

Enhancing Intergovernmental Cooperation on Metro Vancouver's Regional Growth Strategy: The Case of Non-Urban Lands

by

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Ethics Statement



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Abstract

Metro Vancouver's Regional Growth Strategy (RGS) is a regional plan that sets out how the region will accommodate urban growth in the next 25 years, while protecting some lands from urban development. Although the agreement has been adopted by all member municipalities in the region, some municipalities may choose not to implement certain aspects of the RGS. Furthermore, Metro Vancouver's limited ability to enforce the regional plan presents challenges of uncoordinated planning by local municipalities, which may exacerbate the growing pains of urban sprawl, car dependence and urban encroachment of green space.

This capstone study uses a literature review, interviews and case studies to analyse the challenges of regional cooperation and potential opportunities to encourage compliance on the RGS. This study identifies and evaluates a series of policy alternatives to better protect Non-urban lands from development before concluding with a final recommendation for moving forward on this policy issue.

Keywords: Metro Vancouver; Regional Growth Strategy; regional governance; land use planning; growth management; intergovernmental collaboration

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List of Acronyms

ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
CMP	Calgary Metropolitan Plan
CRAG	Columbia Region Association of Governments
CRP	Calgary Regional Partnership
CRPC	Calgary Regional Planning Commission
CSCD	Ministry of Community, Sports and Cultural Development
DRCOG	Denver Regional Council of Governments
GVRD	Greater Vancouver Regional District
LMRPB	Lower Mainland Regional Planning Board
MPO	Metropolitan Planning Organization
OCP	Official Community Plan
RFP	Regional Framework Plan (Greater Portland)
RGS	Regional Growth Strategy
RSC	Regional Statement Context
UCB	Urban Containment Boundary
UGB	Urban Growth Boundary (Greater Portland)

Executive Summary

As British Columbia's largest metropolis, Metro Vancouver is expected to experience significant urban and population growth in the next 35 years. This anticipated growth generates, among many worries, the concern for environmental footprint and need for sustainable development. For the past six decades, the municipalities of Greater Vancouver have worked closely with an overarching regional authority, Metro Vancouver, on ensuring that urban expansion takes on a sustainable approach that promotes livability and sustainability through principles of compact urban planning, transit efficiency and the preservation of green spaces. Regional planning in Vancouver has been designed to ensure that local governments and Metro Vancouver are able to work cooperatively in a non-hierarchical governance system. To manage future growth, Metro Vancouver and member municipalities have adopted a Regional Growth Strategy (RGS) that would direct urban growth within an urban containment boundary, while preserving the non-urban green spaces outside.

Recently, Vancouver's RGS and regional governance has been put to test when two municipalities have sought to amend the document that would allow them to pursue low-density development projects in non-urban areas. While these proposals have been identified to be in opposition to the RGS principles, these unprecedented amendments nonetheless succeeded, posing concerns that such cases will increase into the future, undermining the implementation of the regional vision on preserving green spaces.

Challenges to the regional strategy are driven by three factors. First, the economic opportunities associated with speculative greenfield development incentivize developers and municipalities to pursue such projects. Second, the consensus-based governance system in regional planning provides very few tools and little authority for Metro Vancouver to enforce the RGS. Third, there is also a lack of coordination between the RGS and provincial policies and decisions, which poses another constraint to protecting green spaces in the region. These drivers shed light on some of the inherent limitations of Vancouver's regional planning system and governance structure. The policy problem can thus be distilled as: Metro Vancouver's current policy on protecting green spaces from urbanization is vulnerable to the land use decisions of local governments.

Through a broad examination of literatures, expert and stakeholder feedback and case studies, this capstone project has identified important drivers and barriers of intergovernmental cooperation and compliance on the RGS, and ultimately implementation. First, the deeply entrenched value of local autonomy for municipalities, the lack of political will and support from the provincial government are some of the limiting political factors that undermine Metro Vancouver's role as a regional planner. Second, the legalistic framework behind regional districts and Metro Vancouver's internal institutional structure further prevents the region from pursuing effective measures that could drive implementation of growth management.

In response, this project proposes four diverse policy options with the central objective of promoting alignment of local government land use decisions with the RGS:

- Enhancing stakeholder and public advocacy through implementing a communications strategy,
- Harmonizing policy and objectives on non-urban lands by working with the Agricultural Land Commission (ALC),
- Incentivizing compliance with the RGS through distribution of sustainable planning grants and contribution and
- Allowing for direct election of Metro Vancouver board of directors and option for anonymous voting.

These options are evaluated through a series of criteria: 1) effectiveness, 2) sustainability, 3) financial feasibility, 4) stakeholder acceptability and 5) ease of implementation. The assessment indicates that implementing an enhanced communications strategy in combination with working with the ALC on policy harmonization are the most favourable strategies that are beneficial for both the short and long term in motivating compliance and genuine cooperation.

Chapter 1. Introduction

The Vancouver metropolitan region ('Metro Vancouver') is poised for significant population growth in the next twenty-five years. The region now constitutes over 50% of the provincial population, with Metro Vancouver projecting that the population will exceed 2.69 million by 2020 and 3.37 million by 2040 (BC Stats, 2015). This growth will also be accompanied by a 574,000 increase in dwelling units (Metro Vancouver, 2011). Since the 1960s, the municipal governments of the region have worked closely through Greater Vancouver Regional District ('Metro Vancouver') in a consensus-based federation system to develop regional growth strategies that would help manage population and urban area expansions. These strategies focus largely on four interconnected goals: encouraging compact and dense urban development, encouraging transit-oriented planning, building complete communities and protecting green zones. In working towards these goals, Metro Vancouver and municipalities have mutually adopted the Regional Growth Strategy (RGS), which would set out zoning designations across the region. Such designations would ideally direct growth to areas that are designated "urban", while protecting other "non-urban" designated lands from urbanization.

Since the establishment of this planning framework, Vancouver's¹ strategy has been praised as one of the most cooperative and successful plans in Canada in managing growth (Kadota, 2010; Smith, 2009; Wheeler, 2007; Filion et al., 2010). The region has seen success in densifying dwelling units, protecting agricultural lands and containing urban sprawl (Wheeler, 2007; Filion et al., 2010; Burchfield & Kramer, 2014). Nonetheless, the increasing pressure to develop have triggered conflicts between local and regional land use interests. Recent cases of municipalities successfully challenging the RGS for

¹ In this report, Vancouver refers to the region Metro Vancouver. The acronym COV will be used in reference to City of Vancouver.

purposes of urban development on protected green spaces reaffirm the need for policy interventions to ensure that regional goals are moving forward.

This research combines a literature review, expert interviews as well as case studies. The first part of the research is an in-depth analysis of the institutional history and background of regionalism in Vancouver, as well as the key drivers of the policy problem. The second part of this study analyzes the findings from ten expert interviews. The third part of the research explores the experiences and policy responses in jurisdictions that have encountered similar growth challenges. This is followed by a suite of potential policy options, which are evaluated through a series of criteria and measures, the results of which would inform the final policy recommendation. Finally, this paper concludes with potential policy implications and future research opportunities.

Chapter 2. Methodology

2.1. Literature Review

The literature used in this study is publically available online and in the SFU library collection. Key topics examined include metropolitan governance and institutions, regional land use planning and best practices and policy instruments on urban growth containment. The references examined include academic journal articles, government publications, as well as think tank studies and media reports. For indicators on population, density, population and land use patterns, this study compiled quantitative data from public domains, including Metro Vancouver, BC Stats, Statistics Canada and US Census Bureau.

2.2. Expert and Stakeholder Interviews

Ten expert interviews were conducted between November 2015 and February 2016. Chapter 8 identifies interview participants and their affiliations. Interview participants include current and retired urban planners and local government staff members who have been involved in regional planning in Vancouver, including those from Metro Vancouver and its municipalities. Academics with expertise in the subject of regional governance are also key participants in this study, including faculty members from the SFU Urban Studies Program. Participants have been interviewed according to their professional roles in their organizations and have been fully informed of the purpose and objective of this research and reasons for their recruitment. Appendix I provides a general structure of the interview, including potential discussion topics.

Contact information for potential interviewees were obtained from the public domain, including organization websites and publications. Some potential participants were contacted through personal introduction by faculty members of SFU School of Public Policy upon recommendation. The initial contact and planning of interviews were made through e-mail, telephone or in person. For a template used to contact interview participants, refer to Appendix B. Interviews were conducted in person or over the phone, depending on the preference of the participants. Interviews were audio recorded, with all associated audio files destroyed upon transcription. Findings from expert interviews were

used to inform on the central policy problem, intergovernmental relations of the region, the institutional and governance structure, and potential policy interventions.

2.3. Case Studies

To help inform policy options, this study the regional growth strategies from three comparable jurisdictions that have implemented regional growth strategies with goals of urban containment and green space protection. Each case study summarizes the evolution and current structure in regional planning and policy interventions on managing urban growth. The study also evaluates the quality of intergovernmental cooperation in regional plan implementation. A detailed description on the selection and analysis of case studies can be found in Chapter 9.

Chapter 3.

Urban Geography of Metro Vancouver

Metro Vancouver (previously Greater Vancouver Regional District) corresponds to the Census Metropolitan Area of Vancouver. The region occupies part of the Georgia Basin bioregion in BC's lower mainland (Artibise & Meligrana, 2005, 97). As the province's main economic and administrative centre, Metro Vancouver has experienced rapid population and urban space growth since its establishment. In the past thirty years alone, the population of Vancouver rose from 1.44 million in 1986 to 2.47 million in 2014 (BC Stats, multiple years).

The urban evolution of Vancouver is conventional to that of a North American metropolis, whereby growth spread outwards from the City of Vancouver (COV). Since Vancouver is physically confined between the Pacific Coast and mountainous regions, residential growth has extended into communities located east and south of the Fraser River, including Richmond, Surrey, Coquitlam and Delta (Artibise & Meligrana, 2005; Peck, Siemiatycki, & Wyly, 2014). In the first half of the 20th century, Vancouver experienced an unregulated process of low-density residential development, or urban sprawl. This trend is partly driven by various socioeconomic and policy transformations that took place during the post-war era. First, the rise of the automobile made personal cars widely accessible to middle class families (Keil, Hamel, Chou, & Williams, 2014). Second, the provincial and federal governments invested heavily on transportation infrastructures to connect the downtown cores with surrounding communities (Keil et al., 2014). Third, the institutionalization of the mortgage market through the establishment of the Canadian Mortgage and Housing Corporation ("CMHC") heavily promoted home ownership among the middle class (Keil et al., 2014). These factors, coupled with the "American Dream" ideal for community life and homeownership outside of cities, were capitalized by private home developers. The industry bought out cheap and undeveloped lands outside of the city core to build large-scale and subdivided single-family homes that would be sold at an affordable price (Peck, Siemiatycki, & Wyly, 2014).

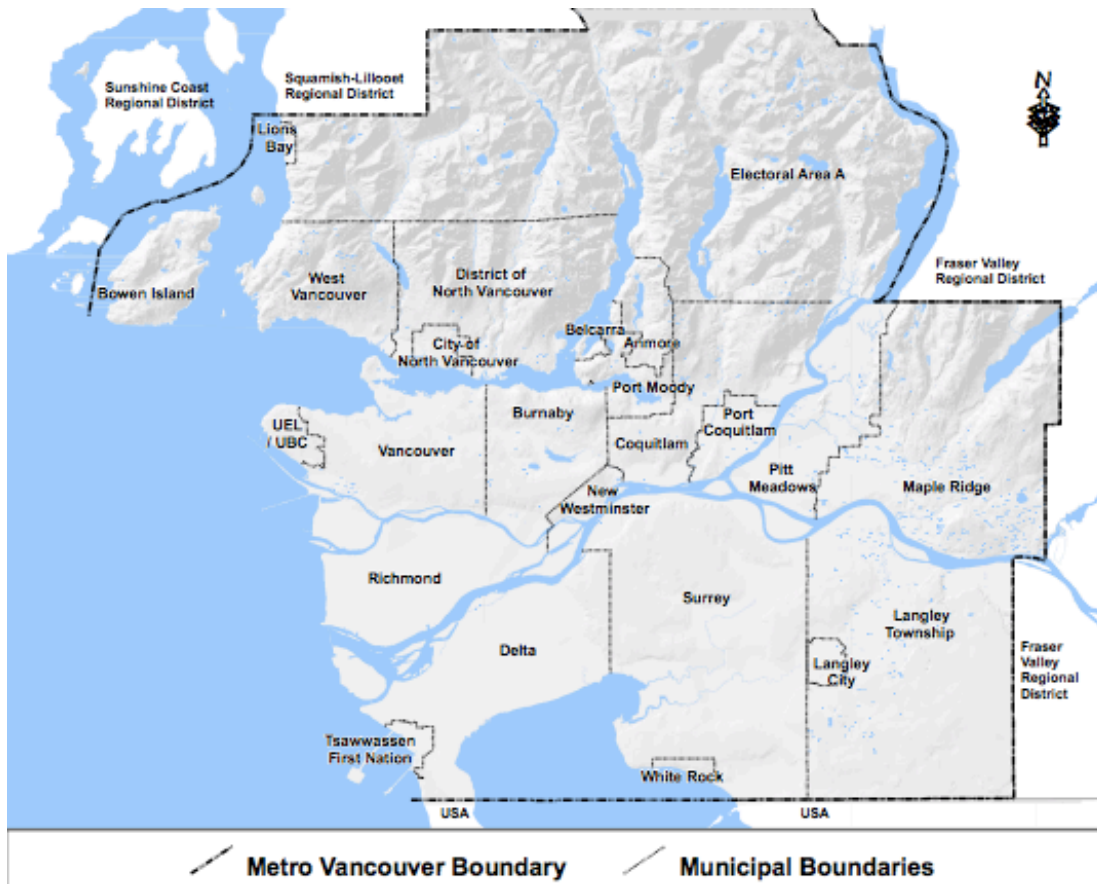


Figure 1 Metro Vancouver²

By the late 1950s, urban sprawl formed the basis of Vancouver’s regional landscape (Peck, Siemiatycki, & Wyly, 2014). Between 1971 and 1996, the population increased by nearly 70%, with over 80% of the growth occurring in the suburban municipalities of Richmond, Delta, Coquitlam and Surrey (Tomalty, 2002, 5). Between 1979 and 1996, over 7,000 hectares of agriculture and rural residential land in Metro Vancouver were converted to urban uses (Tomalty, 2002, 5). As explored further in the literature review, this form of growth now carries a negative connotation and is associated with significant environmental degradation as well as negative social and economic externalities. Fortunately, the province and municipalities in what is now Metro Vancouver have recognized the unsustainable nature of urban sprawl and the importance of green space protection (Peck, Siemiatycki, & Wyly, 2014; CSCD, 2005). The next section will

² Source: Metro Vancouver, 2011. Used with the permission of Metro Vancouver (GVRD) as per its Disclaimer & Copyright Notice.

describe the key policy decisions that Vancouver made in order to contain unregulated growth in a rapidly expanding region.

