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# Where We Want To Be

## *Home Location Preferences and Their Implications for Smart Growth*

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*Many people prefer living in accessible urban villages such as this, but cannot do so because current policies and planning practices constrain this type of development.*

### Abstract

This report investigates consumer housing location preferences and their relationship to Smart Growth. It examines claims that most households prefer sprawl-location housing and so are harmed by Smart Growth policies. This analysis indicates that Smart Growth tends to benefit consumers in numerous ways. Market research indicates that most households want improved accessibility (indicated by shorter commutes), land use mix (indicated by nearby shops and services), and diverse transport options (indicated by good walking conditions and public transit services) and will often choose small-lot and attached homes with these features. Demographic and economic trends are increasing Smart Growth demand, causing a shortage of such housing. Demand for sprawl housing is declining, resulting in oversupply and reduced value. The current stock of large-lot housing is adequate for the foreseeable future, but the supply of small-lot and attached housing will need to approximately double by 2025 to meet growing demand.

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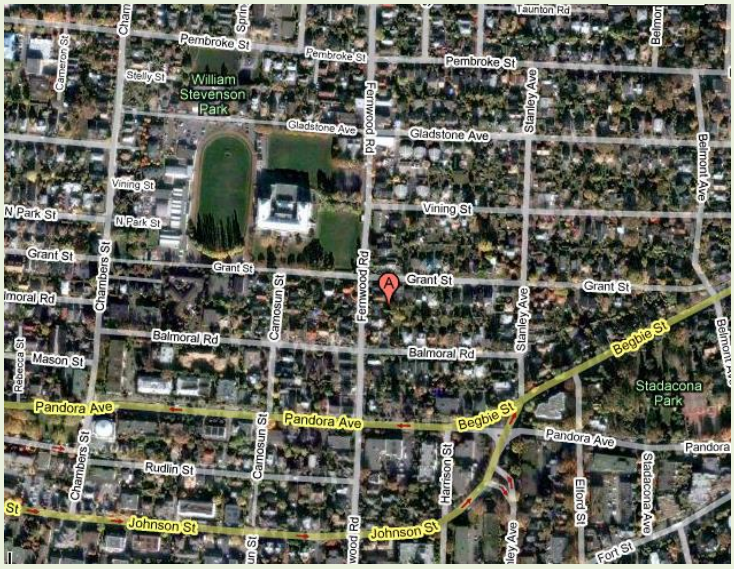
## Preface

I love my city, Victoria, British Columbia, because it embodies Smart Growth attributes.

It's not just me. Visitors come from around the world (tourism is our largest industry), although there are really few attractions here. Their main activity? Walking around our traditional city downtown.




Our demographically average family (a mom, a dad, two children, a dog, a cat and two pet fish) lives in a small-lot (50' x 100'), single-family home in Fernwood, one of Victoria's older neighborhoods. It is highly accessible due to its density and mix, highly connected streets and sidewalks, and proximity to downtown and neighborhood commercial centers. Within a ten-minute walk or three minute bike ride we have three grocery stores, a dozen convenience stores, four pharmacies, many coffee shops and restaurants, several parks and three nice pubs.

As a result, our family is truly multi-modal: we walk, bike, ride public transport, take taxis, and occasionally drive. A year ago our car broke down, so we chose to become car-free. We rent cars when needed.

This keeps us healthy (including the dog) and saves money. We live comfortably on one income, and the vehicle cost savings finance our children's education (one currently attends a private university). Neighborhood walking helps us befriend neighbors and keep our community safe.

Smart Growth critics assume that virtually everybody wants to live suburban, automobile dependent lifestyles, so efforts to create more Smart Growth communities harm consumers and contradict market forces. Our experience indicates otherwise. According to research described in this report, many people want to live in such neighborhoods. Unfortunately, that drives up prices, unless more Smart Growth communities like this are developed. We couldn't afford to purchase our home now.

There is currently plenty of large-lot housing in sprawled locations available with low purchase prices. However, there is a growing shortage of Smart Growth housing because households increasingly prefer accessible, multi-modal communities like Fernwood. Smart Growth policy reforms that allow more of this type of neighborhood can make everybody better off, including sprawl-location residents who benefit from reduced traffic generated by others in their region.

Critics assume that consumers are selfish, inflexible, and lazy, and so, once accustomed to sprawl and automobile travel, cannot change. Experience, however, indicates that most people are actually quite generous and creative, enjoy walking, and tend to flourish in Smart Growth communities.

## Introduction

Choosing where to live is a profound decision that affects households' long-term financial burdens, daily activities and opportunities, social interactions, health and safety, as well as costs they imposed on others. For the last five decades most North Americans associated low-density, urban-fringe, automobile-oriented locations with positive aspirations including economic success, freedom, prestige, security, cleanliness, quiet and privacy. It is therefore unsurprising that efforts to promote more compact and multi-modal development, called Smart Growth in this report, are often met with skepticism and criticism.

This is a timely issue. Smart Growth tends to improve accessibility and resource efficiency, which provides many benefits, as summarized in table 1. Many experts advocate *Smart Growth* (Ewing and Hamidi 2014; TRB 2009).

***Table 1*** **Smart Growth Benefits** (Burchell, et al. 2005; Ewing and Hamidi 2014; Litman 2018)

| Economic | Social | Environmental |
|---|---|---|
| Development cost savings<br>Public service cost savings<br>Transportation cost savings<br>Agglomeration efficiencies<br>Supports environmentally sensitive industries (tourism, farming, etc.). | Improved transport options, particularly for non-drivers.<br>Improved housing options.<br>Community cohesion.<br>Cultural resource (historic sites, older neighborhoods, etc.) preservation<br>Increased physical fitness and health | Greenspace & habitat preservation<br>Pollution emission reductions<br>Energy conservation<br>Reduced "heat island" effect |

*Smart Growth can provide various economic, social and environmental benefits.*

Critics claim that Smart Growth deprives consumers of their preferred lifestyle and unless imposed by onerous regulations will fail because it contradicts consumer demands (Cox 2001; O'Toole 2001; Pisarski 2009). In particular, Smart Growth critics cite surveys indicating that, given unlimited resources, most households prefer living in single-family homes and commuting by car than living in an apartment and commuting by public transit. However, such analysis is incomplete. Surveys that recognize the trade-offs that households often face when choosing a home indicate that a large and growing portion of households would choose compact housing types (townhouses and apartments) if that allowed them to live in a more accessible and walkable neighborhood, and that many households prefer to live in a more multi-modal neighborhood, but cannot due to development policies that restrict compact infill and favor automobile travel over other modes.

This study investigates this issue. It examines the direct benefits to consumers of living in compact, multi-modal neighborhoods, investigates evidence of significant and growing consumer demand for Smart Growth, identifies existing market distortions that favor sprawl over more compact development, and discusses appropriate policy reforms that can correct development market distortions in order to achieve development patterns that benefit consumers and society overall.

## Defining Smart Growth

*Smart Growth* (also called *new urbanism*, particularly when applied at the site or neighborhood level) consists of land use development patterns that emphasize accessibility and modal diversity, as opposed to dispersed, automobile dependent development, often called *sprawl*. Table 2 contrasts these two patterns.

***Table 2*** **Comparing Smart Growth and Sprawl**

| | Sprawl | Smart Growth |
|---|---|---|
| **Density** | Lower-density, dispersed activities | Higher-density, clustered activities |
| **Growth pattern** | Urban fringe (greenfield) development | Infill (brownfield) development. |
| **Land use mix** | Homogeneous (housing, services and businesses are geographically separated) | Mixed uses (housing, services and businesses are located close together) |
| **Scale** | Large scale. Large blocks and wide roads. Less detail, since people experience the landscape at a distance, as motorists. | Human scale. Smaller blocks and roads. More detail, since people experience the landscape up close, as pedestrians. |
| **Public services (schools, parks, etc.)** | Regional, consolidated, larger. Requires automobile access. | Local, distributed, smaller. Accommodates walking access. |
| **Transport** | Automobile-oriented. Poorly suited for walking, cycling and transit. | Multi-modal. Supports walking, cycling and public transit as well as automobiles. |
| **Connectivity** | Hierarchical road network with numerous dead-end streets, and unconnected walking and cycling facilities. | Highly connected (grid or modified grid) streets and nonmotorized networks (sidewalks, paths, crosswalks and shortcuts) |
| **Street design** | Streets designed to maximize motor vehicle traffic volume and speed | Complete streets, designed to accommodate various modes, users and activities |
| **Planning process** | Unplanned, with little coordination between jurisdictions and stakeholders. | Planned and coordinated between jurisdictions and stakeholders. |

*This table compares Smart Growth and sprawl land use patterns.*

Smart Growth can include diverse housing types, including small-lot single-family and multi-family housing in accessible, multi-modal locations (good walking and cycling conditions, nearby shops, and served by high quality public transit). It can be applied in many geographic conditions:

- *Urban:* medium- and high-density mixed-use development concentrated around transit stations, called *transit-oriented development*.
- *Suburban:* small-lot and low-rise, mixed-use, walkable neighborhoods with mixed-use town centers.
- *Rural:* development clustered in walkable *villages*, connected by ridesharing and public transit, and roads with adequate shoulders to accommodate bicycles.

Table 3 summarizes Smart Growth planning principles. Prior to 1950, most development reflected these principles, resulting in relatively compact, multi-modal communities. From 1950 to 1990, development policies tended to favor sprawl. In recent years, some communities have started applying Smart Growth principles and policies.

***Table 3*** **Smart Growth Planning Principles** (Litman 2007)

| Strategy | Description |
|---|---|
| Comprehensive community planning | Community has a planning process which identifies strategic transport and land use goals, objectives and targets |
| Intergovernmental coordination | Effective coordination among various levels of government |
| Location efficient development | Locate and design development to maximize accessibility |
| Location-based taxes and fees | Structure taxes and fees to reflect the costs of providing public services. |
| Locate and design public facilities for Smart Growth | Locate and design schools, parks and other public facilities for multi-modal accessibility. |
| Reform zoning codes | Reduce restrictions on development density and mix. |
| Encourage urban redevelopment | Encourage redevelopment of existing urban areas. |
| Growth controls | Limit urban expansion, particularly on ecologically valuable lands. |
| Transport planning reforms | Improve alternative modes and encourage more efficient transport. |
| More neutral transport funding | Avoid dedicated roadway and parking funds. Apply least-cost planning. |
| Mobility and parking management programs | Implement mobility and parking management as an alternative to road and parking facility expansion. |
| Educate decision-makers | Educate decision-makers about Smart Growth policies and benefits. |
| Land use impact evaluation tools | Develop better tools for evaluating land use impacts. |

*Smart Growth implementation involves a variety of policy and planning reforms.*

Critics argue that Smart Growth relies primarily on negative incentives, such as urban growth boundaries and vehicle travel restrictions, but these are actually a minority of Smart Growth policies. Many Smart Growth strategies reflect good planning practices and directly benefit residents by increasing land use accessibility (reducing the time and money required to reach common destinations), improving housing options (more housing types, particularly affordable housing in accessible neighborhoods), improving transport options (better walking, cycling, ridesharing, public transit and car sharing), and providing new opportunities to save money (such as unbundled parking, and lower development and utility fees in more compact locations). With typical Smart Growth policies, households can still choose single-family homes and automobile travel if they truly prefer those options and are willing to pay the incremental costs.

