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Working Paper - The challenge of achieving suburban recentralisation in Halifax¹

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For the last two decades, Canadian planners have increasingly promoted suburban recentralisation: development patterns that encourage higher densities, mixed use, transit orientation, and walkability. Although policies and plans in Halifax, Nova Scotia, advocate nodal development and urban patterns, new suburban areas continue to feature relatively low density, segregated land uses, and auto-oriented designs. Through a mixed-methods study (based on field surveys, policy review, and interviews), we identify factors impeding recentralisation in Halifax: the legacy of decisions made long before municipal amalgamation, political culture, cultural and lifestyle preferences, fragmented geography, and the size of the community. While small cities may emulate planning trends dominating large metropolises, Halifax's experience with suburban recentralisation efforts suggests that successful implementation is far from certain.

Since the rise of new urbanism, smart growth, and sustainability approaches in the 1990s, community planning practice has increasingly expressed its commitment to urbanising the suburbs and re-centralising the city. A recent study of planning documents of North American cities found widespread support for principles such as higher densities, multi-functionality or mixed uses, and higher transit use (Filion, Kramer, & Sands, 2016). Because suburban areas traditionally had a reputation for sprawl, low density, and segregated uses, many community design theorists today advocate sprawl repair (Tachieva, 2010) and retrofitting the suburbs (Dunham-Jones & Williamson, 2011) to transform those areas into more urbanised spaces.

To what extent is the idea of suburban intensification a viable option for small and mid-sized Canadian cities? In this paper, we focus on the experience of Halifax, Nova Scotia, Canada, a regional municipality with over 300,000 people in its urbanised centre, and another 100,000 in its vast rural region. Halifax plans have paralleled the morphing ideas about centralisation in planning, evidenced by a commitment

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to satellite communities in the post-war period, then to the nodes and corridors of new urbanism and smart growth in the 2000s, and most recently to re-urbanising the central city. An evaluation of development practices in suburban areas, however, suggests that efforts to promote greater densities and mixed uses have not produced the desired results. As we examined efforts to promote recentralisation and interviewed those knowledgeable about planning and development activities in Halifax, we noted significant barriers that prevent effective implementation of plan policies. Although efforts to increase suburban densities and change land-use patterns may be having considerable success in some of Canada's large and rapidly growing cities (Gordon & Vipond, 2005; Hess & Sorensen, 2015), many communities struggle to implement new urbanism and smart growth principles (Filion, 2003, 2009, 2010; Grant, 2009). Despite the overwhelming planning consensus that recentralisation and intensification make sense, planning and development practice in Halifax has not produced multi-functional suburban centres of the kind found in places such as Mississauga City Centre in Toronto or Metrotown in Vancouver (Filion & Saboonian, 2016a). Our analysis reveals that the pressures leading to intensification that operate in larger settlements may be weak or absent in some small and medium-sized cities, and that Halifax encounters significant barriers to recentralisation efforts.

We begin with a brief review of the literature on suburban intensification and recentralisation before describing our study methods. We then discuss the planning context in Halifax and review some suburban projects that have developed in the region. We identify several barriers to suburban recentralisation—path dependency, political culture, cultural and lifestyle factors, local geography, and community size—before offering concluding thoughts on the implications of our findings.

The recentralisation imperative

From the late 1970s, and with growing emphasis following the rise of the smart growth and sustainable urban development movement in the 1990s, planning has reacted against car-oriented suburban dispersion (Handy, 2005). Dispersion has been the dominant North American form of urban development since the late 1940s. It features relatively low density, near universal dependence on travel by automobile, land-use specialisation and the scattering of structuring activities such as employment, retailing, and institutions (Filion, Bunting, & Warriner, 1999; Hirt, 2014; R.E. Lang, 2003). Today, this type of urban development characterises more than three-quarters of urbanised space in

North America (Gordon & Janzen, 2013). Planners reacted against dispersed suburban form by targeting its adverse quality-of-life consequences (Knox, 2008, 32-35), long commutes and traffic congestion (Cervero, 2013; Speir & Stephenson, 2002), air pollution and greenhouse effects tied to high levels of fossil fuel consumption (Stone, 2008), and health issues associated with sedentary lifestyles (Frank, et al., 2003). Despite planning's interest in concentration, governments often seemed committed to trying to accommodate more traffic, thus increasing decentralisation (Balaker & Staley, 2006).

Planning alternatives to suburban dispersion have taken the form of increased density, new urbanism developments, and improved public transit systems. But perhaps the most common reaction to dispersion consists in efforts to create walking- and public transit-oriented multifunctional centres. Planning documents propose different scales of centres, from neighbourhood-level mixed-use nodes to revitalised downtown cores (Calthorpe & Fulton, 2001). Among the different orders of centres, major suburban centres have the greatest potential to challenge suburban dispersion, thanks to the concentration of different categories of activities they provide for a large segment of the suburban realm of a metropolitan region (Filion & Saboonian, 2016b). Such centres bring together retailing, employment, institutions, and high-density housing: land uses otherwise scattered across the suburban landscape. To function as alternatives to the land-use and journey dynamics of dispersion, such centres must provide a pedestrian- and public transit-friendly environment (Ewing, et al., 2011; Frank, et al., 2008; Frank & Pivo, 1994). If dominated by cars, the landscape would be ill-suited to reliance on walking to interconnect activities within major suburban centres, and thus would frustrate the emergence of pedestrian-based synergy effects—or beneficial interactions—among activities (Gehl, 2011; Speck, 2012). Major suburban centres require journey dynamics supported by diverse activities, a walking-conducive environment, and good public transit connections with suburban hinterlands.

North American plans reveal overwhelming commitment to recentralisation as a means of addressing dispersion (Filion, Kramer, & Sands, 2016), but as Downs (2005) noted about smart growth, planners' enthusiasm for recentralisation may represent more talk than action. Recentralising may prove more challenging on the ground: we need to know more about implementation issues and the obstacles recentralisation faces in different urban circumstances. Each metropolitan region presents factors conducive and averse to the implementation of recentralisation strategies. We might anticipate, for instance, that population size, growth rates, and land availability may play critical roles in determining the possibility of creating successful suburban centres.

Given what other scholars have discovered about suburban recentralisation, our research focuses on trying to understand how viable the idea of suburban intensification is for smaller cities. Using Halifax as a case study, we explore new patterns emerging and consider what barriers may limit success in achieving suburban recentralisation and intensification strategies. We employed mixed methods: first we analysed land-use data, census data, documents, and plans to get a sense of overall development patterns and the trajectory of planning policies. Subsequently we conducted field surveys of sites identified as potential suburban centres and interviewed key stakeholders knowledgeable about planning and development in Halifax. We contacted planners, developers, elected officials, stakeholder organisations active on development issues, and brokers involved in real estate appraisal, evaluation, and leasing to ask them questions from a semi-structured interview guide. Twenty-three interviews were conducted in 2016 and 2017² (see table 1). All but one of the interviews were recorded and transcribed for thematic analysis.

