Working Paper
Trends in the suburbs project

Producer and consumer perspectives on increasing densities in new suburban developments in five Canadian cities

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Interviews with those producing suburban landscapes (planners, municipal councilors, and developers) and those consuming new homes (residents) in five Canadian cities reveal divergent attitudes towards increasing housing densities. While housing producers focus primarily on identifying abstract societal benefits and concrete organizational returns from higher density housing, those inhabiting newer communities reveal frustrations with lived experience in a suburban context where services and amenities may not keep up with consumer expectations.

Contemporary urban planning reflects significant consensus amongst planners, elected officials, and development providers that greater urban and suburban densities contribute to sustainability [1-4]. While faith in the blessings of compact form has remained firm for decades, justifications for density have shifted as circumstances changed [5,6]. Those advocating higher densities often point to community-wide benefits such as conserving agricultural or environmentally sensitive land from development, increasing urban efficiencies and services, or reducing housing and infrastructure costs [7,8]. Recent discussions describe increasing densities as one potential strategy to reduce greenhouse gas emissions which contribute to climate change [9]. Since Jacobs [10] argued that population density affected urban vibrancy and social interactions, community planners and urban designers began linking higher densities to urban quality [11,12], safety [13], and social dynamics [14]. Although planning policies in most Canadian communities encourage higher densities, local practice reveals that some housing producers and many consumers resist density: those building, selling, and inhabiting the suburbs experience the externalities of higher density housing in their personal and professional lives. In this paper we examine local perspectives on increasing densities in suburban landscapes in Canada to illuminate some tensions between planning theory and practice.

Managing urban growth and containing sprawl has motivated planners for over a century [15]. Although the advent of widespread car ownership and mass-produced housing reduced suburban unit densities in the 20th century, by the 1950s plans in the city of Toronto were calling for nodal growth [16] with a compact urban core and corridors to satellite cities [17]. By the 1970s, cities in many countries were interested in intensification [6], and plans in major Canadian cities advocated increased densities to promote efficiencies and protect central business areas [18-20]. Despite planners' growing commitment to promoting higher building densities, plans often set maximum rather than minimum unit densities for new developments [21]. As the 20th century came to a close, however, suburban lot sizes gradually began to decline so that the unit density of detached housing areas climbed modestly in many locations [22,23].

Several movements—sustainable development, healthy cities, new urbanism, and smart growth—coalesced in the 1990s in advocating the compact city and urban intensification [4,12,24]. Planners in Canada followed these movements with great interest and persuaded governments to adopt policies to reduce lot sizes and increase urban densities [18]. For instance, Markham, Ontario, revised its planning policies and worked with the provincial government to implement new urbanism strategies. A decade later Gordon and Vipond [25] reported that the mean gross density (7.9 units per acre or 19.5/ha) of new urbanism projects in Markham was 76% higher than densities of conventional areas in the town. Density measures provided valuable tools for planners to show that they were meeting targets envisioned in policy.

Changes in the housing marketplace played an important role in delivering on planning policies promoting density. Projections published by Canada Mortgage and Housing Corporation in the 1990s predicted declining homeownership rates as the baby boomer population aged [26]. Instead, homeownership rates grew quickly after 1991 as Canadians took to condominium[1] living [27]: by 2006 almost 11% of homeowners occupied condominium units [28]. In the Vancouver region over 30% of homeowners lived in condominium units, generally in moderate- to high-density areas of apartments or townhouses. As homebuyers became more comfortable with what Fincher and Gooder (p. 166) [29] called "cosmopolitan consumption" in medium-density housing, upper levels of government and developers grew increasingly supportive of higher density housing [6].

Despite growing policy and market support for higher density environments, however, the gap between policies and outcomes remains significant [2]. Several studies pointed to the challenges of achieving intensification and the benefits its advocates promised [5,19]. Weak regional planning in the 1990s limited efforts in major Canadian cities [30]; however, municipal amalgamations and provincial policies from the late 1990s through the 2000s created a more supportive environment for policy initiatives [16,31]. Neuman [32] argued that intensification policies often reflected generic approaches which failed to address local needs and conditions. As others noted, however, the impacts of higher densities are felt locally as residents cope with concerns about noise, safety, and privacy [33,34].