Chapter 4. Regional Land Use Planning in Metro Vancouver

4.1. Evolution of Regional Planning and Institutions

Up until the mid-20th Century, there had been no planning agencies in the Vancouver region besides informal committees formed by the City of Vancouver and surrounding municipalities on the delivery and sharing of core services provision. Some of these initiatives included the Greater Vancouver Water District, the Greater Vancouver Sewerage and Drainage District, and the regional health board (Artibise & Meligrana, 2005). Land use planning was undertaken only by individual municipalities, as per the provincial legislation (see 6.1.2).

Although Vancouver's municipalities are politically autonomous, they are environmentally, socially and economically interconnected. When the region experienced rapid sprawl into its surrounding fringes, and later, the Fraser Valley Flood of 1948, local planners and the BC government recognized the need for more inter-municipal coordination to guide emergency management and sustainable regional growth (Abbot & DeMarco, forthcoming; Peck et al., 2014). The BC government proceeded to amend the *Town Planning Act* in 1948 to enable regional planning initiatives, which led to the establishment the Lower Mainland Regional Planning Board (LMRPB)³. A federation of 26 municipalities, LMRPB's central function was to lead urban planning for the area and facilitate coordination between municipalities in reducing sprawl (Artibise, 2005; Peck et al., 2014). In 1963, LMRPB released its first plan proposal, *Chance and Challenge*, which made a compelling case that would guide Vancouver's urban planning in the following decades. Taylor & Burchfield (2010, 64) summarize the finding as such:

Without intervention, the supply of urban land would be exhausted by the end of the millennium, and that the best option was to pursue a region-wide policy of infill and redevelopment of existing urban areas, the comprehensive

³ Later in 1965, the province amended the *Municipal Act* (now *Local Government Act*) to allow for the regional districts for service provision and planning. As a result, the Greater Vancouver Regional District (GVRD) was created for the Vancouver region, and inherited the planning functions of the LMRPB (Abbot and DeMarco, forthcoming).

protection of agricultural land whereby only fully serviced greenfield development would be permitted, and the direction of growth to self-sufficient 'regional towns'.

The document proposed to “develop [the region] as a series of cities in a sea of green ... a valley of separate cities surrounded by productive countryside” (LMRPB, 1963, 6, as cited in Abbot & DeMarco, forthcoming, 3). The final plan was adopted in 1966, titled *Official Regional Plan for the Lower Mainland Planning Area*. This statutory plan sought to limit settlement in areas prone to flooding and create a “poly-centric” region with “compact regional towns” (Abbot & DeMarco, forthcoming, 3). Unfortunately, the LMRPB and its predecessors were vulnerable to the province’s executive decisions. Having openly criticized the provincial land use policies in the 1960s, then followed by another high-profile dispute with the province on an exclusion for an Agricultural Land Reserve parcel in Delta, the Provincial Social Credit Party government abolished all planning functions of GVRD in 1983 (Artibise & Meligrana, 2005). It was not until the early 1990s that the New Democratic Party restore some of the regional district’s planning authority (see 4.2). Despite this hiatus, there is no question that the land use objectives of LMRPB formed the conceptual basis of regional planning in Vancouver.

4.2. Vancouver’s Current Growth Management Strategy

4.2.1. Key Planning Principles

In 1996, the newly elected New Democratic Party passed the *Growth Strategies Act* (GSA) in Part 25 of the *Local Government Act* (LGA), which enabled the regional governments in BC to create regional growth strategies (RGS) for “coordinated planning and coordinated action for local governments” (LGD, 2005, iii). This legislation formalized the regional government’s role in land use planning, and established a framework for intergovernmental collaboration and implementation of regional land use policies. Specifically, regional strategies facilitate “interjurisdictional coordination which is necessary to address critical regional issues that cannot be addressed comprehensively by each municipality alone” (LGD, 2005, 9). Ideally, the RGS, as a non-binding document, serves as “a regional vision that commits affected municipalities and regional districts to a course of action to meet common social, economic and environmental objectives. (LGD, 2005, 3).

Since the establishment of the LMRPB and the 1966 plan, the regional authority has released a series of successive planning strategies. The *Livable Region Plan* (1975) was another tombstone document which set the foundational approaches to regional planning in Vancouver, and has been carried through successive plans. After the passing of the Growth Strategy Act, GVRD released the *Livable Regional Strategic Plan* (1996), which laid out the key objectives that now serve as the fundamental long-term planning vision in Metro Vancouver:

- Create compact urban area by concentrating growth within existing developed areas,
- Reduce car dependency by supporting sustainable transportation choices by ensuring a transit-oriented planning,
- Create complete communities by providing mixed-use services and functions, as well as diverse housing options and
- Protect green zones, namely, those zoned as conservation, agriculture and recreational lands.

The most recent RGS, *Metro Vancouver 2040: Shaping our Future* (2011), is an initiative of Metro Vancouver, in agreement with its municipalities, to reinforce the LRSP with stronger implementation strategies and tools (Abbot & DeMarco, forthcoming). The RGS aims to concentrate growth within a defined boundary and prevent urban sprawl into non-urban green space areas. This in turn facilitates mixed-use land use and transit-oriented planning. Finally, protecting the non-urban lands (previously the Green Zone) further reinforces the intensification of existing urban areas, which leads to more compact and concentrated growth. To implement these principles, the new RGS overlays the region with land use designations, which categorizes land parcels for different development or conservation purposes: (Metro Vancouver, 2013, 9-10):

Urban Land Use Designations

Urban Land Use areas are contained within a defined Urban Containment Boundary (UCB), beyond which the regional government not will extend sewage and water services:

- General Urban: Intended for residential neighbourhoods and centres, supported by higher density and mixed-use planning. Designated Urban Centres and Frequent Transit Development Areas (FTDA) are contained within these areas.
- Industrial: Intended for industrial activities with limited commercial activities and not intended for residential purposes.

- **Mixed Employment:** Intended for lower density industrial and commercial uses outside of urban centres and FTDA's. Not intended for residential purposes.

Non-Urban Land Use Designations

Non-urban designations effectively replace the “green zones” component of the 1996 regional plan, but operate with a similar intent. These areas are green spaces that have significant social and ecological value and are to be protected from urbanization in the long term. As mentioned earlier, setting aside these undeveloped lands assists in the key principles of Metro Vancouver’s regional land use strategy by reinforcing urban containment and avoiding sprawl (Tomalhy, 2002). For simplicity, this study will refer to these lands as Non-urban or green spaces. The two terms will be used interchangeably.

- **Rural:** Intended to protect existing environmental qualities of rural communities. These areas are meant for small scale and low density residential, commercial, industrial and institutional development. These areas do not foresee urban development and will not have access to sewer and transit services.
- **Agricultural:** Intended for agricultural uses and protection of agricultural land base. These areas contain the Agricultural Land Reserve (ALR), managed separately by the province.
- **Conservation and Recreation:** Intended to preserve a variety of significant ecological and recreation assets, including forests, wetlands, major parks and tourist recreation areas.

Table 1 depicts the distribution of land use designations by hectares and regional share between 2011 and 2014.

Table 1 Land Use Designations in Metro Vancouver 2011-2014⁴

<i>Metro 2040 Designation</i>	2011 Total Land Area (hectares)	2011 Regional Share	2014 Land Area (hectares)	2014 Regional Share	Net Change
Conservation and Recreation	131,828	47.1%	132,657	47.4%	829

⁴ Reproduced from: Metro Vancouver, 2014, 18

General Urban	70,904	25.3%	70,133	25.0%	(771)
Agricultural	55,313	19.7%	55,242	19.7%	(71)
Industrial	10,190	3.6%	10,133	3.6%	(51)
Rural	8,480	3.0%	8,565	3.1%	85
Mixed Employment	3,394	1.2%	3,390	1.2%	(4)
Total	280,109	100.0%	280,115	100.0%	

Through its long-standing planning system, Metro Vancouver aims to maintain the UCB in the long term, and contain 98% of all urban growth within the UCB by 2040, relative to the current 97% (Metro Vancouver, 2014, 33). Furthermore, the region also aims to increase its density within the UCB from the 2011 rate of 33.3 persons per hectare and 12.9 dwelling units per hectare to 44 persons per hectare and 18 dwelling units per hectare (Metro Vancouver, 2014, 34). Although there are no published measures to indicate the region's progress, qualitative and anecdotal sources suggest that Vancouver is en route to further densification and compact environment (Taylor & Birchfield, 2014).

4.3. A Cooperative Process

Since the establishment of LMRPB, the provincial government has strongly maintained that growth management is a cooperative process of equal partners, as opposed to a hierarchy (Tolmaly, 2002; CSCD, 2005). As far as the legislation is concerned, municipalities reserve the jurisdictions and powers to enact bylaws and create Official Community Plans, which serve as legal documents that set out objectives and policies to formalize land use planning and zoning within municipal boundaries (Harding, 2012).

As documented in the *Growth Strategies Act* guidelines, the legislation advocates for principles of cooperative relationship, including participation, early consultation, and accommodation for regional diversity (CSCD, 2005, 5). This framework clearly implies that Metro Vancouver has no legal authority to coerce municipalities into implementing regional policies. Instead, the regional government must develop a regional growth strategy in consultation with municipalities. All affected municipalities would review the document and request revisions until all parties are satisfied with the final product. To ensure that the local governments' community planning documents are consistent with the regional vision, the Act requires that each municipality submit a Regional Context Statement (RCS) to Metro Vancouver for approval, which details how municipalities plan on implementing the RGS. This legislated tool serves as an important bridging document that identifies how a municipality's Official Community Plan (OCP) conforms to the regional strategy (CSCD, 2005). Another important value of the OCP is that it creates opportunity for negotiation and wiggle room (Cameron, interview by author, Feb. 9, 2016; Taylor, interview by author, March 3, 2016).

4.4. Provincial Agricultural Land Reserve

In addition to regional initiatives, the Agricultural Land Reserve (ALR) has also been instrumental in containing sprawl in BC by protecting lands deemed suitable for agricultural activities from development. The ALR, along with the Agricultural Land Commission (ALC), were established by the provincial government in 1972 under the *Agricultural Land Commission Act* in response to the rapid erosion of farmland in southern BC. The policy drew boundaries around protected agricultural areas in order to prevent the "rezoning of agricultural land for non-farming purposes" (Yearwood-Lee, 2008 as cited in Jackson et al., 2013). Since then, any subsequent applications for land use change on the ALR would be reviewed and subject to approval by the ALC. Currently, there are approximately 60,893 hectares of ALR lands in Metro Vancouver, constituting 20% of the region's total land area (Metro Vancouver, 2014). Of these parcels, approximately 55,240 are designated as Agriculture in the RGS, suggesting a high level of overlap between the two land "statuses". Table 2 summarizes the ALRs in the region by municipalities, which shows that Langley, Delta and Surrey have the highest share of ALR lands.

Table 2 Status of ALRs in Metro Vancouver⁵⁶

	ALR Surveyed⁷ (ha)	Farmed (ha)	Potential (ha)	Unavailable (ha)
Langley Township	23,406	9,913	8,003	5,490
Delta	9,403	6,706	1,161	1,536
Surrey	9,291	5,072	2,465	1,754
Pitt Meadows	6,868	3,788	583	2,497
Richmond	5,176	2,832	908	1,436
Maple Ridge	3,787	1,008	1,458	1,321
Coquitlam	823	263	182	379
Barnston Island	618	370	196	52
Port Coquitlam	599	119	151	329
Vancouver	297	39	13	245
Burnaby	234	109	40	84

⁵ Unavailable = lands with site limitations, incompatible non-farm use (e.g., nature parks, golf courses); or “not surveyed because it cannot be farmed” (Metro Vancouver, 2014b)

⁶ Reproduced from: Metro Vancouver, 2014, 74

⁷ Total includes 3,515 hectares of land not surveyed (e.g., rights-of-way and foreshore) and is considered to be unavailable for farming.

Bowen Island	182	17	20	84
Tsawwassen	165	155	1	9
Langley City	45	5	5	35
Metro Vancouver	60,893	30,396	15,186	15,311

4.5. Strengths of Vancouver’s Regional Land Use Planning

As a voluntary federation, Vancouver’s regional land use planning has often served as an exemplary successful case study in Canada. In a review of regional urban planning strategies in Canadian metropolis, the Burchfield and Kramer (2013) find that Vancouver’s consistent approach to its four planning principles have produced significant densification and intensification in the urban area and directed population towards Frequent Transit Development Areas. Overall, the public, developers and municipalities maintain strong support for intensification and high density developments (Taylor, Burchfield, Kramer, 2014). A part of this success was attributed to the sound collaboration between the region and municipalities. In the last thirty years, the regional model of consensus decision-making has received broad support by municipalities, who have generally shown good will and desire to collaborate at the regional table (Smith, 2009; Artibise & Meligrana, 2005; Cameron, Feb. 9, 2016). As Artibise & Meligrana (2005) suggests, “the power of good and sensible ideas at the regional table had consistent and vigorous pursuit by regional and municipal planners and councils who kept the faith” (115).

While Metro Vancouver’s planning system has worked to ensure sound intergovernmental collaboration, there is also a growing concern that a federal system may compromise the region’s long-term planning vision. This uncertainty has been reaffirmed RGS by recent amendments which have allowed municipalities develop urban projects on what was initially designated as protected non-urban areas. The following chapter provides two examples of such.

Chapter 5. Challenges and Uncertain Future

5.1. Delta Southlands Rezoning

In January 2014, the Corporation of Delta (Delta) requested Metro Vancouver to amend the RGS in order to pursue residential development proposal on a parcel of land known as the Southlands. The Southlands is a 217.5-hectare site designated as Agriculture in both Delta's OCP and the RGS, despite not being in the ALR (Metro Vancouver, 2014b). The proposed development would re-designate 59.7 hectares from Agriculture to General Urban, and 42.2 hectares from Agriculture to Conservation and Recreation, effectively extending the UCB. The project includes 950 residential units and commercial space. The landowner also offered to transfer 172 hectares of Agriculture land to Delta, and an additional \$9 million improve agricultural drainage and irrigation (Metro Vancouver, 2014b).

There was no doubt that the Southlands development would result in significant economic and social benefits to the Delta community. However, as stated in Metro Vancouver's staff report, the development would breach some fundamental principles of the RGS. In addition to a net loss of Agriculture land, the development would disperse growth pattern by introducing approximately 2,500 residents to the "edge of the region with limited transportation options beyond private vehicles" (Metro Vancouver, 2014b, 275). Furthermore, Metro planners were concerned that this development could set a precedent for other private agricultural land owners to pursue market proliferation, especially when the majority of agricultural land in the region is privately-owned (Metro Vancouver, 2014b). For these reasons, Metro Vancouver planners recommended that the Metro Vancouver Board of Directors decline Delta's request for amendment. In spite of this assessment and recommendation, the Metro board of directors voted 93-31 in favour of the amendment and the offer of the developer.

