and senior citizen walking groups. The mall started to decline both aesthetically and financially in the 1990s. In 1994, it had contributed $3.2 million, or 11.5% of the city's sales tax income, which had dropped precipitously by 2001 to $1.2 million, or 3.1% of the city's tax income (Able, 2004). City officials consequently began to frame it as an economic liability and searched for an alternative (Swope, 2002).

Convinced that the beloved auto-centered mall was the "wrong model for the future", city officials sought to frame the development of a new downtown with retail, commercial, and residential land uses as a way for Lakewood to attract new residents and capital and compete in the broader economy of the Denver region (former Lakewood planning manager, personal communication, May 20, 2013). Anticipating Sweeney and Hanlon's (2016) observation that new downtowns are an entrepreneurial strategy for suburban municipalities facing fiscal uncertainty, Lakewood's mayor, Steve Burkholder (personal communication, May 14, 2013), framed the question of developing Belmar to the public in unequivocal terms: "We could either be [a] backwater, first ring suburb, or we can choose to jump into the twenty-first century, and we started to share this New Urbanist vision of…mixed-use development". Indeed, Burkholder was elected to address the mall's decline, which he pursued by replacing it with a dense, walkable, and green downtown district.

Inspired by attending a CNU meeting, Lakewood officials worked with Continuum Partners to apply New Urbanist design principles in designing Belmar, which was opened in 2004. Continuum initially turned down Lakewood's proposal, but the mayor's persistence led Continuum's leadership to reconsider (Continuum project manager, personal communication, May 14, 2013). Moreover, the city had labored to prepare the way for a sweeping change as the Burkholder administration created a redevelopment authority to exercise eminent domain, assemble land, and finance redevelopment through a TIF district. With such support behind them, Continuum worked to connect its vision for a new downtown with residents' and business leaders' concern with the redevelopment of the Villa Italia Mall. The developer engaged these interests through a community-advisory group, which met for over a year and worked to respond specifically to concerns about density and yearning for the communal spaces that once existed in the mall (Continuum president, personal communication, May 16, 2013). Reflecting on the function of the advisory group, Continuum's project manager for Belmar (personal communication, May 14, 2013) explained:

> By the time that process had unfolded over the course of a year…everybody was pretty sure that they came up with the idea [for Belmar as a mixed-use development] and that it had always been their idea and that we were just carrying it out….But in truth, it was our idea—that's why we came there and we knew that's what it needed, but we didn't start there.

The developer thus leveraged public engagement to legitimate a development plan that they believed would provide a substantial return on investment over the long-term.

This process culminated in a design for the 103-acre district that introduced a fine-mesh street grid that focused density at the center, incorporated public spaces throughout, and used green building practices. Belmar's center features buildings that mix street-level retail and restaurants with commercial office space above. Buildings with street-level retail and luxury apartments and condominiums surround the center. Several plazas, promenades, and green spaces connect additional apartment buildings and row houses, which are flanked by big-box retail buildings at the district's perimeter, which are defined by highways. Continuum installed an array of solar panels that generate 2.3 megawatts of energy and constructed LEED certified buildings. Most residential buildings in Belmar meet national or local green certification practices. These elements helped substantiate the commitment to make Belmar a place that would attract interest and investment from environmentally conscious companies, consumers, and residents (former Lakewood planning manager, personal communication, May 20, 2013).

The development of Belmar both represents a departure from postwar suburban patterns and reinforces them. Belmar introduced a new form to Lakewood's built environment, creating a walkable, denser landscape that combines living, consumption, working, and leisure activities in a single space. Beyond the physical change, Belmar has culminated in a thriving mixed-use development that enables a novel lifestyle in suburban Lakewood. Its success as a leisure and shopping destination as well as its commitment to renewable energy generation has given Lakewood a new story to tell about its identity and serves as an exemplar of sustainable suburban development in the wider metropolitan region (Briggs, 2014). Yet, while walking is the most practical

way to move around Belmar. Residents and visitors alike continue to rely on automobiles. Belmar is easily a mile away from the nearest public transit station and a shuttle connects the two, yet its once-an-hour schedule between 11 am and 7 pm ultimately does not offer a compelling alternative to the personal automobile.

