

**The Assessment and Planning Project  
BC Case Report No.4**

# **Growth Management in the Vancouver Region**

by

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## **The Assessment and Planning Project**

Over the past decade or so, several Canadian jurisdictions have moved to integrate environmental considerations more effectively in land use planning. Many of the most promising initiatives have been in the southern parts of Ontario and British Columbia, which are enjoying and suffering significant population increases and associated urban pressures.

Government authorities and citizens in these two areas have used many different approaches to manage growth and improve environmental sensitivity. Relevant initiatives have involved use of strategic environmental assessments, or explicit use of environmental assessment principles and obligations in special planning and growth management regimes, or in consensus-based multi-stakeholder co-operation efforts. Some have been driven by provincial action; others have been led by community groups and local citizens. Some reflect a larger vision of progress to sustainability; others were begun in response to pressing immediate problems and with understandably limited attention to overall implications.

The Assessment and Planning research project, funded by the Social Sciences and Humanities Research Council of Canada, seeks to compare and learn from experiences in the two provinces. Part of the work centres on a series of case studies covering a range of initiatives in the two provinces. Growth Management in the Vancouver Region is the fourth report on British Columbia cases. For other case studies and publications of the project, see the project web site <[ersserver.uwaterloo.ca/asmtplan](http://ersserver.uwaterloo.ca/asmtplan)> or contact the project director and editor of the case study series, Dr. Robert Gibson, Department of Environment and Resource Studies, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1.

### **The Growth Management in the Vancouver Region report**

The Vancouver Region is widely recognized as one North American jurisdiction where strong growth management plans and policies have been put in place in order to control urban sprawl. While many authors have lauded the region for its good planning intentions, there has been little in the way of assessment of actual performance. This paper attempts to identify some quantitative growth management goals that have been (officially and unofficially) espoused by planning authorities in the region, and to measure these against actual trends.

The results are mixed: on the one hand, some key growth management goals adopted by the region are not ambitious compared to existing trends and even these goals are not being met. For instance, the supposedly compact scenario adopted by the region deviates hardly at all from existing growth trends, which regional planners had clearly identified as untenable and requiring drastic change. On the other hand, the region's goal of preserving large swaths of green areas has been achieved without being watered down during goal formulation or implementation. Whereas these findings may appear contradictory, they are not: conservation in the region has been done in a way that does not compromise the potential for growth in the region – at least for the time being. The real test of regional growth management efforts will come in the near future when further expansion meets the “green wall” on the periphery and NIMBY resistance against densification within existing urban areas.

The study suggests that the current structure of regional planning, relying on a partnership between municipal and regional government, has served the region fairly well in building support for the need for growth management and in elaborating growth management vision. However, there is serious doubt about the ability of this system to set ambitious growth management objectives and to see through the implementation of those objectives in the face of social forces attempting to preserve business-as-usual trends in the region.

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# Growth Management in the Vancouver Region

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# Growth Management in the Vancouver Region

## Introduction

Vancouver's unique geography provides a natural opportunity to exercise sustainable development principles. The surrounding mountains, ocean and rivers both stimulate public demand for environmentally sound development and limit the opportunities for irresponsible growth in the region.

Indeed, the Vancouver region is widely recognized as a jurisdiction with highly progressive growth management plans and policies. One of the main and most consistent motivations behind this admirable planning work has been the continuing desire to stem "sprawl" and thereby preserve the region's ecological features, reduce car use and the associated air pollution, and maintain a high quality of life. Few other large metropolitan areas in North America can claim to have such a comprehensive and enduring planning vision.

While many reports and journal articles laud the region for its planning accomplishments,<sup>1</sup> few have bothered to assess real performance on the ground. One of the reasons for this is undoubtedly that information on regional performance is not readily available – there has been no comprehensive monitoring framework in the region and existing data are hard to standardize and scattered among a variety of municipal, regional and provincial offices.

Given this paucity of performance-related information, the present study sets out to:

- describe the regional growth management policies and plans that have been elaborated in the Vancouver region since the 1970s;
- identify the goals set out by these plans;
- gather information on whether the goals are being met; and
- reflect on the reasons for successes and failures in this regard.

This case study builds on the data collected by the author for an earlier study on intensification Canada's largest urban regions.<sup>2</sup> Additional information for this case study was collected in January and February 2000 through

- telephone interviews with municipal officials at the GVRD, TransLink and the Agricultural Land Protection Commission;
- analysis of planning and policy documents supplied by the interviewees; and
- a review of relevant articles appearing in the daily *Vancouver Sun* from 1990-1999.

## Regional Growth Management and Sustainability Issues

There is a substantial overlap between the concepts of sustainable development and growth management. Both are concerned with optimizing the development of the urban area as an environment for meeting human needs while minimizing negative impacts.<sup>3</sup> Of the two, however, sustainable development is the broader concept. Included within its purview are ecological concerns related to resource consumption, energy efficiency, biological diversity and integrity; social concerns such as opportunities for democratic participation, access to services and social equity; and economic concerns such as the need for a strong, locally-integrated economy, meaningful work that does not harm the environment, and sufficient leisure time.<sup>4</sup>

Although certainly compatible with the concept of sustainable development, growth management is usually associated with a rather narrower agenda. It can be defined as "the mitigation of the impacts of growth in order to improve or maintain the quality of life."<sup>5</sup> The "quality of life" has traditionally meant

dealing with traffic congestion, ensuring a supply of affordable housing, preserving open space and maintaining air quality.<sup>6</sup> A review of newspapers over the 1990s indicates that public concerns in the Vancouver region reflect these core growth management issues.

The region has undergone rapid population growth over the last 30 years, going from a 1971 population of 1,082,187 to 1,831,665 in 1996, a cumulative increase of almost 70 percent. Only 11.7 percent of this growth was in the City of Vancouver itself<sup>7</sup> and only 19.7 percent occurred in the metropolitan core (Vancouver plus Burnaby and New Westminster). Over 80 percent of the expansion was in the areas outside the core, chiefly in the suburban municipalities of Surrey, Richmond, Delta and Coquitlam, and the Township of Langley.<sup>8</sup> From 1979 to 1996, over 7,000 hectares of land (mostly rural residential) were converted to urban uses in the region, an increase of over 21 percent in the urban land base in only 17 years.<sup>9</sup>

**Table 1: Population Growth in the GVRD, 1971-1996**

	1971	1976	1981	1986	1991	1996
Population	1,082,187	1,166,348	1,268,183	1,380,729	1,602,502	1,831,665
Five-year Increase		84,161	101,835	112,546	221,773	229,163
Percent Increase		7.8	8.7	8.9	16.1	14.3
Cumulative Increase		7.8	17.2	27.6	48.1	69.3

This growth and decentralization in the region over the last decades has given rise to unprecedented conflicts over land use. Attitudes towards development have been influenced by a strong public attachment to the city’s spectacular natural setting, a combination of mountain peaks and ocean vistas. Concern over the loss of habitat and recreational and conservation areas has created public opposition to the spread of urbanization onto sensitive or valued green spaces such as wetlands and mountain slopes.

In Delta, for instance, a proposed development on the Spetifore Lands produced intense conflict in the late 1980s after the area was approved for withdrawal from the Agricultural Land Reserve by the provincial government. In Richmond, a bitter and protracted struggle was waged between the Save Richmond Farmland Society and the municipal council over development of the Terra Nova farmlands. These conflicts have helped to raise the issue of appropriate development patterns in the region, and have stimulated policy action in favour of more compact communities.

Despite the fact that the Vancouver region is not a highly industrialized city, it has some serious air quality problems. Sea breezes carry pollutants such as oxides of nitrogen and volatile organic compounds from the urbanized areas near the seaboard up the Lower Fraser Valley “funnel”. The result is occasional episodes of severe ozone pollution in the region, especially up the Fraser Valley. Motor vehicles are the area’s largest single source of air pollution, accounting for about two-thirds of pollutants.<sup>10</sup>

Indeed, one of the key issues associated with existing growth patterns in the region is transportation. Residents frequently point to congestion on commuter highways into the regional centre as a major public issue compromising their quality of life. Congestion also spills over into city streets as commuters look for alternative routes. Air pollution and traffic congestion, along with a growing environmental lobby against contributing to greenhouse gases and global warming, has made automobile dependency a major issue in the region and throughout the province.<sup>11</sup>

Housing choice and affordability is also an important concern. Population and economic growth in the region has been associated with soaring housing prices and low rental vacancies. As well, the general aging

of the population is giving rise to an unmet demand for housing that is highly accessible to amenities and services – a type of housing that is difficult to find in car-dependent suburban areas.<sup>12</sup>

These perennial growth-related issues have formed the core concerns around which regional planning in Vancouver has been undertaken for the last 25 years. The key elements in these efforts have consistently been concentrated on:

- achieving more compact population growth, focused on the Burrard Peninsula and surrounding areas;
- encouraging more “complete” communities with a better balance of population and employment;
- preserving agricultural, resource, and habitat lands;
- developing a transit-supportive urban structure based on higher average densities and regional centres; and
- favouring a modal shift towards transit and non-motorized means of transportation, e.g., through demand management.

The following section provides an overview of growth management efforts in the region.

## **Background on Growth Management in the Vancouver Region**

Planning and the management of growth in the Vancouver metropolitan area involves a host of institutions at all levels of government operating on a variety of geographical scales. At the local level are the municipalities that have control over the zoning, urban design and local infrastructure decisions that determine the fine grain of urban development. On the bioregional level, the federal and provincial governments are cooperating on the Georgia Basin Ecosystem Initiative, which promotes public awareness and “action plans” on sustainable communities. This report focuses on the growth management efforts of the regional-level government, the Greater Vancouver Regional District, which has the most comprehensive growth management framework.