Table 1: Sample overview

| Category | Male | Female | TOTAL |
|------------------|-------------|---------------|--------------|
| Planner | 4 | 1 | 5 |
| Developer | 3 | 1 | 4 |
| Stakeholder | 2 | 1 | 3 |
| Transit staff | 0 | 2 | 2 |
| Elected official | 4 | 2 | 6 |
| Broker | 3 | 0 | 3 |
| TOTAL | 16 | 7 | 23 |

² Codes for respondents identify: category (P=planner, D=developer, S=stakeholder, E=elected official, B=real estate broker); gender (m=male, f=female); year interviewed (2016, 2017).

Halifax's efforts to develop Bayers Lake and Ragged Lake Industrial Parks proved challenging: by the 1990s, Bayers Lake had transitioned to big-box retail. As the provincial government increasingly came to see cities as engines of the economy, politicians worried about the risks of cut-throat municipal competition within the region (Grant & Kronstal, 2010).

With the advent of a Liberal government under Premier John Savage, the political culture of the province shifted (MacLeod, 2006): to position Halifax strategically as a city-region with the potential to grow smartly, the Province amalgamated Halifax, Dartmouth, Bedford, and Halifax County into Halifax Regional Municipality in 1996 (Poel, 2000). With consolidation came the potential for regional planning that could implement the ideas then motivating planners: sustainable development, new urbanism, and smart growth theories promoted concepts such as compact form, intensification, walkability, mixed use, transit orientation, and diversity. Planning practices in the early 2000s showed the growing influence of thinkers like Jane Jacobs (1961): responding to development projects, Halifax planners recommended keeping heights lower than developers requested and advocated heritage protection (Grant, 2007). Between 2002 and 2006, planners led various events to engage residents, developers, and councillors in the process of regional planning. During those years, however, suburban and rural developers rushed to get projects approved, thus ensuring that decades of growth under old policies might continue even once the regional plan took effect.

The 2006 regional plan (Halifax, 2006) promoted the kind of intensification and smart growth policies influencing Canadian planning (Grant, 2003) and dominating plans across North America (Filion, Kramer & Sands, 2016). Map 1 in the plan identified dozens of suburban and rural 'centres' for development. The plan envisioned 25% of dwelling-unit growth occurring in the urban cores of Halifax and Dartmouth (the regional centre), 50% in suburban areas, and 25% in rural areas.

The political and planning culture in the city was shifting to become more vigorously urban, with proposals for massive urban towers (Grant & Gillis, 2012) and greater lobbying by pro-urban development groups such as Fusion Halifax (Grant & Leung, 2016). Subsequent plans for downtown (Halifax, 2009) promoted higher densities and heights, facilitated walkability, adopted form-based requirements, and encouraged mixed-use in the city core. Political leaders and planners welcomed growth under a planning regime intended to streamline development applications and encourage building downtown (Grant & Leung, 2016).

Despite a boom in downtown development in the 2010s, Stantec (2013) reported regional centre growth below rates occurring in suburban and rural areas. Under the 2006 regional plan, only 16% of growth had occurred in the regional centre, while 56% was in suburban areas and 28% in rural zones – the lingering effect of projects approved before the plan took effect. Stantec’s best-case scenario for municipal cost-effectiveness suggested that the regional centre should capture 50% of future growth through intensification (Stantec, 2013). Council’s 2014 decision to plan for tearing down infrastructure from a waterfront expressway stopped in the 1970s would provide the city centre with a large strategic parcel for redevelopment to capture a greater share of regional growth (Halifax, 2017d). With the city’s renewed focus on central growth, the revised regional plan (Halifax, 2014) removed the language of suburban growth centres, instead differentiating the regional centre from other ‘urban’ (formerly called suburban) zones. Discussions about the importance of growth corridors and nodes continued under the Centre Plan process that will guide growth in the regional centre (Halifax, 2017c).

Although the focus in planning turned increasingly to the centre, suburban growth continued apace through the 2010s. Rural and suburban areas grew more rapidly than the urban core between 2001 and 2011 (Stantec, 2013). In summer 2016, we conducted field surveys of suburban sites designated as growth nodes in the 2006 plan to examine the kinds of patterns emerging in those areas. Some are little more than residential suburbs, while others have stalled and show limited evidence of growth or mix. Russell Lake, designated as a suburban district centre (Brewer & Grant, 2015; Halifax, 2006), has not expanded into the Shearwater air base lands as originally forecast, because the Canadian Forces rescinded its decision to release the land. By contrast, development has been rapid and extensive in areas such as Clayton Park, Bedford South, and Bedford West.

Halifax's suburban centres

In a study examining Canadian metropolitan areas to identify multi-functional suburban centres or MSCs Filion & Saboonian (2016a) located 14. Their criteria for MSCs utilised a scale that would rarely occur in smaller cities: viz., a high concentration of at least three activities (60,000 m² of multi-storey office; commercial mall, main street or big box; at least 500 units of high-density residential; institutional or higher education facility) within a walkable one-square-kilometre area served by transit and not bisected by major highways. Although Halifax had no MSCs by Filion & Saboonian's definition (2016a), it has suburban nodes that meet some recentralisation criteria.

On the Dartmouth side of the Harbour, the vast **Burnside Complex** includes Burnside Industrial Park employing 30,000 (Halifax, 2017a), City of Lakes business/office park, and Dartmouth Crossing (a big-box retail / office park) (Figure 2). A small residential component is planned for Dartmouth Crossing (Greater Burnside, 2016). The complex is separated from other residential areas and from Mic Mac Mall by major highways. The scale of Burnside makes it too large to qualify as walkable; it contains coarse-grained segregated land uses. The lack of residential uses means that the complex is a zone of work and shopping, with limited potential to become a complete community (Grant, Joudrey, & Klynstra, 1994).