The ideal of suburbia as an exclusive haven for the well-off thus persists in Belmar. The year-long conversation with the community advisory group helped ease aversion to a denser landscape and create a story that connects the memory of Villa Italia Mall as a social hub with the design and use of public space in Belmar. For instance, Belmar hosts an annual Italian festival and regularly offers free outdoor concerts in the summer months. For as much as this process helped to generate sustainability of community, it also protected the centrality of the suburban ideal. Created as a business improvement district, the public spaces of Belmar are patrolled by a private security force. This ensures recreational uses do not interfere with the district's orientation toward work and consumption. Moreover, planners prioritized the protection of property values in Belmar's housing market when they declined a proposal to site subsidized senior housing in the district out of concern that it would detract from the district's image (Continuum project manager, personal communication, May 14, 2013). While the district is a visible symbol of environmental sustainability, it nonetheless reproduces elements of the suburban ideal—such as an emphasis on exclusivity, social distinction, and property—that made the Villa Italia Mall popular.

3.3. Socially Inclusive Development

The City of Chaska's efforts to develop Clover Ridge provides insight into the ways in which social equity, in the form of affordable housing, has been integrated into a TND promoting environmental sustainability in a suburb. This case is instructive because New Urbanism's *Charter* explicitly calls for development that "bring[s] people of diverse ages, races, and incomes into daily interaction" (CNU, 1996). However, scholarship shows this aspiration is frequently ignored or unfulfilled. Less than half of New Urbanist developments in the U.S. include housing that is affordable to people with low- or very low-incomes (Johnson & Talen, 2008). Controlling for federal housing subsidy programs, that proportion is even lower (Talen, 2010). However, there are some projects that advance social inclusion (Kim & Larsen, 2017). The case of Clover Ridge illustrates how development communities led by municipal authorities that prioritize social inclusion are able to integrate this interest into the environmentally-focused aspects of suburban development that the preceding case studies highlight.

Located in Chaska, Minnesota, Clover Ridge is at the urban-rural fringe of metropolitan Minneapolis-St. Paul. Chaska was initially settled in 1851, approximately 25 miles from Minneapolis. As Minneapolis-St. Paul ex-

panded since 1945, suburban sprawl inevitably encompassed small-town Chaska and in the past four decades, development there has repeated patterns that separate land uses and require automobiles for daily life. Highway improvements in the 2000s increased the accessibility of Chaska to the larger metropolitan area, which introduced increased demand for more development, including housing, in Chaska. Since the 1980s, Chaska's comprehensive plans have cited a need for "low- and moderate-income housing". Acknowledging this need, Chaska's planners sought to develop a project that would provide a way to propagate the city's small-town character in new development along the highway corridor and offer an alternative to the suburban sprawl defining existing development in Chaska and nearby municipalities (City of Chaska, n.d.). Like Lakewood and Westminster, Chaska was searching for a way to develop differently in order to distinguish itself from neighboring municipalities. Its strategy, however, is driven by a sentiment of rejecting "the suburban view of the world", explained Chaska's former mayor (personal communication, April 12, 2013), and he went on to state that "the vision for Chaska was to be the best small-town in Minnesota". Chaska's planners turned to New Urbanism for realizing this vision because it offered a vehicle for Chaska to grow in ways that engaged interest in building affordable housing and connecting new growth with aspects of the City's small-town character found in its historic downtown. Chaska's City council supported this interest and provided assistance at key moments (Chaska planning director, personal communication, March 20, 2013).