### ***The Greater Vancouver Regional District***

The GVRD has 21 municipalities and encompasses almost the entire Census Metropolitan Area. The board of governors is indirectly elected from member municipalities and the municipalities are billed for services provided by the regional government, such as water treatment and waste management. The GVRD uses a consensus model whereby the region only assumes functions when consensus is reached among municipalities that this is a good idea.

The GVRD was created in 1967 as one of four regional districts resulting from the break up of the Lower Mainland Regional Planning Board (LMRPB), itself created by the province in 1948. The LMRPB had adopted an official plan for the vast lower mainland planning area in 1966. But because it could be used to criticize provincial land use and infrastructure investment decisions, the regional official plan quickly became a source of friction with the provincial government. With almost half the provincial population residing within the Board’s jurisdiction, the provincial government decided that a decentralized administrative and planning system would be more desirable from a political point of view. The Board was dissolved in 1968 by the province and its functions were taken over by the four regional districts.

Having inherited the Lower Mainland Regional Planning Board’s planning mandate, the GVRD set about producing a regional plan. After an elaborate consultation process, the GVRD approved the first Livable Region Plan in 1975. This was a growth management strategy that included

- a vision of a more compact urban region based on improved transit and reduced car use;
- population growth targets for each municipality in the region with growth concentrated in metropolitan core and constrained up the Fraser Valley;
- job growth directed to regional town centres second-order municipal town centres connected by high quality transit; and

- a regional green system made up of regional recreational lands and environmentally valuable lands.

In 1983, a newly re-elected Social Credit government eliminated the planning powers of the regional districts, on the grounds that they were trespassing on municipal jurisdiction. The regional district decided to maintain a small “development services” division that provided data, but made no plans and the Livable Region Plan became advisory only, without statutory authority. This development was to cast a long shadow over future regional planning efforts.

In 1989, strong growth pressures in the region prompted the GVRD to embark on an ambitious program to update the Livable Region Plan. By this time, the district had evolved a new approach to regional coordination based on public education and consensus building. Preparation of the new plan involved an extensive public consultation process that lasted for over five years, including conferences, workshops, public meetings, phone-in shows, cable television programmes, mail-out questionnaires and written briefs. The process was punctuated by the publication of documents that provided an increasingly detailed picture of what participants wanted the region to look like in 30 years (2021): “Creating our Future”, “Choosing our Future”, and “Steps to a More Liveable Region”.

As part of this process, a number of growth options were identified and evaluated, and one was chosen as the basis for the new plan. At this point, the regional district turned its attention to building a consensus among member municipalities on how to flesh out the vision in terms of urban structure, protected areas, housing targets, and population and employment distribution. The resulting Livable Region Strategic Plan was approved in principle by the GVRD in December 1994 and finally adopted in January 1996.

### ***Growth Strategies Act***

When the Livable Region Strategic Plan exercise was begun in 1989, it was assumed the resulting plan would have voluntary status only. The region had no authority to force municipalities to incorporate the regional targets into their official community plans. By the time the plan was adopted in 1996, however, things had changed. In 1991, the provincial NDP won office and almost immediately started work on legislative changes that would give regional plans more authority. This led to the 1995 passage of the Growth Strategies Act.

The act represented an attempt to strengthen regional planning institutions. It required municipalities to respect regional plans in their official community plans and required public investment and other decisions made by the province to correspond to the regional plans. In turn, the regional plans now had to incorporate provincial goals of avoiding sprawl, minimizing auto use, and protecting environmentally sensitive areas.

The Growth Strategies Act provided for two stage regional planning centred on preparation of Regional Growth Strategies and Regional Context Statements. A Regional Growth Strategy presents the regional vision. It is supposed to provide population and employment projections and proposed actions to meet the needs of the projected population, including actions for housing, transportation, regional district services, parks and natural areas and economic development. Normally it is initiated by regional government and referred to municipalities for acceptance, but the province can initiate a growth strategy where there is a compelling need faced that is going unmet because of a local reluctance to act.

Regional Context Statements are prepared by the municipalities in the region as part of their official community plans and sent to the regional government for acceptance. In this statement a municipality must show how its plan complies with and applies the Regional Growth Strategy. In cases where the plan is not consistent with the strategy, the regional context statement must show how the plan will be brought into conformance with the strategy.

Essentially, this system is based on “horizontal” rather than “vertical” relationships between the re-

gional district and its member municipalities. The municipalities buy into a region plan and are then required to reflect the plan in their own planning documents. Where unresolvable disputes arise between municipalities and the regional body, the Growth Strategies Act allows the province to step in to mediate regional planning issues. The process appears to be inspired by the American growth management concept of “cross acceptance” and the mediation of differences rather than the more top-down models of regional planning typical of central Canada. The process ensures the creation and adoption of a regional plan with a high degree of support among member municipalities.

In February, 1996, the province deemed the GVRD’s Livable Region Strategic Plan a growth strategy under the act, even though it was written prior to the act and did not include some of the elements stipulated by the act. The act requires that municipalities submit their Regional Context Statements within two years after acceptance of the Regional Growth Strategy. By the time this period had elapsed in 1998, all GVRD municipalities had completed their statements and these had been approved by the GVRD Board. No provincial mediation was required.

**Setting Growth Management Goals**

While a comprehensive examination of all aspects of growth management efforts in the GVRD would be desirable, the present analysis is confined to the three key variables for which quantitative targets were set in official planning documents:

- population growth concentrated in the metropolitan core;





- reduced car dependency; and
- preservation of green space.

In this section, we consider how growth management goals for each of these variables were set.

### ***Concentrated Population Growth***

The first detailed plan for the distribution of population within the GVRD appeared in the 1975 Livable Region Plan. That plan divided the region (smaller at that time because Pitt Meadows, Maple Ridge and the two Langleys had not yet joined) into nine sub-areas, and targeted growth for each based on 13 weighted criteria. In setting the targets, most weight was given to:

- preserving farmland,
- respecting municipal views on maximum feasible densities,
- promoting development near public transit,
- discouraging development in areas having open space, conservation and/or recreation values, and
- promoting development around regional town centres.

The population distribution targets that emerged from this process would have resulted in a development pattern for 1976-1986 somewhat different from trend projections:

- growth on the southern periphery of the region would have been checked;
- almost half the expected growth would have been directed to the Burrard Peninsula and Richmond; and
- the remaining growth would have been directed to the Northeast Sector.

As part of the process leading up to the adoption of the new plan in 1996, the GVRD identified and evaluated the following three options:

- **Current Trends:** based on the growth anticipated in current community official plans, would place most of the urban growth in the region south of the Fraser River, outside the currently urbanized portion of the region
- **Fraser North:** would shift growth to the north shore of the Fraser River, but still outside the currently urbanized portion of the region.
- **Compact Region:** would allow some growth into rural areas outside the already urbanized portion of the region, but would focus growth in the core and inner suburban areas.

The three options were presented at public conferences in 1992 and the public gave it strongest support for the compact region option. Subsequently, the Strategic Planning Committee of the GVRD Board selected the compact option in principle as the basis for regional growth management. This option was consistent with the growth management goals pursued in the 1975 Livable Region Plan: concentrate growth in Burrard Peninsula (Vancouver and Burnaby-New Westminster), North Surrey and the Northeast Sector and build a higher order transit system around regional and municipal town centres.

Although the compact region scenario was the one chosen for implementation, it is important to realize that the definition of this scenario was gradually watered down over the three years between its first elaboration and the final adoption of the plan.

The first statement of the Compact Region Scenario appeared in a November 1992 report on growth management options prepared for the GVRD.<sup>13</sup> In that document, the Compact Region Scenario was represented as a radical departure from existing trends, with 95.4 percent of projected growth to 2021 going into the Compact Metropolitan Area (the already urbanized area of the Burrard Peninsula including Vancouver, Burnaby and New Westminster), the Northeast Sector (including Port Moody, Anmore, Coquitlam and Port Coquitlam), and the northern parts of Delta and Surrey. According to this scenario, by 2021 the population share of the Compact Metropolitan Area would rise from 66.9 percent of the regional total to 79.4 percent.

Not surprisingly, some municipalities – especially those outside the Growth Concentration Area –

reacted negatively to these projections. Growth in the City of Richmond, for instance, was to be severely limited; while the trend scenario anticipated a Richmond population of 217,748 by 2021, the compact scenario required a growth cap at 157,526. Thus, the target would be only some 37,000 above Richmond's estimated 1991 population of 120,335. At growth rates typical of the early 90s for this area, the cap would have been reached in as little as six years.

Nine months later, in August 1993, detailed population and employment distribution targets for each sub-region within the GVRD were published in a GVRD report entitled "Managing Greater Vancouver's Growth." This document redefined the compact scenario such that the Growth Concentration Area was expected to receive only 78.4 percent of the region's total growth to 2021, with 21.6 percent going to suburban areas outside the Growth Concentration Area. If these targets were achieved, 71 percent of the region's population would be located in the Growth Concentration area by 2021 and 29 percent would be found outside.

This change was reflected in the growth targets for the individual municipalities. For instance, the plan allowed Richmond to raise its growth cap from 157,526 to 185,000, almost doubling its allowable population growth. The population and employment targets were incorporated into the GVRD's draft plan, entitled "Livable Region Strategy: Proposal" also published in August 1993.

Response to the draft plan varied widely among the region's municipalities. The City of Vancouver was, on balance, supportive of the draft plan because it promised to stem the decentralization of the region, preserve green spaces outside the city, and reduce commuting into the city.