5.2. Township of Langley v. Metro Vancouver Regional District

In 2013, the Township of Langley ('Langley') adopted a bylaw to amend Langley's Official Community Plan that would create a 23.4 hectares University District near Trinity Western University (TWU) within a parcel designated as Green Zone in the previous LRSP (Agriculture in the new RGS) (Ferguson, 2014). The proposal would authorize the development of a 67 lot, single-family residential subdivision within the area (Sinoski, Metro Vancouver takes fight over Langley subdivision to court, 2014). Langley had previously acquired the land's exemption from the Agricultural Land Reserve (ALR). The ALC justified the decision to exempt based on the lack of agricultural viability (GVRD v. Langley, 2014, BCSC 414). The proposed project is a mixed-use development to allow for residential options proximate to TWU (GVRD v. Langley, 2014, BCSC 414). In the same year, Langley has also amended its OCP to re-designate a 4.5-hectare Agricultural land to a Rural Residential area for the development of 21 single-family lots (Novae res Urbis, 2015).

For both amendment requests, Metro Vancouver was in the view that the bylaws were in conflict with the region's effort to protect non-urban areas and contain sprawl, and asserted the inconsistencies between Langley's OCP and the RCS (Novae res Urbis, 2015; GVRD v. Langley, 2014, BCSC 414). These two disagreements ensued into two separate bylaw petitions between Metro Vancouver and Langley, in which the BC Supreme Court (BCSC) Justice ruled to uphold the validity of Langley's bylaws. The decision was founded on the limited legal impact of the RGS (GVRD v. Langley, 2014, BCSC 414). The judge further pointed out that these documents are guidelines and "expressions of policy". Instead, only Langley's bylaw has statutory power (GVRD v. Langley, 2014, BCSC 414). For these reasons, the judge concluded that Metro Vancouver "does not have superiority over land use management within the boundaries of a municipality" (GVRD v. Langley, 2014, BCSC 414).

It was evident that both of the proposed developments and rezoning decisions violate the RGS, and could compromise the key objectives of urban containment and reducing car-dependence. In response to the Langley decision, Metro Vancouver Board Chair, Greg Moore expressed his discomfort:

That's a real big concern because we would argue that land use within a municipality of a certain scale does have regional significance ... It could mean more traffic or transit use or a higher cost of service. Or it could mean displacing industrial use which puts more pressure on another municipality (Sinoski, March 16 2014).

Predictably, some member municipalities welcomed the clarification of their autonomy. The Mayor of Langley Township, Jack Froese, saw that “the ruling should bring greater clarity to Metro Vancouver’s role in the strategy and suggests they may have to ‘rethink’ the plan to ‘recognize a municipality’s right to deal with parcel-to-parcel land use decisions’” (Sinoski, March 16, 2014). Similarly, then-Surrey Councilor Linda Hepner asserted that “edge planning is the prerogative of the local government, not the regional government. We [Surrey] have significant edge farming policies in our city and where we develop” (Sinoski, March 16, 2014). On the other hand, North Vancouver, a city trapped between neighbouring jurisdictions, mountains and the water expressed a very different view on the RGS. Mayor Darrell Mussatto rejects the idea that Metro holds too much power, and saw the RGS “giving too much control to the local municipalities” (Burrows, October 6, 2010). Instead, Mussatto sees the need for “a growth strategy that looks over the region as a whole” (Burrows, October 6, 2010).

These two events are classic case studies that outline some of the tension and disagreement between Metro Vancouver, municipalities and even the provincial government on land use. In response, the following chapter makes the case of the gravity of such conflicts, and most importantly, why they constitute as a policy problem.

Chapter 6. Policy Problem

The conclusions from the Delta Southlands and Metro Vancouver v. Langley Township raise an uncertain outlook for implementing the RGS, and also the role of Metro Vancouver in implementing the plan. They demonstrate the conflicting views on the role of Metro Vancouver. Specifically, the examples illustrate some disconcerting limitations of the regional government to curb urban sprawl through protecting green space areas. In the midst of rapid population growth, the need for growth management will only increase. At the same time, the remaining green space areas in Vancouver will also grow in importance, whether for purposes of future development, food security or limiting sprawl. These conditions therefore escalate the urgency of this policy problem: **Metro Vancouver's current policy on preserving green spaces from urban consumption is vulnerable to the land use decisions and legal autonomy of local governments.**

6.1. Key Drivers of the Policy Problem

6.1.1. Development Pressure

There is no doubt that the demand for greenfield development will only increase into the future in Vancouver. Part of this pressure is simply the natural trajectory for a growing population, already been accounted for by those areas that designated Urban within the UCB (Neilson, interview by author, Nov. 13, 2015). Nonetheless, what concerns most participants is when the pressure begins to encroach on the non-urban lands outside of the UCB. This trend is mainly driven by the cultural desire and budgetary needs for low density single family homes outside of city centres, as well as developers and land owners who seek to maximize the opportunities on cheap land (Neilson, Nov. 13, 2015; Campbell, Nov. 19, 2015; Corrigan, Nov. 23, 2015).

Currently, the majority of non-urban areas are in the suburban municipalities of Surrey, Langley, Delta and Maple Ridge (Metro Vancouver, 2014). These municipalities also hold the largest share (96%) of unused Agriculture lands (Metro Vancouver, 2014, 74). These communities also face large population growth, which increases the pressure for urbanization and incentivizes developers to capitalize on the undeveloped green space areas.

Given Vancouver's real estate market, the high housing prices may compel more households to relocate to the "lower-cost peripheral locations, a situation that would undermine regional equity and the benefits of transit-oriented intensification" (Taylor, Burchfield, Kramer, 2014, 27) and thereby the RGS principles. Neilson (Interview by author, Nov. 13, 2015) remarks, "there's a big part of the market that really desires [low-density developments], and developers respond to that and, in some cases, drive it ... With the cost in the central cores, it's challenging to afford single family living, so [people] get pushed out". Jackson and Holden (2013) theorize that the incentive to withhold undeveloped lands will only decrease as urban land values rises, especially in regions such as Vancouver. In light of the recent cases in Delta and Langley Township, observers suggest that these precedents may trigger more future applications to rezone protected land parcels for urban development (Neilson, interview by author, Nov. 13, 2015; Corrigan, Nov. 23, 2015; DeMarco, Jan. 29, 2016; Cameron, Feb. 9, 2016).

6.1.2. Regional Governance Framework and Municipal Autonomy

Today, Metro Vancouver is a government association that consists of 21 municipalities, one Electoral Area and one Treaty First Nation, tasked to work in a non-hierarchical approach. The LRSP clearly states, "the role of the GVRD [regional government] is to deliver to the area's 1.8 million people ... working through the GVRD, the municipalities provide these services on a regional basis for reasons of economy, effectiveness and fairness. The system is structured so that each partner maintains its local autonomy" (as cited in Artibise & Meligrana, 2005, 110).

In this regard, the regional government has no authority to require individual municipalities to comply with the overarching regional strategies (Artibise & Meligrana., 2005; Tolmalty, 2002). Importantly, this governance framework may necessitate the planning authority to concede to local development interests (Holden & Jackson, 2014). For instance, although approving the Southlands proposal may have been done in the spirit of collaborative governance and compromise, it is analogous to what Holden and Jackson (2014) describe as achieving "a win-win scenario involving acceptable trade offs" – "between environmental and economic interests" (4850-4861). In their case study of the Jackson Farm, which involved a similar exchange of lands between the land owners and City of Maple Ridge, Holden and Jackson (2014) argue that such governance solution

would likely result in the “dilution of adopted policy objectives during plan implementation” (4861).

6.1.3. Lack of Provincial Government Policy Coordination

Another challenge to the effective protection of greenfield areas is a lack of provincial and regional policy coordination. Over the years, the provincial government has adopted a laissez-faire approach to region-local planning issues and offers few opportunities for provincial-regional collaboration on land use planning (Abbot & DeMarco, forthcoming; Smith, 2009; New Public Consortia for Metropolitan Governance, 2011). The province sees itself responsible for solely providing and administering the *Local Government Act*. In fact, Smith (2009, 247) and multiple interview participants would argue that the province may have more incentive to allow “political and administrative diffusion” in a large metropolitan like Vancouver. Already, Metro Vancouver has witnessed the impact of this standard provincial passiveness, especially in the case of transportation planning (Smith, 2009).

The lack of policy coordination between the ALR and the RGS poses another concern for the protection of green spaces in the region. Although the ALR has been an effective mechanism for protecting agricultural lands, its approaches to assessing rezoning applications is not always consistent with the RGS. This is especially problematic for the preservation and safeguarding of non-urban lands in Metro Vancouver since almost all of the agricultural lands in the area are privately owned, and are thus prone to market interests. On the contrary, lands that are designated Recreation and Conservation are less susceptible to speculation, given that approximately 98% of them are publically owned (DeMarco, interview by author, Jan. 29, 2016). As the Langley case illustrates, the ALC exempted the parcels from the ALR on the basis that they were unsuitable for agriculture (*GVRD v. Langley*, 2014, BCSC 414). In particular, the communication gap between the ALC and the region may weaken Metro Vancouver’s protective measures for green spaces. First, in their case study on Jackson Farm, Jackson and Holden (2013) find that Metro Vancouver was not formally consulted prior to ALC’s decision on land exemption, despite asserting its opposition afterwards. While ALC and Metro Vancouver have an Implementation Agreement in place since 1996, which recommended that such decisions be referred to Metro Vancouver for input, there is no

legal compliance required to follow this protocol (Jackson et al., 2013). These records reflect a lack of regional-provincial coordination and misalignment of objectives in strategic land use decisions, thus adding another layer of limitation for RGS implementation.

It is important to note that these are the direct material forces of the policy problem. These drivers are in turn caused and permitted by inherent institutional and cultural environment of this region. To acquire a more in-depth understanding of the policy problem and theoretical context, the following literature review attempts to highlight existing research and academic commentary on Vancouver's planning system and regional governance.

Chapter 7. Literature Review

7.1. Greenfield Development and Urban Sprawl

Although closely related, there is a distinction between urban sprawl and greenfield development. Smart Growth BC (nd) defines greenfield lands as “previously undeveloped land including restored land, agricultural areas, forests, parks and natural areas”. In the context of the RGS, greenfield lands can be seen as green spaces with Non-urban designations. A greenfield development does not necessarily result in sprawl and negative externalities, depending on the location and the nature of development (Smart Growth BC, nd). For instance, a greenfield project that is integrated with existing urban fabric and functions has less impact on car dependence and environmental footprint relative to a greenfield project that is discontinuous from the existing development (Smart Growth BC, nd). Metro Vancouver’s RGS considers this impact by designating some undeveloped greenfield areas with urbanization potential while designating others as non-urban (Metro Vancouver, 2011).

On the other hand, urban sprawl commonly refers to the process associated with some growth patterns. In his recent analysis of Canadian suburban trend, Thompson (2013) identifies some key characteristics of sprawl:

Low density of development per hectare; rigorously separated uses (e.g., long distances between housing and retail); “leapfrogging” past existing areas of build-up, leaving undeveloped gaps; and / or dependency on the automobile. Most of all, sprawl is characterized by development on previously agricultural or natural “greenfield” sites (ii).

Urban sprawl landscapes are dominated by single-family homes in isolated residential areas, shopping or strip malls found along arterial roads and distant industrial and office parks, all of which are isolated and distant from each other (Fox, 2010). Moreover, sprawled communities are overlaid with “a network of roads marked by huge blocks and poor access; and a lack of well-defined, thriving activity centres” (as cited in Blais, 2012, 18).

A wealth of literature has provided compelling evidence on the costs of unregulated sprawl through greenfield development. A decentralized and leapfrog residential landscape causes significant social, economic and environmental costs (Squires, 2002; Fox, 2010; Wheeler, 2009). This growth pattern not only consumes huge parcels of land, but also inefficiently distributes urban functions across a large area, including work locations, leisure activities and public transit nodes (Blais, 2010). Overall, the aggregate impacts of sprawl include ecosystem degradation, air pollution, inefficient usage of space and energy consumption, as well as car dependence (Blais, 2012; Squires, 2002; Fox, 2010; Wheeler, 2009). The rigidity of a homogenous and decentralized landscape means that this pattern of growth sets up an irreversible geographical fragmentation, which takes on a “self-reinforcing dynamic that is difficult to break” (Tomalty, 2002, 24).

Similarly, sprawl in the Vancouver region has sparked similar concerns among urban planners, and sparked the creation of LMRPB. As Wheeler (2009) observes, Vancouver’s rapid urbanization resulted in the dispersion of destinations throughout the urbanized areas and subsequently increased travel distances and car usage. In addition to impacts on carbon emission, this trend has also caused major forest depletion and habitat degradation (Wheeler, 2009). For this reason, Vancouver’s regional plans have always focused on preventing greenfield sprawl through the creation of regional centres and protection of selected green spaces.

7.2. Limitations of the Consensus-Based Governance Model

Literatures on North American regionalism emphasizes the regional government’s emerging role in managing urban growth among a collective of local municipalities, especially with regards to issues of urban sprawl, economic competition, environmental sustainability and transportation (Wheeler, 2007; Norris et al., 2009). However, it also recognize the limited power and capacity of most metropolitan governments in influencing urban growth policy. Wheeler (2009, 864) describes the metropolitan as an “in-between” level of governance that receives minimal support from neither the senior level nor the local governments below. As a result, a dominant feature of the large metropolis is the fragmentation of competing local authorities (Wheeler, 2009). Resistance to regional leadership is commonly found, because growth management policies often conflict with municipalities’ capitalist objectives and urban expansion. Porter (2008) notes that the

requirement for consensus result in broad regional statements, which pose challenges to implementation of meaningful policies. This form of government is advisory in nature and “leav[es] local governments to ignore or implement regional policies at will” (Porter, 2008, 243). These competing interests therefore compromises efforts for a unified approach to land use decisions.

Urban governance academics observe that Metro Vancouver’s confederal governance model has fostered effective cooperation and consensus-building between municipalities and the regional government (Hutton, 2011; Artibise & Meligrana., 2005; Smith, 2009). However, this cooperation may only be effective in performing certain functions, such as the delivery of sanitation and utility services, minimizing conflicts at the planning table, and reaching a consensus on high level objectives of the RGS (Tomalty, 2002; Artibise & Meligrana, 2005). Hutton (2011) notes the fact that both the province and municipalities possess much more significant legal rights over land use decisions further constrains the powers of Metro Vancouver, a view that is corroborated by Tomalty (2002), Artibise & Meligrana (2005) and Smart Growth BC (2010). In a review of the Metro Vancouver’s growth management system, Tomalty (2002) finds that Vancouver’s ambitious planning goals often depend on each party’s “moral suasion”, and the presence of a shared interest (24). For this reason, this model is less adaptive at accommodating conflicts of interests between the regional and local governments (Tomalty, 2002; Artibise & Meligrana, 2005; Hutton, 2011). As expected, municipal stakeholders more often pursue local interests, thus undermining the regional vision in times of conflict (Tomalty, 2002).