Clover Ridge is shaped considerably by city government, though it recruited private developers to finance and build different elements of its plan. Built on a farm at the city's periphery, plans for 255-acre development in Clover Ridge emerged through planners' discussion with the land owners, who were looking to transition it to a more profitable use. Planners communicated a New Urbanist vision for the farmland's development and even arranged for the owners, city councilmembers, and design consultants to visit TNDs in Oregon and Alberta to demonstrate their feasibility and consider how it could apply in Chaska. Planners worked with the land owners to create a master plan for the project and contracted with local builders to execute it. Clover Ridge was ultimately built as four different sub-districts that offered different housing types and density all connected through an integrated pedestrian-oriented street system. The town center features apartment buildings, retail space, and a transit station. Other districts include row houses and single-family homes. An elementary school was built adjacent to the town center. Clover Ridge's approach amidst suburban sprawl helped it earn recognition as a model form of transit-oriented development in the region (Metropolitan Council, 2006). Clover Ridge is also oriented around a protected greenbelt where signage communicates the importance of land conservation for wildlife habitat. A focus on energy efficiency among

some builders has also led the project to be identified as a "Minnesota Green Community" (Greater Minnesota Housing Fund, 2011).

City councilmembers, the mayor, and planners worked from the start to incorporate affordable housing. This effort ensured that 25% of Clover Ridge's 1001 housings units are affordable to people with incomes at or below 80% AMI and distributed throughout all sub-districts (Trudeau & Malloy, 2011). The city achieved this through three approaches. The city arranged to work with one of the builders because it could provide low-cost modular housing that was assembled into row houses, which was priced for households earning 60–70% AMI. Planners worked with a nonprofit housing developer to generate apartment buildings with units that are affordable to renters with very low-incomes, from below 30% to 60% AMI. Fourteen of the units are reserved for households that have experienced homelessness. The nonprofit developer also works with the county to operate supportive services to its renters. Finally, the city created a community land trust to generate ownership-based affordable housing for households earning 60–80% AMI. The latter two approaches stand to provide affordable housing for at least 20 years. Supporting this effort, the city also engaged in a public relations campaign to manage tensions that might surface in response to the construction of affordable housing. The planning director (personal communication, March 20, 2013) explained the approach:

> You have to really be very strategic and [lay] the groundwork early with the politicians, but also the public. From the beginning, you start talking about the people who you're trying to provide housing for and talk about what we need: we need places for teachers and we need places for police officers, we need places for snowplow drivers—people who the community values.

And the former mayor (personal communication, April 12, 2013) noted that city officials framed Clover Ridge as "sustaining the values of small-town community" in Chaska.

Clover Ridge demonstrates how socially inclusive development can impact the sociocultural aspect of suburbia. While development of Belmar and Bradburn each introduce compact, walkable, and mixed use built environments that depart from the physical form of suburban sprawl and its functions, neither upsets the sociocultural embrace of the suburban ideal. Indeed, the market success of each hinges to an extent on the ways the ostensible break with the norm actually works to serve interests that use suburban land development to mark cultural distinction and create boundaries in place that reference and perform social exclusivity. Belmar, in particular, illustrates the tension that can emerge between two elements of the social imperative of sustainability: sustainability of community and social justice. In contrast, such tension is resolved in the development of Clover

Ridge. Chaska's city council and planning department led the process of visioning and planning and prioritized the development of affordable housing in Clover Ridge. The mayor at the time worked with the city council and planners to gather the necessary resources to finance affordable housing and simultaneously disseminated a message that creating a place with housing options for different segment of the population promotes core values of Chaska's community. Pitched as offering something different from the suburban ideal, city officials saw in Clover Ridge an opportunity to move away from the automobile-oriented sprawl that had developed in other parts of Chaska and cultivate small-town character that officials already recognize as a core part of the city's identity (City of Chaska, 2012). City officials and planners ultimately applied New Urbanism principles because they helped make a compelling link between community and social equity, which then affected the built environment in the process.