Described differently, sprawl partly results from planning and market distortions that favor dispersed, automobile-dependent development over more compact, multi-modal development, as described in the following section of this report. This reduces housing and transport options, particularly affordable-accessible housing. Smart Growth policies help correct these distortions, creating more neutral policies that expand housing and transportation options so households can choose the combination that best reflects their needs and preferences.

## Sprawl-Stimulating Policies and Practices

Many current policies and practices tend to favor lower-density, automobile-oriented development over Smart Growth (AIA 2010; Lewyn 2005 and 2006; Levine 2006; Litman 2007; SGN 2002 and 2004; Sugrue 2009). These include:

- Generous public spending on roads and parking facilities, which often degrades urban neighborhoods and encourages sprawled development.
- Zoning codes and development policies that limit density and mix, and mandate generous parking supply.
- Taxes and utility rates that fail to reflect the savings that result from more compact, accessible development.
- Public housing and infrastructure investment that favors greenfield development over redevelopment of existing communities.
- Planning that evaluates transport system performance based on mobility (the ease of driving) rather than accessibility, and therefore favors automobile travel over alternatives.
- Lending policies treat household automobile ownership as an asset, rather than a liability, and ignore the financial savings that result from location-efficient housing.
- Various policies and programs intended to support home ownership, including home mortgage interest income tax deductions, targeted housing loan programs, and home financing agencies such as Fannie Mae and Freddie Mac.

Many policies intended to increase home ownership also tended to favor single-family suburban housing. Some have since been reformed, but their impacts are durable. As one historian describes,

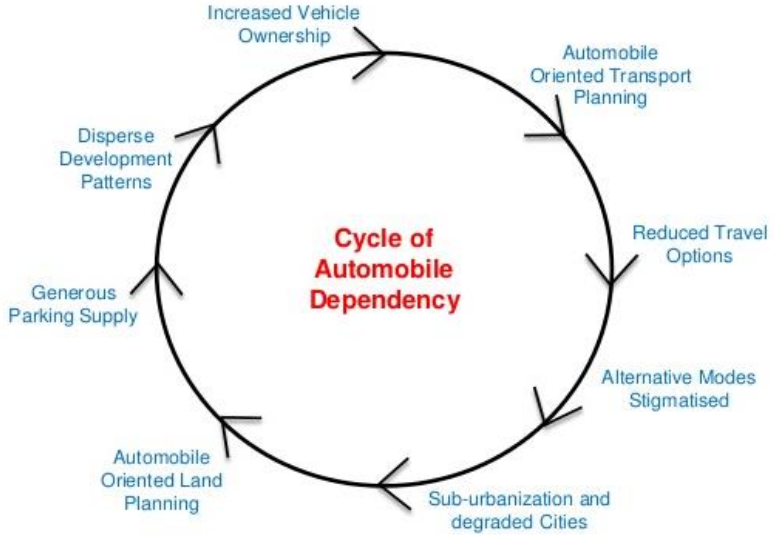
> Federal housing policies changed the whole landscape of America, creating the sprawlscapes that we now call home, and in the process, gutting inner cities, whose residents, until the civil rights legislation of 1968, were largely excluded from federally backed mortgage programs. Of new housing today, 80% is built in suburbs—the direct legacy of federal policies that favored outlying areas rather than the rehabilitation of city centers. It seemed that segregation was just the natural working of the free market, the result of the sum of countless individual choices about where to live. But the houses were single—and their residents white—because of the invisible hand of government. (Sugrue 2009)

Certain *economic traps* (situations that lead people to compete in ways that waste resources) encourage suburbanization. From an individual household's perspective, problems such as neighborhood poverty, crime and inferior schools can be addressed either by helping solve them or by moving to another location. Solving problems is much better for society overall; moving away concentrates and therefore exacerbates the problems, but once the process starts, flight is generally easier. As A Fable About Sprawl (Lewyn 2009) illustrates, the dynamics of sprawl involve middle-class flight to suburbs, urban neighborhood degradation, declining urban tax revenues and declining urban service quality, which can force households that actually prefer urban environments to choose automobile-dependent sprawl home locations.

Although these policies and practices may seem reasonable and justified individually, their impacts are cumulative and synergistic (total impacts are greater than the sum of individual

impacts), particularly over the long-run, as they contributes to a self-reinforcing cycle of automobile dependency and sprawl, as illustrated in Figure 1.

***Figure 1*** **Cycle of Automobile Dependency and Sprawl**




*Many common planning practices contributed to a cycle of automobile dependency and sprawl. These tend to reduce the supply of affordable housing in compact, mixed, walkable and transit oriented communities.*

For many people, suburban housing represented a bundle of goods: home ownership and therefore household investment equity (particularly before condominiums became available in the 1970s), larger homes and yards, separation from poverty (and during the earlier years, minorities), increased safety (or at least, the perception of safety)[1], superior schools, and more status. It is therefore unsurprising that many consumers chose suburban living despite disadvantages such as social isolation and high transportation costs. Homebuyers became rationally irrational: they purchased homes in more isolated, automobile-dependent locations than would be optimal for other desired attributes.

This is not to suggest that suburban living and automobile travel are harmful and should be eliminated. Large-lot, urban-fringe housing is appropriate for many households and automobile travel is the best mode for many trips. However, the planning biases described above create more dispersed, automobile-oriented land use patterns than optimal for consumers and society. Policy and planning reforms that create more accessible, multi-modal communities with features such as attractive homes, neighborhood security and high quality schools could result in options that better reflect consumer preferences and maximize social benefits.

[1] Lucy (2002) shows that overall, urban living is generally safer than suburban living due to the much higher suburban traffic fatality rates.

## Smart Growth Impacts on Housing Supply and Price

Critics claim that by constraining housing supply, Smart Growth drives up prices, forcing households into crowded apartments located in high density neighborhoods. This is an exaggeration. Smart Growth does not require that all residents live in dense, multi-family housing. With typical Smart Growth programs most regional residents can continue to live in single-family homes, although multi-family housing may dominate some urban neighborhoods and multi-family designs may dominate *new* housing. However, these shifts largely reflect changing demands, as discussed later in this report.

Critics ignore various ways that Smart Growth reduces costs and increases affordability by reducing the amount of land required per housing unit, reducing infrastructure costs, and reducing transportation costs (Haas, et al. 2006; CTOD and CNT 2006; Leinberger 2008; Litman 2018). More Smart Growth strategies reduce rather than increase household costs, as illustrated in Table 4. Since small-lot single-family housing typically requires less than a third as much land as standard large-lot housing, per acre land prices could double yet housing would still be cheaper with Smart Growth. Evidence critics use to argue that Smart Growth increases housing costs often fails to account for confounding factors such as the higher wages and housing costs in larger cities, and the tendency of Smart Growth to be implemented in areas experiencing rapid population and economic growth, which tends to drive up housing prices (Nelson, et al. 2002).

***Table 4*** **Smart Growth Household Affordability Impacts** (Litman 2004)

| Reduces Affordability | Increases Affordability |
|---|---|
| • Urban growth boundaries (reduces developable land supply).<br>• Increases building design requirements (curbs, sidewalks, sound barriers, etc.). | • Higher density development (reduces land requirements per housing unit).<br>• Reduces parking and setback requirements (reduces land requirements per housing unit).<br>• Provides more diverse, affordable housing options (secondary suites, apartments over shops, loft, etc.).<br>• Reduces fees and taxes for clustered and infill housing (this is a Smart Growth strategy).<br>• More accessible housing reduces transport costs. |

*Many Smart Growth strategies can increase housing affordability.*

Smart Growth can increase overall affordability if it includes these policies (Litman 2002):

- Reduced restrictions on density.
- Support for more diverse housing types.
- Reduced parking requirements.
- Discounted development fees and utility rates for more accessible locations.
- Affordable transport options (good walking and cycling conditions; high quality public transit services; good taxi, carshare and internet services, etc.)
- Good accessibility (nearby shops and schools, and public transit services).

## Smart Growth Consumer and Economic Impacts

Critics argue that Smart Growth harms consumers (people directly affected by the policies) and the economy by reducing housing options and restricting automobile travel. The following factors should be considered when evaluating these impacts.

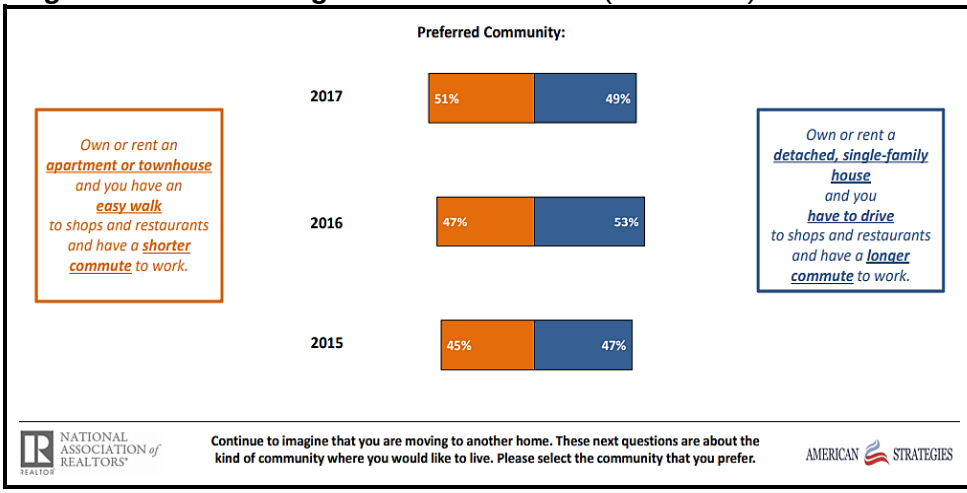
### *Social Versus Physical Attributes of Large-Lot Housing*

A portion of consumer preference for large-lot, suburban housing appears to result from social attributes, such as perceived security, better public services, and higher social status, rather than actual physical attributes, such as a desire to garden. To the degree that this is true, Smart Growth that improves the perceived security, public service quality and social status of more compact, multi-modal neighborhoods can satisfy consumer demands in ways that provide additional economic, social and environmental benefits. For example, improving the quality of urban neighborhood public schools may allow some households to choose more accessible, multi-modal housing rather than moving to automobile-dependent suburbs for better schools. These social attributes are largely self-fulfilling prophecies: as wealthy households fled cities for suburbs during the last quarter of the Twentieth Century, poverty and associated social problems were concentrated in some urban neighborhoods, making suburbs more secure and affluent. In recent years, many of these trends have started to reverse, making urban neighborhoods more attractive.