7.3. The Political Accountability “Crunch”

There is also a growing concern for the current structure of the Metro Vancouver board of directors, who are the key decision makers of regional land use policies. The board structure is based on a two-tiered system, in which municipal council members are appointed by their respective city councils to serve as Metro Vancouver board directors (Artibise & Meligrana, 2005)⁸. Academics have cautioned that while the institutional organization for Metro Vancouver has worked in the past, the region requires a stronger

⁸ This system does not apply to the two electoral area directors, who are elected directly from their areas during municipal elections (Artibise & Meligrana, 2005).

and more accountable leadership in order to implement more ambitious regional land use goals (Artibise & Meligrana, 2005; Smith, 2009; PCMC, 2011). Abbot and DeMarco (forthcoming) and Artibise and Meligrana (2005) argue that the current structure prevents board members from making substantive decisions for the regional interest when all local interests need to agree first. Specifically, there is “a strong bias in favour of local interests exists in the GVRD because municipalities need the support of other and will often not vote against them” (Abbot and DeMarco, forthcoming, 18). Conflicting views between members with regional, local and parochial interests can also result in inaction as politicians are more inclined to pursue the status-quo or politically popular decisions (Artibise & Meligrana, 2005; Abbot and DeMarco, forthcoming). This system is seen as inflexible and works to constrain politicians from taking a more proactive stance when needed (Smith, 2009).

7.4. Local Autonomy and Pro-Development Stance

Municipalities in Canada, particularly those in BC, are highly protective of their local autonomy and power over zoning and land use. Jurisdiction over municipal land use planning and zoning rest under the province. BC, in turn, has delegated these authorities to local municipalities through the *Local Government Act* (Fox, 2010; LGA). In many North American suburban municipalities, this local autonomy has led to a deregulation of land development dominated by the market, which partly drives urban sprawl.

Similar to the US, there has been a decline in financial support from federal and provincial sources among Canadian municipalities (Blais, 2010; Keil et al., 2014). Since the major source of municipal revenue is property tax, municipalities are more inclined to promote business and residential settlement to increase revenue (Keil et al. 2014). At the same time, the underpricing of municipal services, land supply in suburbs, and consumer demand for larger homes incentivize developers to build on greenfield lands in the fringes (Keil et al., 2014). As a result, it has been argued that local land use decisions are mostly driven by private developers (Caulfield, 1992 as cited in Jackson et al., 2013).

The strong local protectiveness over land use decisions also is reaffirmed by provincial government’s unwillingness to contest local autonomy by giving the regional government more authority in municipality affairs, owing to BC’s tradition of local

autonomy (Smith, 2009). As Smith (2009) suggests, “the norm for provincial action on matters municipal and metropolitan in BC has been ... one of “gentle imposition” (237). In fact, the province’s relationship with Metro Vancouver is even seen as “permissive” (Smith, 2009, 15). Since the introduction of regional districts in BC in the 1960s, the provincial government has always maintained that the regional government does not represent a new level of government, but rather a cooperative player among the municipal governments (Artibise & Meligrana, 2005). After all, if not for this condition, the introduction of regional districts could not have been accepted by local governments initially (Taylor, interview by author, March 2, 2016). Even when disputes arise between the region and municipalities, the BC government has tended to favour the local governments (Artibise & Meligrana, 2005).

In short, this survey of literature has provided a background knowledge on Metro Vancouver’s regionalism and the land use challenges that centers the policy problem. The remainder of this capstone continues to build on these key themes through more in-depth interviews of experts and stakeholders.

Chapter 8. Analysis of Expert and Stakeholder Interviews

A total of ten individuals have been interviewed in this research, all except one have agreed to disclose their identity and affiliation:

- Allen Neilson, General Manager of Policy, Planning and Environment at Metro Vancouver
- Elisa Campbell, Regional and Strategic Planning at Metro Vancouver
- Dr. Meg Holden, Assistant Professor at SFU Urban Studies
- Derek Corrigan, Mayor of City of Burnaby
- Jack Froese, Mayor of Township of Langley
- Danielle Lukovich, Growth Strategies Manager, Intergovernmental Relations and Planning Branch, Ministry of Community, Sport and Cultural Development and Responsible for TransLink
- Christina DeMarco, Division Manager, Regional Development at Metro Vancouver
- Ken Cameron, Adjunct Professor at UBC School of Community and Regional Planning, former Manager of Policy, Planning and Environment at Metro Vancouver
- Dr. Zack Taylor, Assistant Professor at Department of Political Science, University of Western Ontario
- Confidential Informant

Findings and analyses from these interviews are used to validate, supplement and add nuance to the policy problem as well as the contributing factors. In addition, informants also advise on the various opportunities and considerations for improvement – all of which are important for the formulation and analysis of policy alternatives.

8.1. Local Autonomy and the Role of Metro Vancouver

The role of Metro Vancouver in land use planning is subject to different interpretations by participants. On the part of Metro Vancouver, there appears to be a slow transition in its implementation approach of the RGS. During the transition from LRSP to the recent RGS, there was also a shift in senior administration internally, which impacted the approach Metro Vancouver took in implementing the new RGS (Personal communication with Cameron, Feb. 7, 2016). Former Manager of Planning and Policy at Metro Vancouver Ken Cameron, remarked that the new RGS is framed as an enforceable document, contrary to the high-level guidelines in the LRSP (Personal communication,

Feb. 9, 2016). Cameron argues that this regulatory approach added to the pressure that sparked recent conflicts detailed in Chapter 5.

Communication with Allan Neilson (Interview by author, Nov. 13, 2015), current Manager of Planning and Policy, corroborated this belief. Specifically, on the Langley Township case, Metro Vancouver's hard stance and attempt to trump local government autonomy over land use decisions were eventually defeated through court rule (Neilson, interview by author, Nov. 13, 2015). For Neilson, the court decision was a blessing in disguise as it helped clarify the role and responsibilities of the regional district (Interview by author, Nov. 13, 2015). Since the decision, Metro Vancouver has resituated itself and its policy as strictly a vision document of planning guidelines, to be adopted by municipalities voluntarily (Interview by author, Nov. 13, 2015). Neilson's colleague, Elisa Campbell, adds, "in the past there has been more of a tendency to say, 'thou shall do this' – I don't think that works. In some cases, they should say no, and the answer should be on the onus of the municipality, not us" (Interview by author, Nov. 19, 2015).

Local communities in BC have always shown a strong sentiment of local autonomy, which is a principle often used to rationalize decisions, including challenges to the RGS (Taylor, interview by author, March 2, 2016; Holden, interview by author, Nov 23, 2015). Political leaders interviewed for this study reaffirm the overall importance of municipal autonomy in local land use decisions, especially when it is a central part of municipalities' existence. Froese argues, "when you're dealing with certain small parcels on the fringes, you need to have confidence in the local government to make those decisions, you have to rely on the local staff to fill you in" (Interview by author, Jan. 12, 2016). The Mayor of the township recognizes the benefit of regional plan in providing a planning vision and facilitating intergovernmental collaboration on technical services but argues that local land use should be under the direct jurisdiction of the elected local government (Interview by author, Jan. 12, 2016). For Corrigan, the question is not of legality or oversight ability, but rather of morality and cooperation. He views the RGS as a strong moral compass, the success of which is highly dependent on municipalities' ability to honour the agreement (Interview by author, Nov. 23, 2015).

Rather than adopting a regulatory planning approach, participants have high regard for the consensus-based governance system. All have attributed the success of Vancouver's planning to the sense of equality and openness of this structure, which has fostered a significant level of local participation, cooperation, good will and strong working-relationships. For this reason, many have identified the importance of flexibility in a regional strategy, as opposed to a static document and top-down command and control. Cameron is a champion on this approach. As the lead for LRSP, Cameron believes in the importance of designing the fundamental principles for a regional plan, but also allowing enough flexibility for local governments to translate these principles onto the ground, a feature found in the more generalized and high-level strategies of the LRSP. In contrast, Cameron sees the current RGS taking on a prescriptive and regulatory approach that challenges local autonomy, which led to conflicts and ultimately dispute with the Township of Langley (Interview by author, Feb. 9, 2016). Contrary to his successors, Cameron advocates for a governance system that puts the onus on the municipalities, "without the region being the policeman" (Interview by author, Feb. 9, 2016).

Certainly, the current senior management at Metro Vancouver aim for this flexibility. Using the example of Delta Southlands, Neilson acknowledges that many land use decisions come with tradeoffs (Interview by author, Nov. 19, 2015). He contends, "when you put a particular problem through the lens of the five regional goals, it is often a judgment call [for the decision-makers] ... In the Delta Southlands case, the developers have done a good job making this a sustainable development ... and have set aside other lands for conservation. They've been really creative" (Nov. 13, 2015). Interestingly, this remark resonates with what Jackson and Holden (2013) caution as the kind of rationalization that compromises sustainable planning (see Chapter 6.1.2).

However, former Manager of Regional Development for, Metro Vancouver, DeMarco disagrees with relying on persuasion to implementing the regional vision. Not discounting the value of consensus and democracy, DeMarco advocates for discipline and evidence-based decision-making in regional planning (Interview by author, Jan. 29, 2016). DeMarco sees a need for an incentive or enhanced legislative measures in place to ensure compliance to the plan (Interview by author, Feb. 18, 2016). The fact that green spaces

are essentially non-renewable, any decision to develop this asset is irreversible except at very high cost, high-impact and should be evaluated against a series of stringent criteria.

8.2. The Political Will

Some experts interviewed in this study are confident with the RGS and its ability to guide sustainable growth. They also agree that the key element to sound implementation is a strong political will at all levels of the government. Not surprisingly, a recurring theme throughout the interviews is that municipalities do not always maintain the disciplined assertiveness to reject projects in conflict with the RGS objectives.

Most participants agree that local politicians are driven by development opportunities in an effort to grow their tax bases and the economy. In addition to strong lobbying efforts, some developers would also offer to fund key infrastructural projects to further incentivize municipalities to support their projects (Holden, Nov. 23, 2015). Mayors and councillors also face pressure from their constituencies and local residents, many of whom are resistant to the idea of densification. In turn, the competition for development and pressure from industry and local land owners weaken local governments' will for supporting the regional objectives, as in the case of the Langley Township (Corrigan, Nov. 23, 2015).

On the Metro Vancouver board, decision-making on land use amendments is also subjected to the political interests of individual municipalities. Echoing findings from the literature review, DeMarco and Cameron (Jan. 29, 2016; Feb. 7, 2016) find that representative directors sometimes vote in the interest of the proponent municipality, rather than on the regional costs and benefits of the proposed development. As raised in Chapter 7, the reason behind lies in the need for “exchanging favours” and “logrolling” by being supportive of each other’s interests. Basically it is a deep-seeded belief in local autonomy at play, which can undermine the very concept of regional planning. It would appear that some controversial decisions to approve greenfield developments – including the mega shopping mall Tsawwassen Mills and the Delta Southlands – were driven by these values.

8.3. The Role of the Province

Numerous participants lament the minimal and reactionary role of the province in regional affairs. Any formal engagement dates back to the period when Metro Vancouver formally requested the Ministry of Community, Sport and Cultural Development (CSCD) to participate in the development of the RGS through an intergovernmental advisory committee, which was disbanded upon completion of the RGS (Lukovich, Jan 22., 2015). This non-interventionist approach in regional-municipal affairs, Lukovich (Jan. 23, 2015) speculates, may be due to the significant decrease in provincial capacity since the early 2000s. The Ministry also recognizes that Metro Vancouver's municipalities require minimal support and oversight given their existing capacity. The other primary stream of provincial involvement occurs when municipalities or regional governments request mediation support. Even in these situations, the province does not actively mediate but instead facilitates like a "traffic cop", by only providing advisory support (Lukovich, Jan. 22, 2015).

What multiple interview participants find worrisome is the recent reforms in the ALR system⁹ and its weakening function as the gatekeeper of agricultural lands. Some participants observe a slow "chipping away" at the ALR, while others find that many decisions to exempt the lands were the result of the province exchanging trade-offs in favour of developers (Holden, Nov. 23, 2015; Corrigan, Nov. 23, 2015; Taylor, March 3, 2016). Most agree that the recent relaxation of ALR regulations may be attributed to its minimal capacity and large mandate, which reduce the agency's ability to review each exemption with a critical eye. Participants from Metro Vancouver are sympathetic towards ALC's limited resources, with Neilson noting that "they've had to make quick decisions – and in some of those cases we would have preferred that they took a bit more time and consulted with us a bit more" (Nov. 13, 2015).

⁹ Bill 24 (2014) essentially allows a broader variety of farm uses on certain ALR parcels, including those of "economic, cultural and social values" (Bill 24, 2014). In other words, Bill 24 opens up the potential for greenfield developments such as industrial or cultural amenity infrastructures and essentially conflicts with the goals of the RGS and weakens the protection for certain green spaces (Neilson, interview by author, Nov. 13, 2015).

Similarly, Mayor Corrigan comments, “we found that with this provincial government ... there has always been a desire of this provincial government to change the ALR and look at ways in which they can answer to the business community, development community and farmers who want to access the value of their lands” (Corrigan, Nov. 23, 2016). Although participants agree that a part of this provincial stance is attributed to the strong culture of local autonomy in BC, some also view the province’s disregard towards the regional growth policy as a form of political reluctance to recognize Vancouver’s economic and political significance. Numerous participants also lament on the province’s unilateral imposition of projects that are in opposition to both the local and regional plans (e.g., Massey Tunnel replacement, Port Mann Bridge expansion). There is no question that the BC government’s absence from the regional table and its executive decisions exacerbate Metro Vancouver’s lack of oversight abilities on protecting green spaces through the RGS.

8.4. The Logic of Cooperation and Resistance to Change

In any consensual system, there is a core logic of cooperation, which serves as a critical element in policy development and implementation. Findings from the literature review and expert interviews can help distill some key underlying drivers of and barriers to cooperation through the lens of regional land use planning. With regards to the driver of cooperation, Taylor (Interview by author, March 3, 2016) raises the social constructivist idea of norms. Rooted in international relations study, this theory suggests that within a community with no superordinate coercive authority, the members’ actions and decisions are guided by a set of norms that represent shared vision and expectations (Payne, 2001). In turn, this constructivist framework can be applied to the consensus-based system of Metro Vancouver. Taylor views the logic of cooperation in Metro Vancouver as deeply rooted in the tradition of collaboration, trust and moral persuasion, and the norm for regional thinking and planning, to which both Cameron and Corrigan allude. Since the establishment of the Sewerage and Drainage Commission in 1913, these values have been upheld and perpetuated by the long tenured municipal politicians, staff planners and academic arm of regional planning, University of British Columbia’s School of Community and Regional Planning (Taylor, interview by author, March 3, 2016). In the past, “municipalities cooperated for the sake of cooperation” (Taylor, interview by author, March 3, 2016).

Through this lens, an underlying barrier to cooperation is the erosion of norms and trust. As the region moves through time, it is now confronting growing pains and market interests from a globalized economy, all of which are in conflict with a new regional plan that is more prescriptive and may hint at infringing on municipal autonomy. In combination, these changes and material forces now destabilize the logic of cooperation which defined the governance of Metro Vancouver in the previous decades.

In response, one may consider the obvious alternatives to restore cooperation or rather, enforce compliance. Some options include allowing Metro Vancouver the power and authority to regulate the RGS and override municipalities or enabling Metro Vancouver to use innovative policy instruments such as taxation to incentivize local behavior (Taylor, interview by author, March 2, 2016). But as an “association”, Metro Vancouver is unable to change its governance and institutional system without the consensus of its member municipalities and the provincial government. As already established in this study, both parties are highly resistant to change. As municipalities hold tightly onto their autonomy, the BC government is reluctant to override local wishes unless it sees an economic or political interest. In between these entities awkwardly sits Metro Vancouver, incapable of acting on the obvious solutions to fulfill the RGS.