4. Conclusion: Sustaining Suburbia or Advancing Suburban Sustainability?

End of Suburbia predicts the suburbs' collapse based on the scarcity of inputs for an automobile-centered economy. This narrative incorrectly presumes that U.S. suburbs are a technological phenomenon. Rather, as scholars like Hayden (2003) have argued, suburbs are a remarkably resilient cultural formation that adapt to changing circumstances. Indeed, land developers and their allies extol suburbs' proximity to nature, protected property, and homogeneous community. Pursuit of this suburban ideal has likewise adapted to—and partially appropriated—sustainable development. This article illustrates some of the ways such appropriation sustains suburbia and takes shape through use of New Urbanism design principles. At the same time, against tendencies that totalize the critiques of some New Urbanist communities (e.g., Marshall, 2001), I show that there are efforts to promote social justice through application of New Urbanism principles that also advance sustainability in the development of suburbs.

The cases of Belmar and Bradburn confirm longstanding criticisms concerning the ways New Urbanism is applied to effectively repackage suburban sprawl. Strategies promoting sustainable development through suburban densification or green neighborhoods, as illustrated in case studies of Belmar and Bradburn, respectively, show different ways development communities use New Urbanism to offer a sustainability fix for continuing profit-motivated business-as-usual development. Such strategies offer ways to generate change in both the physical and functional aspects of established suburban patterns. Nevertheless, they fall short in advancing a holistic view of sustainability as the integration of three logics of economic growth, environmental protection, and social justice. Taken together, these cases add to the critique that New Urbanism is deployed to sustain suburbia in two dis-

tinct ways. On the one hand, we see that development communities in each case deliberately generate and execute plans that embrace the suburban ideal and use New Urbanism to create places that appear to work differently and move toward greater environmental protection, but ultimately support the profit motives of land developers. On the other hand, it is evident that suburban municipalities are attracted to and enable the sustainability fix that New Urbanism portends to offer precisely because of its emphasis on securing stable growth and lasting value through careful attention to physical planning. Whereas Sweeney and Hanlon (2016) show this at work in suburban densification projects like Belmar, the case of Bradburn shows the entrepreneurial attraction of New Urbanism also applies to suburban municipalities focused on green single-family neighborhood development. These projects exemplify the established critique that New Urbanism largely sustains the status quo of suburban development. The case of Clover Ridge suggests, however, that this critique does not apply to all efforts using New Urbanism to advance sustainable suburban development.

Sustainable development in Clover Ridge integrated social justice into the ecological and economic imperatives precisely because the development community prioritized it and sought an alternative to the suburban ideal. In contrast to the configuration of the development communities operating in Belmar and Bradburn, the municipal authority-led effort to plan and build Clover Ridge enabled affordable housing for a range of income groups to be an integral part of its approach to sustainable development. Mayor, city council, and planning agencies succeeded to advance social justice, economic growth, and greening agendas because they labored to find land developers and builders that would support this end and cultivated a narrative that developing Clover Ridge as a socially inclusive place sustained community norms and identity. If not for this narrative, exclusionary interests could align development with the suburban ideal, as unfolded in Belmar. If not for the leadership of municipal actors, profit-driven interests could dominate the discussion of how best to grow the city, as exemplified in Bradburn.

Clover Ridge is just one instance of sustainable development in the suburbs, yet it speaks to a broader point that social imperatives can indeed be integrated with the ecological and economic imperatives of sustainability. Clover Ridge's experience emphasizes that promoting sustainable development that integrates social, ecological, and economic logics is accomplished by leadership that coordinates different actors in a development community and brings the necessary resources to support action. Key to this is planning from the start about how to connect justice with sustainability of community. Officials turned to Chaska's historic small-town identity to link equity with sustainability of community. Moreover, the city's message that affordable housing needs to be provided to "people who our community values"

is problematic to say the least as it refracts complex relationships of community solely through an economic lens, which undoubtedly leaves out populations who need housing and ought to be a part of a vision promoting sustainability. This caveat notwithstanding, Clover Ridge's approach is surely not the only path toward the integration of social, ecological, and economic imperatives and further research exploring the multiple ways this can occur—and how these relate to the suburban ideal—will advance our understanding of "made in the suburbs" strategies for sustainability.

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Conflict of Interests

The author declares no conflict of interests.

References

Able, C. (2004, May 15). Lakewood unveils new downtown. *Rocky Mountain News*.