Urbanists argue that higher unit densities can reduce housing costs [11]. The City of Vancouver's Ecodensity initiative encourages strategies such as laneway housing and secondary suites: it explicitly links higher densities with housing choice, affordability, and neighborliness [35]. Evidence from Canadian cities, however, indicates that increasing densities may inflate land and housing prices, thereby limiting choices for those entering the market [36]. The last decade witnessed rapid escalation in housing prices relative to incomes in Canada as the median selling price of a home rose from $134,240 in 2001 [27] to $352,600 in 2011 [37]; by contrast, average incomes only increased by one-third [38,39]. Critics lay some blame for rising costs on planning policies that restricted the supply of land for low-density development [40,41].

With some of the highest housing costs and urban densities in Canada, the Vancouver region highlights the complexity of the relationship between unit densities and population densities. At very high urban densities relatively few households contain children [42,43]: decreasing household sizes frustrate efforts to increase urban densities and to achieve greater urban efficiencies.

In a study of condominium housing in Leeds (UK), Unsworth [34] suggested that the purchase of high-density units by small investors contributed to instability in neighborhoods. Ancell and Thompson-Fawcett [33] noted that higher urban densities drove displacement and gentrification in Christchurch, New Zealand. Pendall and Carruthers [44] found a complicated relationship between income segregation and density but little evidence that higher density increases social integration. Filion [16] identified two kinds of high-density areas in the inner city: one type is occupied by wealthy, small households with high status occupations and high education levels, while the other houses poor, large households with low status occupations and low education levels. Some studies of private and gated communities hinted that the push for greater densities may contribute to market interest in enclosure for privacy and separation [45,46]. Increasing densities does not necessarily produce the mixing and social integration that planning theory espouses.

While on the one hand consumer interest in entering the housing chain encourages some households to buy high-density housing types, on the other hand long-standing ideals associated with housing make some consumers reluctant to accept smaller units or lots. Many consumers remain interested in getting the largest house they can for their dollar [47,48]. Housing producers and consumers continue to believe that families with children are best served in a suburban house with a yard [29,49]. Surveys in higher density housing show residents do not intend to stay long: most aspire to purchase larger detached houses in future [22,49].

Even as densities increase, some anticipated benefits may not materialize in the short term. For instance, residents may not get rid of their cars. Unsworth [34] found that 75% of the residents of high-density housing in Leeds owned cars, the same proportion as in the UK as a whole [50]. Residents' decisions on what transportation mode to use depends on many factors besides density: these include time, convenience, and the purpose of trips [51,52]. In cases where higher densities result from condominium construction the

use of private roads and amenity spaces may undermine efforts to promote connectivity [53]. The mix of retail and other uses which would allow high-density living to achieve its objectives of vibrancy and walkability may not prove immediately viable [54,55].

Although the literature is replete with discussions of contemporary development trends we find relatively little insight into the views of those involved in producing and inhabiting the suburbs. What do those producing new residential areas believe that higher densities can deliver, and how do those inhabiting the suburbs respond to the effects of contemporary efforts to design places that are denser and more mixed than those built over previous decades? Our study contributes to contemporary understanding of the challenges facing planning practice in implementing higher suburban densities. We examine five Canadian communities to understand what those producing and consuming the landscapes of the suburban fringe say about the opportunities and challenges of higher unit densities. We use the term "producers" to include those adopting and enacting planning policies, those planning and regulating development, and those developing and building new areas for housing. "Consumers" are residents of the landscapes; most of the producers we interviewed also reside in the communities and sometimes discussed issues from that perspective. Our analysis finds that producers often described the benefits of greater density in an abstract or philosophical way, but consumers and those critical of higher densities pointed to personal experiences and practical concerns that resulted from life at higher densities. If planners hope to encourage community residents to accept higher suburban densities they need to move beyond rhetoric which promises urban vibrancy and housing choice to address emerging realities for residents in high-density areas.

Evaluating practice

We report here on some results of a long-term research program investigating trends in planning for Canadian suburbs, focusing on three provinces: British Columbia (BC), Alberta (AB) and Nova Scotia (NS). The work involved analyzing planning policies and documents, visiting new developments in the target communities to conduct field surveys of development conditions and practices, reviewing housing marketing materials and information about local development issues online, and interviewing producers and consumers of housing in the communities. In 2007, we completed interviews with producers / practitioners (planners, developers, and municipal councilors) in Surrey BC and Calgary AB. In 2010, we interviewed a small sample of consumers / residents in Calgary and Surrey and added interviews with all categories of respondents in the Township of Langley BC and Airdrie AB. In 2011, we interviewed in Halifax NS.

