Smart Growth BC
TRANSPORTATION POLICY

Approved by the Smart Growth BC Board of Directors
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1.0 INTRODUCTION

Smart Growth BC encourages the development of communities that are compact, complete, inclusive, accessible, and affordable. In urban, suburban and rural settings, such communities can offer residents and visitors a variety of employment, housing and transportation choices. Sound transportation decisions for settlements of any size can only occur within the context of planning to create these elements. In their absence, small towns and large cities alike are susceptible to the pitfalls of inappropriate transportation planning.

Transportation decisions have the power to shape land use, but are also driven by existing patterns, which can be represented by three broad categories of settlement:

- Older, compact neighbourhoods;
- Conventional low-density suburbs;
- Emerging neighbourhoods.

In many older neighbourhoods, particularly in town and city centres, residential and commercial densities support a variety of viable transportation options that compete with the private automobile in terms of cost, comfort, and convenience. Because their street grids, built form, and other infrastructure elements were established prior to widespread automobile use, these environments are likely to be convenient and relatively safe for pedestrians and cyclists. Compared to the built environments resulting from more recent physical planning decisions, in older areas vehicles speeds tend to be slower, roads narrower, crosswalks more frequent, sidewalks wider, and the development fabric more interesting for pedestrians and cyclists. Finely mixed land uses make distances more appropriate for human powered transportation. The grid pattern of older neighbourhoods is better connected than curvilinear streets and cul-de-sacs, again allowing shorter, more convenient trips. People can more easily reach their different destinations using a variety of transportation modes.

On the other hand, some settlements are built at low densities with segregated residential, commercial, institutional and industrial precincts. Poorly connected road networks further increase travel distances, offering limited, inefficient and expensive transportation options. Wide roads and large setbacks invite high speeds and discourage human powered travellers. The combined result is large volumes of single occupant vehicles and, in small towns as well as major centres, congestion. Despite their high capacity, wide roads often fail to accommodate cyclists and pedestrians or do so poorly. Bicycle lanes and walking paths can be added for safety but do not overcome the long distances created by segregation and low density, characteristics that also tend to delay commercial vehicles with heavy commuter traffic and rarely support

frequent or affordable public transit services. In these places, land use patterns present a significant obstacle to transportation choice.

New and emerging neighbourhoods can choose among various land use models to guide their development, and thus their transportation systems. Neighbourhoods may arise or redevelop as a result of a new road or rail link, in response to renewed interest in an existing urban area, or due to population pressures at the edge of a city. In any case, they can grow in a manner that either supports or discourages a variety of options for access to and from, and within, the precinct. Narrow, interconnected streets, a mixture of land uses and higher residential and employment densities, for example, tend to make it easier for residents and visitors to reach their destinations.

In spite of the de facto urban growth boundary established by our Agricultural Land Reserve around many BC cities and towns, a significant number are expanding in area faster than they are growing in population[1]. With few exceptions this trend means less density, continued separation of land uses, more kilometres of pavement, higher per capita vehicle kilometres travelled, few transportation choices and a greater proportion of household income and public funds devoted to transportation expenditures. Citizens spend more time in their cars while the resulting congestion of expanding road networks impedes the movement of freight, increases air pollution, and fuels spurious arguments for additional investments in highways. This is the vicious cycle of transportation spending that Smart Growth BC's transportation policy aims to address.

2.0 IMPLICATIONS

Outside certain neighbourhoods in older communities and major urban centres, the dominant land use patterns in British Columbia create communities dependent on automobile transportation. Large distances, infrequent, inconvenient or non-existent intercity connections and minimal local bus services in most areas limit transportation options. From a smart growth perspective, pursuing the automobile-oriented land use patterns that predominate across the province precludes the development of compact, complete communities.

The defining features of automobile-oriented patterns include low densities, the separation of land uses and large land areas dedicated to roadways and parking facilities. Municipal zoning is often complicit in creating these inefficiencies with requirements for excessive parking space. Consequences range from smog and traffic congestion to watercourse pollution and obesity[2,3]. Worldwide, the relationship between urban density and per capita fuel consumption is well proven: fuel consumption drops exponentially as urban densities increase.[4] In addition to the widely documented health and environmental impacts of automobile dependence, significant social and economic concerns are associated with this type of land use.

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[1] From 1971 to 2001 BC's population rose by 180%, while our urban land area increased by 256%.
[2] Litman, Todd (2004) *If Health Matters: Integrating Public Health Objectives in Transportation Planning* Victoria Transportation Policy Institute: Victoria
[3] Frank, Lawrence D, MA Andresen and TL Schmid (2004) "Obesity relationships with community design, physical activity and time spent in cars" *American Journal of Preventive Medicine*. 27:2, 87-96
[4] Newman and Kenworthy (1989) *Cities and Automobile Dependence: An International Sourcebook*. Avebury Technical: Great Britain

Age, income or physical challenges restrict many members of our communities from convenient access to daily amenities because they cannot drive or do not have regular access to a vehicle. Even for those who enjoy the privilege of automobile use, the nature of human interactions in car-oriented landscapes illustrates a related concern. Street life is restricted where distances between destinations, and their physical design, make bicycle and pedestrian travel inconvenient and sometimes dangerous. When cars dominate the landscape, important social and aesthetic functions of neighbourhood public spaces are compromised; chance encounters, casual strolling, window-shopping and sidewalk dining are relegated to commercial malls and memory banks.