### *Demand for Compact Housing in Walkable Urban Neighborhoods*

Given unlimited resources most people would probably prefer a detached home, or even a castle, but consumer preference surveys indicate that, given realistic trade-offs, a growing majority of home buyers prefer an attached house (townhouse or apartments) in a walkable urban neighborhood over a detached house that requires a longer commute and driving to shops (UDI 2015). The figure below summarizes results from the National Association of Realtor's 2017 National Community Preference Survey. Most respondents like walking (80%), driving (73%), about half like bicycling, more than a third (38%) like public transit travel, and nearly 60% report driving due to inadequate alternatives. Younger people are much more likely to prefer walkable neighborhoods, bicycling and transit travel, suggesting that their demand will increase. Walkable community residents are also more satisfied with their quality of life.

***Figure 2*** **Housing Preference Trends** (NAR 2017)




*The National Association of Realtors survey indicates a growing preference for living in walkable urban neighborhoods even if that requires attached housing (apartment or townhouse). The IHAS ignores this research, claiming that most households still prefer automobile-dependent sprawl.*

The survey also investigated the types of new housing needed to serve unmet demands. Only 10% of attached home residents would prefer a detached house in an automobile-dependent neighborhood, but more than twice as many (21%) detached home residents would prefer an attached house in a walkable urban neighborhood, as indicated below. Since there are about five times as many detached as attached housing units in the U.S., this indicates about ten times more latent demand for compact housing in walkable neighborhoods than detached housing in sprawled, automobile-oriented areas.

***Figure 3*** **What Housing Type is Needed?** (NAR 2017)

**One-in-Five Living in a Detached Home Currently Would Prefer to Live in an Attached Home in a Walkable Community with Shorter Commute**

Chart Title

| | Lives in | Prefers | % |
|---|---|---|---|
| Mismatched | Detached home | Apartment/townhouse in *walkable neighborhood* | 21% |
| | Attached home | Detached home in *conventional neighborhood* | 10% |
| Matched | Attached home | Apartment/townhouse in *walkable neighborhood* | 28% |
| | Detached home | Detached home in *conventional neighborhood* | 37% |

*The survey found that only 10% of attached home residents would prefer a detached house in a conventional neighborhood, but 21% of detached home residents would prefer a townhouse or apartment in a walkable urban neighborhood. This indicates a significant shortage of Smart Growth housing.*

## *Demand for Non-Auto Travel Options*

Sprawl tends to be automobile-dependent, making other modes inconvenient, inefficient and costly in time and money. Surveys indicate that a growing portion of travellers want to drive less and rely more on alternative modes, provided they are convenient, comfortable and affordable (NAR 2017). Younger people in particular tend to prefer non-auto modes for affordability and health sake (Schwartz and Fiore 2018). For example, a 2018 survey (Schmidt 2018) found that a majority of Millennials (59%) would "rather spend time doing more productive tasks than driving," compared with 45% of Baby Boomers. Similarly, 61% of Baby Boomers report that they "enjoy most of the time spent driving" compared with just 48% of Millennials, and about a third of Millennials said the amount of time they spend in their car is "very frustrating." This indicates significant and growing demand for non-auto travel and less automobile-dependent lifestyles.

## *Net Consumer Costs and Benefits*

Smart Growth can impose various direct costs and benefits on consumers, all of which should be considered when evaluating net impacts on individuals and groups. Two Smart Growth features may impose consumer costs: growth controls can prevent some households from obtaining the large-lot housing they prefer, and more multi-modal transport planning may reduce automobile travel speed and convenience. Offsetting these negative impacts are improvements in other housing and transport options, such as more affordable small-lot housing, better schools and shops in compact neighborhoods, improved walking and cycling conditions, and better public transit services. To the degree that these improvements attract people to more compact neighborhoods and alternative modes they will reduce prices for large-lot homes, and reduce traffic congestion, benefiting consumers who prefer sprawled locations and automobile travel.

In addition to these direct benefits, Smart Growth can provide indirect benefits, including infrastructure and public service cost savings, energy conservation and emission reductions, open space preservation and associated environmental benefits, and improved mobility for non-drivers and resulting reductions in motorists' chauffeuring burdens.

Table 5 summarizes the consumer and economic efficiency impacts of various Smart Growth strategies. Many strategies correct existing market distortions that reduce housing and transportation options, and so directly benefit consumers and the economy. This is not to suggest that all Smart Growth policies benefit everybody, but to the degree that Smart Growth creates more compact, accessible, multi-modal communities where residents consume less land per capita, drive less and rely more on alternative modes, it tends to provide a variety of direct and indirect benefits. All these impacts should be considered when evaluating Smart Growth net impacts.

***Table 5*** **Smart Growth Consumer Impacts** (Litman 2007)

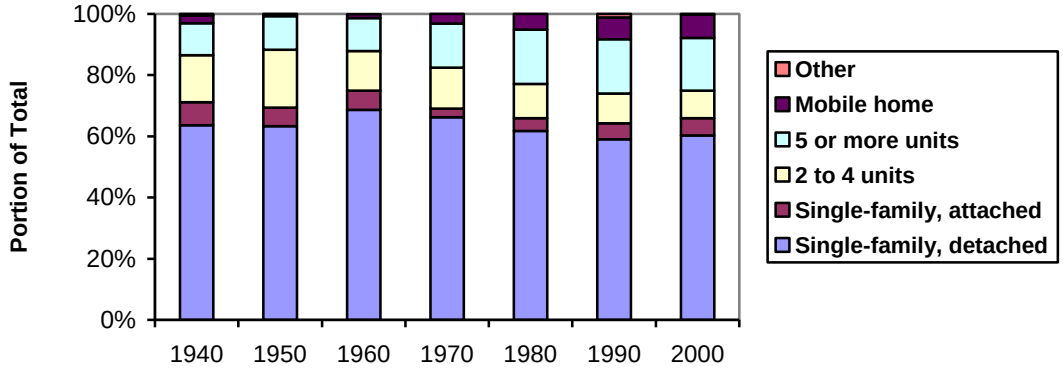
| Strategy | Examples | Consumer Impacts | Economic Impacts |
|---|---|---|---|
| **More integrated transport and land use planning** | Better sidewalks and bike lanes around schools. Commercial development concentrated along transit routes. | Tends to benefit consumers, particularly those who, due to necessity or preference rely on alternative modes. | Tends to reflect good planning and increase overall efficiency. |
| **Location-efficient development** | More affordable housing located in accessible areas. | Benefits lower-income residents who choose such housing. | Responds to consumer demand and increases efficiency. |
| **More flexible zoning codes** | Allow more compact and mixed development. | Benefits consumers who prefer more compact, affordable housing options. | Responds to consumer demands and increases efficiency. |
| **Reduced and more flexible parking requirements.** | Reduced parking requirements in response to geographic, demographic and management factors (more sharing and pricing of parking) | Benefits consumers who prefer more affordable, compact housing options, particularly those who own fewer than average number of cars. | Responds to consumer demands and increases efficiency. Can provide significant savings and benefits. |
| **Growth control** | Urban growth boundaries that limit urban fringe development. | Disadvantages some consumers who demand large-lot housing. | Increases automobile-dependency and associated costs. |
| **Transportation funding shifts** | Reduced funding for roadway expansion and increased funding for walking and cycling facilities and public transit service improvements. | People who prefer alternative modes benefit directly. Motorists may have less capacity, but can benefit from reduced chauffeuring requirements, and reduced congestion if better alternatives cause mode shifts. | Can increase efficiency if there is demand for alternative modes and if mode shifting reduces problems such as congestion and accidents. |

*Most Smart Growth strategies directly benefit consumers and increase economic efficiency.*

## Housing Trends

Figure 4 illustrates U.S. housing by type through seven decades. The portion of single-family homes peaked in 1960 and has declined since. Although the majority of existing housing units are single-family, multi-family housing construction is growing faster than single-family due to demographic and economic trends including the Millennial generation's preference for urban living and Baby Boomers downsizing from single-family to multi-family homes (Sexton 2015; Schwartz and Fiore 2018).

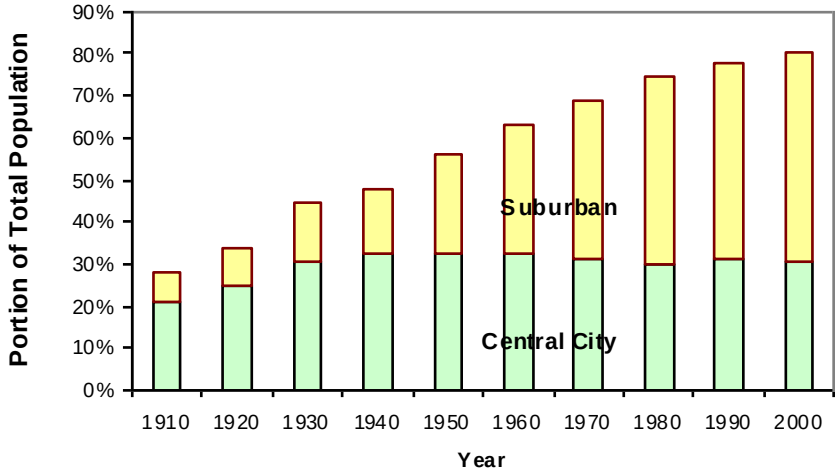
***Figure 4*** **U.S. Housing Units By Type, 1940-2000** (Census 2001)




*The portion of total single-family housing in 1960.*

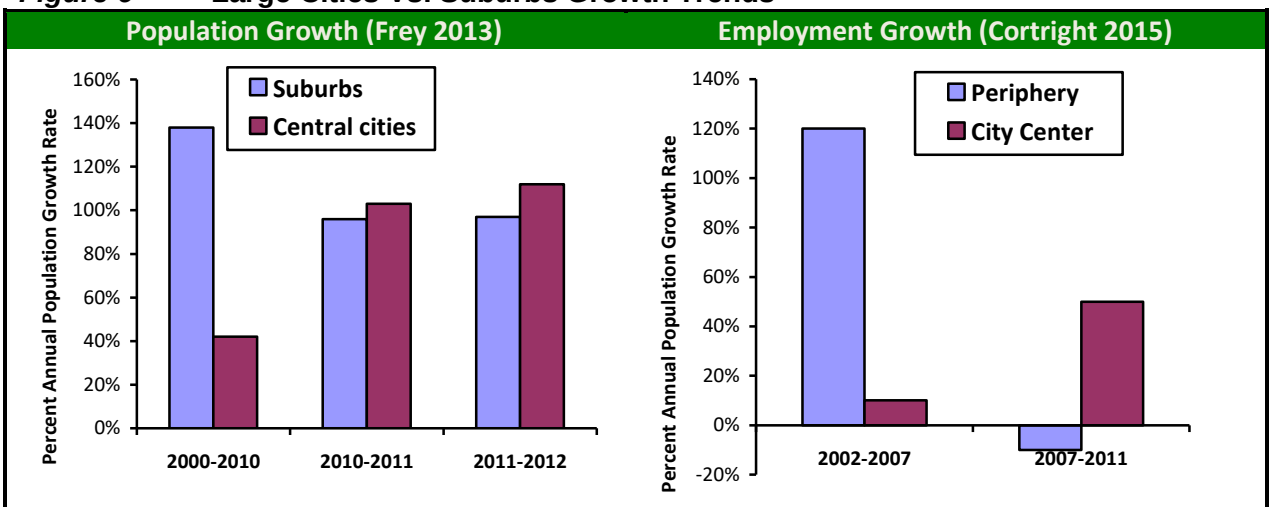
Figure 5 illustrates U.S. housing location trends. Between 1930 and 2000 the portion of total national residents living in suburban area grew steadily. That trend has ended. In recent years central city population growth rates have converged with those of suburbs, and many suburbs are evolving from low-density, bedroom communities into more compact, mixed, multi-modal towns and cities in their own right (Frey 2012; SGA 2012).