Table 1 describes the sample of 90 respondents whose interviews were analyzed for the study. We interviewed 26 planners working for local governments in planning or development control, or employed as private planning consultants. Our sample of 25 developers included builders, project planners, and administrators working in the development industry. The 13 councilors were elected as aldermen, mayors, or other representatives on municipal councils. Residents interviewed ranged in age from

teenagers to senior citizens, included occupants of single and multiple unit buildings, and involved a range of ethnicities and household types. Since we recruited resident respondents through social networks and snowballing strategies they were relatively homogeneous in income levels. Because our sample of residents (26 in total) was relatively small we also examined web sites of residents' associations and news reports about higher density developments in the region to gain a broader picture of residents' concerns. While we are cautious about generalizing from small samples, the rich data base of recorded transcriptions from the interviews (which generally lasted 50 to 60 minutes) provided useful insights into the kinds of issues which challenge communities in contemporary planning practice.

Table 1. Respondents in sample.

	Surrey	Langley Township	Calgary	Airdrie	Halifax	TOTAL
Planners	2	3	6	3	12	**26**
Developers	6	3	5	7	4	**25**
Councilors	2	3	1	1	6	**13**
Residents	4	9	5	4	4	**26**
TOTAL	**14**	**18**	**17**	**15**	**26**	**90**

The analysis which follows draws primarily on interview results supported where appropriate by other data sources. Although an economic downturn intervened between the first and final interviews, development activities in the communities involved did not diminish substantially. Consequently, data remain generally comparable over the four-year period.

The communities present useful contrasts for a study of the pressure to increase urban densities. We compare high growth and modest growth areas in western and eastern Canada (Table 2) to get a sense of whether development strategies and practices vary. Surrey and Langley Township in British Columbia are in the suburban fringe of Metro Vancouver. This region contains rapidly growing communities constrained by geography (mountain and sea) and agricultural land protected by provincial legislation. Provincial and municipal policies promote intensification as the key strategy to accommodate growth [20]. Calgary and Airdrie in Alberta are also growing quickly, although they are less constrained by geography than by policy choices that control their ability to annex rural land and which encourage intensification [56]. Formerly a small town, Airdrie has seen significant growth in the last decade as a site of housing for commuters from Calgary [57]. By contrast, Halifax Regional Municipality—Halifax or HRM—has experienced steady but relatively modest growth. Its expansive geography affords residents a wide range of housing choices within easy commuting distance of centers of employment [58-60]. Consequently, while policy encourages intensification in central areas in Halifax, low density development on exurban lots with no municipal services has been challenging to contain.

Table 2. Population size, density, and recent growth in sample communities (2006)

	Population in 2006	Population growth 2001-2006 (%)	Population density (per sq km)
City of Surrey (BC)	394, 976	13.6	1245.3
District of Langley (BC)	93,726	7.9	305.4
City of Calgary (AB)	988,193	12.4	1360.2
City of Airdrie (AB)	28,927	41.8	874.0
Halifax Regional Municipality (NS)	372,679	3.8	67.9

Source: Statistics Canada, 2006

Surrey and Langley District Municipality (Langley Township) are part of Metro Vancouver, formerly known as the Greater Vancouver Regional District (GVRD), which includes Vancouver and surrounding municipalities. Both are within commuting distance of Vancouver's central business district. The Vancouver region, one of the densest metropolitan regions in Canada, has strong growth management policies [61]. For more than a decade it has promoted small lots and densities of 12 units per acre (29.6/ha) or more for new areas [20]. Due to regional and community planning policy, as well as development pressures, these municipalities are becoming densely built up as row-house/townhouse and apartment development increases.

With a population nearing 400,000, Surrey lies 10 km east of Vancouver. A high-speed rail connection in its core links Surrey to Vancouver. East Clayton, a green-field development on its eastern edge, received design awards for incorporating sustainability, new urbanism, and smart growth principles [62,63]. Among the development's features are higher than average densities, varied housing types, and innovative storm-water management facilities [63]. Approximately one-third of Surrey's land is agricultural land reserve (ALR), a provincial land-use designation that restricts non-agricultural uses [64]. Planning policy encourages compact and nodal development [65] and permits homeowners to add secondary suites (ancillary apartments) within detached homes [66]. A high proportion of Surrey's housing stock is in medium- to high-density forms, with less than half in detached homes (Table 3). Over half of the housing stock was built in the period from 1986 to 2006 (Table 4). Surrey has the largest proportion of foreign-born residents of the study communities, and the largest average household size.