The costs of automobile-dependence reach beyond congestion delays and declining town centres, and are especially dramatic in small communities with limited tax bases. Automobile oriented land use patterns are associated with high per unit infrastructure costs and onerous ongoing servicing requirements[5]. Individual households also bear a heavy financial burden to support their vehicles. In 2004 Canadian vehicle owners spend $7000 - $7500 to cover ownership costs and 12 - 13 cents per kilometre on operating expenses[6]. These costs are comparable to financing an $80,000 mortgage. The cumulative impact of thousands of individuals relying on their cars is congestion. Traffic-choked arteries in major economic centres and trade gateways cause freight delays and undermine the competitiveness of any economy. When governments allocate funds to increase road capacity the costs of automobile dependence increase while the problem of congestion continues[7]. This cycle of large public investments with questionable returns is characteristic of transportation spending in jurisdictions across North America.

3.0 CONCERNS

3.1 Land use patterns

In the absence of compact, mixed-use development patterns citizens, transportation planners, and service providers are constrained in their ability to choose, or offer, alternatives to the private automobile. Although many communities adopt policies for walking, cycling and public transit, most trips, regardless of their distance, are still made in cars. This situation is not simply a result of poorly designed or inadequately applied policy; rather, it illustrates the difficulty in meeting objectives for transportation choice without a combination of commercial, residential and industrial uses in sufficient density to support the provision of alternative modes. Whether planning for a pedestrian path in a rural community or a public transit route in an urban centre, municipalities will be challenged to ensure that these facilities are successful without a good number and variety of potential users nearby. If committed to accessible, affordable and efficient transportation systems, local governments cannot continue approving low-density, single-use developments far from jobs, services and transit.

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[5] Canada Mortgage and Housing Corporation (1996) *Infrastructure Costs Associated with Conventional and Alternative Development Patterns* CMHC Research Highlights: Ottawa

[6] Canadian Automobile Association (2004) *Driving Costs 2004* www.caa.ca/e/automotive/pdf/driving-costs-04.pdf (low estimate is for a compact sedan, high estimate applies to a mini-van).

[7] Litman Todd 2004 *Generated Traffic and Induced Travel: Implications for Transport Planning* Victoria Transportation Policy Institute: Victoria.

3.2 Provincial policies and infrastructure spending priorities

Although land use regulation falls under local jurisdiction, the Local Government Act that governs municipalities is a provincial responsibility. Both regional and provincial governments have a significant role in the provision of transportation infrastructure and consequently the modal choices of British Columbians and the land use patterns of the communities they live in. The provincial government funds our highway network and subsidizes ferries and local transit services through BC Transit. In recent years, the provincial government has overseen the removal of BC Rail passenger services, the elimination and then remodelling of the Cycling Network Program, restraints on the ability of ICBC to invest in road safety projects and reduced support for local transit services. These changes have been accompanied by investments in large-scale transportation infrastructure projects supporting private automobile travel. Often undermining stated local and regional land use goals these investments curtail transportation choice by fuelling road network expansion and poorly planned development into a suburbanising countryside.

3.3 Incorrect focus in the public policy debate

Like their elected leaders, citizens may fail to recognize the inability of road network expansions to solve their traffic congestion problems in the long term. The scope of public discussion is often narrowed to focus on when, where and how additional automobile capacity will be created. The possibility that alternative transportation solutions coupled with more efficient land use patterns may address the stated problem is unrecognised, ignored or avoided. Effective public policy decisions require a careful analysis not only of the merits of a single approach but also of the likely costs and benefits of various alternatives. In the context of transportation planning these alternatives include: the provision of infrastructure to support walking, cycling and public transit; policy and financial incentives to reduce automobile dependence; and most importantly the development of compact mixed-use neighbourhoods that increase the proximity and accessibility of daily amenities.

3.4 Undeveloped intermodal opportunities

Though access to community and neighbourhood amenities should be a primary goal of both land use and transportation planning, movement between regional and provincial centres also requires attention. If British Columbians wishing to reach areas outside of their own communities cannot do so conveniently without an automobile, they are more likely to use that vehicle for most of their travel needs. Intermodal links include ferries and inter-City bus and train services that efficiently connect to urban centres and their transit systems.

4.0 SMART GROWTH BC'S TRANSPORTATION VISION

Smart Growth BC supports the development of communities that by design and function reduce the need for travel by private automobile and encourage walking, cycling and public transit.

5.0 GUIDING PRINCIPLES

Smart Growth BC's supports transportation planning based on the following principles:

1. Transportation decisions and investments shared by all levels of government, and guided by the Transportation Hierarchy:
   a) Walking
   b) Cycling
   c) Public Transit
   d) Goods and Commercial Services
   e) High Occupancy Vehicles
   f) Single Occupant Vehicles;

2. Urban development guided primarily by compact, efficient land use planning rather than the expansion of transportation capacity to meet increasing travel demand;

3. Infill and redevelopment within mixed-use neighbourhoods, and communities with residential and employment densities sufficient to enhance the viability of higher priority transportation modes (35 people and/or jobs per hectare);

4. The use of Transportation Demand Management (TDM) strategies that reduce congestion and decrease commuting costs by encouraging drivers to choose alternatives to travelling in private automobiles;

5. Transportation decisions designed to support land use and economic objectives as opposed to relieving short-term congestion problems caused by low density development;

6. Transportation spending that facilitates economic activity, rather than aiming to generate jobs and investment;

7. Transportation infrastructure improvements designed to provide all citizens with safe, convenient and affordable access to most daily needs, including employment, education, shopping, personal services and recreation;

8. An informed citizenry that understands the implications of transportation investment trade-offs and advocates for a balanced approach to infrastructure spending.