***Figure 5*** **Central City and Suburban Populations** (US Census 2002a, Table 1-15)




*During the Twentieth Century, suburban populations grew. This trend has essentially peaked. Recently, central cities have started gaining population.*

***Figure 6*** **Large Cities Vs. Suburbs Growth Trends**




*Since 2000, central cities have experienced more population and employment growth than suburbs.*

North American cities are experiencing redevelopment and repopulation by middle-income households (Cortright 2015; Gallagher 2013), as illustrated in Figure 6. An increasing portion of population and employment growth is occurring in metropolitan regions and central cities (Frey 2012). In a comprehensive study of urban development trends, Juday (2015) found that since 1990, most downtowns and central neighborhoods have attracted significantly more younger, educated and higher-income residents, while suburbs experienced decrease in income and education as more low-income households migrate outwards from city centers. Most housing and population growth continues occur at the outer edges of cities where residents tend to be older, educated and have higher incomes.

Housing in Smart Growth communities tends to be worth more and retain its value during real estate market declines, indicating consumer demand (CNT 2013; Eppli and Tu 2000; Leinberger 2010; USEPA 2011). The portion of households that demand large-lot housing is projected to decline while demand for more accessible and compact housing is expected to increase in the future due to various demographic and market trends (Leinberger 2008; Litman 2006; Myers and Ryu 2008; Nelson 2014; Pitkin and Myers 2008; Pembina 2014; Reconnecting America 2004; Thomas 2010; ULI 2015):

- *Aging population.* The portion of residents over 65 years of age is projected to approximately double between 2010 and 2050, and will increase from 13.2% to 20.0% of the total population (DOC 1996). People in this age range tend to demand smaller homes and more transportation options than younger households (Myers and Gearin 2001).
- *Smaller households and fewer households with children.* Household size is projected to decline during the next few decades (Jiang and O'Neill 2007). The portion of households with children under 18 years of age declined from 50% in 1998 to 46% in 2008, and this decline is likely to continue (U.S. Census 2008, Table FM-1).
- *Rising fuel prices and financial constraints.* As fuel prices rise, sprawled locations become more expensive and financially risky (Sipe and Dodson 2013), causing demand for sprawled, automobile-dependent locations to decline (Cortright 2008; Weiss 2008). Smart Growth can provide substantial financial savings (CTOD and CNT 2006).

- *Growing congestion.* As traffic and parking congestion increase, the value of more accessible, multi-modal locations and alternative modes tends to increase.
- *Changing attitudes about urban living.* Until recently cities were considered dirty, dangerous and impoverished. Increasingly, cities are considered exciting, healthy and attractive places for successful households to reside (Weiss 2008).
- *Increasing health and environmental concerns.* A considerable body of research indicates that Smart Growth development increases residents' health and safety (CDC 2005; Litman 2003; Meyers, et al. 2013), and can help reduce environmental impacts (Ewing, et al. 2007).
- *Shifting real estate values.* Recent experience has ended the assumption that suburban real estate investments are more secure than urban (Chernikoff and Yoon 2010).

Demand for large new suburban homes is declining while demand is growing for smaller single-family homes and multi-family housing in walkable urban neighborhoods (Chernikoff and Yoon 2010; Keely, et al. 2012; Romero 2017). This shift is occurring in both older city neighborhoods and suburbs. Using detailed demographic analysis Pitkin and Myers (2008) conclude,

> Once the large Baby Boom generation begins to decline in number and scale back its occupancy of housing (starting within 10 years) and immigration flows have leveled off (and possibly decline due to policy changes), the demographic pressure for price increases and new construction will slacken, and mismatches between housing stock supply and demand will leave substantial portions of the national housing stock subject to increased vacancy, disinvestment, and potential demolition or conversion.

*2009 Emerging Trends in Real Estate* explains (ULI 2009):

> Energy prices and road congestion accelerate the move back into metropolitan-area interiors as more people crave greater convenience in their lives. They want to live closer to work and shopping without the hassle of car dependence. Higher-density residential projects with retail components will gain favor in the next round of building. Apartment and townhouse living looks more attractive, especially to singles and empty nesters—high utility bills, gasoline expenses, car payments, and rising property taxes make suburban-edge McMansion lifestyles decidedly less economical.

Similarly, a major Canadian real estate advisory company concludes (GWL 2010):
Economic, demographic and social shifts are increasing the popularity of multi-family living. Specifically, the growth of the knowledge economy, which tends to be based in dense urban areas, and changing consumer preferences is increasing demand for more compact housing in accessible, amenity-rich neighborhoods. The following are some of the reasons this shift is predicted to continue in future decades.

- Apartment and condominium dwelling is now often a desired choice of many urban residents when multi-family living offers a commute and amenity advantage.
- Increased educational attainment of women (who earn almost 60% of all Bachelors' and Masters' degrees in the US and Canada) combined with increased female workforce participation has also contributed to rise of both the knowledge economy and of apartment and condominium living.

- Increasingly, families are choosing multi-residential living. With most families having no more than one or two children, a two bedroom apartment home can work well. Moreover, if both parents work, living in a low-maintenance home with a short commute allows for more family time.
- Buying a home (including a condo) in close proximity to employment and amenities is becoming increasingly expensive in comparison to renting. As a result expect more 25–45 year olds to be renters in the coming decades.

Detailed demographic and economic analysis indicates that much of California's residential and employment development demand could be accommodated in transit-oriented neighborhood, but achieving this will require policy changes to allow more compact and mixed development, reduce parking requirements, and improved public amenities, such as parks and schools, in those areas (Nelson 2011).

Consumers increasingly value Smart Growth features such as compact, mixed-use, multi-modal neighborhoods (ULI 2015). Popular culture increasingly portrays urban living as desirable and feasible, particularly for young professionals. This is a major shift from the 1960s through the 1990s, when urban living was often portrayed as unusual and dangerous. The newspaper column below illustrates these shifts.

**Bright Lights, Big-City Condo Versus A Suburban House**
Ellen James Martin, *Chicago Tribune*, 26 July 2007
www.chicagotribune.com/classified/realestate/advice/chi-0707240533jul26,0,4372543.story

They're the new urbanites: age 26 to 34, often recently married. In the past they might have opted for a small house in the suburbs. But the trend nowadays is to buy a condo-apartment in the city, provided the neighborhood suits their tastes. "Younger buyers are increasingly attracted to an amenity-rich lifestyle – to the dynamism of an area with pubs, restaurants, shops and city parks. This demographic doesn't identify with neighborhoods where soccer moms drive around in minivans," says real estate expert Mark Nash.

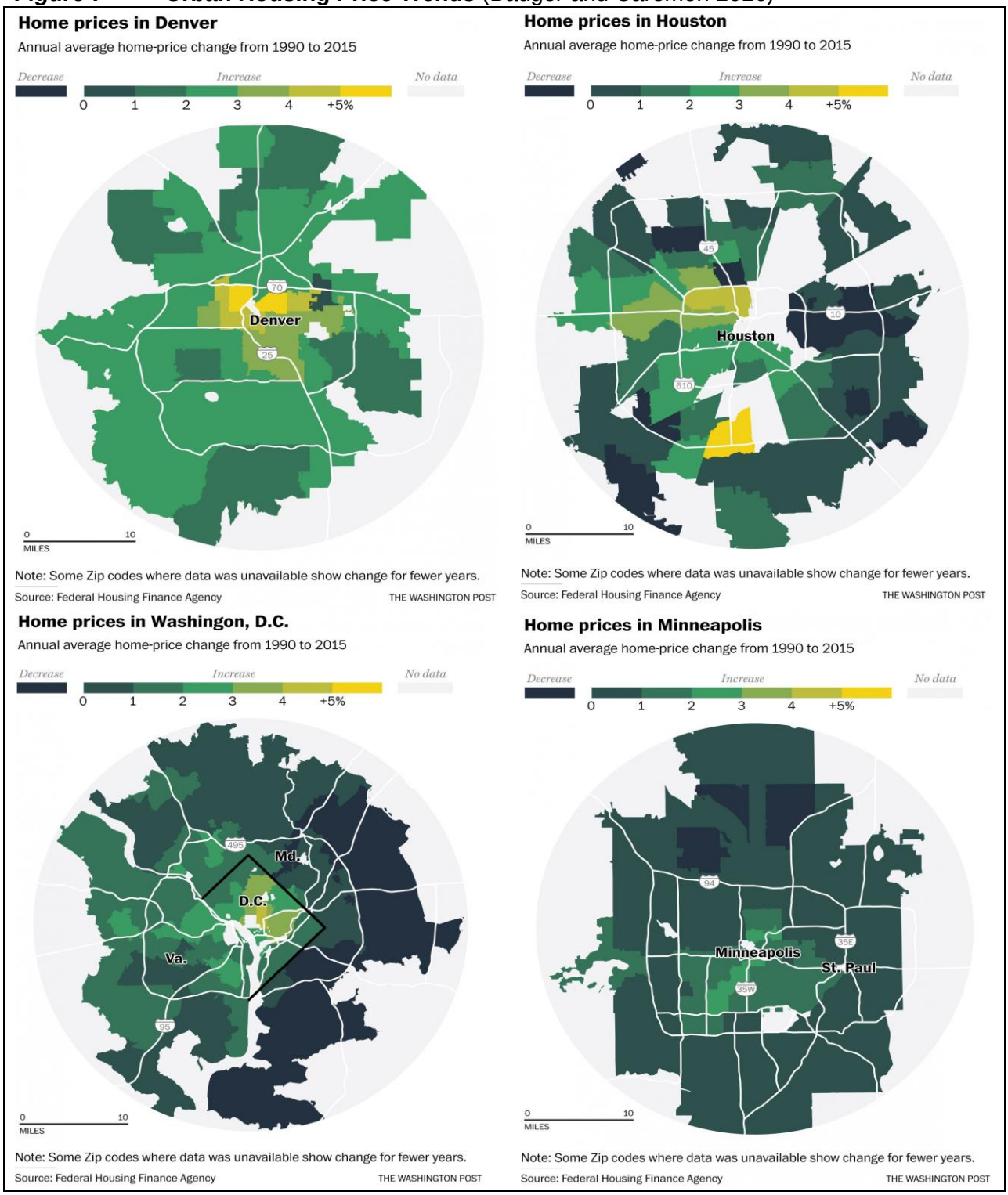
Of course, the suburbs retain a certain appeal to many young adults. Some believe a traditional house in the suburbs will gain and hold value better than an urban condo. And many like the autonomy of a detached house with its own garage and garden plot, however diminutive. "For young buyers, the struggle comes down to this: Which of the two options has the most pros and the fewest cons? This is a personal choice no one can make for you," says Nash, a real estate broker and author of *1001 Tips for Buying and Selling a Home*.