Table 3. Housing types in sample communities (in per cent, 2006 census)

	Surrey	Langley District	Calgary	Airdrie	Halifax
Detached	43.8	61.2	57.8	72.6	51.6
Semi-detached	2.7	3.5	5.8	6.2	6.9
Row-houses	11.7	11.6	9.1	10.0	3.5
Duplex Apartments	17.4	10.6	4.2	0.4	4.0
Apartments in buildings under 5 stories	21.2	7.5	15.8	10.1	22.1
Apartments in buildings 5 stories and over	1.9	0.0	6.8	0.0	9.6
Other	1.4	5.6	0.6	0.6	2.4

Source: Statistics Canada, 2006.
Note: Totals may not equal 100 per cent due to rounding.

The Township of Langley is immediately east of Surrey, approximately 30 km from Vancouver. The ALR protects approximately three-quarters of the area, with pockets of urban development centered on former villages in a largely agricultural landscape [67]. The Township facilitates intensification in urban nodes, including several former villages. Some nodes include clusters of private and gated communities [53]. Since 2006 it has permitted secondary suites to be added in all residential zones [68]. Langley's population is somewhat older than Surrey's, household sizes are smaller, and average income is higher. Langley has higher homeownership rates, fewer immigrants, and a lower population density than its neighbor, Surrey. In light of the limited land base and high demand, the municipality has adopted smart growth principles promoting higher densities, mixed-use nodes, and varied housing types to accommodate growth [67]. Suburban areas formerly zoned for 2-acre (.8 ha) lots have been reclassified to encourage redevelopment at higher densities. Detached units are the most common housing form although recent developments include a growing proportion of multi-family units.

Table 4. Characteristics of sample communities (2006 census)

	Surrey	Langley District	Calgary	Airdrie	Halifax
Per cent of owned dwellings	75.2	86.0	72.8	89.4	64.0
Per cent built 1986 to 2006	56.4	52.5	40.5	66.9	34.6
Per cent of immigrants	38.3	17.1	24.8	6.8	7.4
Per cent of population 15 and over	79.9	80.6	81.9	75.7	83.9
Median age of population (in years)	37.0	39.1	35.7	32.6	39.0
Average household size	3.0	2.8	2.5	2.9	2.4
Median income all households ($)	60,168	69,805	67,238	78,097	54,129

Source: Statistics Canada, 2006.

Calgary and Airdrie are partner communities within the rapidly growing Calgary Metropolitan Region. Between 2007 and 2009 the Calgary Regional Partnership developed a plan to coordinate land-use policies and practices [69,70]. The plan seeks to reduce the urban footprint of new development, and hence encourages intensified development in currently built-up areas and new development in compact, transit-oriented nodes [71]. Calgary is the largest city in Alberta, attracting young people and immigrants in significant numbers (Table 4). In recent years the city experienced significant growth due to the strength of the petroleum sector [70]. Since the mid-1990s planning policy in Calgary has encouraged intensification, mixed-use, and transit-readiness [72,73]. Despite policy intended to encourage infill and denser forms, however, considerable amounts of development occurred on the fringe in the form of conventional suburban neighborhoods of detached houses. Because most development occurs in a contiguous pattern, Calgary has the highest population density in the sample communities (Table 2). Detached housing dominates, although recent developments include a high proportion of multi-family units (Table 3). Through planning policy [74], the city emphasizes increasing residential densities in new development nodes and encouraging transit-oriented development along light-rail transit lines. Despite the mayor's vigorous efforts to promote policies to encourage higher densities, municipal council has resisted measures to permit secondary suites except in designated zones [75].

Located 15 kilometers north of Calgary, Airdrie is within easy automobile commuting distance of Calgary's core. Amongst the fastest growing municipalities in Canada, Airdrie is a former small town that benefited from comparatively low home prices within the Calgary region: consequently, households looking for larger homes and yards for their housing dollars have seen Airdrie as attractive. The average household income is higher in Airdrie than in Calgary, and households are larger and more likely to own homes (Table 3 and 4). A rapid increase in population in the last decade spurred residential development on almost every edge of the city: two-thirds of dwellings were built between 1986 and 2006 (Table 4). Airdrie recently annexed land to accommodate further growth. While development traditionally produced low-density, conventional detached units, new projects increasingly incorporate varied housing types on smaller lots than in previous decades. Airdrie's growth strategy emphasizes smart growth, sustainable development, and higher densities [76]. Greene [57] called Airdrie a case study in sustainability as it set density targets of up to 9 units per acre (22.2 / ha) for new developments.