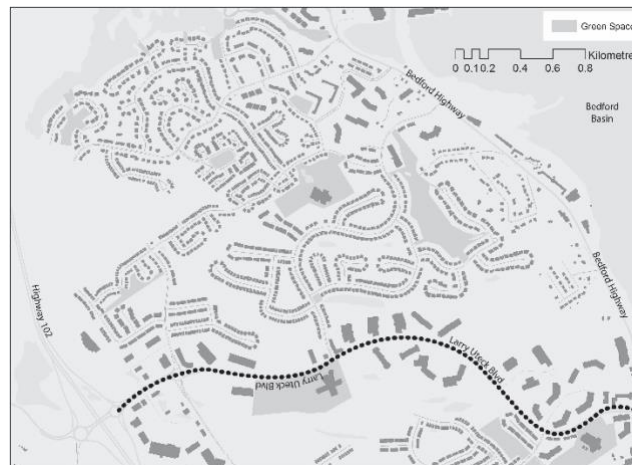
Figure 2 Burnside complex



Bayers Lake Business Park contains a concentration of retail and office uses, with some light industrial, but no residential component (Halifax 2017b). At under 3 km², the scale is more modest than Burnside, but the landscape is equally auto-oriented, with large parking lots separating structures, and inadequate connections for pedestrians. Highway 102 divides the area from Mount Royale, a residential suburb, and from Clayton Park West, a suburb with some commercial areas, institutional uses (library), and a significant residential component of medium- and low-density uses well-connected to central Halifax by transit.

Bedford South and **Bedford West**, suburban areas currently under development on the eastern flank of Bedford Basin north of Bayers Lake, have some potential to become multi-functional centres. Master-planned by Clayton Developments, the region's largest residential developer, Bedford West is intended to house some 20,000 residents on around 300 hectares (Brunet, 2017). Nearby, Clayton is developing Bedford South for about 10,000, and is expanding eastward into The Parks of West Bedford. A commercial centre operates where Larry Uteck Boulevard intersects Highway 102, and further commercial areas are planned. The developers describe this as an 'urban community' (Zaccagna, 2015) and a 'complete community' (Brunet, 2017), which emphasises walkability, transit, and integrated mixed use. Multi-storey apartment towers line Larry Uteck Blvd (Willwerth, 2017); bus transit connects residents directly to downtown (in 40 minutes). While the developments have a mix of housing types, tenures, and price points, types are segregated (Perrin and Grant, 2014) and the streets follow a loop and cul-de-sac pattern (Clayton/Cresco, 2017). When development finishes on these sites, the city will have largely infilled the greenfield areas between Halifax and Bedford (Figure 3).

Figure 3 *Bedford West and South*



Factors influencing recentralisation efforts

Most Halifax respondents interviewed indicated that they supported intensification, mixed use, and transit orientation, although many preferred to see greater growth in the regional centre rather than in the suburbs. One councillor identified concerns about suburbs competing with downtown.

There's a fundamental contradiction, which is that we have some very dense near-suburban areas like Sackville and Bedford and even Clayton Park ... that are arguably nodes. If you want to build complete communities where people can work, then you're trying to reconcile if we want to have more than 50% of people working in the urban core near downtown ... We want people to be able to walk to work and have these diverse neighbourhoods. ... But those things [suburban centres and downtown growth] conflict with one another. [E2m-2016]

Some praised specific suburban developments, while noting reservations. For instance, a planner discussed the Bedford suburbs.

There's a fair bit of good in Larry Uteck. It seems to have developed pretty much as a full community from the start. I sometimes go there to restaurants... it's not just residential. You know, there's schools there; there's some amenity. There is a lot of density in one place: probably not the ideal place at all. It's pretty far out there. [P3m-2017]

Many respondents acknowledged the city's rapid recent growth, with some elected officials sharing residents' concerns about uncontrolled change. One councillor noted:

Well, it's crazy. In 2012, the main discussion around development concerns was 'How are we going to get development?' Only four and a half years ago, the election was dominated by 'We need more development' and ... 'The city is dying', and 'Young people aren't going to want to live here', ... and 'We're sprawling, and it costs too much money.' ... And then in 2016, the conversation of the election is the terrifying pace of change! ... And it's a huge difference when ... we're doing 30 years of pent-up development [demand] in five years. [E5m-2017]

Elected officials suggested that decision makers recognise the business case for intensification, especially in the regional centre. For instance, one spoke about the downtown's recent growth, suggesting that 40% of building permits now come from the regional centre.

We've come back from the dead. There's an incredible renaissance going on. Reinvestment has begun again downtown: not just public, but in a very large way private investment as well. The housing market has done an incredible shift from the demand being on single-family suburban homes to more urban multi-residential format, as the Nova Scotia Home Builders' Association will tell you. And I rejoice in that because every unit that gets built down here is a single-family home that's not getting built out somewhere on very expensive linear infrastructure requiring servicing. [E3m-2016]

Overall housing unit starts may not have increased much in Halifax over the last decade, but their type and location shifted, according to one planner interviewed [P4m-2017], with more applications for multi-unit projects even in the suburbs. A spokesperson for a stakeholder agency confirmed the change in building activity.

If I were to show you slides of construction activity by housing type since 2009, this is the first year where we built more apartments than single-detached homes. The implication is that more apartments also means smaller footprints concentrated in smaller areas: ... [a more] urban city in some ways. ... And because of the geography we have, the single-detached family home is located on the outskirts. [S1m-2016]

A few planners believed that the 2009 downtown plan with its form-based codes and clear rules on height, massing, and design unleashed new demand. One explained:

...the downtown Halifax secondary planning strategy aimed to move things away from development agreements to a form-based code so that there would be a lot more predictability both for the residents and heritage people, and for the developers as to what is allowable. That has really led to a boom of interest by developers in the downtown because risk and uncertainty has been reduced. [P1m-2016]

Most of those interviewed, however, pointed to market conditions and continuing migration to the region to explain growth patterns. Low interest rates offered opportunities to institutional investors and local developers with long-term commitment to the region to take advantage of supportive political conditions to get projects approved. One elected official implied that the stars aligned:

There have been some changes in the framework legislation over the last decade. ... As a result of demand for more accommodation, both residential and commercial, in HRM, along with the

very important factor that interest rates are very low now, the development community has been using these years to build a lot of capacity, whether capacity is immediately needed or not. I tend to think we're over-building at the moment in terms of our immediate needs, and particularly in the residential or commercial sectors, we're probably over-building in terms of our long-term needs. But this doesn't seem to have slowed the process: one of the major factors being that there's a very complacent municipal council, and that's been the case for quite some time. [E4m-2017]

As they discussed development trends, respondents often alluded to factors that impeded efforts to change growth patterns. The lower cost of suburban land and the ease of obtaining building permits were seen to favour suburban growth, often at low densities. Resistance to intensification policies generated political pushback that some respondents noted. For the most part, though, respondents tended to support the idea of building at higher densities and with mix in suburban centres. Given those sentiments, how do we explain the limited progress on suburban recentralisation in Halifax? In the next section, we synthesise findings from across our research methods to identify the barriers that reduce the effectiveness of recentralisation policies and practices.