Here are pointers for young people debating between a city condo and a suburban house:

- Ponder your lifestyle preferences. If you grew up in suburbs you may be programmed to think that's the best habitat. It's likely your parents aimed for a suburban abode as soon as they could afford their initial home. But much has changed since your parents first went house shopping. Among other factors, many downtown neighborhoods have been revitalized, making them more appealing.
- The access and amenities of city living can outweigh the smaller size of the home you can afford there, and a suburban house doesn't have the same status it did before.
- Think through the commuting implications. "Living downtown could be wonderful – a huge time-saver – if you also work downtown. Maybe you can walk or take a short public transit trip. You might save an hour or two each day – time that could go to better purposes, and there's gas savings too.

Analysis of housing price trends indicates that 1990 to 2015 price increases tend to be much higher in central cities than urban fringe areas.

***Figure 7*** **Urban Housing Price Trends** (Badger and Caremon 2016)



## Evidence of Consumer Housing Location Preferences

Smart Growth critics argue that most consumers prefer large-lot suburban homes and so are harmed by Smart Growth policies. For example, Pisarski (2009) states, "It is clear that most people, excepting a small but often very loud minority, opt for lower density living when income permits." Smart Growth criticism rests primarily on this claim. Is it true?

Market surveys have investigated consumer housing preferences (Brown 2014; Emrath and Siniavskaia 2009; Keely, et al. 2012; NAR various years; Pembina 2014; RGS 2014; Song and Knaap 2003). These indicate that most Americans prefer single-family homes at some point in their lives, particularly when raising children, but also value Smart Growth amenities including walkability and nearby services, and a growing portion would accept more compact housing types, such as townhouses and condominiums, if that provides better neighborhoods, shorter commutes, transportation cost savings or other financial savings.

Many of the factors that make single-family, suburban housing attractive are social and economic features currently associated with suburbs, such as newer housing stock, security, better public services and more prestige, as summarized below. Although some households use large lots for gardening or pets, many choose larger lots as an investment or for prestige, and so could be equally satisfied with smaller lots in more accessible, multi-modal locations if they had these attributes. For example, some currently automobile-dependent households might choose more accessible, multi-modal locations if they were considered safer or more prestigious.

***Table 6*** **Attributes Contributing To Consumer Preference for Suburbs**

| Social and Economic Attributes | Unique Physical Attributes |
|---|---|
| Newer housing stock | |
| Increased security (less crime) | |
| Better public services (policing and schools) | Larger lots |
| Increased economic stability | More open space |
| Prestige | Better automobile access |

*Many factors that make suburban locations desirable can be achieved in Smart Growth areas.*

Housing preferences can be analyzed by lifecycle stage. Large-lot single-family housing tends to be preferred most by families with children, which represent a minority of a total adult lifespan, as indicated in Table 7. Young adults and seniors tend to prefer smaller homes and more accessible, multi-modal locations. Even people who aspire to own a single-family home may prefer other housing types for much of their lifecycle.

***Table 7*** **Typical Lifecycle Housing Preferences**

| Stage | Typical Ages (duration) | Housing Preferences | Transport Preferences |
|---|---|---|---|
| Young adult | 20-30 (10 years) | Multi-family | Multi-modal |
| Parents with children | 30-55 (25 years) | Single-family | Auto-oriented or multi-modal |
| Empty nesters | 55-65 (10 years) | Single- or multi-family | Auto-oriented or multi-modal |
| Active retirees | 65-75 (10 years) | Single- or multi-family | Multi-modal |
| Older seniors | 75-85 (10 years) | Multi-family | Multi-modal |

*Only a minor portion of a typical adult lifecycle has a strong preference for single-family housing.*

Yan (2020) measured walkability, transit accessibility and auto accessibility impacts on housing location decisions in Atlanta, Southeast Michigan and the Puget Sound region. The study found that all three types of accessibility affect residential location decisions. Auto commute time has the greatest effect of all independent variables, but auto accessibility to non-work destinations appears to be inconsequential. Transit accessibility has a statistically significant positive influence on residential location choice across all three regions. Walkability is found to be a key determinant of residential location choice in the Puget Sound region but not the other two regions, apparently due to a shortage of walkable neighborhoods in Atlanta and Southeast Michigan. This finding suggests the need for cities and regions to promote pedestrian-oriented development in order to broaden residential choice. The results further imply that, due to housing-supply constraints, households often have to live in a neighborhood with a level of accessibility lower than what they prefer. Song and Knaap (2003) analyzed 48,000 Oregon home sales transactions between 1990 and 2000. They found that homes in a new urbanist neighborhood command a 15% premium ($156,986 compared with $132,731 average). Prices declined with density, multi-family housing, commercial and arterial streets within the development, indicating that some Smart Growth features are considered undesirable.

Market survey analysis indicates that younger people tend to prefer public transit more than older people, that living in a transit-oriented community significantly increases transit ridership, and that many residents of automobile-dependent communities would prefer to live in more compact, multi-modal neighborhoods (NAR 2013; Nelson 2006; RSG 2014). A community preference survey of 3,300 US residents, found that about half would choose a more compact house located in a walkable and accessible neighborhood, over a house in an automobile-dependent neighborhood, with young adults and women over 65 years most likely to prefer walkable communities (PEW 2014). This indicates higher demand for walkable urban than the market research showed 10 to 15 years ago (Steuteville 2014).

Handy (2008), found that consumer support for traditional community design increased from 44% in 2003 to 59% in 2005. A Houston, Texas survey asked, “Would you personally prefer to live in a suburban setting with larger lots and houses and a longer drive to work and most other places, or in a more central urban setting with smaller homes on smaller lots, and be able to take transit or walk to work and other places?” Fifty-five percent of respondents chose the “Central urban setting” and only 37% chose the “Suburban setting” (Blueprint Houston 2003). Detailed travel and consumer attitude survey analysis indicates that Millennials (younger adults) are more likely to be multimodal commuters, even if they often live in neighborhoods that are less supportive of such behaviors, and often prefer to live in accessible locations and adopt non-motorized and multimodal travel options more often (Circella, et al. 2017).

Levine, et al (2005) compared housing options and preferences between compact and multi-modal Boston, and sprawled, automobile-dependent Atlanta. The study had three major components: A clustering of neighborhoods throughout each metropolitan area according to their transit and pedestrian characteristics; an urban design analysis of selected neighborhoods in each region; and a survey of 1,600 households regarding their preferences for neighborhood environments. The study concludes that while Atlanta residents are less interested in transit- and pedestrian-friendly neighborhoods than their Boston counterparts, the difference in preference is insufficient to explain the difference in the transit and pedestrian quality of the neighborhoods the two groups inhabit. The Boston neighborhood options were therefore more sensitive to residents’ transportation and land use preferences than in Atlanta.

In a survey of housing location and transportation preferences, Schwanen and Mokhtarian (2005) categorized about a quarter of residents as "dissonant," meaning that their housing location and related travel options are inconsistent with their preferences. In urban North San Francisco, 24% of residents indicated that they prefer more suburban locations and automobile transportation, while in suburban Pleasant Hill and Concord, 27% and 19% of residents respectively indicated that they prefer more urban locations and multi-modal transportation. The authors found that both location and preferences affected residents travel behavior, so urban residents who prefer suburban locations drive more than urban residents who prefer urban locations, but not as much as suburban residents.

Consumer preference surveys by real estate analysis firm Robert Charles Lesser (RCLCO 2008) asked respondents to make trade-offs between various home characteristics including accessibility, neighborhood condition and house type. They found that in every location examined, about one-third of respondents prefer Smart Growth housing products and communities. They found significant latent demand for higher-density and walkable neighborhoods nationwide, driven by demographic shifts and changing consumer preferences favoring higher-density environments. Their analysis indicates that future demand for high-density residential products—units in structures with more than five units each—could be 140% above the current levels of occupied stock.

A consumer survey commissioned by the Royal Bank of Canada (Pembina 2014) found that most Toronto region home buyers prefer walkable, transit-friendly neighbourhoods to car-dependent locations. More than 80% of respondents prefer living in an urban or suburban neighbourhood where they can walk to stores, restaurants, rapid transit and other amenities, and would choose these neighbourhoods even if it meant trading a large house and yard for a modest house, townhouse or condo. Understanding transport costs makes homebuyers more likely to choose Smart Growth locations: homebuyer preferences shift when they are told that they can save a minimum of $200,000 over a 25-year period by choosing a multi-modal neighborhood where they can give up one household car. When informed of these savings, 60% of respondents would choose to live in a transit-oriented neighborhood even if they could only afford a smaller home. Only 36% of respondents would choose a larger home in an area without access to rapid transit.

The Atlanta, Georgia SMARTRAQ study found that most regional neighborhoods are not walkable (Goldberg, et al. 2006; Levine and Frank 2007). Only about 5% of homes in the region are in compact and walkable neighborhoods, and only 40% of respondents indicated that they could walk to nearby shops and services. Yet, there is considerable demand for more accessible, multi-modal neighborhoods. Between 20% and 40% of respondents expressed a very strong preference for the most compact and walkable neighborhoods (depending on which attributes were considered), 49% prefer a neighborhood where residents can walk to nearby shopping, and 55% prefer living in a community that offers shorter travel distances to work even if it meant smaller residential lots. The survey indicated frequent mismatch between residents' preferred and actual environment: About a third of automobile-dependent residents indicate they would prefer more walkable neighborhoods (examples of survey questions are illustrated below). This suggests a significant undersupply of accessible, walkable neighborhoods.