However, a number of suburban municipalities were opposed to the growth management targets. Although they agreed in principle on the need for growth management in the region, they rejected the region's call for them to intensify already settled areas and prevent growth in greenfield areas. Many suburban councilors and developers feared that diverting population to the regional core would undermine their growth aspirations, reduce the property values of greenfield lands on which development is delayed, increase the price of existing housing, lead to a long-term increase in the local unemployment rate, and discourage provincial funding for transportation and other infrastructure development in their vicinity.

Once again, Richmond was among the protesting municipalities. The city refused to endorse the plan on the grounds that even these more generous limits would unrealistically constrain growth in the rapidly developing suburban municipality. It pointed out that the new proposals would still limit growth at a level almost 40,000 below the city's own municipal plan. Surrey Council voted to reject the GVRD vision on the grounds that it entailed unacceptably high densities in certain areas of the municipality and was out of step with the projected demands for ground-oriented housing. The draft plan called for a drastic reduction (compared to current trends) in the amount of development in south Surrey and adjacent regions in Delta and the Langleys. Instead of permitting growth in these areas from 208,100 in 1991 to 440,400 in 2021, the draft plan envisioned a cap at 307,500. Because Surrey was expected to accept the lion's share of regional growth, this decision threw the fundamentals of the Livable Region Strategic Plan into question.

Resistance to the draft plan led to a renegotiation of the plan targets. Memos of understanding were exchanged between several suburban municipalities and the GVRD. For instance, Richmond's growth allotment was boosted to 212,000, just short of the expected population growth in the absence of a growth management plan. The results were incorporated into the final version of the Livable Region Strategic Plan, which was approved in principle by the GVRD Board in December 1994.

Compared to the numbers presented in the 1993 proposals, the new figures permitted more development in the outer suburban areas while lowering the targets for the Growth Concentration Area. The target population for the Growth Concentration Area was reduced from 1,972,300 in the draft plan to 1,832,000. This meant that the Growth Concentration Area's share of the regional population growth was now down to

73.4 percent,<sup>14</sup> and the growth to be allowed in the outlying areas had climbed from a mere 4.6 percent as projected in the original definition to 26.6 percent of the total growth. According to the definition of the Compact Region Scenario, only 68.5 percent of the region’s population would be within the Growth Concentration Area by 2021.

**Table 2: Changing Definition of the Compact Region Scenario: Percent Expected Regional Growth in Growth Concentration Area**

Document	Date	Percent Growth in Growth Concentration Area	Percent Growth outside Growth Concentration Area
Growth Management Options	November 1992	95.4	4.6
Managing Greater Vancouver’s Growth	August 1993	78.4	21.6
Livable Region Strategy: Proposals	August 1993	78.4	21.6
Livable Region Strategic Plan	January 1996	73.4	26.6
Current Growth Management Scenario	February 2000	69.6	30.4
Actual Trends 1986-1996		65.5	34.5

Since the adoption of the Livable Region Strategic Plan in 1996, planners at the GVRD have informally modified the growth management targets in the light of actual population and employment growth trends in the region and their assessment of municipal capacity to accept or limit growth. These modified targets are not part of the official plan for the region, but they are used by planners to adapt their expectations to the changing realities of the region.

The version that was current in February 2000 indicates a further erosion in the percent of population growth to be accommodated in the Growth Concentration Area. Although the absolute figure for the Growth Concentration Area remains roughly what it was in the Livable Region Strategic Plan (1,828,165), the total population of the GVRD is anticipated to be about 100,000 greater than that envisioned in the plan and 100 percent of this increment is to be accommodated in the suburban areas outside the Growth Concentration Area. The result is that only 69.6 percent of the population growth is expected to take place in the Growth Concentration Area, with 30.4 percent outside that area.

Clearly, the successive targets outlined here represent a gradual dilution of growth management aspirations for the area. If we compare the current compact scenario to recent growth trends in the region, we are confronted with an alarming fact: the compact scenario deviates little from the growth trends that existed in the region while the Livable Region Strategic Plan was being formulated, trends that regional planners had identified as undesirable.

***Less Car Dependency***

The 1975 Livable Region Plan contained a section entitled “Build an Improved Transit-Oriented Transpor-

tation System,” that clearly linked population and employment growth management objectives to strategic improvements in the transportation system. The plan set out target travel characteristics for the region, including reduced car travel (compared to those levels that would be expected with unmanaged growth) and an increase in the transit modal share from 10 percent of daily trips to 25-30 percent by 1986. This was to be achievable by carrying a majority of people heading into downtown or regional town centres by transit. To this end, the plan proposed a number of transit improvements focussed on the development of light rapid transit linking the regional town centres. The plan also called for expansion of commuter rail to the suburbs and improvements to the bus system throughout the region.

Although the 1975 Livable Region Plan included a transportation component, it fell well short of a comprehensive transportation plan for the region. It would be another 20 years before the need for such a plan was addressed. Transport 2021 was a medium- and long-range transportation plan developed in parallel with the Livable Region Strategic Plan. It was a co-operative project conducted by a committee made up of representatives from the provincial Ministry of Transportation and Highways, the Ministry of Economic Development, Small Business and Trade, BC Transit, BC Ferries, municipalities, and GVRD staff. The GVRD adopted the plan in 1994.

The principles and vision behind the Transport 2021 plan were essentially identical to those found in the transportation section of the 1975 Livable Region Plan. Transport 2021 aimed to reduce reliance on the private automobile and to provide greater choice in the mode of transport through strategic expansion of public transit and opportunities for walking and bicycling.

The plan set a number of specific numeric targets including those shown in the following table.

**Table 3: Selected Targets of Transport 2021**

Measure	1991 Actual	2006 Target	2021 Target
Transit share of rush hour trips	13 percent	17 percent	18 percent
Car occupancy	1.28	1.35	1.33

The 1996 Livable Region Strategic Plan included a series of policy statements intended to reduce car dependency and increase transportation choice in the region. This included support for transportation demand management, improving transit facilities and services (especially in areas targetted for “above trend” population growth), and urban design measures that would favour transit, bikes and pedestrian travel. The plan did not set forth a comprehensive set of quantitative targets. It did, however, express one numeric target: that rush hour travel across the eastern boundary of the GVRD be limited to 5500 vehicles north of the Fraser River and 2000 vehicles south of the Fraser River.

***Preserve Green Space***

The Green Zone is another principal component of the 1996 Livable Region Strategic Plan, an extension of the Open Space Conservancy concept from the 1975 plan. The Green Zone sets out areas with great social or ecological value (e.g., open space, wetland, habitat, or resource land) that will be protected from urbanization within the time frame of the plan. This approach to regional planning represented a departure from the normal practice of extrapolating land needs from population and employment trends and then designating whatever land is needed for eventual development in the long-term plan. The Green Zone approach held out the promise of landscape features that would be held permanently in a natural or semi-natural state.

In addition to maintain the character of the designated areas, the Green Zone was created to assist urban containment. Containment was seen as a way to limit expenditures on infrastructure, avoid the ecological and social costs of further sprawl, make possible a good public transit system, and lessen pressures to convert green areas to urban uses.

As part of the strategic planning process, municipalities were invited to submit candidate areas for inclusion in the green zone. The GVRD provided municipalities with guidelines for the exercise – including information on the types of lands that should be considered. By 1992, most municipalities had completed their identifications. While some municipal submissions included maps and precise definitions, others made vaguer commitments. Nonetheless, a total of 173,300 hectares – about two-thirds of the region’s total land area and about one-half the region’s developable lowland area – were put forward by municipalities for inclusion in the Green Zone.

The GVRD then prepared a composite map based on the municipal submissions and presented it at a regional workshop in November 1992. The workshop attendees expressed strong support and the map was included as a component of the draft Livable Region Strategic Plan in 1994. It was adopted along with the rest of the plan in 1996.

**Goal Implementation and Outcomes**

***Concentrated Population Growth***

A key feature of both the 1975 Livable Region Plan and the 1994 Livable Region Strategic Plan was the effort to direct population growth. A review of actual development trends compared to the 1975 targets will provide some insight into the effectiveness of efforts to implement the initial growth management plan.

The actual 1986 Census figures in Table 4 show that the growth targets set out in the 1975 plan went largely unmet. First of all, the region (smaller than the current GVRD because Langley City, Langley Township, Pitt Meadows and Maple Ridge had not yet been added) experienced a smaller rate of growth than anticipated by the Livable Region Plan. The population in 1986 was only 231,270 greater than in 1971, rather than the 449,990 that had been predicted. Some of the predicted growth did take place just outside the GVRD of the day, for instance in Langley City, Langley Township and Pitt Meadows. This points to more sprawl in exactly the direction that the plan attempted to avoid– on the south shore of the Fraser up the valley.

**Table 4: Population Trends, Targets and Actual Growth, 1971-1986**

	1971 Census	1986 Projected Trend	Percent of Total Growth	1986 Planning Target	Percent of Total Growth	1986 Census	Percent of Total Growth
Vancouver	429940	474455	9.9	489500	13.2	434752	2.1
Burnaby - New Westminster	168495	226070	12.8	248500	17.8	185133	7.2
North Shore	127115	182245	12.3	167000	8.9	140205	5.7
Northeast Sector	84560	159600	16.7	154500	15.5	115054	13.2
Richmond	62130	120700	13.0	130000	15.1	108492	20.0
Delta	45935	98000	11.6	77500	7.0	79610	14.6
Surrey-White Rock	108860	214630	23.5	209200	22.3	195834	37.6
GVRD	1,027,810	1,477,800	100.0	1,477,800	100.0	1,259,080	100.0

Secondly, the plan was hoping to steer 31 percent of new growth into the Burrard Peninsula (Vancouver, Burnaby and New Westminster), but only 9.3 percent went there. Attempts to reduce growth in the Surrey-Delta area were also unsuccessful. Delta was slated to receive only 7.0 percent of the region's growth, but it actually received 14.6 percent, a number greater than the expected trend in the absence of growth management policies. Likewise the Surrey-White Rock area accommodated a whopping 37.6 percent of the new growth in the region when it was supposed to see only 22.3 percent of that growth and again, the actual growth was far in excess of the trend growth foreseen for the area.