Barriers to recentralisation

Our review of policies, plans, interview transcripts, and other data about development in Halifax leads us to suggest that five key factors -- path dependency and slow growth; political culture; cultural and lifestyle preferences; geology and topography; and community size—explain the challenges faced in promoting suburban recentralisation in Halifax.

Path dependency and slow growth

In many ways, development in the region continues to reflect the after-effects of political fragmentation. Prior to 1996, four jurisdictions demanded varying densities and levels of services for new development. Scattered suburban and exurban development resulted, undermining the potential for transit. During the lead-up to the first regional plan (Halifax, 2006), many small developers sought approvals, often for low-density residential projects in the former county area. Larger developers, like Clayton Developments, negotiated agreements for master-planned communities in suburban Bedford. Thus, even before the Regional Plan (Halifax, 2006)—with its multiple growth centres—came into effect, the pattern of future suburban and exurban development had largely been set. A planner explained that some pre-approved projects frustrated staff.

Dartmouth Crossing really took us by surprise because it was done using as-of-right zoning. There had been a deal with the province many years ago whereby the province had been allowed to build Highway 102 through those lands in return for a promise by the province to build an interchange for them at some time in the future. ... It blindsided us. ... It's pulled a lot of retail out of Dartmouth, away from where people live. ... We had to add [the area] as a growth centre after the fact, just before we took the first Regional Plan to council. [P1m-2016]

One planner interviewed described why it seems easier to build in suburban areas like Bedford South and West than in downtown.

If you go and buy a building lot in Larry Uteck and put up an apartment building, there's a company that spent the last three years master-planning the whole area, going through a development agreement ..., and getting all the approvals in place so that you can just waltz in and get your [building] permit in two weeks. [P4m-2017]

For the most part, the developers and builders in Halifax are local companies: many are family businesses relying on local banks or their own funds for financing. Some of those interviewed indicated that financing practices affected developers' ability to propose, fund, and sell some types of projects, such as apartment buildings in the suburbs [P4m-2017]. One planner discussed challenges with form and mix.

It's not so much the recentralisation itself [that developers resist]. I think they get that. It's the front-yard parking that seems to be the show stopper. It's sacrosanct. And I don't really know

why, except that it's probably related to the way the financing works. We need to reach out more to the financial industry, to help inspire them. Probably the best way to do that would be to find examples elsewhere in North America where this sort of thing has worked, and get some *pro formas* and show how the cash flow works, and speak their language. [P1m-2016]

A real estate broker explained problems with financing mixed use.

The banks right now love residential. ... They will give you financing for all your residential. But if you've got a mixed-use component... from a banking perspective, the banks will look at the residential component and say, 'That's easy to finance, we'll give you approval on that financing'. When it comes to the retail or the office or the hotel, the banks will say, 'That's a little bit more problematic. We're not as comfortable giving that to you; we're going to assume a lease-up [delay] and assess a higher cap rate to it. Basically, we're not going to give you the value out of that retail space that we would if you had done residential'. The banks would really like to have pure-play residential if they can. Every time you add another component like office or retail or hotel, you're discounting the amount of money that the banks are willing to offer. [B3m-2017]

In the case of Russell Lake West, planned suburban recentralisation failed because the Department of National Defence changed its mind about releasing hundreds of hectares of land. The old City of Dartmouth and then HRM had long expected that eventually the airbase would be sold for urban development: they planned accordingly. Although the 2014 regional plan lists Russell Lake as an urban district growth centre, development to date has been coarse-grained and poorly integrated (Brewer & Grant, 2015).

Some of the older suburbs (such as Sackville) and the master-planned projects (such as Clayton Park, Bedford West, and Portland Hills) benefit from the legacy of Metro Transit decisions. Transit terminals, frequent bus service, and express routes directly to the city centre offer such locations ready access to jobs and amenities downtown and support higher-density residential uses along key corridors, such as Larry Uteck Boulevard.

Overall Halifax has been growing at just under 1% per annum for decades (Stantec, 2013): under 3000 units produced many years. With so many options for development, the region has seen concentrated

growth only in a few locations, such as suburban Bedford, Sackville, Clayton Park, and recently on the peninsula. At present, commercial vacancies are increasing, and office vacancies are high (Burke, 2016). Areas that expanded rapidly from the 1950s to 1980s, such as Dartmouth, have declined in relative income and experienced little growth (Prouse, et al., 2014). As one councillor [E2m-2016] noted, developers have shown no interest in the Main Street area of Dartmouth, despite plans promoting intensification.

Political culture

Halifax, like Nova Scotia generally, has the reputation of being politically conservative and pro-development (Beck, 1985; Fingard, et al., 1999; Grant, 1994). After the city administrator dismissed the city's chief planner in early 2017, press coverage and opinion pieces suggested that some Halifax council members thought staff should support more developer requests to change, rather than enforce, plans (Boon, 2017; Woodford, 2017). Interviews with those involved in local planning and development processes revealed perceptions that council, and the bodies that advise it, support growth regardless of plan policies or the implications for neighbourhoods.

Nova Scotia does not require that candidates for local office report the source of political donations. Some council candidates reject developer contributions, but donations from developers are significant for other candidates (Berman, 2016). Several respondents suggested that developers have considerable influence over local decision making. One developer [D2m-2016] commented, 'There are also some fairly large developers out there [in the suburbs] who have ... a large amount of sway with the council.' Suburban and rural councillors dominate council. An architect active in the city [S4m-2017] suggested that the problem of developer influence is widespread, with the city's planning and design committee being 'a little bit too inclined to approve' projects, a sentiment echoed by an elected official [E5m-2017] and by a planner [P5f-2017]. The architect went on:

I think that the planning department is widely seen and understood as being very pro-development. I would like to see that department get much tougher on development, particularly from a design point of view. [S4m-2017]

Planners interviewed generally supported current development trends. Most said little about council, or proffered evidence that political leaders supported policy directions. For instance, one planner [P4m-2017] described political support for a downtown project:

Now the development industry has kind of become more confident that council will entertain development proposals through those old processes. ... But I think the sort of nature of the public discourse and the political will for development changed to give that developer more confidence to go ahead with something of that scale downtown.