## Question 1

First, we'd like you to imagine moving to a new neighborhood. Please read the two neighborhood descriptions below and then answer the four questions. Assume that anything that we do not refer to in the neighborhood choices - such as school quality, public safety, or cost - is exactly the same as where you live now.

| *Neighborhood "A":* | *Neighborhood "B":* |
|---|---|
| Within a half-mile of my home there is a **mix** of single family detached houses, townhomes, apartments and condominiums on **various sized lots.** | Within a half-mile of my home there are **only** single family houses on **1 acre lots.** |
| Destinations such as shopping, a restaurant, a public library, and a school are within a **few blocks** of my home. | Destinations such as shopping, a restaurant, a public library, and a school are within a **few miles** of my home. |
| Local destinations are close enough that I can **either walk or drive**. Parking there is **limited**. | Local destinations are too far to walk, **most are driven to**. Parking there is **ample**. |
| My one-way commute is **3** miles. | My one-way commute is **18** miles. |
| Public transit, like a bus or train, is **nearby**. | Public transit, like a bus or train, is **distant**. |

1) *Assuming that there are no differences between the neighborhoods apart from the ones we mentioned, which neighborhood do you think you'd rather live in?*

☐ ***Neighborhood "A"*** OR ☐ ***Neighborhood "B"***

## Question 2

Now we'd like you to imagine moving to a different neighborhood. These questions ask you about the kind of neighborhood you'd hope to find. Please look at the following images and read their neighborhood descriptions, then circle the appropriate number to indicate your answer to the questions. Keep in mind that anything that we do not refer to in a question - such as school quality, public safety, or house cost - is exactly the same between the two choices presented.

**A.**

**B.**

***If I were to move, I'd like to find a neighborhood . . .***

| | | |
|---|---|---|
| **A.** where the commercial areas are kept separate (over a mile) from the houses, even if this means that I can't walk to stores, libraries or restaurants. | OR | **B.** where I can walk to stores, libraries or restaurants, even if this means that the houses and commercial areas are within a few blocks (1/3 mile) of each other. |

5) ***Your neighborhood preference is:***

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| strongly prefer **A** | | | somewhat prefer **A** | | neutral | | somewhat prefer **B** | | | strongly prefer **B** |

6) ***Please indicate whether your current neighborhood is more like "A" or "B":***

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| more like **A** | | | | | equally like A & B | | | | | more like **B** |

7) ***Regarding the ability to walk to nearby shops and services, the neighborhood you'd hope to find would be:***

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| more like **A** than your current neighborhood | | | | | like your current neighborhood | | | | | more like **B** than your current neighborhood |

*These are examples of questions asked in the SMARTRAQ study. The results indicate that many residents of automobile-dependent, suburban locations would prefer to live in more accessible, mixed-use, walkable neighborhoods.*

The *Housing Alternatives Acceptability Study* (Stillich and Agrawal 2008) surveyed 8,000 Toronto-area households. It found that many households prefer accessible, multi-modal neighborhoods and would accept compact housing forms such as townhouses and condominiums. Key findings were:

- More than two-thirds of respondents (68%) identified having daily destinations within walking distance as a 'must have' or 'very important.'
- 71% of respondents said living in a community well-served by public transit was 'very important' or 'must have,' and 68% are willing to pay more to improve transit service.
- Almost a third report that rising energy prices would affect their housing choice 'very much,' although the survey was performed mid-2007 when fuel prices were low.
- Only 32% considered single-family houses essential. About half rated a townhouse 'acceptable' or 'may be acceptable,' particularly if they have private backyards.
- 51.6% of respondents would accept or could accept living in a large condominium apartment; this percentage held true for all household sizes. Acceptability was strong for both Toronto City residents and for those living in nearby suburban municipalities.
- Low-rise apartment living is preferred to high-rise living by a wide margin.

Peterson (2017) used American Community Survey data to track vehicle ownership in U.S. state, metropolitan regions and core cities. She found that between 2010 and 2015:

- Car-free households grew 0.2 percentage points from 8.9% to 9.1%.
- Families (households with two or more persons) reduced vehicle ownership in 39 states, 28 of the 50 largest metros, and 25 of their core cities, mostly shifting from multiple cars to only one car.
- One-person households polarized: people living alone became both more likely to live car-free and to have multiple cars. In 15 states, 28 metros, and 25 core cities, singles shifted to car-free living, but in 16 states, 13 metros, and 11 core cities, having multiple cars became more common.

A U.S. Federal Reserve Board study found that, after a four year lag, each 10% fuel price increase leads to a 10% decrease in demand for homes in locations with longer average commute relative to locations closer to jobs (Molloy and Shan 2011). Tanguay and Gangias (2011) found that, controlling for variables such as income and population growth, a 1% gas price increase causes inner city populations to increase 0.32% and lower-density housing development to decline 1.28% in Canadian urban regions. A market survey found that Calgary households would shift from single-family suburban homes to urban townhouses if they could save an average of CA$130 (US$90) per month (Hunt 2001). This premium is comparable in magnitude to the lower public service costs of more compact development, indicating that many households would choose smarter growth residences if development and utility fees reflect location-related costs (Blais 2010). Similarly, if Smart Growth developments provide other cost savings and benefits, such as transport and parking cost savings (good walking and cycling conditions, high quality public transit service, integrated carsharing services, unbundled parking), more households would choose such neighborhoods.

The Urban Land Institute offers the following advice to developers:

- *Reorient to Mixed Use and Infill.* Energy prices and road congestion accelerate the move back into metropolitan-area interiors as more people crave greater convenience in their lives. They want to live closer to work and shopping without the hassle of car dependence. Higher-density residential projects with retail components will gain favor in the next round of building. Apartment and townhouse living looks more attractive, especially to singles and empty nesters.
- *Plan More Transit-Oriented Development*. Metropolitan areas nationwide realize they need to build or expand mass transportation systems in order to overcome road congestion, which strangles economic growth and increases carbon footprints. Increasingly, people want to drive less and seek subway, commuter railroad, or light-rail alternatives. Developers can't miss securing project sites near rail stops and train stations.

The report, *Choosing Where We Live: Attracting Residents to Transit-Oriented Neighborhoods* (MTC 2010), identifies various housing market segments and describes ways to make urban development more attractive in response to each groups' specific needs and preferences. It includes specific recommendations for improving walking and cycling condition, transit service quality, neighborhood livability (quiet, cleanliness and safety), school quality and accessibility, parking management, and urban housing affordability.

Some urban housing is relatively high-density but not very accessible due to poor connectivity and inadequate walking and cycling facilities. For example, Moudon and Hess (2000) found that

40% of Puget Sound suburban residents live in medium- to high-density, multi-family housing which often lacks pedestrian access to nearby retail and public services, forcing residents to drive rather than walk for errands. Better integration between land use and transportation can significantly reduce automobile use without changing housing type or density.

Opposition to multi-family (particularly rental) housing is often based on the assumptions that such housing attracts undesirable residents and lowers nearby property values. However, several studies indicate that this is not generally true: a significant and increasing portion of multi-family housing occupants have relatively high income and choose such housing out of preference, and overall, multi-family rental housing has minimal or even positive impacts on nearby property values (CHP 2009; Hart Research Associates 2013; NMHC 2006).

**Aging-In-Place**
As the Baby Boom ages there is increasing discussion about the value of *aging-in-place*. As the National Association of Home Builders explains,

> *In plain English, aging-in-place means remaining in one's home safely, independently, and comfortably, regardless of age, income, or ability level. It means the pleasure of living in a familiar environment throughout one's maturing years, and the ability to enjoy the familiar daily rituals and the special events that enrich all our lives. It means the reassurance of being able to call a house a "home" for a lifetime.*

American Association of Retired Persons (AARP) surveys indicate that 85% of older people want to age in place. They want to enjoy familiar friends and activities, and to contribute to their community. Aging in place requires homes designed to accommodate people with physical disabilities (minimal stairs, low counters, easy to grasp handles and switches, etc.), appropriate senior services within communities (www.seniorresource.com/ageinpl.htm), and accessible, multi-modal home locations.

As people age their ability to drive declines, so they want quality transportation options, particularly walking facilities (with particular attention to accommodating people with physical disabilities and mobility devices), conventional transit, paratransit, taxi and delivery services. Safe and convenient walking facilities are particularly important to help people maintain fitness as they age. It is important that these services be affordable for elderly people with limited budgets. Appropriate land use mix, that is, having public services such as food stores and medical services within convenient walking distance of homes also helps people age in place.

Analysis of Washington DC property values by Leinberger (2012) found that as the number of environmental features that facilitate walkability and attract pedestrians increase, so do office, residential, and retail rents, retail revenues, and for-sale residential values. Lu, et al. (2015), used data from a 2011 National Association of Realtors community preference survey to estimate market potential for Smart Growth neighbourhoods. Using a latent class choice model, identified four classes of individuals that reveal distinctive behaviours when choosing Smart Growth neighbourhoods, based on aspects of community design, socioeconomic characteristics and personal attitudes. Based on these results we estimated the demand for Smart Growth neighbourhoods given the way they are planned and built. By linking the results of the latent class choice to a market diffusion model we were able to evaluate the effectiveness of a proposed Smart Growth neighbourhood design in inducing less sprawling development.

Housing market analysis by Gillen (2012) indicates that, unlike previous housing market downturns, during the 2007-2012 period, houses located in more accessible and multi-modal neighborhoods exhibit greater price stability than those located in lower-density, automobile-dependent suburbs. They suggest that this reflects the effects of increasing fuel prices and changing consumer preferences toward more urban locations by many younger and older households. Regression analysis of house prices on zip-code level housing attributes indicates that homes in communities with New Urbanist characteristics have, on average, maintained their value much better during the recent downturn than their counterparts in lower-density, single-use, auto-oriented, exurban communities.

## Trends Affecting Consumer Housing Location Preferences

The following factors influence consumer housing location preferences:

- *Function.* Functional features include price, size, quality and accessibility. Some households have specific functional requirements: larger families want more bedrooms, gardening enthusiasts and large pet owners want large yards, lower income households want cheaper housing, and people with disabilities want accessibility features.
- *Local economic and social conditions.* Neighborhoods differ in residents' income and social status, and therefore the quality of public services (such as schools) and security.
- *Status.* The perceived prestige and social acceptability of a neighborhood.
- *Ownership versus rentals.* Renting is more common in cities than suburbs.
- *Investment value.* The expected economic stability and gains in resale value.

Table 8 summarizes trends related to these factors. This indicates that many of the factors which that encouraged households to prefer sprawl housing are declining due to demographic and economic shifts. Although most of these factors have been discussed individually in the popular media and academic literature, it is important to consider their cumulative and synergistic effects. Their total impacts are likely to be even greater than the sum of their individual impacts, since these trends tend to complement each other.