While it is too early to judge the fate of the new 1996 Livable Region Strategic Plan, there are signs that the population targets for the GCA are not being met. The 2000 Annual Report on the Livable Region Strategic Plan indicates that for the years 1997-99 an average of only 64.3 percent of growth in the GVRD was being directed to the Growth Concentration Area, not only significantly less than the 73.4 percent target expressed in the plan, but also below the 1986-1996 trend of about 65.5 percent.

Planners at the GVRD report some "slippage" between the Regional Context Statements adopted by the region's municipalities and actual development approval decisions on the ground. Some projects being approved by member municipalities do not conform to the logic of the regional plan. For instance, Surrey announced in 1997 that it was "shelving" its commitment to the Livable Region Strategic Plan because the plan conflicted with the city's vision of more deconcentrated development.<sup>15</sup> The municipality is approving projects at a faster rate than envisaged in the Livable Region Strategic Plan in its southern sector while avoiding densification in the northern sector. Likewise, in Langley and other outlying areas where growth is supposed to be limited, development approvals are exceeding growth goals. However, in the opinion of GVRD planners, the deviations are not sufficiently large to undermine the integrity of the plan.<sup>16</sup>

Other municipalities are adopting the Livable Region Strategic Plan objectives and attempting to implement them. For instance, the City of Vancouver's official community plan, adopted in 1995, makes provision for extensive intensification of the existing urban fabric. Population figures show that the city increased its population between 1995 and 1999 by about 34,000. Thus, the city has increased its density, as foreseen by the Livable Region Strategic Plan. However, most of the increased density appears to have been accomplished through major redevelopment projects such as around False Creek and Coal Harbour. The other principal form of densification – adding population to the vast stretches of relatively low-density residential neighbourhoods that characterize the city – appears less promising. This raises concern that the densification process will be arrested once the available redevelopment sites (chiefly former industrial lands) are exhausted in the city.

### ***Less Car Dependency***

As mentioned above, the 1975 Livable Region Plan laid out quantified targets for limiting the growth in car use. Although these offer a convenient way to assess performance of the plan, up-to-date data that would allow a comparison between current travel characteristics and the 1975 plan targets are not available. The following assessment of goal implementation in transportation is therefore limited to Transport 2021 and the 1996 Livable Region Strategic Plan.

In order to accomplish the strategic goal of expanding transportation choices in the region, the Transport 2021 plan set out four basic policy instruments:

- land use controls,
- transportation demand management,
- transport service level adjustments, and
- transport capacity expansion.

### ***Land Use Controls***

Transport 2021 acknowledged that achieving a more transit oriented transportation system would depend on

the success of growth management efforts, in controlling the spread of population and promoting higher densities. However, assessing performance on this variable is hazardous for two reasons. First, neither the 1975 nor the 1996 regional plans set out concrete density targets. Secondly, where density is mentioned in regional planning documents, definitions are so widely divergent that it is misleading to compare figures over time and to use them as a reliable measures of performance. Thirdly, there is disagreement over the wider significance of density figures and the appropriateness of various density targets.<sup>17</sup> However, a draft paper entitled *Growth and Change in Greater Vancouver* produced for the GVRD planning department accepts a density of about 35 people per hectare as a benchmark separating auto-dependent low density urban form from a more transit-supportive one.

In the City of Vancouver, average residential densities are comfortably above this level (at about 44 people per hectare) and are rising as population in the city continues to grow. Elsewhere in the Growth Concentration Area (e.g., Burnaby) development is taking place at a level consistent with viable bus services. In the GVRD outside the Growth Concentration Area, densities are probably in this ballpark in designated town centres or along Sky Train corridors (although three of the nine town centres remain in the low-density category according to the GVRD's draft study). Outside these areas, however, development densities are thought to be significantly below the level at which transit can be delivered economically,<sup>18</sup> probably around 20 people per hectare or less.<sup>19</sup> Thus, although densities are moving in the appropriate direction in certain areas of the GVRD, low densities on the metropolitan fringe are helping to deepen car dependency in the region.<sup>20</sup>

### ***Demand management***

The Transport 2021 plan called for the use of policy instruments to reduce automobile dependence in the region and reverse urban sprawl. It proposed a variety of instruments, such as tolls on bridges coming into Vancouver, a much higher gas tax, increased parking charges, and disincentives to employers who offer free parking. These measures would encourage population growth in the central area rather than in auto-based developments on the urban fringe. However, almost no demand management programmes to discourage single occupancy vehicle use have been put in place in the six years since Transport 2021 was adopted.<sup>21</sup>

### ***Transport service levels***

The plan called for better transit services, and better access to these services, throughout the region, especially in the Growth Concentration Area. In fact, however, the quality of transit services in the region declined over the 1990s. For example, aggregate service hours and kilometres travelled by transit vehicles per year increased by only 9 percent although the population increased by almost 18 percent between 1993 and 1998.

### ***Transport capacity***

Buses are the mainstay of the transit system in the GVRD. But the number of buses serving the region did not keep pace with population growth. For instance, between 1993 and 1998, the population grew by almost 18 percent but the number of buses grew by less than 5 percent. Public money was instead committed to expanding the SkyTrain system, which absorbs over 30 percent of the transit budget in the region but moves only 15 percent of riders. Throughout the period, heavy investment continued in the road system: High Occupancy Vehicle lanes, road widenings, extensions, turning lanes, and so on.

Given the lack of implementation measures, it is not surprising that the system has not responded as foreseen in Transport 2021. One of the key transportation objectives of both the 1975 and the 1996 regional plans was to reduce car dependence in the region. In fact, however, car ownership grew at a much faster rate than the population throughout the 1970s and 1980s, with serious consequences on the rate of traffic growth. Per capita ownership leveled off in the 1990s at about 580 cars for every 1000 people or about 1.5 cars per household, usually considered a saturation level.<sup>22</sup>

Whereas transit ridership declined over the 1990s in most Canadian metropolitan areas, it steadily increased in the GVRD. It is not clear, however, whether any of this gain can be attributed to regional planning and transportation efforts. At least one observer of the situation believes that Vancouver’s transit performance can be largely attributed to the strong population and employment growth in the region.<sup>23</sup> Indeed, when looked at on a per capita basis, ridership actually declined in Vancouver: from 64.8 trips per year in 1992 to 62.2 trips in 1998.

Another goal of Transport 2021 was to increase car occupancy substantially in order to help reduce the number of cars on the road. However, occupancy has actually fallen since the plan was formulated, from 1.14 people per vehicle in 1989 to 1.12 in 1999.<sup>24</sup>

The modal share increase for transit targetted in the region’s transportation plans did not materialize. By 1999, transit’s share stood more or less where it had been in the early 1970s when the Livable Region Plan was being formulated – about 10 percent of trips in the region.<sup>25</sup>

As for the goal of limiting the number of vehicles crossing the eastern boundary of the GVRD during rush hour, travel behaviour since the Livable Region Strategic Plan goals were formulated in 1992 show that the targets are likely to be missed by a wide margin. If the rate of increase in vehicle crossing continues, the target for the South of Fraser will be surpassed by 2007 and for North of Fraser, the target will be surpassed by 2018. This observation comes despite the fact that the anticipated boom in population growth east of the GVRD has not materialized.<sup>26</sup>

**Table 5: Vehicles Crossing Eastern GVRD Boundary. Livable Region Strategic Plan Targets and Actual Performance.**<sup>27</sup>

	1992 Actual	2021 Target	1996 Actual
South of Fraser River	2,685	5,500	3,240
North of Fraser River	715	2,000	835

***Preserve Green Space***

Following the adoption of the Livable Region Strategic Plan, the GVRD undertook to encourage municipalities to formalize their Green Zone identifications. Designated lands had to appear as part of the municipalities’ Regional Context Statements and to be submitted for approval to the GVRD. According to GVRD planners, the Regional Context Statement process forced municipalities that had been relatively vague in their Green Zone submissions back in 1993 to clarify just what was to be included in the Green Zone. These clarifications resulted in some minor “removals” from the zone, but as the table below shows, the amounts of land included in the Green Zone at the end of the Regional Context Statement process actually exceeded that originally included in the Livable Region Strategic Plan. When the Pitt Meadows/Maple Ridge area is discounted from the following table (they weren’t part of the GVRD when the Livable Region Strategic Plan was passed) the Green Zone is 600 hectares larger now than in 1996.

The Green Zone includes the farmland in the Agricultural Land Reserve; publicly owned parkland; environmentally sensitive areas protected by federal, provincial or municipal regulation; and other lands identified by member municipalities within their boundaries. Therefore, long-term protection of these lands will depend on the coordinated action of a large number of government agencies.

The variety of governments involved means that the various elements of the Green Zone enjoy different levels of protection. The GVRD owns some of the land in the Green Zone (e.g., the watersheds in the north of the region from which the GVRD draws its drinking water and a few regional parks), but beyond this form of direct control it has no special powers to protect land in the Green Zone. Essentially, it relies on other government agencies and private organizations to protect the integrity of the zone and restricts itself to the role of information coordinator.