Elected officials interviewed –all from the regional centre-- proved critical of council's commitment to planning. One explained compromises involved in producing the 2006 regional plan, with its multiple suburban growth centres:

... the generalised future land use map – the one that has all the dots on it that show the nodes-- it was a hybrid ... I think the team put two options to council. One was very centralised: the big regional centre, and then a small number of nodes where there's established community centres. Then they showed another version which was meant to sort of scare them off, which was 'or we could develop this way, the way we have been'. That map was covered in dots: decentralised investment everywhere. And council, of course, said, 'Oh, we'd like to merge those two and find the happy middle.' So we wound up with I think 26 growth nodes! [E3m-2016]

One councillor [E1f-2016] explicitly questioned council's commitment to the plans it produced: 'There shouldn't be the assumption that because of what the plan says that in fact that is actually going to be directing council.' Another elected official [E5m-2017] commented, 'The council for the last four years demonstrated that it wasn't willing to listen to anyone below the councillors and kept voting for some really bad things.' Several respondents noted that council often approved plan changes when developers wanted to build higher, bigger, or differently than the plan proposed, thereby undermining public support for planning. One was especially blunt.

But now we're seeing so much stuff that's happened in the last three years that people don't have the confidence that council will say 'no'. We could go through the entire Centre Plan process and still have somebody come in with a proposal [for high towers on a low-rise residential street] and get council to approve it. So a lot of my constituents go, 'Why bother?' And it's 'Because there is no other option,' is sadly the only answer. If you don't have a plan, the

absence of a plan is the excuse they use for enabling inappropriate development. Even if it seems like a Pyrrhic victory, we at least have to get to the point that we have a plan that they're violating for no other reason than they're in the pockets of the developers. [E2m-2016]

Cultural and lifestyle factors

Many respondents identified various cultural and lifestyle factors that influenced development patterns, including the success of suburban centres. Most noted the increased interest in urban living, especially among millennials and retirees. One planner [P3m-2017] described the cultural shift: 'You know, when I started as a planner, nobody used urbanism as a compliment ... Now, if you want to say something is cool basically, you say "It's urban". ... There's a cultural change that has had an effect.'

Some respondents expected that intensification will spread in response to the market:

There are suburban developers who have put their fingers in the air and realised which way the wind's blowing. People don't want to live in those single-use, car-based, dispersed neighbourhoods anymore. They want to be next to transit, next to services. And that's what's getting built primarily in Bedford West, and ... a few others: close to transit, mixed use, higher density. ... The market is driving that more than any specific program that the city has put together. [E3m-2016]

Some respondents argued, though, that the market for high density has limits.

I know a lot of people whose real preference is to stay on the peninsula, stay downtown. They really like the amenities. They're typical young urban millennials. But there's also, ... a lot of people when they do start to want kids, their priorities do change a little bit. And despite what I think is an increasing popularity of urban areas, some people do prefer suburban housing. ... even if downtown Halifax is being revitalised, some people are just going to prefer to live in Bedford. [S3m-2016]

Those who want low-density housing for a family lifestyle look for homes in the suburbs or outside the city, argued some developers. One [D2m-2016] noted that certain people really like the suburbs.

Another commented,

... most people are trying to get the most they can for their money. And usually because Halifax is so small, if you live an extra 20 minutes out, which is nothing when you're talking commuting, ... you can get twice the land and 50% more house, or you can get a much newer house. [D1f-2016]

A few respondents identified challenges with the kind of cultural and housing preferences being expressed. One stakeholder argued that it made little sense to try to recreate urban conditions in suburban areas in a region with diverse housing options.

You have Hamilton trying to mimic Toronto in some ways because Toronto has a lot going on, and there's an affordability question in that case. But in the case of Halifax, we don't need to have Bedford trying to mimic Dartmouth or the peninsula. Bedford ... can flourish as a suburb. And the same thing for Clayton Park or Cole Harbour or Russell Lake. We don't need to try to densify these areas or recentralise. This, in my opinion, would be a huge planning mistake. It would be taking away from the potential of both downtown Dartmouth and the peninsula. [S1m-2016]

A real estate broker explained some of the segmentation occurring in the market. He said that suburban Bedford is

... serving a different market. ... It's really catering to the downsizer and the baby boomers that don't want to own homes anymore. ... It's unlikely that you're selling your south-end home and moving up to Larry Uteck. You're probably staying in the area. But if you're moving from rural somewhere, and you've got a limited budget to live on, but you like your square footage, that's where you're going to land. ... You get a bigger unit, and you're paying a buck a square foot per month. When you compare that to downtown, you're double that on a square footage basis, right? So you can get a 3-bedroom in Larry Uteck... a 3-bedroom, 1400 square feet, for under \$1400 a month, with a massive patio, quartz countertops, stainless-steel appliances – what everybody's looking for these days – and a view of the freaking harbour for \$1400! It sounds pretty appealing. [B3m-2017]

Given the different interests of residents and the economics of projects, the form of suburban nodes differs from the urban core. A broker explained:

If you look at the residential side, the residential buildings that are getting built in the suburbs, very few of them are mixed use. Most of them are pure-play residential. There's no ground floor retail, there's no hotel component, there's really no second- or third-floor office. In some cases, they have surface parking, in some cases they have underground parking. ... And then what they do is they put retail into nodes. Now, obviously this is car-based shopping and car-based living as opposed to pedestrian-based shopping and living. The densities are very, very low. But what's happening which is interesting is that the demand for suburban homes has shifted from single-family homes to duplexes, townhouses, and high-density residential. People still want to live in a car-based environment, but they don't want to be doing the maintenance on houses. They want to live in an apartment. I see that as a similar demand for product – the actual physical product – but a different lifestyle in terms of car-based versus pedestrian-based. [B3m-2017]

The respondents reflected the growing consensus in the planning and development field that urban living is preferred over suburban. Although some [eg, E1f-2016] commented on the growing problems of lack of affordability and prevalence of small units on the peninsula, more said they found areas such as Larry Uteck Boulevard unappealing. For instance, asking not to be identified, one respondent commented, 'Larry Uteck. Ugh, that's the worst'. One planner told us that he tried to avoid the common tendency of his colleagues to cast aspersions on the suburbs because, he said, cities need options for people. Some respondents [e.g., B3m-2017] questioned whether the push for mixed-use throughout the regional centre was reasonable, given the high rates of vacancies in some of the ground-oriented retail space provided. In sum, the complexity of cultural behaviours and lifestyle choices complicate planning for and implementing new urban patterns.