In 1996 the Province of Nova Scotia created Halifax Regional Municipality by amalgamating the former City of Halifax with the City of Dartmouth, Town of Bedford, and Halifax County. With an area of about 5500 square kilometers, Halifax has a concentrated urban population around its harbor but scattered residential developments within commuting distance of the core in many directions [58,77]: thus, its overall density is lowest among the sample (Table 2). A geography that features ocean coastline, lakes, and rivers creates verdant exurban settings of relatively affordable homes within an easy drive of the city center: the bus transit system serves the core and suburbs but only a few parts of the periphery. The lower proportion of detached dwellings (Table 3) and lower homeownership rates than seen in the other cities studied may reflect low median

household income and small average household size (Table 4). Although the Regional Plan adopted in 2006 promoted nodal development and urban intensification, relatively slow population growth and rural building lots approved prior to 2006 helped to moderate housing prices and maintain low densities in the fringe [78]. Halifax has the lowest proportion of dwellings built between 1986 and 2006 of the five communities studied (Table 4).

All five communities committed to smart growth and sustainability principles in their municipal plans and policies. During the last decade they affirmed their commitments to regional planning based around coordinating and integrating land uses, increasing densities, and encouraging use of mass transportation to achieve greater urban efficiencies. Despite a high degree of consensus on their planning objectives, however, the communities have not produced uniformly high densities in built-up areas. The number of townhouse and apartment units is on the rise in all communities, but the relative share and form of multi-family and detached units varies considerably. In Surrey and Langley an overwhelming proportion of new units are low-rise multi-family, often in condominium ownership. In Airdrie, Calgary, and Halifax detached units remain common in new construction. Apartment buildings have become important to the housing market in Surrey, Calgary, and Halifax, and low-rise apartment buildings even take a share of the markets at some distance from urban centers, as in Langley and Airdrie. Urban densities are generally increasing at nodes near highways or transit hubs. Clusters of medium-density units occur in the suburban fringe of all communities studied. Policy documents in the five communities describe secondary suites as positive measures to increase housing supply, reduce costs, and raise densities while protecting neighborhood character, but only the BC communities permit suites widely.

Increasing densities are a fact of life in new suburban developments in many parts of Canada: planning policies call for them, the development industry benefits from density, and consumers buying homes are adapting to new housing options. Lot sizes for detached houses are declining. Based on the results of interviews with practitioners and residents, the next sections identify the factors that participants in producing and inhabiting the suburbs see as contributing to or undermining efforts to increase urban densities in the study communities.

Encouraging higher densities

Those respondents involved in producing new residential areas identified various philosophical and economic factors which they saw as justifying higher densities.

Philosophical factors

Several planners and some municipal councilor respondents spoke at length about the contribution of higher densities to sustainable, smart, and cosmopolitan development. Most planners interviewed-- like the policies in place in their communities [68,79,80] -- linked higher densities to vibrancy, competitiveness, livability, and / or neighborliness. Sandalack [81] argued that "Calgary's most current planning documents advocate increasing density, and indeed many urbanists view density as the magic bullet that will cure all our social ills, including sprawl, homogeneity of suburbia, decline in walkability, shortage of good public spaces, and even homelessness." Planners expected that higher densities would support land use mix, public transportation, affordable housing, and choices for residents. Several planners and councilors pointed to Vancouver as a good model of successful development at high densities: "Everyone is trying to do the same thing [increase densities], and if we don't catch up we will be left behind" (Langley planner in 2010). Planners often treated need for higher density as conventional wisdom and necessary for growth.

Economic factors

Producer respondents often suggested that higher development densities reduced costs to municipalities, to developers, and to consumers. Similar arguments appear when developments are contested in the communities: for instance, a Calgary planner told a reporter, "A more compact city costs less to build and operate" [82]. Planners and councilors looked to higher densities to enhance efficiencies in developing infrastructure (such as water, sewerage, and roads) and in providing services (such as public transit, waste collection, and schools). For instance, planners talked about linking higher densities to transportation planning with the aim of facilitating travel options other than the automobile.

Current practices produce large master-planned development areas with high-density housing that planners believe can be well-served with necessary services and amenities to enhance urban quality and ensure long-term predictability in land supply. Those producing new development areas described themselves as accommodating demand. Many producer respondents saw higher densities as enabling growth in a smart or sustainable way. In the western communities examined, geographic constraints and land policies affected land supply and cost, creating a sympathetic environment for increasing urban densities. Some planners and councilors proudly proffered statistics as evidence of increasing suburban densities in their communities.