Much of the land in the zone is protected by the provincial government. From 1991 to 1999, the number of hectares of provincially protected habitat within the Green Zone almost tripled, from 30,430 to 91,730 hectares. This is just under one half the total Green Zone and amounts to about one third of the total land area of the GVRD. This increase was largely as a result of province-led purchases of habitat under the Nature Legacy Programme. Provincial regulatory requirements also help protect Green Zone lands. For example new regulations require minimum setbacks and buffers to protect stream ecology.

**Table 6: Green Zone Inclusions. 1993 Targets and 1999 Achievement (hectares)**

Sector	Green Zone Goals (1993)	Actual Green Zone (1999)	Difference
North Shore	49,000	51,000	2,000
Burrard Peninsula	3,900	4,400	500
Northeast Sector	60,200	60,100	-100
Bowen Island	6,000	4,400	-1,600
Richmond	5,300	5,500	200
South of Fraser	25,200	25,000	-200
Langleys	23,700	23,500	-200
Pitt Meadows/Maple Ridge	NA	26,000	26,000
Total	173,300	199,900	26,600

Note: an additional 22,300 hectares of tidal flats and wetlands outside municipal jurisdiction, are also considered part of the Green Zone.

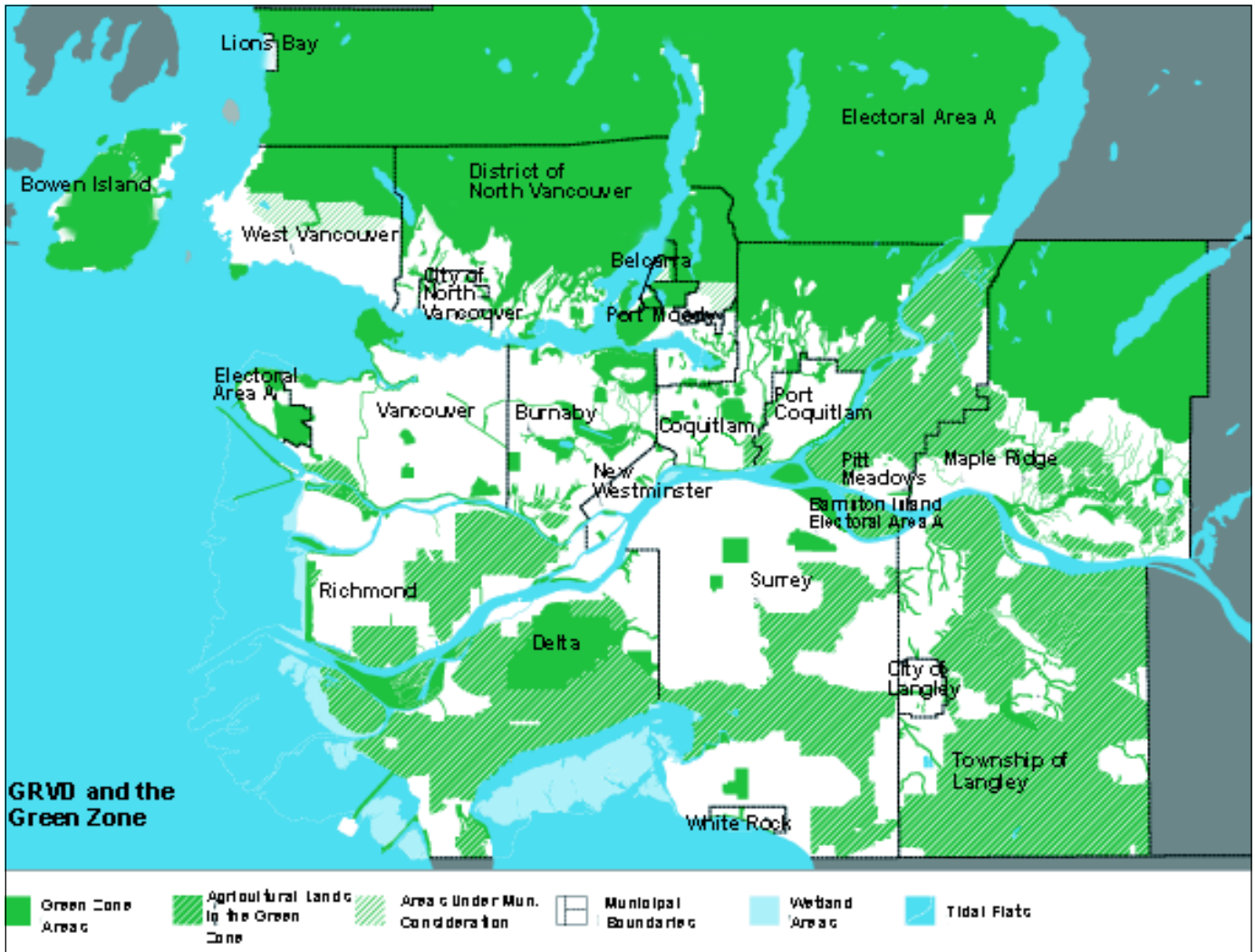
Some smaller Green Zone lands are protected only by municipal zoning regulations. These areas, which include hazard lands and those designated as rural, parkland or environmentally sensitive, are considered to be less well protected because municipal councils can change the designation on such lands when development pressures rise. However, the Growth Strategies Act strengthened the protection of these lands because any municipal attempt to remove lands from the Green Zone would henceforth have to be approved by the GVRD because it would entail a modification of the municipality's Regional Context Statement.

A key mechanism for protecting land in the Green Zone is the Agricultural Land Reserve. The zone includes about 53,000 hectares (about one quarter of the total land area in the zone) of highly productive farmland. This land area represents only 2 percent of all farmland in the province, but produces 25 percent of the province's agricultural output. Likewise, the GVRD represents only about 2 percent of the province's land surface, but accommodates about half the province's population growth. Thus, there is great potential for conflict over the urbanization of farmland in the region.

In the 1960s and early 1970s hundreds or thousands of hectares of productive farmland in the region were being converted to urban use every year. In response to this and similar situations elsewhere in the province, the government created the Agricultural Land Reserve in 1973. This defined 4.7 million hectares of agricultural land where agricultural uses would be favoured and non-agricultural uses would be regulated.

The province also set up a commission to oversee applications from landowners to remove land from the reserve. In the first twenty years, 30,000 such applications were received and 103,000 hectares were removed from the reserve, a loss of 2.2 percent.<sup>28</sup>

The land reserve has proved to be a stabilizing influence in the region and has undoubtedly helped to contain urbanization. For instance, only 15.6 hectares were removed in 1994 and 357 hectares in 1995.<sup>29</sup> In 1998, the Agricultural Land Commission considered 23 applications in the GVRD: 200 hectares under application were approved for release while 130 ha were refused.<sup>30</sup> This compares favourably with other urban regions in Canada. Manitoba, for example, continues to lose an average of 1,215 hectares of farmland



each year due to subdivision on Winnipeg’s periphery. No other province, with the partial exception of Quebec, has an agricultural land preservation regime as comprehensive or successful as BC’s.

**Successes, Failures and Explanatory Factors**

***Concentrated Population Growth***

The above analysis shows that the growth concentration goal – the principal objective of both the 1975 and the 1996 plans – was gradually diluted as regional planners were forced to retreat from dramatic visions of urban containment. As mentioned above, the 2000 Annual Report on the Livable Region Strategic Plan indicated that actual performance in 1996-1999 on the key variable of percent growth in the Growth Concentration Area was not encouraging – an average of only 64.3 percent of growth in the GVRD was being directed to the Growth Concentration Area. The 35.6 percent of growth that occurred outside the Growth Concentration Area represents an almost ten-fold increase over the original objectives in the Compact Region Scenario.

This clearly suggests that municipalities are largely following their own development paths, regardless of regional planning efforts.<sup>31</sup> There is wide agreement that the current structure of regional planning, relying on a partnership between municipal and regional government, has served the region fairly well in building support for the need for growth management and in elaborating growth management vision. However, there is serious doubt about the ability of this system to set ambitious growth management objec-

tives and to see through the implementation of those objectives in the face of social forces attempting to preserve business-as-usual trends in the region.

In suburban municipalities slated for less growth than would otherwise be the case, resistance to the Livable Region Strategic Plan appears to emanate from local interests who benefit from growth, including local politicians, developers, builders and other real estate interests – what the literature calls the “growth machine”.<sup>32</sup> In municipalities where greater– than-trend growth is planned, such as the City of Vancouver, Burnaby, and New Westminster, a different dynamic appears to be undermining planning targets – recalcitrant resident groups are trying to preserve the existing character of their neighbourhoods and object to projects that would help achieve the planned density increases.

It is these observations that the advocates of a more compact region have highlighted. They claim that the Growth Strategies Act has not really given the regional districts the authority they need to manage growth effectively and to divert regional growth away from ingrained patterns. For instance, the Agricultural Land Commission has pointed out that the Act does not provide real provincial policy leadership and leaves considerable uncertainty about the practical outcomes of the regional planning process. As well, it lacks strong measures to ensure that provincial agencies support the regional plans.<sup>33</sup>

The Growth Strategies Act has also been criticized for failing to give regional governments sufficient leverage over member municipalities in implementing the plan. “The similarities of these proposals to what is in place in Oregon and Washington is striking, but with the important difference that municipal funding in those jurisdictions is tied to participation in an agreed and approved regional plan”.<sup>34</sup> In the GVRD, there is no direct transfer of revenues to municipal treasuries that could be used as a lever to secure municipal cooperation on growth management objectives, but the district does have control over key services (such as transit) and infrastructure investments (such as major sewer, water works and transportation improvements) that are preconditions for growth in any given area of the region.

These services and investments are supposed to be consistent with the growth management goals expressed in the Livable Region Strategic Plan. In theory if municipalities are deviating substantially from those objectives in their zoning and development approval decisions, the district might refuse to service this growth or provide for growth-supportive facilities. This, however, is not the practice.