Geology and topography

Although the geology of the region has clearly shaped development patterns since Halifax's founding, and influenced the location of suburbs over the last six decades, few respondents identified factors of geography and topography influencing the fate of intensification efforts. Some respondents mentioned the high costs associated with excavating in areas with limited soils and acidic slates. Field surveys and historic reports, however, indicated that addressing issues related to the topography of rocky areas such as the Bedford suburbs reduced densities and frustrated efforts to create integrated street networks (see Low, 2016). Brokers and developers noted that lower land costs made surface parking possible in

suburban areas, and some planners and elected officials argued for reduced parking requirements downtown. Some respondents spoke about limited access to the peninsula along the Bedford Highway as a constraint for growth in the area. Although transit planners identified suburban routes in Clayton Park and on Larry Uteck as having high ridership, the distributed nature of development in the region and a geography dotted with lakes, shorelines, rock outcrops, and drumlins can frustrate efforts to develop cost-efficient rapid transit networks.

Global theory, local practice: Challenges for small cities

Planning in Halifax reflects changes in planning values over time. In the post-war decades policy was explicitly pro-development (Grant, 1994) and decentralising. For a brief period after amalgamation, the planning philosophy promoted mid-rise forms, horizontal mixed use, and heritage conservation (Grant, 2007). In recent years, the planning philosophy has become vigorously pro-urban, advocating medium to high density, high rise, signature architecture, vertical mixed use, and complete communities. In its pursuit of intensification, Halifax employs consultants and follows trends from other cities, as a planner explained:

We utilise best practices from around the world. Our consultants are from Calgary. They bring their experience of how things were done in Calgary as well as other cities they've worked in. And as planners, generally you tend to keep up with what other places are doing and look to that as suggestions and ... new ideas. [P5f-2017]

The growth centres of the 2006 regional plan emulated aspects of the *Places to Grow* approach used in Ontario (2005). The 2009 downtown plan reinforced urban design ideas that influenced development in Vancouver and Toronto. 'Global theory' spreads widely to influence plans and policies in smaller cities. In practice, of course, Halifax is a small market with relatively slow growth. Its suburban centres struggle to compete with the regional centre and with each other. Although low interest rates and finance capital looking for profitable projects have stimulated a boom in development projects in Halifax (Rutland, 2010), the kind of mixed use, higher densities, and transit orientation that plans envisioned for suburban centres have not followed. For the most part, suburban development remains auto-oriented, low-density, and segregated. The suburban nodes that have developed lack the fine-grained integration of uses, the walkability, and the density that characterise urban neighbourhoods.

Policy encouraging recentralisation may be a necessary condition for development that can produce different kinds of suburbs, but it is not sufficient in small cities like Halifax. Powerful land developers with extensive holdings and political influence continue to build out their rural and suburban projects even if social and economic conditions are not ripe for significant intensification. Decisions taken long ago undermine contemporary efforts to change development dynamics. A political culture that values saying ‘yes’ to any development request weakens planning policies that promise different outcomes. Moreover, decisions to release or reassign non-compliant planners affect the resolve of those who stay.

By seeking to replicate urban features in suburban areas, plans aim to produce urban residents. Current planning policies implicitly reinforce certain stereotypes. Respondents interviewed described differences in lifestyles among those living in suburb and city: they saw the urban resident as young, physically and socially active, willing to accept small units, and disinterested in owning a car. By contrast, they sometimes portrayed suburban residents as car-oriented, TV-watching families, who were socially isolated hyper-consumers.

Contemporary discourse about urban development reveals an incipient ageism or ‘generationalism’ (Moos, 2015) linked to images of the city. Respondents often connected positive comments about urban intensification to the preferences of millennials, without acknowledging that inequality is a significant problem within that cohort (Moos, et al., 2018). Several respondents—including planners and elected officials—made disparaging comments about ‘older’ people or baby boomers opposing higher density and high-rise projects, especially in the context of heritage conservation. For instance, a developer explained opposition to intensification:

I’ve encountered some people where when you say about putting more density downtown, they get really upset. It tends to be older people that tend to think that it's going to be too busy and it's going to become this big rat race, and somehow that this density is going to cause it to become a bad place to be, too crowded and there's going to be crime. [D2m-2016]

The entrance of Fusion Halifax (a group funded by economic development interests to provide networking opportunities to millennials) into the development debate provided a mechanism that has strongly linked youthful voices to the call for higher densities, signature architecture, and mixed uses (Grant & Leung, 2016).

The cultural shift that is bringing people back downtown parallels some disturbing trends in society. Halifax, like many Canadian cities, is becoming less equal in income (Prouse et al., 2014). Census tracts on the Halifax peninsula – where intensification is occurring – are becoming more affluent, while inner suburban areas such as Dartmouth and Spryfield are declining. White-collar workers who work downtown or retirees living off the capital accrued in their urban houses can afford to live on the peninsula; service workers who work downtown commute by transit to suburban areas such as Sackville or Eastern Passage; blue-collar workers who work in Burnside may live in comfortable suburban or exurban areas. While the average household downtown is small, affluent, and well-educated (Grant & Gregory, 2015), household profiles differ in suburban corridors like Larry Uteck, and differ again in older suburbs such as Sackville. The city seems increasingly segregated by lifestyle, income, and household characteristics: such trends may be exacerbated by urban and suburban intensification.

Relatively small cities such as Halifax face major constraints in efforts to recentralise. Unless they are in regions of rapid growth and strong political will favouring intensification, they lack the levers necessary to change dispersed development trajectories or the financial resources to improve urban connectivity. Because land and housing costs remain relatively low, residents can choose to maintain suburban lifestyles without having to spend hours in their daily commutes. Although planners in Halifax have followed the lead of colleagues in many other cities in promoting suburban recentralisation, development practice continues to produce relatively low-density, segregated, and auto-oriented landscapes.

References

BALAKER, T., & STALEY, S. (2006), *The Road More Travelled: Why the Congestion Crisis Matters More than You Think, and What We Can Do About It*, Lanham MD, Rowman and Littlefield.

BECK, J.M. (1985), *The Politics of Nova Scotia*, Tantallon NS, Four East Publications.

BERMAN, P. (2016), 'Some Halifax election candidates reject developer dollars', *CBC News online*, 3 October. <http://www.cbc.ca/news/canada/nova-scotia/halifax-election-campaign-contributions-developers-1.3786213> (accessed 12 August 2017).

BOON, J. (2017), 'Chief planning director Bob Bjerke exits city hall', *The Coast*, 22 August. <https://www.thecoast.ca/RealityBites/archives/2017/08/22/chief-planning-director-bob-bjerke-exits-city-hall> (accessed 2 September 2017).