8.5. Opportunities for Improvement

8.5.1. Collaboration with Senior Governments

Since a majority of the lands with agricultural designations are within the ALR, the ALC plays an important gatekeeper role to safeguard a large portion of green spaces of Metro Vancouver. For this reason, senior managers at Metro Vancouver are driven to support the ALC’s mandate wherever possible, including information sharing, research and advisory support. Metro Vancouver has been working with the province on developing an agricultural land inventory that contains key information on the ALR parcels in the region, which would serve as an important tool for the ALC and its decision-making process. Neilson (interview by author, Nov. 13, 2015) also recognizes the need to coordinate the operation of ALC and the RGS, especially on the value of unavailable farmlands that are vulnerable to exclusion.

Some participants (Campbell, Nov 19, 2015) also raise the critical role of the provincial and federal governments in empowering the RGS through its own programs. In the past, CMHC led large-scale research on sprawl and sustainability development, many of which indirectly supported the RGS goals. The agency has also administered incentive and competition programs – some of which were carried out in consultation with Metro Vancouver – which awarded grants for sustainability community infrastructures (Campbell, interview by author, Nov. 19, 2015). The initiatives helped shape the housing market and development locations in the region. Similarly, the provincial government in the past has also taken bold executive decisions that have had enduring impacts on the RGS indirectly, including the BC Carbon Tax and its effect on reducing car dependence. Some participants feel that more collaboration with the province on policy development would be immensely beneficial for implementing the RGS, since its executive influence helps to empower the regional goals.

To sum up all the drivers and stakeholders involved in land use decisions in Metro Vancouver, Figure 5 attempts to visualize these intertwining relationship.

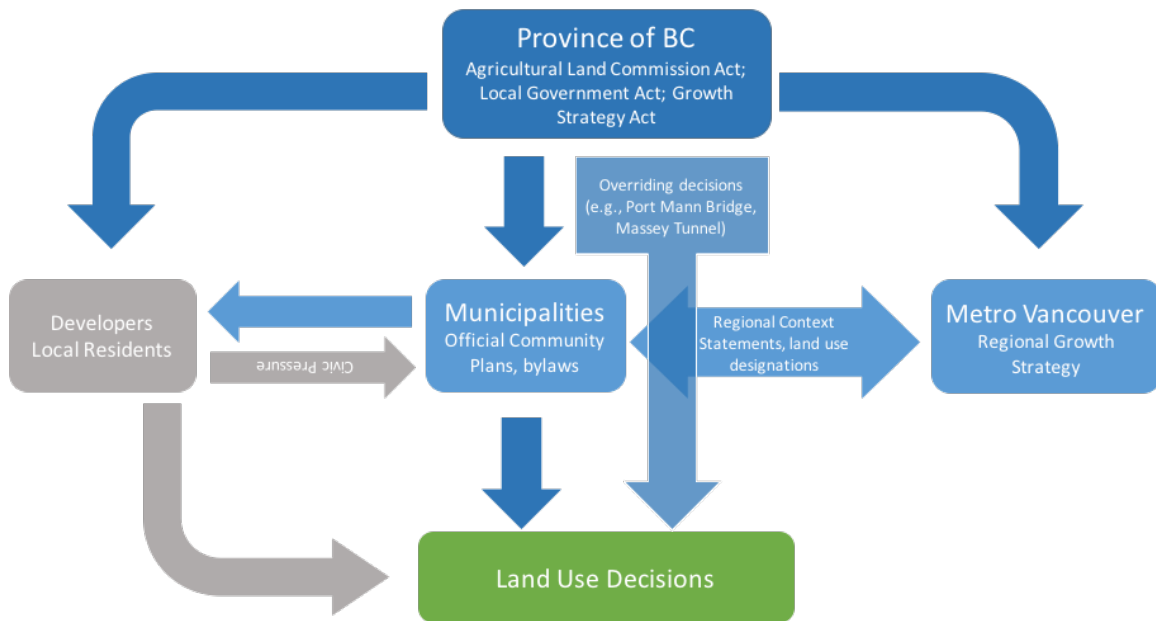


Figure 2 Different players of Land Use Decisions in Metro Vancouver¹⁰

8.5.2. Advocacy

In light of Metro Vancouver’s consensus-based governance structure and the lack of enforcement authority, its senior managers plan on engaging with stakeholders to achieve a shared understanding:

If we don’t have a strong stick, then we need to rely on our ability to persuade, convince and educate so that we work with municipal partners to make sure that certain things don’t happen and we work with the province through the ALC to make sure that they are true to their mandates in protecting agricultural lands. The pressure [for greenfield development] is going to increase, developers will want to make money off of these lands because it is the easier route, and thus there is the incentive for land owners to develop. Our job is to convince people of why [the RGS] is important, we need to help people understand why they need to buy this” (Interview by author with Neilson, Nov. 19, 2015).

Recognizing that elected officials are influenced by their constituencies, participants stress the need to expand the target audience of Metro Vancouver’s engagement effort to the general public in order to affect the overall public opinion and knowledge of Metro Vancouver’s RGS vision. Campbell admits, “the general public’s

¹⁰ Created by author.

understanding of the RGS at best is almost negligible, and this will be one of the most important pieces for me in the next years – to embark on a new communications strategy to raise public understanding” (Interview by author, Nov. 19, 2015). She terms this the “backdoor approach”, through which outreach programs can help shape public opinion and garner support for the regional objectives, and ultimately influence municipal land use decisions.

Similarly, for Taylor (interview by author, March 2, 2016), advocacy is by far the most important prerequisite to regional cooperation. He argues that the successful implementation of Portland’s RPF (see 9.2.3), the effective buy-in on Vancouver’s 1966 plan and the 1995 LRSP were all products of the extensive public consultation and outreach carried out by the regional government. Taylor contends that outreach and persuasion lead to legitimacy and good intergovernmental relation and is more effective than legislated authority. These elements allow local governments to put more trust in Metro Vancouver and the principles it represents.

The interviewees have lent some multifaceted insight to the key drivers and barriers of intergovernmental collaboration on regional growth from the perspective of local, regional and provincial governments. In turn, this intelligence allows for the formation of more targeted policy intervention, as will be discussed in Chapter 11.

Chapter 9. Lessons from Other Jurisdictions

In light of the current policy problem, this section presents key policies from other jurisdictions that may help inform innovative options for Vancouver's intergovernmental collaboration on protecting green spaces and provide cautioning notes. The first case study is the Calgary Regional Partnership (CRP), which oversees the regional growth plan in Calgary metropolitan area. The second case study looks at the experience of Denver, Colorado, and its regional planning association, the Denver Regional Council of Governments (DRCOG). The final case study is on the State of Oregon's Greater Portland and its state-legislated regional government, Metro. For each jurisdiction, this study will analyze:

- Emergence of regional planning,
- Regional governance framework and growth management goals,
- Effectiveness of intergovernmental cooperation and policy implementation with regards to urban containment and density (performance indicators to be provided wherever available¹¹) and
- Challenges and or successes to the above.

The selection of the jurisdictions is deliberate and follows a set of criteria. First, the metropolitan governments chosen are from either Canada or the US to help control for institutional structure and urban landscape development. The political and geographical environments in other continents are less comparable to Vancouver and thus would not produce informative findings. Second, all three regions have comparable population size and number of local governments (with the exception of Calgary). Finally, each metropolitan organization also exhibit some form of regional land use and growth strategy that contain objectives in containing urban growth and protecting green spaces.

¹¹ Due to a lack of data, the performance and goal indicators referenced throughout the case studies are limited to unit density measures, which although is not directly tied to the level of and government cooperation in green space protection, but is indicative of the breadth and ambition of regional plans.

Table 3 Summary of Regional Profiles¹²

	Vancouver	Calgary	Denver	Portland
Population (2014)	2.47 million	1.41 million	3.01 million	2.35 million
Population density	802.5/ km ²	237.9/km ²	126.38 / km ²	129/km ²
Regional agency	Metro Vancouver	Calgary Regional Partnership	Denver Regional Council of Governments	Metro
Local jurisdictions in region	23	18	76	24
Member jurisdictions	23	14	45	24
% population served by regional agency	100%	98%	80%	100%

9.1. Calgary, Alberta

9.1.1. Emergence of Regional Planning

Regional planning in Alberta began as an effort to respond to the rapid economic and population growth that resulted from the booming resource sector. The *Town and Rural Planning Act* (1950) (later replaced by *Planning Act* of 1977) established planning advisory commissions for each district throughout the province, including the Calgary

¹² Statistics Canada, 2015; Metro, 2015; Metro Denver Economic Development Corporation, 2014; Government of Alberta, 2014).

Regional Planning Commission (CRPC) (Climenhaga, 1997). Subsequent amendments to the Act rendered Calgary's regional planning a highly centralized, top-down system. Under these changes, memberships by municipalities were required for all, and planning commissions were granted the legal authority to enforce regional plans (Climenhaga, 1997). This model assured a consistent planning approach and prevented municipalities from pursuing one-off decisions (Climenhaga, 1997).

Unfortunately, this strong hierarchical form of regional governance also played a large role in its downfall. During the 1980s, political tension within the CRPC began brewing, as rural municipalities were unhappy with the commission's top-down planning decisions, many of which favoured the urban communities and the City of Calgary (Climenhaga, 1997). There was strong dissatisfaction from rural municipalities when the CRPC turned down numerous proposals for development on the urban fringe (Climenhaga, 1997). In 1995, the CRPC was dissolved as a result of the Alberta Conservative government's desire to cut spending and please its rural electoral base (Climenhaga, 1997). The resentment and bitterness felt by rural communities towards any form of regional governance was an obstacle to securing a strong successor for the CRPC.

9.1.2. Current Growth Management Framework and Goals

Upon the termination of planning commissions in the 1990s, a large portion of planning power and responsibilities was transferred to the local governments under the new *Municipal Government Act* (Climenhaga, 1997). Municipalities in Calgary began planning within their own jurisdictions (with the exception of Intermunicipal Development Plans for joint planning of shared border areas, in parallel to the CRP), thereby resulting in uncoordinated regional growth (McKinney, Field, Johnson, 2007). It was not until 1999 when municipalities began a collaborative effort to examine land use and growth issues, largely in response to another booming energy economy. This collaborative effort later transformed into the Calgary Regional Partnership (CRP), which is the current voluntary forum for regional planning.

The CRP's official growth strategy, Calgary Metropolitan Plan (CMP), sets the direction for development patterns and density requirements for its member municipalities in effort to respond to water scarcity, urban sprawl and the sharing of regional services

(Mcknney, Field, Johnson, 2007). The CMP states “accommodating growth in more compact settlement patterns” as one of the five key goals in regional planning (CRP, 2014a, 3). Similar to Metro Vancouver’s approach, the Calgary region intends to accomplish this through developing mixed-use and transit-oriented communities (CRP, 2014a). Instead of implementing an urban containment boundary, new developments would occur in “priority growth areas”, which are those eligible for regional utility servicing. These areas are anticipated to absorb 3 million additional people and 1.5 million jobs by 2076 through intensification of developed areas (CRP, 2014a, 52). Other key guiding principles include (CRP, 2014a, 28):

- Priority Growth Areas (PGA) to be mixed-use, contiguous and connected,
- New projects in PGA to be located in proximity to transit services and
- New residential projects in greenfield areas to achieve minimum density of 8 to 10 units per gross residential acre in respective Municipal Development Plans.

The CMP affirms that regional planning is “supported through a regional governance approach” by enabling collaborative implementation of the CMP and commitment to consensus-based decision-making (CRP, 2014, 3). As a voluntary association, municipalities’ Municipal Development Plans would prevail over any regional strategies.

9.1.3. Effectiveness of Growth Management and Intergovernmental Cooperation

With regards to the effectiveness of the CRP, McKinney et al. (2007) remark that the forum serves as an effective “platform for information sharing, relationship building and project incubation and development” (10). On the other hand, they also anticipate that Calgary will eventually face growing pains as there exists no hard measures to regulate land development in a voluntary system (McKinney, Field & Johnson, 2007). As in the case of any voluntary board, members retain the autonomy to implement the policy at will. Although municipalities adopt the CMP as its growth strategy, city councils sometimes reject high density projects due to local protests (Taylor et al., 2014). According to CRP’s 2014 performance indicator report, the average units per gross residential area among member municipalities is 6.75 (2014c, 18). At this rate, it may be unlikely for the region to achieve its goal of 8 to 10 units per acre anytime soon. Another challenge is that four municipalities remain absent from the partnership, including Rocky View County, Wheatland County, Foothills, Bighorn and Crossfield. The City of High River, in fact,

withdrew from the CRP in 2013, and later rejoined in 2014 (Municipality of High River, 2015).

A significant barrier to effective collaboration in the CRP is the lingering rural and urban tension (McKinney, Field & Johnson, 2007; Norman, 2014). This void is evident as those municipalities that have opted out of CRP are the major rural communities. The two groups disagree on core planning values. First, contrary to their urban counterparts, the rural municipalities are uncomfortable with compact and high density urban planning (McKinney, Field & Johnson, 2007). Instead, they prefer to accommodate the market demand for low density and upscale development on the fringes (McKinney, Field & Johnson 2007). Second, many rural communities view regional organizations with very little trust, as they are often reminded of the unpleasant history with the CRPC. Third, McKinney et al. (2007) also note that the Alberta government's policy to intervene and facilitate mediation processes only after relations have gravely deteriorated in fact worsens many intergovernmental conflicts in the region.

Moreover, the perception of inequality between the City of Calgary and other municipalities remain a significant barrier to collaboration (McKinney, 2007, Norman, 2014). Granted, the City of Calgary dominates the CRP decision-making system. When a decision goes through a vote in the CRP, it requires a two-third positive vote, or 50% representation of the population (CRP, 2014a). As a result, the City has a natural veto on the board given its overwhelming share of the regional population. Adding to the tension, Calgary has also maintained a policy of refusing to extend water pipelines to new settlements outside of corporate boundaries if they are not planned at minimum urban densities or contiguous to existing communities (Taylor, Burchfield, Kramer., 2014). While urban municipalities accept these conditions, many rural communities and developers remain weary (Taylor et al., 2014).

While CRP has attempted to amend and relax some sections of the CMP to resolve outstanding issues with the two key non-member municipalities – Foothills and Rocky View Country. Unfortunately, they have yet accepted the terms (CRP, 2014b). Since rural communities own the largest amount of developable land, their non-memberships constrain CRP's functions and strategies (Norman, 2012; McKinney et al., 2007). As

Taylor et al. (2014) sum up, “opposition from influential stakeholders, combined with weak and unstable regional governance institutions and inconsistent support from the province and local politicians renders the current urban development policy regime unstable” (17).

9.2. Portland, Oregon

9.2.1. Emergence of Regional Planning

In the late 1960s and 1970s, the State of Oregon passed the landmark Senate Bill 10 (1969) to require local governments to adopt and implement comprehensive land use plans that would address the prescribed broad goals, which included conserving open spaces and farmlands. This move was driven by farmers who were advocating for the protection of farmlands from urban sprawl (Abott, 2002). Afterwards, a subsequent Senate Bill 100 (1973) mandated each local government to adopt an Urban Growth Boundary (UGB), within which urban development would be concentrated and outside of which lands would be protected (Abbott, 2002).