***Table 8*** **Trends Affecting Housing Location Preferences**

| Factor | Past (1950-2000) | Current (2000-2010) | Future (2013+) |
|---|---|---|---|
| **Function** | Rising incomes, increased vehicle ownership, declining real fuel prices, and more families with children favored larger, single-family homes and reduced the cost of sprawl locations. | Incomes and vehicle ownership are stagnant, real fuel prices are starting to increase. Household sizes have declined and fewer have young children. | Incomes and vehicle ownership are likely to stay stagnant, real fuel prices will increase. Household size will change little, fewer households will have children the number of people with disabilities will increase due to population aging. |
| **Economic and social conditions** | Middle-class flight concentrated poverty and social problems in cities. Suburbs were generally safer and had better public services. | Many cities are attracting more middle-class families. Cities tend to have equal or better services, and are often safer than suburbs. | Trends favoring cities are likely to continue. Cities are inherently more resource efficient and so are usually more economically productive than sprawl. |
| **Ownership** | Consumer preferences and public policies favored ownership | Ownership rates have peaked | Ownership rates are unlikely to increase, and may decline somewhat. |
| **Status** | Suburban living was considered prestigious and appropriate (healthier and more responsible). | Many people consider urban living more prestigious, healthier and responsible than suburban living. | Trends favoring cities are likely to continue. |
| **Investment** | City homes were considered unreliable investments. | In recent years, urban housing prices have proven more durable than sprawl housing. | The factors describe above will probably continue to increase the value of Smart Growth housing. |

*Most Smart Growth strategies directly benefit consumers and increase economic efficiency.*

## Smart Growth Demand

The following analysis explores the implications of current and projected consumer housing location preferences for housing demand. Table 9 categorizes households according to home location preferences and options. Two categories are satisfied: their preferred housing type is available. Two categories are dissatisfied: available housing options do not match their preferences.

### *Table 9* Housing Option Satisfaction Categories

| | | Available Options | |
|---|---|---|---|
| | | **Sprawl Available** | **Smart Growth Available** |
| **Preferences** | **Prefers Sprawl** | Satisfied | Wants more sprawl |
| | **Prefers Smart Growth** | Wants more Smart Growth | Satisfied |

*Two categories of households are satisfied: their preferences match available housing options. Some households may want more sprawl. Others may want more Smart Growth housing options.*

Various factors described in this paper suggest that latent demand (consumers want more of it than markets provide) for Smart Growth is much larger than for sprawl.

First, consumer preference surveys indicate that a greater portion of suburban residents want more accessible, multi-modal communities than urban residents want more suburban locations. For example, the SMARTRAQ study (Goldberg, et al. 2006) found that in 2001-02, between 20% and 40% of residents strongly preferred walkable neighborhoods although only 5% of current housing is located in such areas.

Second, preference for Smart Growth is increasing due to demographic, economic and market trends such as aging population, rising future fuel prices, increasing traffic congestion, and increasing health and environmental concerns. Handy's study showed a significant increase in support for Smart Growth between 2003 and 2005, a period that preceded the fuel price increases and suburban housing market collapse of 2008 and at a time when the full public health benefits of Smart Growth were not widely recognized (Litman 2006). These trends are durable and cumulative, and some are only beginning to have their full impact on housing demand. Over the next two decades the portion of consumers who prefer Smart Growth over sprawl should continue to grow.

Third, a much greater portion of current housing stock is sprawl rather than Smart Growth. A large number of large-lot urban fringe homes were built during the 2002-2007 housing boom, resulting in excess supply. Even if the portion of sprawl residents who prefer Smart Growth was the same as the portion of urban residents who prefer sprawl locations, the Smart Growth housing shortage is larger in absolute numbers.

For example, the U.S. currently has about 92 million suburban and rural area homes, and 36 million urban homes (US Census 2008).[2] If 20% of each group is discontent, wanting the other housing type, 7.1 million urban households prefer suburban locations and 18.5 million suburban households prefer urban locations. To meet this need, suburban and rural housing supply must increase by 7.8% while urban housing supply must increase by 51%. This probably understates future latent demand for Smart Growth housing that includes amenities such as walkable neighborhoods and access to high quality transit.

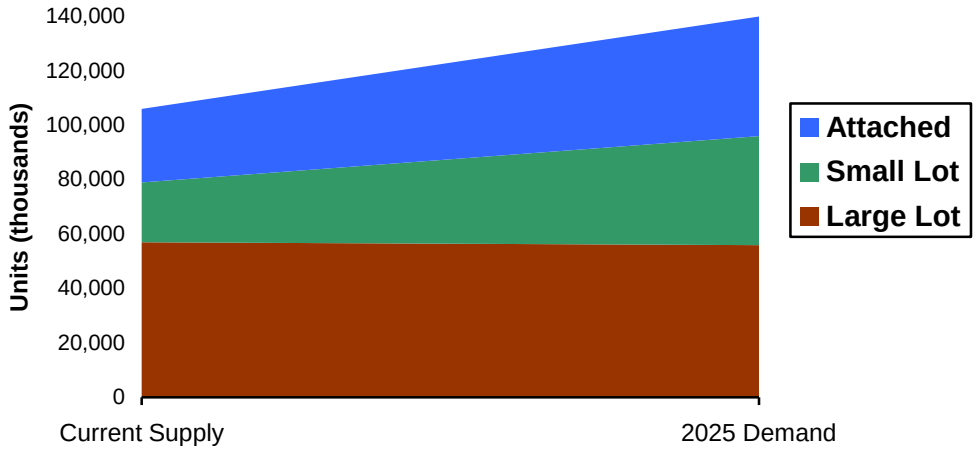
***Table 10*** **Housing Stock Increase Needed To Meet Latent Demands**

| | Urban | Suburban & Rural |
|---|---|---|
| Totals (millions) | 35.9 | 92.3 |
| 20% discontent (millions) | 7.1 | 18.5 |
| Percent increase in current stock required to meet latent demand | 51% | 7.8% |

*This illustrates why Smart Growth latent demand is probably much larger than sprawl latent demand.*

Table 10 indicates that current demand for Smart Growth housing exceeds current supply, justifying more Smart Growth development. This conclusion is consistent with other market studies (Reconnecting America 2004; Thomas 2010) which all highlight changing consumer preferences and the need for more Smart Growth housing. An *American Planning Association Journal* article summarized in Figure 9 indicates that during the next two decades, the existing large-lot housing supply will meet anticipated demand, but the small-lot and attached housing supply will need to nearly double. The shortage of compact housing in accessible, multi-modal neighborhoods is predicted to be particularly large in high-demand regions such as California (Nelson 2014).

***Figure 9*** **Demand For Housing By Type** (Nelson 2006)




*Housing market demand analysis based on consumer preference surveys indicates that during the next two decades demand for large-lot housing will decline slightly, so current supply is sufficient to meet future needs, but demand for small lot and attached housing will approximately double.*

[2] These categories are imperfect since some urban neighborhoods are sprawled and some suburban developments are Smart Growth, but adequate for illustrative purposes.

Although exact impacts are both difficult to predict and depend on how *sprawl* and *Smart Growth* are defined, Figure 8 indicates that until two decades ago (1990) approximately two-thirds of households preferred sprawl and less than a third preferred Smart Growth. The split is now about fifty-fifty, and within two more decades (2030) less than one third of households will prefer sprawl and more than two thirds will prefer Smart Growth.

This explains why Smart Growth locations, such as older urban neighborhoods and new transit-oriented communities are often unaffordable. Inadequate supply drives up prices. The rational response is to significantly increase the supply of Smart Growth housing to bring Smart Growth benefits within the budget of more consumers, particularly economically and physically disadvantaged households.

This is not to suggest that demand for large-lot, urban fringe housing will disappear, but for reasons discussed here it is a declining market segment attractive to people with specific needs and preferences, such as gardening enthusiasts and horse lovers. Other households will increasingly prefer more accessible, multi-modal locations that offer functional benefits such as travel time and financial savings, improved fitness and health, and improved economic opportunities.

Since housing is a durable good with low annual turnover, modest shifts in total demand have large impacts on new housing demand. The bulk of North America's existing housing stock is suburban single-family. Demand for such homes will not grow; in fact, it may decline somewhat due to the trends identified in this report. Large-lot, urban fringe housing is currently in oversupply, with declining prices and high foreclosure rates (Leinberger 2008; ULI 2015; NRDC 2010). At most, only a few more large-lot, urban fringe homes should be built in the future, sufficient to replace existing large-lot house that are demolished or subdivided. The majority of new housing should reflect Smart Growth principles in response to market demands. Communities and developers that understand these trends will be at a competitive advantage over those that ignore them.

Some past studies ignored or understate these shifts. For example, during the housing boom peak the chief economists of Fannie Mae, Freddie Mac, the Independent Community Bankers of America, the National Association of Home Builders and the National Association of Home Realtors concluded that house values would stay high, demand for new housing would be "robust," most new housing would continue to be detached single-family, and home ownership would exceed 70% (Berson, et al. 2006). These inaccurate predictions were made just prior to the housing market collapse and resulting bankruptcies of some of these organizations and their members.

It is wrong to claim that Smart Growth policies harm consumers by restricting their housing options. Sprawl housing is abundantly available and relatively inexpensiveWeiss 2009). In the future, many consumers who purchase these discounted exurban homes may regret their inaccessibility and automobile dependency, and wish that past policies had favored more accessible, multi-modal development so their affordable housing would have lower transportation costs.

## Evaluating Smart Growth Criticism

*This section evaluates common criticisms of Smart Growth based on this analysis. For additional discussion of these issues see Litman (2004).*

*Americans prefer large-lot, suburban housing and automobile travel.*
Market research described in this reports indicates that Americans' housing preferences are diverse and changing (Chernikoff and Yoon 2010). Although many families (especially those with young children) prefer single-family homes, an increasing portion will choose more compact houses in exchange for improved accessibility and financial savings, and many young people and seniors prefer dense urban environments. Similarly, although few motorists want to give up automobile travel altogether, many would prefer to drive less and rely more on alternatives, provided they are convenient, comfortable, safe and affordable. These shifts are large and rapid, resulting from durable demographic and economic trends, so older survey data (for example, surveys performed prior to 2007) cannot be used to predict future housing and travel demands.

*Reduces affordability.*
Some Smart Growth policies tend to increase, and others reduce, housing and transport costs. Urban growth boundaries can increase large-lot housing costs, but other Smart Growth policies provide savings by allowing smaller lot sizes, increasing housing options (townhouses, condominiums, etc.), reducing the costs of providing public services, and reducing household transportation costs (CTOD and CNT 2006; Litman 2008). As a result, Smart Growth policies only reduce affordability under specific circumstances: where strong consumer demand for large-lot, automobile-dependent housing exceeds supply and there is little demand for alternatives. Shifting consumer preferences are making these circumstances unusual. Sprawl housing is now abundant and cheap, but demand is low and unlikely to return to previous levels. Increasingly, Smart Growth can increase overall affordability by increasing the supply of small-lot and attached housing, improving compact community livability (by improving public infrastructure and services in existing urban neighborhoods), reducing development charges and utility fees in accessible locations, and improving affordable transport options (walking, cycling, ridesharing and public transportation) that maximize potential savings.