- BREWER, K. & GRANT, J.L. (2015), 'Seeking density and mix in the suburbs: Challenges for mid-sized cities', *Planning Theory and Practice*, **16**, 151-68.
- BRUNET, M. (2017), 'New neighbourhood in Bedford was master planned', *Halifax Magazine*, 16 May. <http://halifaxmag.com/cityscape/new-neighbourhood-in-bedford-was-master-planned/>
- BURKE, D. (2016), 'Halifax's rising office vacancy bad news for downtown, says consultant', *CBC online*, 15 January. <http://www.cbc.ca/news/canada/nova-scotia/halifax-downtown-commercial-vacancy-rate-1.3404366>
- CALTHORPE, P., & FULTON, W. (2001), *The Regional City: Planning for the End of Sprawl*. Washington DC: Island Press.
- CERVERO, R. (1996), 'Mixed land uses and commuting: Evidence from the American housing survey', *Transportation Research Part A: Policy and Practice*, **30**, 361–77.
- CERVERO, R. (2013), *Suburban Gridlock*, New Brunswick NJ, Transaction Publishers.
- CLAYTON/CRESCO. (2017), *A concept for your lifestyle. The Parks of West Bedford*, <https://www.theparksofwestbedford.ca/the-parks/concept-plan/> (accessed 2 October 2017).
- COBLENTZ, H. (1963), *Halifax Region Housing Survey: A Planning and Housing Study of the Halifax and Dartmouth Metropolitan Area*, Halifax NS, Halifax Housing Survey.
- DOWNS, A. (2005), 'Smart growth – Why we discuss it more than we do it', *Journal of the American Planning Association*, **71**, 367–80.
- DUNHAM-JONES, E. & WILLIAMSON, J. (2011), *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs*, Hoboken NJ, Wiley.
- EWING, R., GREENWALD, M., ZHANG, M., WALTERS, J., FELDMAN, M., CERVERO, R., FRANK, L., & THOMAS, J. (2011), 'Traffic generated by mixed-use developments: Six-region study using consistent built environmental measures', *Journal of Urban Planning and Development*, **137**, 248–61.
- FILION, P. (2003), 'Towards smart growth? The difficult implementation of alternatives to urban Dispersion', *Canadian Journal of Urban Research (Canadian Policy and Planning supplement)*, **12**, 48-70.
- FILION, P. (2009), 'The mixed success of nodes as a smart growth planning policy', *Environment and Planning B: Planning and Design*, **36**, 505-21.
- FILION, P. (2010), 'Reorienting urban development? Structural obstruction to new urban forms', *International Journal of Urban and Regional Research*, **34**, 1-19.
- FILION, P., BUNTING, T. AND WARRINER, K. (1999), 'The entrenchment of urban dispersion: Residential location patterns and preferences in the dispersed city', *Urban Studies*, **36**, 1317–47.

- FILION, P., KRAMER, A., & SANDS, G. (2016), 'Recentralisation as an alternative to urban dispersion: Transformative planning in a neoliberal societal context', *International Journal of Urban and Regional Research*, **40**, 658-78.
- FILION, P. & SABOONIAN, S. (2016a), 'Suburban multifunctional centres as alternatives to dispersion: A morphological analysis', (unpublished).
- FILION, P., & SABOONIAN, S. (2016b), 'Suburban multifunctional centres: Their potential for metropolitan planning change and the obstacles to their implementation', (unpublished) Urban Affairs Association Conference, San Diego.
- FINGARD, J., GUILDFORD, J., & SUTHERLAND, D. (1999), *Halifax: The First 250 years*, Halifax NS, Formac.
- FRANK, L., BRADLEY, M., KAVAGE, S., CHAPMAN, J., & LAWTON, T. K. (2008), 'Urban form, travel time, and cost relationships with tour complexity and mode choice', *Transportation*, **35**, 37-54.
- FRANK, L. D., ENGELKE, P. O., & SCHMID, T. L. (2003), *Health and Community Design: The Impact of the Built Environment on Physical Activity*, Washington DC, Island Press.
- GEHL, J. (2011), *Life between Buildings: Using Public Space*, Washington DC, Island Press.
- GORDON, D.L.A., & JANZEN, M. (2013), 'Suburban nation? Estimating the size of Canada's suburban population', *Journal of Architectural and Planning Research*, **30**, 197-220.
- GORDON, D.L.A. & VIPOND, S. (2005), 'Gross density and new urbanism: Comparing conventional and new urbanist suburbs in Markham, Ontario', *Journal of the American Planning Association*, **71**, 41-54.
- GRANT, J. (1989), 'Hard luck: The failure of regional planning in Nova Scotia', *Canadian Journal of Regional Science*, **12**, 273-84.
- GRANT, J. (1994), *The Drama of Femocracy: Contention and Dispute in Community Planning*, Toronto, University of Toronto Press.
- GRANT, J. (2003), 'Exploring the influence of new urbanism in community planning practice', *Journal of Architectural and Planning Research*, **20**, 234-53.
- GRANT, J. (2007), 'Vision, planning and democracy', in L. Hopkins and M. Zapata (eds), *Engaging the Future: Forecasts, Scenarios, Plans, and Projects*, Cambridge MA, Lincoln Institute of Land Policy, 39-57.
- GRANT, J.L. (2009), 'Theory and practice in planning the suburbs: Challenges to implementing new urbanism, smart growth, and sustainability principles', *Planning Theory and Practice*, **10**, 11-33.
- GRANT, J.L. & GILLIS, C. (2012), 'The Twisted Sisters: Disputing iconic urban design', *Carolina Planning Journal*, **37**, 27-34.
- GRANT, J.L. & GREGORY, W. (2015), 'Who lives downtown? Neighbourhood change in central Halifax, 1951 to 2011', *International Planning Studies*, **21**, 176-90.