Planners and councilors sometimes suggested that developers reaped great rewards from policies encouraging greater density. A Surrey councilor told us in 2007 that developers "make buckets" from higher density. However, developers argued that they apply the same margin whatever they build. Developers (especially builders) saw higher densities as improving their ability to provide housing at lower costs while reducing the amount of land released annually. A Surrey developer interviewed in 2007 reflected a common refrain when he said that "straight economics" drive densities up. As one commented in

2007, "when our clients are paying one million [dollars] per acre [.4 ha] they are going to look for ways to densify." Several producers used "densify" as a verb in this way.

Although most producer respondents supported growth, not all described higher densities in positive terms. Even those who supported increasing densities acknowledged resistance. For instance, an Airdrie councilor (in 2010) explained:

> One of the things is that we recognize in order to be sustainable, we have to increase densities. … The problem is that you get lots and lots of push-back from developers who really like just plain single-family homes, the traditional model, garage out front -- just let them develop the way that they have always developed.

Resisting higher densities

Many residents interviewed expressed reservations about higher densities, as did some respondents in the producer categories. The principal factors linked to objections to higher densities were economic, spatial, and social.

Economic factors

Developers and councilors often pointed to market realities in discussing density. Developer respondents argued that consumers prefer low-density, detached housing but suggested that in the areas where land supply was constrained costs force densities up and required consumers to make compromises. Where land costs were lower, however, some developers resisted pressures from planners for higher densities. For instance, some developers in Airdrie complained the city was trying too hard to increase densities in a commuter market that preferred detached housing. Although developers accepted smaller lot sizes, they sometimes pushed back on the proportion of multi-family housing that planners requested. An Alberta developer interviewed in 2010 explained:

> We've done sustainable development in Calgary for the last 15 years. That's what we do. … We deliver what people want, not what the theoretical planners downtown want. We deliver what the customers want, the homeowners want. … And that has been sustainable for the last 100 years and going. […] So that is our definition of sustainable. Not some theory about units per acre or densities or those types of things.

Some councilors interviewed acknowledged the high costs of upgrading infrastructure to accommodate higher densities, and identified challenges with providing required transit services and amenities. Some planners noted that they found it easier to make new development transit-ready than to ensure that transit services would be available. Failure to deliver infrastructure and services in the early years of developments engendered criticisms that cities increased densities to enhance property tax revenues without putting enough into services and amenities. Resident respondents in some communities complained of overcrowded schools, inadequate parks or playgrounds, and ineffective public transportation. In some cases, promised services and commercial uses were slow

to develop. Delays in providing urban amenities and services colored residents' attitudes towards those promoting higher densities.

Spatial factors

Respondents in all categories noted that higher residential densities often leave neighborhoods with parking issues. Parking and traffic congestion also emerged as common themes in surveys and public meetings about adding secondary suites in single detached neighborhoods in the communities [66,83,84]. In some communities residents worried about extra garbage and decreased property values associated with increasing densities in detached neighborhoods [85]. Resident respondents often raised concerns about noise (from children and young people) and about lack of privacy. Many of these issues could be addressed by good design and planning, but given developers' use of multi-family to serve the entry-level housing market, few enhancements tend to be offered.

Some developers explained that planning policies promoting high densities sometimes generated negative design impacts. Several talked about strategies to balance trade-offs between density, amenity, and design. A developer in Surrey (2007) described a particular challenge.

> People still prefer … a back yard out to the property line. Then you have a six-foot fence behind you. Often times you get back-to-back blocks so you have a dividing fence this way [illustrating], which looks like an ice-cube tray. In the higher density your hands are tied. You don't have much choice.

In some of the communities, such as Halifax and Calgary, local geography gives consumers many housing options within an easy automobile commute. Although planners in those communities support higher urban densities consumers often vote with their dollars for less dense options at some distance from jobs. Even planners recognized that homebuyers may not choose high-density options. For instance, a Halifax planner in 2011 opined that not everyone "wants to live in a nest of people" or "in a box in the sky".

Social factors

While respondents typically focused first on economic and spatial concerns in criticizing higher densities, social factors appeared soon after. A handful of councilors expressed misgivings about increasing densities, noting public resistance to crowding. In opposing increased density in these communities residents talked about seeking to protect the character of neighborhoods (e.g. [86]). Resident respondents often revealed concerns about being overwhelmed by renters, vehicles, children, or crime associated with high-density housing.

Respondents often reflected their interest in living near other households similar in household composition, age, and class. Many residents interviewed—especially those with children living at home—indicated that having more space was desirable for families, while seniors might want to live in "quiet" neighborhoods (code for "no

children around"). Respondents in all categories saw high-density housing as suited to small households likely to relocate as soon as they can afford to do so (if they are young) or they need to do so (if they are older): in other words, they viewed higher density areas as less stable socially than lower density neighborhoods. In Langley, where intensification was rapidly increasing urban densities, some residents felt they were being driven from their community by newcomers with limited commitment to the place.