*Is intrusive ("social engineering")*
Critics portray Smart Growth as a set of regulations that intrude in people's lives in ways that reduce their housing and transportation options. In fact, many Smart Growth strategies reduce regulations (minimum parking and setback requirements, limits and density and alternative housing types), and improve accessibility options (better walking, cycling and public transit, and increased proximity to services and activities). Smart Growth policies could be considered intrusive only if demand for large-lot, automobile-dependent housing significantly exceeds supply. As described above, this situation is increasingly rare due to shifting consumer preferences. On the other hand, current policies such as minimum parking requirements and limits on density and housing types restrict the supply of Smart Growth housing and accessibility options, and so can be considered "social engineering" that favors sprawl and automobile dependency.

*Higher densities increase congestion, and therefore fuel consumption and emissions.*
It is true that, if all else is held constant, increased development density tends to increase traffic congestion intensity, that is, delay per peak-period vehicle-mile. However, this can be more than offset if Smart Growth reduces travel distances and improves travel options, reducing total

vehicle travel and therefore delay per capita. Although Smart Growth community traffic speeds are lower, residents usually spend fewer annual hours delayed by congestion, and their per capita fuel consumption and pollution emissions are lower, than that of residents in automobile-dependent suburbs (Ewing, et al., 2007; TRB 2009).

*Cities are dangerous and inefficient; suburbs provide a higher quality of life.*
Popular cultural often portrayed cities as dangerous and inefficient, although cities actually tend to be safer and more economically productive than sprawl locations. Per capita homicide rates are now about equal and traffic fatality rates much lower in cities than in suburbs, making urban areas safer overall (Meyers, et al. 2013). Urban locations tend to be more resource efficient than sprawled locations (reduced land consumption, more energy efficient and lower transport costs) and enjoy agglomeration economies (Carlino, Chatterjee and Hunt 2006), and Smart Growth policies can increase these efficiencies by allowing more compact, mixed development, and better accessibility options. These advantages are likely to increase in the future due to rising energy prices.

Urban social problems primarily result from concentrated poverty. Poverty is worse in sprawled locations due to greater isolation and higher transport costs (Dougherty 2009). Smart Growth can help reduce poverty and social problems by increasing integration and employment opportunities. Although a particular household may experience less exposure to social problems (poverty, drugs, graffiti, etc.) by moving from a lower-income urban neighborhood to a more affluent suburb, Smart Growth that includes urban redevelopment (including better education, crime prevention and drug rehabilitation), are far better from society's perspective because they address causes rather than symptoms, and so reduce social and economic problems rather than simply shifting their location.

*Smart Growth advocates exaggerate sprawl costs and ignore its benefits.*
Numerous studies have quantified the economic, social and environmental costs of sprawl and benefits of Smart Growth (Burchell, et al. 2002 and 2005; Litman 2008). Although some Smart Growth advocates may ignore sprawl benefits, most serious studies recognize the benefits of single-family housing and mobility and so recommend policies that reflect market principles that allow consumers to choose the housing and transport options that best meet their needs and maximize economic efficiency (Ewing, et al. 2007; Levine et al. 2002; Litman 2007; AASHTO 2009; TRB 2009).

*Smart Growth and VMT reduction strategies represent an extreme environmental agenda.*
Smart Growth and VMT reduction strategies are endorsed by a wide range of experts and professional organizations, including the Institute of Transportation Engineers, the Center for Disease Control, the Transportation Research Board, the American Association of State Highway and Transportation Organizations, the American Governors Association, the American Planning Association, and many other organizations and jurisdictions.

## Policy Implications

This analysis indicates that a large and growing portion of consumers prefer Smart Growth housing. Large-lot, urban fringe housing is now readily available for sale and rent at discounted prices but there is little demand for such housing. On the other hand, there is growing demand for Smart Growth housing options found in older urban neighborhoods, transit-oriented development, and walkable, mixed-use suburban towns. This growing demand is driving up prices and making such housing unaffordable for many consumers who need it most: economically and physically disadvantaged households.

Meeting this growing demand for Smart Growth housing can provide many benefits, as summarized in Table 11. Many sprawl location households would probably be better off had Smart Growth policies been implemented years ago; they would now enjoy benefits such as time savings, less crash risk, and increased physical fitness and health, and would be less vulnerable to higher fuel prices, job loss or illness.

***Table 11*** **Smart Growth Benefits and Costs** (Burchell, et al. 2002 & 2005; Litman 2008)

| | Internal (Users) | External (Other People) |
|---|---|---|
| **Benefits** | Improved housing options (reduced restrictions on multi-family housing)<br>Increased housing affordability (e.g. reduced land and parking requirements).<br>Improved accessibility options<br>Transportation cost savings<br>Reduced crash risk<br>Improved public fitness and health<br>More attractive, livable community<br>Reduced chauffeuring responsibilities | Public service cost savings (lower costs for roads, utilities, emergency services, etc.)<br>Reduced road and parking costs/subsidies<br>Reduced congestion (if people drive less)<br>Reduced crash risk to other road users<br>Increased community cohesion<br>Improved accessibility for non-drivers<br>Energy conservation<br>Reduced pollution emissions<br>Open space preservation (farms and wild lands) |
| **Costs** | Smaller lot size<br>Less privacy<br>Lower local traffic speeds<br>More road and parking fees<br>More exposure to some local pollutants | Some additional infrastructure costs (curbs, sidewalks and public transit)<br>Increased local traffic congestion<br>Higher impervious surface coverage in some areas |

*This summarizes various Smart Growth benefits and costs. Even people who live in sprawled communities and rely entirely on automobile travel can enjoy some of these benefits.*

For most of the last sixty years, public policies and planning practices favored sprawl. The land use patterns of popular urban neighborhoods (Greenwich Village, New York; Pasadena, California; Queen Anne Hill, Seattle; and small town central business districts) are prohibited by conventional zoning codes and development policies that limit density and mixed, require generous setbacks and parking supply, and dedicate most transport funds to roadways. These policies are unresponsive to consumer demands, and often irrational, in the literal sense that they inefficiently allocate scarce resources.

To satisfy Smart Growth consumer demands and maximize net benefits, development policies and planning practices will need to change. Current planning and market distortions that discourage compact, mixed, accessible development should be corrected (Levine 2006; Litman 2007; TRB 2009). Public infrastructure should focus more on urban redevelopment and less on urban expansion. Transportation planning will need to recognize the full benefits of a diverse and efficient transport system, and so do more to improve alternative modes, apply efficient pricing, and implement other cost-effective mobility management strategies.

These Smart Growth policies are justified for several reasons:

- They respond to consumer demands for more compact, accessible, multi-modal, affordable locations.
- Smart Growth can help reduce external costs associated with providing public services, parking subsidies, accidents, land consumption, petroleum dependency and pollution.
- Many Smart Growth policy reforms reflect good planning practices and market principles (integrated land use and transport planning, least-cost investments, cost based pricing, more efficient modes and higher value trips).

Many Smart Growth criticisms are actually justifications for *more* rather than *less* Smart Growth policy implementation. For example, since urban growth boundaries limit land supply, it is important that they be implemented with policy reforms that allow and encourage more compact housing in order to maintain housing affordability. Since increased density can increase traffic congestion, it is important that more compact development include improvements to alternative modes (including grade-separated HOV and transit systems), land use mix, and mobility management congestion reduction strategies (such as commute trip reduction programs, and efficient road and parking pricing). Smart Growth policies should also be implemented along with policies to prevent urban problems such as concentrated poverty, drug addiction and vandalism.

To their credit, some critics acknowledge that consumers may prefer Smart Growth, which could justify some Smart Growth reforms. For example, while criticizing Smart Growth in general, Alan Pisarski (2009) writes, “Any public policies that inhibit a market trend toward higher densities must be addressed.” This suggests that sprawl critics may be willing to support some reforms such as reduced and more flexible parking requirements, and excessive restrictions on land use density and mix.

## Conclusions

Smart Growth consists of more compact, accessible, multi-modal community development. This tends to be more resource efficient, requiring less land, energy and total vehicle travel per capita than more sprawled development. This efficiency can provide numerous benefits to residents and society overall. Critics claim that most consumers dislike this type of community and so are harmed by public policies that encourage it. This analysis suggests otherwise.

Although market surveys indicate that most North American households preferred single-family homes, they also indicate strong and growing consumer preference for Smart Growth features such as accessibility and modal options (reflected as short commutes and convenient walkability to local services). Twenty years ago less than a third of households preferred Smart Growth, but due to demographic changes (smaller families with fewer children), changing consumer preferences (more acceptance of urban lifestyles, plus increased health and environmental concerns), and improved urban conditions (reduced urban crime and air pollution), about half of households now prefer Smart Growth, and this portion is likely to continue growing. For many young people, urban, multi-modal lifestyles are considered more glamorous, and suburban lifestyles less so. An increasing portion of consumers now aspire to urban lifestyles for at least part of their lifecycle.

Described differently, for a few decades consumer housing and transportation decisions seemed to defy basic rules of economics. Housing location decisions seemed insensitive to transport cost factors such as commute distance and fuel prices, resulting in dispersed housing and automobile-dependent lifestyles. Walking, cycling and public transit were dismissed as inferior and undesirable modes, even where they are efficient and cost effective. Increasing congestion, fuel prices, health and environmental concerns causes consumers to be more rational. Some embrace this opportunity while others react with fear.

This is not to suggest that automobile travel and suburban living will end. Even with Smart Growth policies most North Americans will continue to live in single-family houses. However, there is a large stock of large-lot, single-family exurban housing, and a shortage of compact housing in multi-modal urban neighborhoods. Communities and developers that respond to this unmet demand are likely to succeed better than those that continue past development policies.

This is good news overall since more compact, accessible, multi-modal housing can provide many benefits to consumers and society. It gives consumers better options and greater efficiency. Smart Growth residents benefit directly from time savings, financial savings, and increased safety and health. Society benefits from infrastructure cost savings, improved opportunity for disadvantaged populations, and improved environmental quality.

Claims that Smart Growth deprives consumers of preferred housing options are clearly inaccurate. Sprawl housing is abundant while Smart Growth housing is scarce in many regions, which drives up prices, making it unaffordable to the lower income households that need it most. Sprawl results, in part, from planning and market distortions that favor dispersed development and automobile travel. There are many reasons to correct these distortions and support Smart Growth. Such reforms will result in land use development patterns that better reflect consumer preferences.

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