- GRANT, J., JOUDREY, D. & KLYNSTRA, P. (1994), *Next Door to the Factory: Housing People in Modern Industrial Parks*, Ottawa ON, Canada Mortgage and Housing Corporation.
- GRANT, J.L. & KRONSTAL, K. (2010), 'The social dynamics of attracting talent in Halifax', *The Canadian Geographer*, **54**, 347-65.
- GRANT, J.L. & G.W.K. LEUNG. (2016), 'Disputing the character of the city: Heritage, regeneration and the urban design turn' *London Journal of Canadian Studies*, **31**, 113-30.
- GRANT, J.L. & SCOTT, D. E. (2012), 'Complete communities versus the Canadian dream: Representations of suburban aspirations', *Canadian Journal of Urban Research (Canadian Policy and Planning supplement)* **21**, 132-57.
- GREATER BURNSIDE. (2016), *What's Going on in Dartmouth?* 8 November. <http://www.greaterburnside.com/burnsidenews/4370427> (accessed 2 August 2017).
- HALIFAX. (2006), *Regional Municipal Planning Strategy*, Halifax NS, Halifax Regional Municipality.
- HALIFAX. (2009), *Downtown Halifax: Secondary Municipal Planning Strategy* (as amended to 2014), Halifax NS, Halifax Regional Municipality. https://www.halifax.ca/sites/default/files/...planning/DowntownHalifax_MPS.pdf (accessed 23 August 2017).
- HALIFAX. (2014), *Regional Municipal Planning Strategy*, Halifax NS, Halifax Regional Municipality. <https://www.halifax.ca/about-halifax/regional-community-planning/regional-plan> (accessed 23 August 2017).
- HALIFAX. (2017a), 'Burnside Industrial Park'. <https://www.halifax.ca/business/business-parks/business-industrial-parks/burnside-industrial-park> (accessed 23 August 2017).
- HALIFAX. (2017b), 'Bayers Lake Business Park'. <https://www.halifax.ca/business/business-parks/business-industrial-parks/bayers-lake-business-park> (accessed 23 August 2017).
- HALIFAX. (2017c), 'Centre Plan'. <https://www.halifax.ca/about-halifax/regional-community-planning/regional-plan/centre-plan> (accessed 23 August 2017).
- HALIFAX. (2017d), 'Cogswell Interchange through the years'. <https://www.halifax.ca/transportation/transportation-projects/cogswell-redevelopment-project/cogswell-interchange-through> (accessed 24 August 2017).
- HANDY, S. (2005), 'Smart growth and the transportation-land use connection: What does the research tell us?', *International Regional Science Review*, **28**, 146–67.
- HESS, P. & SORENSEN, A. (2015), 'Compact, concurrent, and contiguous: Smart growth and 50 years of residential planning in the Toronto region', *Urban Geography*, **36**, 127-51.
- HIRT, S. A. (2014), *Zoning in the USA: The Origins and Implications of American Land-use Regulations*. Ithaca NY, Cornell University Press.

- JACOBS, J. (1961), *The Death and Life of Great American Cities*, New York, Vintage.
- KNOX, P. L. (2008), *Metroburbia, USA*, New Brunswick NJ, Rutgers University Press.
- LANG, R.E. (2003), *Edgeless Cities: Exploring the Elusive Metropolis*, Washington DC, Brookings Institution Press.
- LANG, R.S. (1972), *Nova Scotia Municipal and Regional Planning in the Seventies*, Halifax NS, Department of Municipal Affairs.
- LOW, S. (2016), *The Dilemma of Dispersion: Barriers to Smart Growth and Recentralisation in Halifax Suburbs*, (Master's research project, Dalhousie University).
http://theoryandpractice.planning.dal.ca/pdf/suburbs/mplan_projects/s_low_2016_thesis.pdf
 (accessed 22 September 2017).
- MACLEOD, J. (2006), 'Nova Scotia politics: Clientelism and John Savage', *Canadian Journal of Political Science*, **39**, 553-70.
- MILLWARD, H. (2002), 'Peri-urban residential development in the Halifax region, 1960-2000: Magnets, constraints, and planning policies', *The Canadian Geographer*, **46**, 33-47.
- MOOS, M. (2015), 'How city planning can cause greater generational divides,' *Huffington Post*, 20 January. http://www.huffingtonpost.ca/markus-moos/city-planning-generational-divide_b_6508024.html (accessed 25 October 2017).
- MOOS, M., PFEIFFER, D., & VINODRAI, T. (2018), 'The millennial city, shaped by contradictions', in M. Moos, D. Pfeiffer, and T. Vinodrai (eds), *The Millennial City: Trends, Implications, and Prospects for Urban Planning and Policy*, New York, Routledge, 3-11.
- ONTARIO. (2005a), *Places to Grow Act*, Toronto, Ministry of Municipal Affairs.
https://www.placestogrow.ca/index.php?option=com_content&task=view&id=4& (accessed 2 August 2017).
- ONTARIO. (2005b), *The Greenbelt Plan*, Toronto, Ministry of Municipal Affairs, Ministry of Housing.
<http://www.mah.gov.on.ca/Page189.aspx> (accessed 2 August 2017).
- PERRIN, L. & GRANT, J.L. (2014), 'Perspectives on mixing housing types in new suburbs', *Town Planning Review*, **85**, 363-85.
- POEL, D.H. (2000), 'Amalgamation perspectives: Citizen responses to municipal consolidation', *Canadian Journal of Regional Science*, **23**, 31-48.
- PROUSE, V., GRANT, J.L., RADICE, M., RAMOS, H., & SHAKOTKO, P. (2014), *Neighbourhood change in Halifax Regional Municipality, 1970 to (2010)*, Halifax NS, Dalhousie University.
<http://theoryandpractice.planning.dal.ca/neighbourhood/working-papers.html> (accessed 2 August 2017).
- RUTLAND, T. (2010), 'The financialization of urban redevelopment', *Geography Compass*, **4**, 1167-78.

SPECK, J. (2012), *Walkable City: How Downtown Can Save America, One Step at a Time*, New York, Farrar, Strauss and Giroux.

SPEIR, C., & STEPHENSON, K. (2002), 'Does sprawl cost us all? Isolating the effects of housing patterns on public water and sewer costs', *Journal of the American Planning Association*, **68**, 56–71.

STONE, B. Jr. (2008), 'Urban sprawl and air quality in large US cities', *Journal of Environmental Management*, **86**, 688–98.

TACHIEVA, G. (2010), *Sprawl Repair Manual*, Washington, Island Press.

WILLWERTH, N. (2017), *High Finance Descends: The Nexus of Macroeconomics and Urban Design on Larry Uteck Boulevard*, Thesis, Dalhousie University.

[http://theoryandpractice.planning.dal.ca/_pdf/multiple_plans/nwillwerth_\(2017\).pdf](http://theoryandpractice.planning.dal.ca/_pdf/multiple_plans/nwillwerth_(2017).pdf)

(accessed 2 August 2017).

WOODFORD, Z. (2017), 'Halifax councillor "not disappointed" chief planner out of job', *Metro News*, 23 August, <http://www.metronews.ca/news/halifax/2017/08/23/halifax-councillor-not-disappointed-chief-planner-out-of-job.html> (accessed 2 October 2017).

ZACCAGNA, R. (2015), 'Massive Bedford residential project still years from completion', *Chronicle-Herald*, 11 September. <http://thechronicleherald.ca/business/1310560-massive-bedford-residential-project-still-years-from-completion> (Accessed 5 September 2017).