The recent GVRD publication, *GVRD Trends*,<sup>35</sup> notes that the regional growth patterns do not match those aimed for in the Livable Region Strategic Plan. But instead of proposing that regional investments be withdrawn from areas in violation of the growth management objectives, it concludes that the Region’s transportation operations should be adapted to better serve the new situation, including new engineering investments and new roads. Planners at the GVRD point out that the board’s mandate requires the district to provide services to member municipalities as they are needed and that as a federation of municipalities, the GVRD board is unlikely to enforce its planning objectives by selective provision of services.<sup>36</sup>

Thus, the consensus that the GVRD was able to achieve around the growth distribution targets is to some extent illusory. A closer look at the targets themselves show how they helped to achieve consensus while undermining implementation of planning objectives. First, the officially sanctioned targets do not express any quantitative objectives for individual municipalities (this aspect of the background reports was quietly dropped from the official plan). Thus, each jurisdiction can argue that there is a leeway in the translation of the regional plan into local planning decisions. Secondly, the target/horizon year for the regional plan is 2021, with no milestones specified for the intervening period. This leaves municipalities to make population distribution decisions that are inconsistent with the plan under the guise that they will eventually catch up to their 2021 targets.

### ***Less Car Dependency***

The transportation side of growth management in the GVRD is a similar story of contradiction between

ambitious planning goals and disappointing results. The past 25 years of planning documents are characterized by the themes of compact, transit-supportive urban structure with high-quality transit links between urban centres and a shift away from car dependency. Unfortunately, this vision has been realized only in a very limited form.

A primary reason for this disappointing performance has to be the chronic underfunding of transit infrastructure in the region. In the early 1970s, the Livable Region Plan noted that the GVRD has had one of the lowest per capita transportation expenditures of any North American metropolis. In the mid-1990s, BC Transit's five-year service plan for the GVRD indicated that it has less than half the \$785 million necessary to meet the capital improvement requirement of Transport 2021 and continued funding cuts to transit were forcing an even greater retreat from the projected infrastructure needs of the region. Yet the province continues to facilitate urban sprawl by providing hundreds of millions of dollars for regional road investment and commuter railways to distant suburbs, while well-used transit services in established areas of the GVRD languish for lack of investments. The provincial commitment to SkyTrain is widely seen in the planning community as an unwise use of scarce transportation dollars, drawing investment away from improving the bus system.<sup>37</sup>

Another key explanatory factor is the lack of coordination between land use and transportation planning in the region. Regional transportation and transit planning were not functions assigned to the GVRD when it was created in 1967. The provincial government maintained control of capital expenditures and facility planning. Under provincial management, transportation in the region has suffered not only from chronically inadequate funding for transit improvements in the region, but also from facility planning that has not necessarily been motivated by a desire to support regional growth management objectives. For instance, the 1979 decision to build the SkyTrain was made unilaterally by the province, as was the choice of technology and route. The province's primary motivations were linked to serving the Expo '86, creating jobs and attracting federal funding. Objections from the GVRD were ignored.

Some of these issues will be addressed by recent developments in transportation planning in the region. The linkage between regional land use and transportation planning was strengthened by the 1998 agreement between the province and the GVRD to devolve regional transportation planning authority to a regional body controlled by municipalities in the GVRD. The Greater Vancouver Transportation Authority (later renamed TransLink) was given responsibility for planning, developing and financing transportation facilities and services within the region, including overseeing transit system in the region and controlling traffic on major roads. It will get all transit fare revenues in the region, a share of the gasoline tax, parking tax revenues and a share of property taxes in the region. It will also have access to a number of new funding sources, including a registration charge for vehicles and tolls on new facilities it constructs (such as bridges). The vehicle charge could be based on mileage or emissions/engine size, and therefore could itself be both a revenue-raising instrument and a way to discourage excessive car use or size.

As the new agency assumes responsibility for planning and managing the regional transportation system, the provincial role will diminish. However, the provincial government will continue to help fund transit improvements and recent evidence suggests that it may continue to make investment decisions based more on political priorities than on planning realities ("moving votes, not people"). Transport 2021 called for the completion of three rapid transit lines by 2006, including the New Westminster to Coquitlam line, the Central Broadway to Lougheed line, and the Richmond line. The province announced that the SkyTrain would be extended from New Westminster to Vancouver Community College in the Lougheed corridor. This line is part of two lines identified in Transport 2021, but completes neither. The announcement was made without the support of regional authorities.

TransLink recently created a strategic transportation plan for the region. The plan incorporates the basic vision of Transport 2021 (and the Livable Region Strategic Plan) and provides added detail on the management objectives in the short term, pending a coordinated review of long range strategies by

TransLink and the GVRD in 2001. The plan emphasizes the need to move away from car dependence and sets out a financing scenario to show that the region has the wherewithal to pay for its plan.

However, this most recent plan, even if fully realized, will not allow the region to catch up to the objectives set out in older plans. For instance, the new plan aims to improve transit modal share only to 12.4 percent, down from the 17 percent laid out in Transport 2021 and below the 13 percent share reported in Transport 2021 for 1991. This more modest goal is emblematic of the gradual dilution of growth management targets in the region over the last 25 years, as shown by the following table.

**Table 7: Modal Share of Transit (percent)**

	Actual	Target
Livable Region Plan	(1971) 10	(1985) 25-30
Transport 2021	(1991) 13	(2021) 18
TransLink Plan <sup>38</sup>	(1999) 10.6	(2021) 12.4

Moreover, there is considerable doubt as to the ability of the region to achieve even these limited objectives, given its current funding shortfall. A controversial vehicle levy (at least one municipality threatened to leave the GVRD over the issue) that would have helped address the shortfall was approved by regional decision-makers, but the province derailed the proposal by saying it wouldn't help collect the levy. TransLink now faces a \$40 to \$50 million shortfall starting in 2002.

***Preserve Green Space***

Among the four dimensions of growth management explored in this case study, undoubtedly the most successful from an implementation and performance point of view has been the Green Zone concept. Implementation of the concept appears to have proceeded with little dilution or distortion and the outcome is a faithful reflection of the original concept.

This initiative has been successful largely because the concept of the Green Zone is very heavily endorsed by the general population of the area, in particular by urban residents who look upon the zone as a recreational resource and aesthetic refuge from the city. Municipal officials and politicians appear to share in the assumption that the Green Zone should be protected as a recreational and resource area.

Another success factor is perhaps less obvious but equally important. It is that the planning and definition of the zone was a “bottom-up” process, which minimized conflict, predisposed the players to reaching consensus and almost guaranteed successful implementation. Although the GVRD initiated the process, the municipalities proposed specific parcels of land to be included in the zone. This ensured the least possible friction between the GVRD and municipalities and is another example of the consensus building type of regional planning for which the GVRD has become known and admired.

This process also has its drawbacks, however. Because of the “bottom-up” process involved in identifying lands to be included in Green Zone, some concern was expressed at the time that this would exclude some agriculturally and ecologically important features of the region.<sup>39</sup> Indeed, the map of the Green Zone that appears in the Livable Region Strategic Plan suggests that while the sheer quantity of green areas to be preserved within the region is impressive, there is no obvious linkage or integration among the various parcels. From an ecological perspective, such fragmentation may seriously undermine the usefulness of a green system if, for instance, it means that the minimal ranges and migration corridors needed by many forms of wildlife are unmet.<sup>40</sup>

It is also important to qualify the success of the Green Zone initiative by noting that the vast majority of the land that ended up in the Green Zone was already protected through public ownership, provincial park

status or through inclusion in the Agricultural Land Reserve. Municipalities had no choice but to include this land in their designations. In many cases, they did not go much further in designating new land for inclusion.

Moreover, it is important to note that the Green Zone label is somewhat misleading. Most of the lands in the Agricultural Land Reserve lands, and probably a good portion of recreational lands used for soccer and other such activities are not green in the sense of natural or even semi-natural. They may be more awash in pesticides and more heavily populated by exotic species than residential backyards.

Approximately 29,770 hectares of “vacant urban” land were left outside the Green Zone and are or will be available for urban development. This land is only 10 percent of the total GVRD surface area, but amounts to almost exactly half the size of the already urbanized portion of the district (58,780 ha).<sup>41</sup> Thus, while the Green Zone may be an urban containment boundary, it appears to leave quite a bit of room for greenfield development to occur before hitting the Green Zone “wall”.

Planners at the GVRD admit that the Green Zone has not yet been tested. Because there is still enough room for greenfield development, developers and municipalities have not challenged the zone through political or legal campaigns. Real pressures on the Green Zone concept will come as easy development sites outside the zone are used up. Demographer David Baxter of the Urban Futures Institute – the consultant who wrote the earlier cited 1993 GVRD publication, *Managing Greater Vancouver’s Growth* – believes this will happen in 2003.<sup>42</sup> But planners at the GVRD believe the “green wall” won’t be hit until some years later because a substantial share of population growth will be absorbed through densification in the city of Vancouver and elsewhere on the Burrard Peninsula.<sup>43</sup>

It is also noteworthy that although the Green Zone concept is broadly supported in the region, those who bear the cost of preservation are not silent. Property owners, farmers, and municipalities that forgo development revenues complain that they are unfairly burdened by society’s wish to have green and open spaces. These voices are raising the possibility that the Green Zone could be breached if the social value of doing so exceeds the environmental, resource and recreation value of maintaining its current contours.<sup>44</sup>

Removing land from the Green Zone would require a municipality to change its Official Community Plan and apply to the GVRD board to change its Regional Context Statement. This puts a number of administrative and legal obstacles in the way of property owners vying for exclusions from the Green Zone. However, intrepid developers that have the support of their local municipality may be encouraged by the “ghost in the closet” of regional planning in the GVRD.<sup>45</sup> That is the province’s 1983 decision to abolish regional planning when the district tried to overrule a municipality (Delta) on a local development matter.