SB 769 gave the Columbia Region Association of Governments (CRAG) – the voluntary planning agency serving the Greater Portland region – additional planning authorities to “affect the plans, regulations, and actions of the cities and counties within its boundaries” (Sullivan, 2014, 461). Nonetheless, the Portland regional government suffered the same constraints as Vancouver when it came to land use planning by a board of local government officials. Not only was it challenging for representatives to devote time and energy to CRAG operations, they were often under the pressure to protect their own communities from undesired regional policies (Abbot & Abbot, 1991; Sullivan, 2014; Hamilton, 2014).

In 1979, when the state shuffled CRAG under the service provider Metropolitan Service District (‘Metro’)¹³, the new Metro emerged with enhanced planning authorities and a new governance structure. First, the new governing board abandoned the system of appointed representatives, and became an elected council. It was envisioned that a system of elected members would create more accountability and democratic representation (Abbot & Abbot, 1991, 22). In addition, Metro was also given the ability to

¹³ The Metropolitan Service District was created by the Oregon legislature in 1970 to undertake Portland region’s solid-waste planning and later on, to manage the Washington Park Zoo.

“recommend or require” local plans to conform to the regional one” (Sullivan, 2014, 463-464), though it was reluctant to exercise its authority to curb urban sprawl and land speculation (Seltzer, 2004). Perversely, rural residential developments increased outside of the UGB, while urban lands within the UGB remained unused (Seltzer, 2004). In the midst of all, local governments firmly opposed to Metro using its power as that “would be regarded as a serious usurpation of local control”, perhaps alluding to the lack of legitimacy (Seltzer, 2004, 40).

Hoping to revamp its regional governance structure and enhance effectiveness, Metro consulted a wide array of interests including governments, development industry, environmental organizations and the public. The committee of stakeholders created a set of “regional urban growth goals and objectives” (RUUGOs) that outlined Portland residents’ vision of how regional planning should be carried out, as well as the appropriate role and responsibilities of Metro (Seltzer, 2004). This process built a significant amount of trust between Metro and its partners, leading to the approval of the *Metro Charter* in 1991 through a popular referendum. This charter significantly increased and solidified Metro’s oversight and enforcement authority over land use strategies in Portland.

9.2.2. Current Growth Management Framework and Goals

Today, Metro encompasses 25 cities and portions of three counties on the Oregon side of the Columbia River (Sullivan, 2014, 459). It is governed by a president who is elected region-wide, as well as six elected council members, each representing a district¹⁴ (Metro, nd). The new governing Charter (Metro, 2015) enabled Metro to develop a Regional Framework Plan (RFP), titled the 2040 Growth Concept. Among the many goals, the RFP encourages compact development, the protection of farms, forests, river streams and natural areas (Metro, 2016). The RFP has implemented a UGB and a set of highly specific zoning designations, including town centers, transportation centers, main streets, regional centers, natural areas and rural reserves (Metro, 2016). To ensure accountability, Metro has also developed an “Urban Growth Management Functional Plan” under the Metro Code to provide detailed procedures on operationalizing the RFP, from specific requirements for neighbourhood densities to time exemptions for compliance procedures

¹⁴ In 2011, the Metro Council adopted boundaries dividing the region into six districts, each represented by an elected council.

(Metro, 2016). According to RFP's 2011 update, Metro aims to increase unit dwelling density from 3,504 km² to 5,198 km² by 2035, which is a 48% increase within the UGB (Wallis, 2012, 17).

9.2.3. Effectiveness of Growth Management and Intergovernmental Cooperation

Of all the other jurisdictions examined, Portland's regional planning has emerged as one of the most effective systems with highly collaborative local players, albeit mandated by law. Over the years, the region has slowly expanded in a controlled and gradual fashion, as its UGB has helped to achieve intensification and reduce sprawl (Hamilton, 2014, 294). Between 1979 and 2007, the UGB increased less than 20%, while the population within increased by more than 46% (Hamilton, 2014, 295).

Portland's success in policy implementation and frugal practice of urban expansion may be attributed to a combination of Metro's strong oversight abilities and extensive outreach program. The local governments were willing to give up some of their autonomy to allow the formation of a strong regional planning agency. As Sullivan (2014, 464) argues, "these provisions gave Metro the ability to 'make things happen' and to provide a more substantial, regional perspective in local planning and land use regulation". But it is important to note that this immense legal power stems from a unique Oregonian political culture. Bragdon (2003) argues that the population homogeneity, a narrow urban-suburban fissure and strong environmentalism lead to a more pacified partisanship in Portland in land use politics.

Although Metro's authority is unquestionable, in practice, Metro also heavily relies on persuasion and consensus. Its plans are also implemented through mutual agreement, and the system itself keeps a sound balance of power for Metro, local governments and multiple interests. Seltzer (2008) describes the system as a "combination of top-down and bottom-up... [which] puts important power in local hands, but retains an important oversight role for state". This is also achieved through Portland's system of elected board, which enhances objectivity in decision-making, since each council member wears one single "regional hat". Sullivan argues:

[H]aving an elected body to deal with the regional aspects of planning, the provision of public services and facilities, and the establishment and change of a UGB gives legitimacy to that body's actions. Additionally, the election of the councilors by district, excluding the regionally-elected presiding officer, gives the council a perspective from all parts of the region, as well as greater political legitimacy (Sullivan, 2014, 495).

Second, many important milestones, including home charter came into being through extensive public participation and region-wide referendums (Abbot, 2002). From 1992 to 1994, the Portland Metro engaged in a variety of outreach activities to allow for public input on the RPF. These efforts include distribution of television and other media ads, questionnaire sent to 500,000 households, an information and comment phone line, presentations to “hundreds of civic and community organizations” and “dozens of public open houses, workshops and forums”, among many others (Metro, nd b).

Through these activities, the region was able to build public understanding, widespread support and a strong morale on regional planning, at the same time gaining legitimacy (Seltzer, 2008; Abbot, 2002). For Portland, public engagement is a continuous process. Metro has released a Public Engagement Guide “that establishe[s] consistent procedures to ensure all people have reasonable opportunities to be engaged in planning and policy process” (Metro, 2013).

Finally, the Oregon state frameworks also play an important role in providing certainty on the RPF and ensuring an effective implementation. Land use disagreements can ultimately be referred to the state Land Use Board of Appeals (LUBA), which applies a consistent and unbiased approach to analyze each case against the key principles and goals of the regional plan (Anderson, 1999). In fact, there has been various amendment by Metro itself to expand its UGB, many of which were rejected or deferred by LUBA in order to uphold the RPF (*Residents of Rosemont v. Metro, 2001*; *1000 Friends v. Metro, 2001*; *Citizens Against Irresponsible Growth v. Metro, 2002* as cited in Sullivan, 2014).

9.3. Denver, Colorado

9.3.1. Emergence of Regional Planning

In 1955, Denver experienced a high influx of returning military veterans and their families, spurring rapid population and economic growth (DRCOG, 2005). This growth led to widespread urban sprawl and thereby prompted Denver region mayors to initiate an intergovernmental voluntary forum on region-wide issues (DRCOG, 2005). As a result, the regional commission, now known as the Denver Regional Council of Governments (DRCOG) was established in 1955. As a voluntary forum, the DRCOG suffered years of shaky leadership and instability resulting from member disagreements with policies (DRCOG, 2005). The organization did not affirm its regional leadership role until it assumed environmental planning on air and water protection in the 1960s, and later regional transportation planning (DRCOG, 2005). These initiatives and added responsibilities lend more authority and capacity to DRCOG, and also established a firm foundation for collaboration growth management, which later translated into its first comprehensive plan, the Metro Growth Plan of 1961 (DRCOG, 2005).

In the early 1990s, the Denver region once again experienced a population boom, which amplified the effects of air pollution, congestion and low-density urban sprawl (Goetz, 2013). The population density of region (persons/km² of urbanized land) decreased from 12,279 km² to 8,570 km² between 1950 and 1990 as a result of sprawl. The DRCOG responded to this regional challenge by releasing the Metro Vision 2020 plan (now updated as Metro Vision 2035) in 1997, a 20-year growth strategy that was intended to guide urban land growth, protection of the natural environment and transit development (Goetz, 2013).

9.3.2. Growth Management Framework and Goals

Denver's Metro Vision plan states its growth management goal as "to ensure [ensuring] that urban development occurs within a defined urban growth boundary/area to promote and orderly, compact and efficient pattern of future development" (DRCOG, 2013, 14). As a smart growth plan, it advocates for a high-density housing pattern, infill redevelopment and mixed-use urban growth in designated centers and along transit corridors (Goetz, 2013). Replicating Portland's model, Metro Vision uses land use

designations and overlays Denver with a UGB to conserve open spaces and environmentally sensitive areas (DRCOG, 2011).

Within the DRCOG, its board of directors are composed of officials from member governments, in addition to three non-voting members appointed by the state governor (Margerum, 2005). Regardless of the size, each jurisdiction member has an equal voice and single vote and decisions are approved with a simple majority (McKinney & Johnson, 2009). In face of conflicts and disagreements, DRCOG would only provide facilitation and mediation support when necessary (McKinney & Johnson, 2009; DRCOG, 2000).

Since its inception in 2000, 45 communities, representing 90% of the population, have signed onto the agreement (DRCOG, nd a). To formalize members' commitment to the regional plan, the DRCOG intergovernmental agreement, developed in 2000 under the Colorado constitution, commits its members to:

- a. adopt a comprehensive land use plan,
- b. use growth management tools including zoning regulations and development codes,
- c. link the comprehensive plans to the Metro Vision and
- d. work collaboratively to guide growth and ensure planning consistency (DRCOG, nd a).

Despite its designation as an official regional commission under the Colorado statute, the DRCOG does not have the statutory authority to require member governments to comply with regional plan (DRCOG, nd b). As the agreement states, the Metro Vision growth plan is intended to be implemented "in good faith" (DRCOG, 2000). As with Metro Vancouver, it does not have the power to enforce consistency between the local and regional plans. Its only lever is its designation as Denver's Metropolitan Planning Organization (MPO) under the federal statute (DRCOG, nd c). This allows DRCOG to administer federal and state transportation grants, which would incentivize cooperation on the part of local governments (Porter, 2008).

9.3.3. Effectiveness of Growth Management and Intergovernmental Cooperation

According to the 2005 progress report on the regional plan (DRCOG, 2005), Metro Denver's overall density has been growing through infill and intensification strategies. Between 2000 and 2002, the unit dwelling density increased by 3.6%, which is moderately on route to its 10% reduction target for 2030 (DRCOG, 2005, 6). However, performance is also offset by the extensive low-density greenfield developments at the semi-urban areas (DRCOG, 2005). Between 2000 and 2002, Denver region has also added 57 km² of land to its UGB, which exceeds its average annual quota of 22 km² (DCROG, 2005, 5).

Observers would agree that regional growth management has been relatively effective as a result of a strong intergovernmental relationship (McKinney & Johnson, 2009; Magerum, 2005; Goetz, 2011; Wallis, 2011). For one reason, regional governance in Denver is built on an effective "bottom-up" system that won the support from member governments. DRCOG has fostered a culture that is open and flexible to local governments proposing changes to the Metro Vision (McKinney, Harmon & Johnson, 2009). This reciprocation "acknowledges that changes, goals and aspirations at the local level should be allowed to inform and influence shape of regional plan" (McKinney, Harmon & Johnson, 2009), and would most certainly help build trust between members.

External engagement is also at the heart of DRCOG's regional planning. Denver's long history of regional alliances have cultivated a firm collaborative culture. Metro Denver Network and the Denver Metro Chamber of Commerce are all active and influential regional coalitions (Wallis, 2011). To garner businesses' support, DRCOG communicated the economic benefits of smart growth to the development communities (Goetz, 2011; DRCOG, 2000). In turn, the industry recognized the advantage of measures to improve air quality, relieve congestion and foster alternative urban activity centers (Goetz, 2011). Moreover, the long-existing Metro Mayor's Caucus was most instrumental in bringing together the DRCOG, public, non-profit and private sectors in the region to collaboratively design what is now the Metro Vision (Wallis, 2011). For such reasons, it was not challenging for stakeholders to achieve a unified vision that departs from the more confrontational setting dominated by discord and parochialism (Goetz, 2011).

Finally, as mentioned previously, DRCOG also retains an effective lever to ensure implementation by local governments. As the designated Metropolitan Planning Organization, DRCOG exerts “significant influence” on federal funding for transportation, and has established criteria for project selection processes for local governments’ funding application (DRCOG, 2005; McKinney & Johnson 2009). For funding opportunities, local governments are expected to demonstrate to the MPO on how they conform to the regional transportation strategies, which are also closely tied to the regional land use objectives in the Vision Plan (Confidential informant, interview by author, Feb. 17, 2016; McKinney, 2009).

Unfortunately, sound engagement and few incentives alone cannot ensure the effective implementation of a voluntary regional plan. As McKinney and Johnson (2009) point out, compliance with the regional plan is facilitated through peer pressure and persuasion. Without adequate incentive or regulatory measures, Magerum (2005) remarks the challenges of attaining Metro’s ambitious goals. Goetz (2011) finds that low-density sprawl is still occurring in the outlying urban fringes, especially as local developers and landowners have exerted pressure to develop outside of the UCB, making implementation of the regional plan difficult (Confidential informant, interview by author Feb 9, 2016). Between 2000 and 2006, the urban land area in the Denver region has increased by 12.9% (Goetz, 2011, 2191). Should urbanization proceed at this rate, Denver would exceed the urban growth boundary goal for 2035 (Goetz, 2011, 2191).

9.4. Key Lessons Learned

The three case studies presented here exemplify a diverse range of regional governments and their approaches to growth management and protecting green space. Importantly, this jurisdiction scan inform key themes on what drives regional collaboration and what hinders it. The lessons learned here are instrumental in the formation of policy options for Metro Vancouver.

9.4.1. Minimize Urban-Rural and City-Suburban Division

The region of Calgary demonstrates an interesting transition from a top-down governance to a voluntary system. But regardless of the governance structure, the underlying urban-rural and city-suburban tension in Calgary has constrained

intergovernmental collaboration on regional plan implementation. During the era of centralized, command-and-control form of regional governance, the fact that most policies benefitted the urban municipalities more than the rural eventually fueled the downfall of CRPC. Despite switching to a voluntary system, City of Calgary's dominance in decision-making structure still triggers dissatisfaction amongst others. This unresolved tension between the urban and rural communities continue to create fissures in the current CRP and fail to entice key players to come on board. Such factors are not conducive to fostering a unified vision in regional planning and slows down CRP's already modest densification goals. In comparison, although Vancouver's local governments have a positive working relationship, the differing opinions regarding municipal autonomy and land use decisions between the urban and suburban municipalities are starting to show. This poses concerns, among many others, about Vancouver's own voting structure (DeMarco, interview by author, Jan. 29, 2016).