Agyeman, J. (2013). *Introducing just sustainabilities: Policy, planning, and practice*. New York, NY: Zed Books.

Al-Hindi, K., & Staddon, C. (1997). The hidden histories and geographies of neotraditional town planning: The case of Seaside, Florida. *Environment and Planning D: Society and Space*, *15*(3), 349–72.

Briggs, A. (2014, May 6). Ten years later, Belmar exceeds expectations for Lakewood growth, identity. *The Denver Post*. Retrieved from www.denverpost.com/2014/05/06/10-years-later-belmar-exceeds-expectations-for-lakewood-growth-identity

Cabrera, J., & Najarian, J. (2013). Can New Urbanism create diverse communities? *Journal of Planning Education and Research*, *33*(4), 427–441.

Campbell, S. (1996). Green cities, growing cities, just cities: Urban planning and the contradictions of sustainable development. *Journal of the American Planning Association*, *62*(3), 296–312.

City of Chaska. (n.d.). *2030 Comprehensive plan, chapter 4: Land use*. Chaska, MN: City Hall. Retrieved from www.chaskamn.com/166/2030-Comprehensive-Plan

City of Chaska. (2012). *Southwest growth and development plan*. Chaska, MN: Hoisington Koegler Group Inc. Retrieved from www.chaskamn.com/DocumentCenter/View/486/Southwest-Growth-and-Development-Plan?bidId=

City of Westminster. (2006). *Design guidelines for tradi-*

tional mixed use neighborhood developments. Westminster, CO: City Council. Retrieved from www.city ofwestminster.us/Portals/1/Documents/Government %20-%20Documents/Departments/Community%20 Development/Planning/Traditional%20Mixed-Use% 20Neighborhood%20Developments.pdf

City of Westminster. (2008). *Comprehensive Land Use Plan, 2004*. City of Westminster, CO: City Council.

Collins, T. (2007, June 1). McStain Homes at Bradburn Village: Solar-electric homes raise the bar on energy-efficiency. *Boulder Daily Camera*.

Congress for the New Urbanism. (1996). *Charter of the New Urbanism*. Washington, DC: CNU. Retrieved from http://www.cnu.org/charter

Congress for the New Urbanism. (2007). *Pilot version: LEED for neighborhood development rating system*. Washington, DC: CNU, US Green Building Council, National Resource Defense Council. Retrieved from www.cnu.org/sites/default/files/LEED-ND-PROG.pdf

Congress for the New Urbanism. (2008). *Canons of sustainable architecture and urbanism: A companion to the charter of the new urbanism*. Washington, DC: CNU. Retrieved from www.cnu.org/charter-new-urbanism/canons-sustainable-architecture-and-urbanism

Dale, A., & Newman, L. (2009). Sustainable development for some: Green urban development and affordability. *Local Environment*, *14*(7), 669–681.

Duany, A., & Plater-Zyberk, E. (1991). *Towns and town-making principles*. New York, NY: Rizzoli.

Dunham-Jones, E., & Williamson, J. (2009). *Retrofitting suburbia: Urban design solutions for redesigning suburbs*. Hoboken, NJ: Wiley.

Farr, D. (2008). *Sustainable urbanism: Design with nature*. Hoboken, NJ: Jon Wiley and Sons.

Fishman, R. (1987). *Bourgeois utopias: The rise and fall of suburbia*. New York, NY: Basic Books.

Forsyth, A. (2012). Defining suburbs. *Journal of Planning Literature*, *27*(3), 270–281.

González, E., & Lejano, R. (2009). New Urbanism and the barrio. *Environment and Planning A*, *41*(12), 2946–2963.

Grant, J. (2006). *Planning the good community: New Urbanism in planning and practice*. London: Routledge.

Grant, J. (2007). Two sides of a coin? New Urbanism and gated communities. *Housing Policy Debate*, *18*(3), 481–501.