Although Canadians rarely speak openly about inequality, a subtext of class politics permeated the discourse about density. Several residents worried that neighboring high-density uses might affect property values. Consumer respondents often defined housing as an investment protected by zoning and potentially undermined by increasing densities. A Surrey resident called high-density housing areas "future slums". Residents described low-density areas as signifying high status: "We don't have multi-family [here] and that's why this is the premier area" (Airdrie resident). Resident respondents living in lower density housing sometimes contrasted the size or value of their homes or lots with higher density / low status houses nearby. Changing densities were perceived to alter status structures and potential social mobility in the communities.

Living with density

Governments and industry have found higher densities attractive in large part because of the promise of efficiencies in infrastructure, service provision, and maintenance. High land costs make developers and cities seek high densities for economies of scale, profitability, and affordability. The study communities illustrate the difficulty of relying on higher density to reduce housing costs: although unit densities are increasing, inflation in housing prices undermines savings which might have accrued. Practice in the communities studied also reveals the challenges of providing services and amenities at a pace which precedes or immediately follows development. As residents experience lags in delivery, higher taxes, and property inflation they blame the problems they encounter on higher densities and poor planning.

The higher density master planned communities being built today offer a mix of housing types and plan for a mix of uses. Despite over a decade of policy efforts to mix housing types and densities, however, some level of residential segregation continues. Our field surveys of developments in the communities found relatively uniform clusters of housing types: streets of townhouses, other streets of semi-detached homes, and cul-de-sacs of detached houses. Furthermore, housing types grouped by price point. Despite efforts to increase unit densities, class structuring of suburban environments persists. Since particular housing types attract targeted consumers, households clustered by types, age of household head, and tenure status. We found diversity at a gross scale—i.e., the master-planned community—but rarely at the local neighborhood level.

As expected, we found differences among communities depending on how quickly they were growing. More households are buying and inhabiting higher density units in areas subject to greater growth pressures. In general, though, we found similarities in attitudes

about density across communities. Occupation and age seemed to be better predictors of views about high-density housing than growth patterns. The key factor affecting the relative contribution of high-density housing to current development numbers in areas with opportunities for growth appears to be access to land for building. In BC where land availability is highly constrained by geography and policy, a significant proportion of new development is occurring at higher densities. In Halifax where buyers have ample options for relatively affordable ownership, a smaller proportion of growth occurs in high-density forms. Policy can only do so much of the work toward encouraging higher urban densities: factors operating in the local market play key roles in consumer choices and development outcomes.

High-density housing retains a stigma in Canadian communities. Respondents (especially residents) complained, for instance, about "squeezing people together", "jamming more people in", living "cheek-by-jowl", not having "room to swing a cat", and homes "looking like chicken coops": not dissimilar to the "rabbit hutches" residents used to describe high-density housing in the UK a generation earlier [40]. While many middle-aged and older respondents acknowledged that "their generation" had limited interest in high-density living some suggested that the next generation may accept higher densities in ways that older people do not. Some thought that younger people have limited interest in maintenance and may therefore be willing to accept smaller houses, smaller lots, and urban living. Resident respondents living in medium-density housing confirmed that unwillingness to deal with maintenance affected their decisions to purchase condominiums instead of freehold housing units. Perhaps developer respondents are correct in suggesting that the market will "mature in time" as consumers gradually come to accept the idea of higher densities. Perhaps, however, those producing and consuming the suburbs hope they can put off finding ways to live more modestly for another generation.

Part of the adaptation residents make to inhabiting high-density areas is to define their status as *transitional*: temporarily inhabiting accommodations at particular stages of household growth related to lifestyle or (re)productive status. Planners seeking to envision vibrant neighborhoods with positive long-term social and economic prospects might reasonably worry that the inhabitants of high-density areas appear to be limiting their commitment to community.

Theorizing about density

Different participants in the process of producing and inhabiting the suburbs tell different stories about what should be and what is happening. Throughout the interviews we noted that producers often described the benefits of higher densities in an abstract or generic way: they talked about increasing choice, affordability, diversity, vibrancy, efficiency, sustainability, and livability. By contrast, those describing the challenges of higher densities did so in a concrete or personal way: they pointed to noise from neighbors or traffic, local parking issues, loss of privacy, insufficient play-space for children, petty

crime, and safety concerns. Some exhibited visceral reactions to the externalities of higher density living.