Land in the Agricultural Land Reserve is thought to be more secure than municipally-protected land because it requires the approval of the Agricultural Land Commission to convert it to other uses. However, this system of protection is itself constantly being brought into question by those who would like to free up more development sites across the region. For instance, a 1997 report by the 1,200-member Canadian Home Builders’ Association of BC claimed that unprecedented population growth, rising home prices and government-imposed costs are threatening the \$2-billion-a-year industry. The association asked the province to revise Agricultural Land Reserve legislation in order to make it “more responsive and realistic to modern demands for housing.”<sup>46</sup>

The provincial government continues to hold the power to overrule decisions of the Agricultural Land Commission when provincial interests are at stake. This means that political lobbying of the provincial cabinet can sometimes override tribunal decisions and lead to unwarranted removals from the preserve. In 1998, the provincial government amended the Agricultural Land Commission Act to make the conditions under which it could overrule the commission more explicit and to restrict it to those rare cases when larger issues are involved that outstrip the commission’s mandate to preserve agricultural land.

However, Agricultural Land Commission officials are quick to point out that political winds change and the rules governing removals from the Agricultural Land Reserve could be changed by a future administration less committed to preserving resource land and more reluctant to constrain growth in the GVRD. They note that during the 1980s, for instance, the Social Credit government used a special appeal process to override the decisions of the Agricultural Land Commission on a number of important occasions.

## **Lessons/Conclusions**

This report has focussed on the setting and implementation of regional goals. Before moving on to the lessons to be drawn from that process, we should pause to reflect on whether the goals themselves can be considered adequate when looked at in the light shed by the concept of sustainable development.

In this context, it should be noted that the goals set out in the region's growth management strategy over the last 25 years have been relatively narrow in scope. As mentioned earlier, growth management is certainly compatible with progress toward sustainability. However, growth management plans tend to be limited to a narrow range of variables and instruments: population and employment distribution, land consumption, density targets, housing provision, and targets for the performance of the transportation system. Even by these standards, the GVRD's official planning documents fall short. One measure of this shortfall is the fact that the provincial Growth Strategies Act encourages attention to a wider range of policy issues than were addressed in the 1996 Livable Region Strategic Plan, including rental and affordable housing, employment opportunities, protection of features with cultural, historical and archeological significance, and energy efficiency.

Early drafts of the Livable Region Strategic Plan expressed a grandiose vision:

Greater Vancouver can become the first urban region in the world to combine in one place the things to which humanity aspires on a global basis: a place where human activities enhance rather than degrade the natural environment, where the quality of the built environment approaches that of the natural setting, where the diversity of origins and religions is a source of strength rather than strife, where people control the density of their community and where the basics of food, clothing, shelter, security and useful activity are accessible to all.<sup>47</sup>

However, the plan as approved by the GVRD Board in 1996 contained no reference to most of these goals and measurable targets were limited to a few population, housing type and transportation variables.

Furthermore, the goals set out by the region – setting aside the question of implementation – would not in themselves be a guarantee that the region was moving towards sustainability. Although the establishment of green zones, encouragement of densification and provision of better transit are laudable goals, all three could be undertaken in ways that contribute little if anything to the overall objective of a more sustainable region. They could even be negative. For example, if high densities separate people from nature, if transit projects cut through viable neighbourhoods, and if green zones include fragments providing only the illusion of ecological protection, the region could well move backward.<sup>48</sup>

Finally, there are grounds for doubt that the geographical scope of the objectives is adequate. While it is true that the GVRD encompasses virtually the entire Census Metropolitan Area, some observers have argued that a much larger planning region is required in order to address sustainability issues. In order to contain the dynamics leading to sprawl, Seelig and Artibise at the University of British Columbia would prefer to see the planning unit expanded to capture the whole "Pacific Fraser Region", which would extend from Hope in the east to Whistler in the north and Vancouver in the west.<sup>49</sup>

But even within the confines established by the GVRD's planning scope, the research results indicate mixed performance with respect to regional growth management. On the one hand, population distribution targets have represented only minor deviations from existing trends; development densities in "Greenfield" (i.e., rural residential areas that are being urbanized) are still below sustainable levels, and a large gap is opening between the objectives for the transportation system and actual performance. On the other hand, the targets set for the GVRD would probably be considered ambitious in most other metropolitan regions in North America, large areas of greenspace are being preserved, few large parcels of land are available primarily for single-detached, large-lot homes, densities in the region are increasing on average, and the new transportation plan adopted for the region has promised to deliver on at least some aspects of the growth management vision for the region. What lessons can be gained from these uneven results?

One evident conclusion is that the consensus building model for regional planning and growth management is not as effective as many authors seem to assume.<sup>50</sup> The main virtue of the model appears to be its adeptness at minimizing open conflict between the various players at the regional planning table. But because it provides a mechanism for agreement without a mechanism for enforcement, the model lends itself to ambitious policy statements that often are not followed up with concrete action and desired outcomes. Municipalities are able to use the regional level to reach accords where there is shared interest in collective action. However, this structure is much less adapted to resolving conflicts of interest, for example when the regional and the local interest are pitted against each other. This is illustrated by the relative success of the Green Zone and the lack of success in diverting population growth to the regional centre.

The case study also shows that the consensus model does not work well when key stakeholders are not at the table or are making decisions that essentially ignore the regional consensus. As Ley et al. have remarked "The Livable Region Plan [was] quietly bypassed by the provincial government," undermining its transportation and land use goals.<sup>51</sup>

The lack of enforcement mechanisms tends to cast a long shadow back into the goal setting process. Because all the players are aware that at the end of the day the region has only moral suasion on its side, ambitious planning goals tend to be diluted as they move through the formulation process. Thus, growth management goals that challenge established trends – such as ambitious intensification or transit share objectives – are diluted through negotiation until they become indistinguishable from existing trends. In contrast, policies that are formulated in a "bottom-up" way (such as the Green Zone) are less likely to have ambitious goals or to divert development from existing patterns, but are more likely to be implemented.<sup>52</sup>

The fact that ambitious goals are set at all – even if they are not ultimately achieved – is a reflection of the progressive planning culture in the region. Planners from all levels of government, along with academics, private consultants and urban activists seem to agree on the main elements that need to be put in place in order to move towards regional sustainability. This helps to account for the remarkable consistency in the vision that has sustained planning discourse in the region for 25 years or more.

In this absence of strong enforcement powers, however, ambitious goals rely on moral suasion for implementation. Moral suasion can be an effective tool where citizens and regional leaders share a commitment to a certain planning direction. The problem is that while the growth management vision promoted by planners in the region is broadly supported by the citizenship in the abstract (i.e., during public consultations on planning principles), implementation is frustrated in practice, for example when specific intensification projects or bridge tolls are proposed.

The oscillation between visionary principles and the evident reluctance of many Vancouverites to cede to dramatic changes in their living and travel arrangements seems to lie behind much of the conflict and debates over growth management in the region. As many authors have noted, trends towards low-density living and car-based transportation set up a self-reinforcing dynamic that is difficult to break.<sup>53</sup> The danger



in the GVRD is that the broad consensus on the growth management vision for the region – and whatever concrete progress that has been made to date – will gradually be undermined by the skepticism generated by a lack of significant progress on key indicators.

Such progress would be more likely to come about if planning signals in the region were better aligned. Because the province sets the rules for the planning and development “game” in BC (as elsewhere in Canada), the primary responsibility for reform lies with it. For instance, the Growth Strategies Act could be amended to require regional authorities to use their spending and investment powers to enforce municipal compliance to regional goals. The province could also help strengthen transportation planning – and the link between transportation and land use goals – by providing TransLink with a more stable funding base with which to carry out its transit expansion and demand management plans. For instance, it could permit TransLink to impose tolls and other road pricing mechanisms, as foreseen by Transport 2021.

The province could also make its commitment to preserving the Agricultural Land Reserve clearer, explicitly rejecting any notion that may water down the definition of permitted uses on farmland. This would short circuit land speculation on the fringe and boost farmer willingness to invest in their businesses and to maintain a healthy rural economy as a bulwark against urban sprawl.

Of course, local authorities also have a role to play. The City of Vancouver has experimented with policies that reward neighbourhoods that are willing to accept change with better urban services. Other municipalities could explore the use of this or other incentive mechanisms that would enhance acceptance of densification initiatives in established neighbourhoods.

Developers and builders also need to be given the right signals, i.e., that land must be used more efficiently in the future. Towards this end, municipalities could choose among the many planning tools that are becoming better understood in Canada. This includes density bonusing, inclusionary zoning requirements, basing development cost charges (which go to pay for the infrastructure needed to support growth) on a per square metre basis, alternative development standards, and performance based zoning.<sup>54</sup>

## Notes

<sup>1</sup> For example, Patrick Smith. 1986. “Regional Governance in British Columbia.” *Planning and Administration* 13: 7-20.

<sup>2</sup> Ray Tomalty. 1997. *The Compact Metropolis: Growth Management and Intensification in Vancouver, Toronto, and Montreal*. Toronto: Intergovernmental Committee on Urban and Regional Research.

<sup>3</sup> A key distinction between growth management and sustainable development is in the assumed inevitability of growth. Advocates of growth management dismiss the notion that growth can be limited within any economic region (not to be confused with growth control advocates, who propose growth limits within particular municipalities). The challenge is to direct and qualify growth so that an optimum level of public and private objectives is met. In contrast, sustainable development does not assume urban or economic growth. In fact, advocates of sustainable development often question whether material growth can be sustained by the ecological and institutional systems that underpin it.