Greater Minnesota Housing Fund. (2011). *Clover Field marketplace*. Chaska, MN: Minnesota Green Communities. Retrieved from www.fhfund.org/wp-content/uploads/2016/03/CloverField.pdf

Greene, G., Silverthorn, B., Zwicker, B., & Electric Wallpaper Company. (2004). End of suburbia: Oil depletion and the collapse of the American dream (Documentary).

Hayden, D. (2003). *Building suburbia: Green Fields and urban growth, 1820–2000*. New York, NY: Pantheon.

Johnson, J., & Talen, E. (2008). Affordable housing in New

Urbanist communities: A survey of developers. *Housing Policy Debate*, *19*(4), 583–613.

Kim, J., & Larsen, K. (2017). Can New Urbanism infill development contribute to social sustainability? The case of Orlando, Florida. *Urban Studies*, *54*(16), 3843–3862.

Knaap, G., & Talen, E. (2005). New Urbanism and smart growth: A few words from the academy. *International Regional Science Review*, *28*(2), 107–118.

Kotkin, L. (2007). *The suburban archipelago* (Working Paper no. 621). Philadelphia, PA: Samuel Zell and Robert Lurie Real Estate Center, The Wharton School, University of Pennsylvania.

Lehrer, U., & Milgrom, R. (1996). New (Sub)urbanism: Countersprawl or repackaging the product. *Capitalism Nature Socialism*, *7*(2),49–64.

Markley, S. (2018). Suburban gentrification? Examining the geographies of New Urbanism in Atlanta's inner suburbs. *Urban Geography*, *39*(4), 606–630.

Marshall, A. (2001). *How cities work: Suburbs, sprawl, and the roads not taken*. Austin, TX: The University of Texas Press.

McCann, E. (1995). Neo-traditional developments: The anatomy of a new urban form. *Urban Geography*, *16*(3), 210–233.

Metropolitan Council. (2006). *Transit-oriented development project profile: Clover Ridge, Chaska*. St. Paul, MN: The Metropolitan Council.

Moore, S. (2010). 'More Toronto, naturally' but 'too strange for Orangeville': De-universalizing new urbanism in Greater Toronto. *Cities*, *27*(2), 103–113.

Stone, C. (1993). Urban regimes and the capacity to govern: A political economy approach. *Journal of Urban Affairs*, *15*(1), 1–28.

Sweeney, G., & Hanlon, B. (2016). From old suburb to post-suburb: The politics of retrofit in the inner suburb of Upper Arlington, Ohio. *Journal of Urban Affairs*, *39*(2), 241–259.

Swope, C. (2002). After the mall: Suburbia discovers main street. *Governing Magazine, 2002*(October), 20–24.

Talen, E. (2010). Affordability in New Urbanist development: Principle, practice, and strategy. *Journal of Urban Affairs*, *32*(4), 489–510.

Teaford, J. (1997). *Post-suburbia: Government and politics in the edge cities*. Baltimore, MD: Johns Hopkins University Press.

Trudeau, D. (2013). A typology of New Urbanism neighborhoods. *Journal of Urbanism*, *6*(2), 113–138.

Trudeau, D. (2017). Patient capital and reframing value: Making New Urbanism just green enough. In W. Curran & T. Hamilton (Eds.), *Just green enough* (pp. 227–238). New York, NY: Taylor & Francis.

Trudeau, D., & Malloy, P. (2011). Suburbs in disguise? Towards a geography of the New Urbanism. *Urban Geography*, *32*(3), 424–447.

Vallance, S., Perkins, H., & Dixon, J. (2011). What is social sustainability? A clarification of concepts. *Geoforum*, *42*(3), 342–348.

White, S., & Ellis, C. (2007). Sustainability, the environment, and New Urbanism: An assessment and an agenda for research. *Journal of Architecture and Planning Research*, *24*(2), 125–142.

World Commission on Environment and Development. (1987). *Our common future*. New York, NY: United Nations World Council on Economic Development.

Yin, R. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.

Zimmerman, J. (2001). The 'nature' of urbanism on the New Urbanist frontier: Sustainable development, or defense of the suburban dream? *Urban Geography*, *22*(3), 249–267.

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