9.4.2. Legal and Economic Incentives

Economic incentives help entice governments into implementing the prescribed land use policies, as shown in the cases of both Portland and Denver. This logic is also echoed a Ryerson University's City Building Institute research report on the Greater Golden Horseshoe region, which reasons that funding decisions for transit projects "should require municipalities to demonstrate a commitment to transit-supportive densities and land uses along proposed routes in order to be eligible for funding" (City Building Institute, 2015 ,5).

Unfortunately, given a modest budget and a narrow taxation authority, Metro Vancouver alone does not have the capacity to create attractive incentive programs. In most cases, municipalities in BC access sustainable land use incentives and funding programs through non-profit organizations such as the Union of BC municipalities, Federation of Canadian Municipalities or federal agencies such as Infrastructure Canada (Infrastructure Canada, 2011; UBCM, 2012; Infrastructure Canada, 2014; Federation of Canadian Municipalities, 2015). And even so, application criteria for these funds are broadly defined and does not address specific regional mandates.

The presence of a legal mandate in Portland may reinforce the significance of the regional plan. As Wallis (2011) speculates, in comparison with the other cases, Portland

is able to use its firm regulatory power to take on a more ambitious approach in managing growth. Consider the difference in terms of each regional strategy's breadth and goals. Metro's ambitious goal of a 48% increase in urban density by 2035 is twice as much as Denver's goal (Wallis, 2011). Metro Vancouver sits in between the two US regions with a 20% goal, while CRP does not even have a specified goal (Metro Vancouver, 2014).

9.4.3. Public and Stakeholder Engagement Drives Success

Literature on regional governance and growth management all highlight the importance of meaningful stakeholder and public engagement by the regional planning entity (McKinney, Field & John, 2007; Margerum, 2005; McKinney, Harmon, Johnson, 2009). The rationale behind this approach stems from the fact that many planning decisions at the local level are fueled by public and development pressure. Furthermore, targeted engagement also helps minimize uncertainty and conflicting interests.

Among the four jurisdictions examined, there is a clear distinction in regional collaboration and implementation effectiveness between those who engage extensively with the public and stakeholders, and those who lead minimal outreach. In particular, the outreach efforts of Portland Metro garnered widespread support for the RPF, and even helped pave the way for legislative reform (Wallis, 2011). Taylor argues that Metro's formal legal powers are in fact almost irrelevant in generating sound implementation, "it has succeeded only through extensive outreach and persuasion, supported by state laws and institutions. In this way it is no different than Vancouver (Taylor, interview by author, March 2, 2016).

In contrast, Vancouver and Calgary has applied relatively weaker public relation measures in developing and implementing recent plans. During the development phase, both regions focused on information dissemination, but engaged in little meaningful dialogue with stakeholders (Pickering & Minnery, 2012; CRP, 2010). For Vancouver, the key organizations consulted include TransLink, developers and Port Metro Vancouver (Metro Vancouver, 2011). Open houses, town hall meetings and four public hearings took place over the course of five weeks (Abbot & DeMarco, forthcoming; Metro Vancouver, 2011). In Calgary, interest groups, business associations and the general public were targets of a brief engagement process, and were consulted through 14 workshops, 53

open houses and media advertisements over the course of a year (CRP, 2010). The regional plans prescribe few guidelines on external engagement (Metro Vancouver, 2014, CMP, 2013). There is thus no surprise that the RGS remains an issue of low salience among the public.

This cross-jurisdictional scan has provided a modest overview of how other metropolitan bodies manage land use and regional growth with a collective of local governments. While Metro Vancouver excels in many aspects of regional governance and growth management, it nonetheless can consider the successes and failures of other regional governments moving forward. Table 4 summarizes the key attributes of each jurisdiction.

Table 4 Comparison of Case Study Findings

	Vancouver	Calgary	Denver	Portland
Regional Plan	Metro 2040 (2011)	Calgary Metropolitan Plan (2014)	Metro Vision 2035 (2011)	Regional Framework Plan (updated 2014)
Governance Model	Mandated membership, non-binding policy	Voluntary membership, non-binding policy	Voluntary membership, non-binding policy	Mandated membership, strict compliance with policy
Governing Board	Directly appointed	Directly appointed	Directly appointed	Elected

Growth Boundary	Urban Containment Boundary	Priority Growth Areas	Urban Growth Boundary / Areas	Urban Growth Boundary
Policy tools / drivers for compliance	Sewerage / Water pipeline network; persuasion	Persuasion	Federal / State allocated transportation funding	Regulation; Federal / State allocated transportation funding
Stakeholder/ Public Outreach	Minimal	Minimal	Strong	Strong
Unit dwelling densification goals	1.32% annual increase (2011-2040)	8-10 per acre in greenfield areas (no timeline)	0.8% annual increase (2006-2035)	1.46% annual increase (2010-2035)
Dispute Resolution	Resolved at the board; may then request provincial government participation (not direct mediation) in	Resolved at the CRP board informally. Board may refer matter to provincial	Resolved between local governments. Regional board intervention if	Disputes considered at local level before hearing officer, and if need be,

	facilitating and advising on resolution options.	government for mediation.	deemed appropriate.	before the council. Further appeal referred to LUBA, and then ultimately state circuit courts.
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Chapter 10. Objectives, Criteria and Measures

Recall that the policy problem in this study is: Metro Vancouver's RGS is vulnerable to the overriding land use decisions of local governments, and thus may fail to protect the region's Non-urban lands from unsustainable greenfield developments. In light of this challenge, the central policy objective of this proposed intervention is to ensure that local governments' land use decisions cooperate with Metro Vancouver's RGS to ensure the preservation of Non-urban lands.

To evaluate policy alternatives, this paper will consider two key societal objectives: **effectiveness** and **sustainability**. Three governmental objectives are also applied: **financial feasibility**, **stakeholder acceptability** and **ease of implementation**. Policy options will be assigned with a score of High (3) / Medium (2) / Low (1) impact on the objectives, with High being the most desirable, and Low being the least desirable. A summary of the criteria, measures and benchmarks used are found in Table 5. The sum of scores for each policy are used to advise on the final policy recommendation.

10.1. Effectiveness

The Effectiveness criterion is directly related to the key policy objectives, which is to ensure that local governments' land use decisions are well aligned to the RGS policy of preserving Non-urban lands. To measure policy effectiveness, this paper will consider the frequency of local governments succeeding in amending the RGS for greenfield development on Non-urban lands. The measure for Effectiveness is the annual number of amendments to the UCB. Recognizing that not all decisions to extend the UCB violate the RGS, this measure should only account for amendments that are deemed in opposition to the RGS objectives, as would be detailed in Metro Vancouver's staff evaluation reports. This measure recognizes that some local decisions to extend the UCB do not violate RGS objectives. As a benchmark, this study considers the status-quo (current rate of amendments) as HIGH measure of impact (3). A moderate or significant increase in amendments would constitute measures of MEDIUM (2) and LOW (1) respectively. This study is unable to provide quantifiable measures due to the limited scope of the project. The assigned measures of HIGH, MEDIUM and LOW are determined based on the author's rationale and hypothesized impact.

10.2. Sustainability

Sustainable development is a central theme in this study and a core objective in Vancouver's regional planning system. The Bruntland Commission Report (1987) describes sustainable development as one "that meets the needs of the present without compromising the ability of future generation to meet their own needs" (WCED, 1987, 16). In the context of regional planning in Vancouver, sustainable development aims to preserve the region's green spaces and non-urban lands without compromising future regional needs. The measure used to evaluate sustainability is the annual amount of Non-urban lands (in hectares) re-designated as Urban. In this study, a HIGH impact of *Sustainability* (3) reflects little or no lands re-designation of land parcels to accommodate urban development. A moderate or sizable re-designation suggest MEDIUM (2) and LOW (1) impacts of *Sustainability*. Similar to *Effectiveness*, the magnitude assigned based on the author's hypothesized impact.

It should be noted that the *Sustainability* measure correlates somewhat with *Effectiveness*. By reducing re-designation amendment would likely lead to more lands being protected from developments. This overlap should not be seen as double counting since are they are of different objectives that coincidentally have similar end goals.

10.3. Financial Feasibility

This criterion considers the monetary cost of implementing the policy program for Metro Vancouver. The measure uses the percentage increase in Metro Vancouver's current average annual operating expenditures for regional planning. This measure considers the average program budget in regional planning in the past three years as a benchmark, which is approximately \$2.9 million (Metro Vancouver, 2014c; Metro Vancouver, 2015; Metro Vancouver, 2016). The regional planning budget includes operating expenditures on Regional Planning (\$2.3 million in 2016), Environment (\$0.5 million) and Housing Policy Planning (\$1.8 million). Most recently, a new communications program has also been added (\$64,000) (Metro Vancouver, 2015). High Financial Feasibility (3) implies an increase of operation expense by less than 5%. A moderate

Feasibility (2) would be an increase between 6% and 10%, while a low Feasibility (1) implies an increase of more than 10%.

10.4. Stakeholder Acceptability

This criterion specifically considers the level of opposition expected from key stakeholders. This can be informed by assessing whether stakeholders' perceived benefits are maintained as a result of the policy change. A reduction in perceived benefits indicates low acceptability, while an increase or no change in perceived benefits suggests high acceptability. Stakeholders' perceived benefits vary depending on their subjective values as an organization, or simply just as local residents. A range of key stakeholders are considered in this study, including the provincial government, local governments, development industry (including land owners), the public and other organizations that may be impacted by certain policy options.

The impact on the provincial government may be associated to budgetary commitment and political interests. Local governments' acceptability is measured by the changes in level of autonomy over land use planning and economic gains through developments. Similarly, impact on development industry's perceived benefits are measured by the changes in opportunities for land development. A policy option that results in no significant reduction of perceived benefits of stakeholders implies a High Acceptability (3). Opposition by one stakeholder suggests a Moderate measure (2) while opposition by two or more stakeholders indicates Low Acceptability (1).

10.5. Ease of Implementation

This criterion considers both the upfront administrative, institutional and/or legislative changes required for each policy option. The measure for this criterion is the degree to which the policy triggers changes to existing administrative operations, institutional structure or ultimately legislative amendments, and the number of external organizations whose involvement is required through consent, approval or consultation processes. A policy with High measure entail minor internal administrative changes, implicates few stakeholders and incurs no legislative actions. A policy that demands some administrative or institutional changes implies a Moderate ease of implementation (2). Finally, a policy involving legislative changes and is subjected to multiple stakeholder

approval and extensive consultation induces a Low measure (1). The stakeholders considered in this measure include local governments, provincial and federal agencies and quasi-governmental authorities.

The following chapter will present potential solutions to respond to the central policy problem in this study. Following each summary of policy solution is an evaluation of the policy using the criteria and measures developed in this section.

Table 5 Summary of Criteria and Measures

Criteria	Definition	Measures and Magnitude (H/M/L) L = Least desirable; H = Highly desirable
Effectiveness: Alignment of local land use decisions with the RGS policy on UCB	Frequency of amendments to the UCB at the request of municipalities, that are in opposition to the RGS objectives	<i>Number of amendments to the UCB and RGS as a result of local government land use decisions that are in opposition to planning evaluation and recommendation.</i> High (3): 0-1 amendments per year Medium (2): 2-3 amendments per year Low (1): 3+ amendments per year
Sustainability	Preservation of green spaces designated non-urban within the UCB	<i>Amount of undeveloped green spaces (Hectares) designated non-urban which are re-designated to urban and included within the UCB as a result of local government land use decision.</i> High (3): Less than 39 Ha Medium (2): 30 – 59 Ha

		Low (1): 60 Ha or more
Financial feasibility	Level of cost-effectiveness based on total increase in dollar cost of implementing and maintaining policy program	<p><i>Cost-effectiveness based on the percentage increase in dollar cost of additional human resources and programming costs for a given policy on an annual basis relative to benchmark.</i></p> <p>High (3): Spending increase of < 5%</p> <p>Medium (2): Spending increase of 6 - 10%</p> <p>Low (1): Spending increase of > 10%</p>
Stakeholder acceptability	Municipalities, development industry, land owners and residents at the local level are supportive of the proposed policy change	<p><i>Expected stakeholder opposition based on whether parties maintain or gain current levels of perceived benefits, including municipalities' autonomy over land use planning and economic gains through tax base; development industry and land owners' perceived economic gains through potential development; and local residents' sense of livability</i></p> <p>High (3): No expected opposition by stakeholders</p> <p>Medium (2): Expected opposition by at least one stakeholder</p> <p>Low (1): Expected opposition by two or more stakeholders</p>

Ease of implementation	Level of administrative, institutional and legislative changes required	<p><i>Changes to existing administrative, institutional and legislative environment, as well as the number of external parties that need to provide consent and approval.</i></p> <p>High (3): Minor administrative adjustments, such as the reallocation or addition of staff members to proposed program. Few external parties involved.</p> <p>Medium (2): Moderate administrative and institutional changes required, such as the creation of an entire department or program, as well as some consultation with affected agencies / parties.</p> <p>Low (1): Significant administrative, institutional and legislative amendments, extensive participation by multiple external parties required.</p>

Chapter 11. Policy Options and Evaluation

11.1. Devise and Implement Communications Strategy for the RGS

. The importance of outreach has been a recurring theme in this study. Enhancing Metro Vancouver's advocacy role has emerged as a politically feasible option to improve intergovernmental relations, gain legitimacy and promote the regional principles. This option is built on the assumption that municipality decisions are motivated and driven by the local sentiment and developer interests (Nielson, interview by author, Nov. 13, 2015 & Campbell, interview by author, Nov. 19, 2015). Achieving a shared vision on land use objectives across stakeholders helps to build constituency for regional collaboration (McKinney & Johnson, 2009). By pinpointing different interests through engagement, Metro Vancouver can better navigate local conflicts. This communications strategy would have the following desired outcomes:

- Improve communication between Metro Vancouver and stakeholders and enhance legitimacy and trust in the regional government
- Increase public knowledge and understanding of the RGS and promote citizenship,
- Harness public and stakeholders support and buy-in for the RGS and
- Motivate public to exert pressures on municipal land use decisions.

To achieve deliberate outreach, this communications strategy targets three groups of stakeholders. First, the region requires a platform where Metro Vancouver can communicate with local governments and the development industry on each parties' future land use objectives (Neilson, interview by author, Nov. 13, 2015; Campbell, interview by author, Nov. 19, 2015).

Second, Metro Vancouver would need to carry out consistent and active engagement activities with the local residents to educate on the purpose and importance of the regional plan, as well as the role they play (Porter, 2008). Currently, Metro Vancouver holds monthly Sustainability Community Breakfast events (Metro Vancouver, nd) that are open to the public, which seeks to increase awareness on sustainability in the region. A new communications strategy could ideally expand this type of initiative by including more purposeful promotion and dialogue with the public on the RGS and its key

themes. Metro Vancouver would also need to expand its presence through mediums such as social and broadcast media and print newspapers. Champions such as senior managers and local politicians should also insert themselves into local events, and dialogue opportunities to promote and build the Metro Vancouver brand (Interview by authors with Neilson, Nov. 13, 2015; DeMarco, Jan. 29, 2016).