<sup>4</sup> Although advocates of sustainable development vary in the range of issues they are likely to include in the concept, a typical set of desiderata is provided by Judy Corbett and Michael Corbett. 2000. *Designing Sustainable Communities: Learning from Village Homes*. Washington, DC, Island Press.

<sup>5</sup> G. R. Cox and C. G. Whiteside. 1991. *Growth Management Strategy*. In *Local and Regional Perspectives on Growth Management*. Sacramento, Calif.: Office of Planning.

<sup>6</sup> These are the issues dealt with by growth management advocates such as John DeGrove (e.g., 1992. *Planning and Growth Management in the States*. Cambridge, Mass, Lincoln Institute of Land Policy) and Phillip Carter (e.g., 1993. “Techniques for Coordinating and Managing Growth.” *Journal of Urban Planning and Development* 119(2): 84-95.)

<sup>7</sup> The population of the City of Vancouver actually declined between 1971 and 1976, and did not recover to previous totals until after 1981.

<sup>8</sup> GVRD. May 1999. *GVRD Trends: Population Dynamics in the Region*. Working Paper Series. Policy and Planning Department.

<sup>9</sup> GVRD. April 1997. *Greater Vancouver’s Land Use: 1979-1996*. Strategic Planning Department.

10 Michael Seelig and Alan F.J. Artibise. 1991. *From Desolation to Hope: The Pacific Fraser Region in 2010*. Vancouver:

University of British Columbia School of Community and Regional Planning.

<sup>11</sup> BC Energy Council. June 1994. Draft Energy Strategy.

<sup>12</sup> United Way of the Lower Mainland and Associates. 1993. *Implication of Social Trends for Growth Management and Transportation Planning in the Lower Mainland*. Vancouver.

<sup>13</sup> GVRD. November 1992. *Vancouver Metropolitan Region: Options for Growth Management 1991 to 2021*. Vancouver: Development Services Department.

<sup>14</sup> This number actually reflects a minor spatial error as it included two small parts of the region that were not actually in the growth concentration area. It makes about a one percent difference to the ultimate GCA growth number, dropping it from 73.4 to 72.4 percent of 1991 to 2021 growth.

<sup>15</sup> *Vancouver Sun* August 2, 1997.

<sup>16</sup> Personal communication, project interviewee, January 2000.

<sup>17</sup> For example, a study undertaken for the Washington State Growth Management Program (1992. *The Art and Science of Designating Urban Growth Areas: Part II. Some Suggestions for Criteria and Densities*) suggests that residential densities of at least 40-50 people/hectare are needed to achieve transit service with less than 30 minute frequency and to support neighbourhood shopping. This contrasts with the 35 people/hectare number put forward by Anthony Downs (1994. *New Visions for Metropolitan America*. Washington, D.C., Brookings Institute) and the number of 20-30 proposed by TransLink, the GVRD transportation authority.

<sup>18</sup> TransLink. 2000. *Draft Strategic Transportation Plan: Appendices*. Vancouver.

<sup>19</sup> Personal communication, project interviewee, January 2000.

<sup>20</sup> The GVRD's draft paper (Growth and Change in Greater Vancouver) argues that densities are increasing throughout the region. While this is true, it should be kept in mind that the GVRD is starting from a position of very low density relative to other urban regions in Canada. A recent study by Tamim Raad (1998. *The Car in Canada: A Study of Factors Influencing Automobile Dependence in Canada's Seven Largest Cities, 1961-1991*. School of Community and Regional Planning. Vancouver, University of BC) shows that in 1991, average density in the GVRD was only 20.8 people/hectare compared to 27.4 in Edmonton, 33.8 in Montreal, and 41.3 in Toronto.

<sup>21</sup> TransLink. January 2000. *Draft Strategic Transportation Plan*. Vancouver.

<sup>22</sup> Perl, A. and J. Pucher (1995). "Transit in Trouble? The Policy Challenge Posed by Canada's Changing Urban Mobility." *Canadian Public Policy* 21(3): 261-283.

<sup>23</sup> Pucher, J. (1998). "Back on Track: Eight Steps to Rejuvenate Public Transport in Canada." *Alternatives Journal* 24(1): 26-34.

<sup>24</sup> TransLink. September 1999. *Our Future: Making the Right Moves. Strategic Transportation Plan*, Discussion Paper.

<sup>25</sup> A consistent measure of transit share over decades is not available. Measures vary by time of day (morning rush hour, peak hours, other times), geographical scope (GVRD or lower mainland), purpose of trip (work or all purposes) and so on. Thus, various publications report different transit modal shares for the same periods and over time. However, in the professional judgement of TransLink officials (Personal communication, project interviewee, July 2000), morning rush hour transit share has not changed since 1975. Transit share is up slightly at other times of the day.

<sup>26</sup> Personal communication, project interviewee, January 2000.

<sup>27</sup> GVRD. September 1997. *Livable Region Strategic Plan: 1997 Annual Report*. Strategic Planning Department.

<sup>28</sup> *Planning Institute of BC News*, June 1993.

<sup>29</sup> BC Agricultural Land Reserve. 1998. *Statistics*. <[www.landcommission.gov.bc.ca/alc/index.html](http://www.landcommission.gov.bc.ca/alc/index.html)>

<sup>30</sup> GVRD. 1999. *Livable Region Strategic Plan: Annual Report*. Vancouver.

<sup>31</sup> As the chairwoman of the GVRD's strategic planning committee (Delta's Mayor, Beth Johnson) put it: "The pattern (since the adoption of the *Livable Region Strategic Plan*) was business as usual. It was similar to the 1980s, when no regional growth plan existed." *The Province* (Vancouver), December 13, 1998, Final Edition, p. A8.

<sup>32</sup> For example, see J. R. Logan and H.L. Molotch. 1987. *Urban Fortunes: The Political Economy of Place*. Berkeley: University of California Press.

<sup>33</sup> *Planning Institute of BC News*, March 1995, p. 19.

<sup>34</sup> Graham Murchie. 1995. Looking Beyond Vancouver's Picture Postcard Beauty. *Plan Canada* 35 (3): 9-10, p. 10.

<sup>35</sup> GVRD. May 1999. *Trends*.

<sup>36</sup> Personal communication, project interviewee, February 2000.

<sup>37</sup> Personal communication, project interviewee, February 2000.

<sup>38</sup> TransLink. January 2000. *Draft Strategic Transportation Plan: Appendices*. Vancouver.

<sup>39</sup> Personal communication, project interviewee, January 2000.

<sup>40</sup> A *GVRD Regional Greenway Vision* (July, 1999) was approved by the GVRD Board in 1999. If implemented, it will help address this issue. The vision includes provisions for both recreational and ecological corridors. Sixteen municipalities in the GVRD have approved the vision and it may eventually become part of the *Livable Region Strategic Plan*.

<sup>41</sup> GVRD. April 1997. *Greater Vancouver's Land Use: 1979-1996*. Strategic Planning Department.

<sup>42</sup> *The Province* (Vancouver). January 11, 1998, p. A29.

- <sup>43</sup> Personal communication, project interviewee, January 2000.
- <sup>44</sup> See for instance, the article “Delta unfairly burdened with costs to save open farmland: Councillors ask why their taxpayers are hit hardest to preserve a regional amenity.” *Vancouver Sun*, June 22, 1998, p. B1.
- <sup>45</sup> Personal communication, project interviewee, January 2000.
- <sup>46</sup> Canadian Home Builders’ Association of B.C. 1997. *Housing 2020: A Time for Action*. Burnaby.
- <sup>47</sup> GVRD. 1990. *Creating Our Future: Steps to a More Livable Region*. Vancouver: GVRD.
- <sup>48</sup> One way to address this issue would be to launch a monitoring programme based on key sustainability indicators, such as those proposed by the now defunct BC Round Table on the Environment and Economy (1994. *State of Sustainability: Urban Sustainability and Containment*. Victoria) or Virginia Maclaren (1996. *Developing Indicators of Sustainability: A Focus on the Canadian Experience*. Toronto: Intergovernmental Committee on Urban and Regional Research). Such a programme has been “in the works” at the GVRD for several years but progress appears to be slow.
- <sup>49</sup> Michael Seelig and Alan Artibise. 1991. *From Desolation to Hope: The Pacific Fraser Region in 2010*. Vancouver: University of British Columbia School of Community and Regional Planning.
- <sup>50</sup> For example, Patrick Smith. 1996. Restructuring Metropolitan Governance: Vancouver and BC Reforms. *Policy Options* 17 (2): 7-11.
- <sup>51</sup> David Ley, Daniel Hiebert, and Geraldine Pratt. 1992. *Time to Grow Up? From Urban Village to World City, 1966-1991*. In *Vancouver and Its Region*, edited by G. Wynn and T. Oke. Vancouver: UBC Press.
- <sup>52</sup> Similar dynamics were noted by the author in other regional planning contexts, notably in the Greater Toronto Area. See Ray Tomalty. 1997. *The Compact Metropolis: Planning for Residential Intensification in the Greater Toronto Area*. Ph.D., School of Urban and Regional Planning, University of Waterloo, Waterloo.
- <sup>53</sup> Pierre Filion. 1995. Planning Proposals and Urban Development Trends: Can the Gap be Bridged. *Plan Canada* 35 (5): 17-19.
- <sup>54</sup> For a description of these tools, see Ray Tomalty et al. 2000. *Municipal Planning for Affordable Housing*. Ottawa: Canada Mortgage and Housing Corporation.