Is high-density housing sustainable or smart? Is increasing densities making the suburbs more urban and healthy? Several councilor and planner respondents explicitly linked density and sustainability. Most planners interviewed saw progress towards higher densities as indicating successful policy development and implementation. Some described themselves as "urbanizing the suburbs" and changing counter-productive patterns of sprawl. Planners expected that experience with living in higher density communities would convince residents that more residents in an area could provide the means for generating livable places with attractive urban qualities. They saw greater density as a prerequisite for improving services and amenities in suburban areas. Planner respondents, and some councilors, reiterated the kind of principles and strategies embodied in the literature on urban sustainability, smart growth, and new urbanism (e.g. [4,11,87].

Producer respondents often talked about reducing the "footprint" of development. In pointing to their successes in increasing dwelling unit densities, however, they rarely noted that decreasing household sizes continued to frustrate population targets or affect affordability. While they acknowledged some challenges—such as the difficulty of prying people out of their cars—they offered few concrete suggestions about how to manage immediate issues related to traffic, congestion, and parking in high-density areas. They were philosophically committed to increasing densities but limited in their ability to deliver some of the benefits promised [31].

Planners' commitment to higher density was well understood in the communities studied. Planners linked higher densities to amenities, urbanity, affordability, and choice. But not all participants in the urban development process shared the faith in density to deliver benefits. Some developers criticized planners for being dogmatic, unrealistic, and "theoretical" in pursuing density targets. A resident commenting on an article in the *Calgary Herald* revealed skepticism about Calgary's long term planning strategy: "Plan-It is nothing more than a way for infill and condo developers to fast-track unpopular rezoning and densification schemes" [79]. A Langley resident said that if sustainability means shrinking living spaces and reducing standards then it is "stupid planning". Those who opposed higher densities revealed a certain disdain for planning and its theory.

While most planners spoke strongly in favor of increasing densities, a few planners and development staff challenged conventional professional wisdom. For instance, a Langley Township planner expressed reservations about the community's focus on density.

> I personally do not believe we should be just aiming at density. ... What a narrow way of looking at it! But we do have planners here that just look at density. I think it's much more important to look at density as an important component of livability. And I don't know if they just forgot that page in their education or they just haven't reflected on that or what...

A Halifax resident knowledgeable about planning told us that planners sometimes go too far in pushing their own views on the public.

> I am concerned actually that in some areas planners have gone too far. … We've got densities that are too high. We've got some very unattractive subdivision designs because of the new urbanism. New urbanism as it's being rolled out really isn't what people want, in my opinion. … Planners can't or shouldn't be telling us what we want. And so many planners—who don't live, by the way, many of them often don't live in the suburbs—have a very negative stereotype of the suburbs. But they should ask themselves, "Why is it then that so many people want to live there and do live there?" It's because the suburbs provide many of the things that the average Canadian wants. It's still what the average Canadian aspires to, to have a house of their own on their own lot in the suburbs. … Really, the suburbs are working…. Don't change them too much.

Although we are necessarily cautious in generalizing from a qualitative study of planning practice, the findings offer useful insights that planners in other communities might note and researchers might investigate further. Increasing densities has intuitive appeal to municipal officials who feel the need to measure outputs to identify progress towards goals and also to land developers who reap returns from units sold. Planners may not always recognize that in the process of tracking densities *means* may readily be transmuted into *ends*.

Those producing the suburbs are motivated by the philosophy that higher density is smart, good, and necessary, and that it offers societal benefits such as urban vibrancy and affordability. Along with mixed use and diversity higher density is pursued relentlessly for its anticipated benefits [14]. Increasing densities also serves the economic interests of the organizations producers represent. In our study of five communities, however, we found that suburban residents did not always encounter the social, societal, or economic benefits promised. Some residents experienced significant externalities and reduced livability as a product of increasing urban densities. The rhetoric of smart growth and sustainability is not proving persuasive to the inhabitants of these communities: they want to see investment in the infrastructure necessary for quality of life in dense neighborhoods. If the producers of suburban landscapes hope to persuade consumers of the utility of higher density living then they need to find more effective ways to deliver on promised physical, social, and economic benefits. They need to provide attractive and functional urban environments that make high-density neighborhoods rewarding to those who inhabit them [81].

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Notes:

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[1] Condominium (known as strata in some provinces) is a form of tenure in which someone owns the unit (which may or may not include walls and land) but a corporation comprised of all owners jointly owns and manages the common elements and spaces in the housing complex.