Third, it is also critical to work closely with higher education institutions, non-profit sector and advocacy groups. These organizations are instrumental in developing research and analytical services, fostering community cooperation, as well as transparent and neutral communication between the government and the civic players (Hamilton, 2014).

Ideally, Metro Vancouver would use these forums to actively promote the regional vision, and help parties understand the benefits they can derive the RGS.

11.1.1. Effectiveness

Implementing a communications strategy may result in mild effectiveness on the alignment of local land use decisions and regional policy. On one hand, persuasion may build morale and peer pressure for municipalities and the developers. Nonetheless, this tactic alone is inadequate to offset some greenfield development interests, especially if those developments reap significant benefits for the local community. On the other hand, targeted education for the general public on the RGS is highly beneficial for upholding RGS principles since public sentiment translates into political pressure for municipalities (Magerum, 2005). In other words, active promotion of the RGS can motivate the public in forming a stronger voice against controversial greenfield projects violates against the RGS principles, thereby sway local government decisions on these land use decisions.

For this reason, education can only result in a modest decrease overtime in greenfield projects on non-urban lands, and hence the amendments for these purposes. A moderate score of “Effectiveness” (2) is assigned to this policy option.

11.1.2. Sustainability

As it is expected that proponents of potential greenfield projects and municipalities will be subjected to peer pressure and opposition from the public and advocacy groups, it is reasonable to assume that developers and municipalities would be reluctant to pursue projects on larger parcels of lands, as that would result in large environmental footprints and hence public controversy. However, the fact that there are no hard measures to ensure compliance with the RGS, there may still be some lands lost as a result of land speculation outside the UCB. Given this projection, this option performs at a score of MEDIUM (2) Sustainability.

11.1.3. Financial Feasibility

The current budget (2016) for the communications program in regional planning is \$64,000. The additional logistics for this option comes in the form of salary expense for additional staff members, especially when carrying out the more labor-intensive activities such as public consultation (Pickering and Minnery, 2012). This communications strategy would also incur programming costs in public advertisement, branding and promotional events. It is expected that additional programming requirements for this policy option will trigger at least an additional \$100,000 annually, which increases the regional planning budget at Metro Vancouver by less than 5%. Given this estimate, this policy option scores HIGH on the measure of financial feasibility (3).

11.1.4. Stakeholder Acceptability

This policy option does not trigger significant reduction to stakeholders' perceived benefits. Engagement and relationship building does not present an immediate threat to local governments' autonomy, or the expected economic gains from increased land use development. The local governments retain the freedom to make land use decisions. Since this policy option does not involve any coercive measures to regulate the market, the development industry would not view this policy as an interference. In fact, businesses may even welcome the certainty and clarification of plans and objectives that this initiative would bring. Given this assessment, this policy option results in HIGH (3) stakeholder acceptability.

11.1.5. Ease of Implementation

The implementation of a communications strategy generates minor administrative changes that are internal to Metro Vancouver. The bulk of these changes would be the additional human resources and programming requirements, which would result in the reassignment and expansion of the current communications sector at the Regional Planning department. This policy option thus scores HIGH (3) on implementation ease.

11.2. Policy Harmonization with the BC Government on ALR

This option seeks to address the current communication and policy gap between Metro Vancouver and the provincial government on the ALR policy. Recall that there is a high proportion of overlap between ALR parcels in Metro Vancouver and non-urban lands that are designated Agriculture in the RGS, the ALC policy on land exemptions is thus highly impactful to the preservation of the region's green spaces (Metro Vancouver, 2014).

Through the establishment of a provincial-regional working group, the Metro Board and ALC representatives would meet on a regular basis to bring forward regional concerns. Most importantly, the regional government may lobby for ALC's recognition of the importance of agriculture lands' importance in regional planning and environmental sustainability in its policy. Ultimately, the agencies may identify opportunities for the ALC to integrate certain RGS objectives into its own decision-making process, such as preventing urban developments on sites outside of the UCB. By leveraging on the ALC's gatekeeping authority, this initiative would support and empower the region's ability to protect those Non-urban lands that overlap the ALR.

Mechanisms for policy coordination need not necessarily lead to ambitious legislative amendments on the ALC Act. Instead, the two parties can commit to an agreement or a Memoranda of Understanding that detail actions leading to better alignment of criteria used by both organizations. Since 2015, Metro Vancouver has been working with the ALC on developing a new implementation agreement "exploring opportunities to work more closely, particularly on ALC applications from a land use planning perspective" (Metro Vancouver, 2015, 6). This collaboration represents an ideal opportunity for Metro Vancouver to expand and clarify its role in supporting the ALC and push for the inclusion of RGS principles on these decisions.

11.2.1. Effectiveness

This policy option seeks to benefit from the legislative arm of the ALC in protecting agricultural lands that overlaps with the Non-Urban parcels in the RGS. Should the ALC be willing to integrate Metro Vancouver's land use policies in its exemption decisions, there would be a smaller chance for ALR parcels to be exempted to begin with, thereby making amendments to the UCB more unlikely. Since Agriculture-designated lands are most vulnerable to market interests (as they are mostly privately owned), this option ultimately helps secure a large proportion of green spaces in Metro Vancouver that could otherwise be subjected amendments for greenfield development. However, the initiation of MOUs and increase of engagements may not lead to tangible implementation actions, thus offsetting the good intentions of this policy. For this reason, this option performs MEDIUM (2) on Effectiveness.

11.2.2. Sustainability

If the ALC adopt RGS principles when evaluating ALR exemption applications from land users, the additional criteria would consider the environmental significance of agricultural lands. This raises the threshold for exemptions. The new system would indirectly protect many vulnerable privately-owned parcels from development interests. Consequently, it would be reasonable to assume that fewer parcels of agricultural lands would be released from the ALR for development. Under this option, this objective suffers from the same weakness as *Effectiveness*. As a result, this policy option scores MEDIUM (2) on Sustainability.

11.2.3. Financial Feasibility

Policy harmonization with the province does not incur extensive programming needs, given that the bulk of the operation will occur through an intergovernmental committee between Metro Vancouver and the provincial ALC. The collaboration on policy coordination may require Metro Vancouver to allocate moderate resources to liaise with the ALC on this intergovernmental file, comparable to one additional department officer to this intergovernmental file. This increases Metro Vancouver's salary expense at most by

\$150,000 annually¹⁵, or a 5.2% increase from the average budget. Consequently, a HIGH score (3) of financial feasibility is assigned to this policy option.

11.2.4. Stakeholder Acceptability

Metro Vancouver's attempt to insert its own principles into the ALR exemption process would no doubt generate opposition from stakeholders. By extending the RGS into ALC policy, the threshold for exemption would be raised, thereby limiting opportunities for greenfield projects. The development industry and municipalities would both view this policy as anti-development. Based on this expected response from stakeholders, a score of LOW (1) stakeholder acceptability is assigned to this policy option.

11.2.5. Ease of Implementation

This policy option requires minor logistic processes within the regional agency and the ALC. These include the establishment and operationalization of intergovernmental committee and its work on policy development and coordination. Given these modest administrative requirements and stakeholder partnership, this policy option performs at a HIGH score (3) on implementation ease.

¹⁵ According to Metro Vancouver's Financial Statement in 2014, an average planning officer's annual base salary is between \$90,000 to \$100,000.

11.3. Sustainable Planning Grants and Contribution

The use of incentives has emerged as an effective policy instrument for growth management (Smart Growth BC, 2010; McKinney & Johnson, 2009; Bengston et al., 2004). Through a subsidy, this policy rewards local governments that align land use decisions with the RGS. This program allows Metro Vancouver to administer and distribute monetary grants to municipalities for planning urban infill projects, thus helping shift developments from greenfield projects to brownfield redevelopments, reducing the development pressure on non-urban lands.

This type of program exists in many state and local governments, including the Better Urban Infill Land Program of Dane county in Wisconsin (County of Dane, Wisconsin, 2015), and California's Sustainable Communities Planning Grants and Incentives Program (California Strategic Growth Council, nd). In 2007 and 2008, the CSCD administered the LiveSmart BC Green Cities Awards, which distributed a total of \$950,000 in grants to cities that excelled in sustainable planning (LiveSmart BC, 2009). Many of the program's criteria coincide with RGS objectives, such as increase in density, reduction in sprawl and greenhouse gas emissions (LiveSmart BC, 2009).

To ensure that the program operates to combat the pressure on lands outside of the UCB, the grant should be subjected to the following criteria:

- To be used for planning expenses through cost-sharing, and does not include infrastructural developments;
- To be used for the planning of Urban Centres identified in the RGS, including Metro Centres, Regional City Centres, Municipal Town Centres and Frequent Transit Development Areas and
- Recipient be free of projects that violates any of the key goals and principles in the RGS.

This study proposes an annual grant value equivalent to half of a planning consultant's base salary, approximately \$50,000 (Pay Scale, nd). Given that there are 23 local governments in Metro Vancouver, the maximum annual budget for this program is \$1,150,000. Under this policy, the regional government would need to lobby the senior government agencies to contribute to and co-administer this incentive program, with Metro Vancouver evaluating the applications and recommending eligible recipients. A potential funder is the CSCD, which currently administers unconditional and conditional

infrastructure grants for local municipalities (CSCD, nd) and has had past experience with the LiveSmart BC Green Cities Awards.

11.3.1. Effectiveness

Ideally, this rewards program would motivate some municipalities to align their decisions with the RGS principles. For a few municipalities however, the value of the grant might not be attractive enough to induce behavioural change, as found in Maryland's initiative (Frece, 2005). This is especially plausible if the grant value does not match the foregone benefits municipalities can otherwise assume through greenfield projects that may be in opposition to the RGS. In these cases, the upfront increase in tax base stemming from urban growth and land developments outside the UCB may exceed the grant value. Under this scenario, the incentive program may not be strong enough to prevent municipalities from seeking to amend the designations of non-urban lands in order to accommodate opportunities for growth. Given this uncertainty, a score of MEDIUM effectiveness (2) is assigned to this option.

11.3.2. Sustainability

Similar to the evaluation for the previous criterion, this policy option would generate incentives for municipalities to conform their planning decisions to the RGS goals. In exchange for this grant, municipalities would refrain from approving projects that violates the RGS principles, including greenfield projects on Non-urban lands. This reduces the likelihood for Non-urban lands to be re-designated for urban consumption. But as previously raised, a drawback of this policy is that not all municipalities may be attracted the grant, especially those with more lucrative and unused green spaces, thereby offsetting the positive impact on sustainability of this option. Under this assumption, a MEDIUM score of sustainability (2) is assigned to this option.

11.3.3. Financial Feasibility

Metro Vancouver's role in this program is limited to the initial lobbying, designing and administration of the grants. It alone does not have the financial capacity to award monetary grants to member municipalities. Instead, the provincial government would be

the ideal investor in this \$1.2 million annual program. For Metro Vancouver, the key expense for this policy would stem from hiring two to three additional department officers to co-administer this program with the senior government(s). This portfolio may increase the annual budget for regional planning by \$200,000 to \$300,000, or a 6.9% to 10.3% increase. This change would therefore place this policy option at a MEDIUM score for Financial Feasibility (2).

11.3.4. Stakeholder Acceptability

As an incentive, the policy program does not diminish local autonomy nor growth opportunities. Similarly, minimum opposition is anticipated from the development industry. When Maryland implemented a similar smart growth incentive program, the antagonism that developers and land owners had previously harbored towards smart growth development were in fact dampened (Frece, 2005). This high acceptance is due to the reward nature of incentive programs, and the fact that the program branded itself as a pro-growth program of urban centres (Frece, 2005). The main opposing force to this program stem from the BC government, who would be reluctant to commit itself to a sizable grant program. As a result, this option ranks MEDIUM (2) for Stakeholder Acceptability.

11.3.5. Ease of Implementation

In addition to program design, the operationalization of this policy would require extensive negotiation with the provincial government for administrative and monetary support. As the co-administrator, the Regional Planning department at Metro Vancouver would assign additional human resources and prescribe administrative processes to maintain this program in partnership with the provincial government. Consequently, this policy option ranks MEDIUM (2) in terms of ease of implementation.

11.4. Directly Elected Board of Directors and Secret Ballot

This option aims to minimize the local political interests at the regional table through institutional reform by ensuring that board decisions are accountable to the the region, rather than catering to local interests. There are two layers of restructuring. First, the voting structure of the current governing body at Metro Vancouver would be reformed into a system of 23 elected board of directors who do not concurrently serve as council members in the local government they represent (Metro, nd b). This helps to minimize conflicts of interests by ensuring that decision makers' votes are informed more by impartial judgments, rather than be subjected to local councils' political desires. Currently, board directors take on both regional and local responsibilities. The reformed system may demand more commitment to regional matters on part of the board directors, while still maintaining close working relationship with respective local councils.

The second part of this policy option is to allow for anonymous voting, in particular for more sensitive decisions such as land use amendments. Since board directors' votes are currently disclosed at Metro Vancouver (Metro Vancouver, 2015 b, 12), the lack of political privacy contributes to the pressure for board directors to vote in each others' favour in amendment processes. A secret ballot would help eliminate the practice of reciprocating votes and minimize peer pressure. This in turn would allow board directors to exercise more individual discretion when voting, without fearing reprimand from respective municipalities. Overall, this renewed system ideally results in more objective evaluations of proposals at the table to effectively uphold the RGS principles.

11.4.1. Effectiveness

By removing the political pressure and conflicts of interest from the decision-making table, this option allows the RGS and Metro Vancouver staff recommendations to carry more weight on the evaluation of amendment proposals. It is expected that decision-makers would exercise more scrutiny and objectivity when evaluating amendments, thereby disapproving those that do not align with the RGS. By strengthening the final gatekeepers' objectivity and accountability, it is expected that the board will allow close to no amendments that would approve unsustainable development on green spaces outside of the UCB on an annual basis. Thus, this option ranks HIGH in Effectiveness (3).

11.4.2. Sustainability

Through promoting independent decision-making and increasing political privacy, it is expected that board directors at Metro Vancouver would evaluate amendment proposals according to the RGS principles with more rigor and objectivity. Under this circumstance, board directors would be unlikely to approve projects with significant environmental footprint on green spaces outside of the UCB. This would lead to minimum parcels of Non-urban land being re-designated for urban consumption. For this reason, this policy option will score with a high (3) Sustainability measure.

11.4.3. Financial Feasibility

As elected members accountable to Metro Vancouver, board directors would augment their responsibilities at Metro Vancouver, which would be reflected in their remunerations. Currently, elected officials at Metro Vancouver are paid according to their attendance in committee meetings¹⁶ (Metro Vancouver, 2015 d). As stated in the Remuneration Bylaw (Metro Vancouver, 2015d, 5), a committee member is paid “0.5% of the Board chair’s annual salary for each meeting attended and twice that amount when a meeting lasts longer than 4 hours, subject to a daily cap of 1% of the Board chair’s annual salary”. Under this policy option, elected officials would significantly increase their commitment and meetings at Metro Vancouver. This circumstance would necessitate a new payment scheme not simply based on the attendance of meetings, as that would be financially burdensome.

To give an idea of how much board members earn at Metro Vancouver, based on 2013 rates, an average politician in the Vancouver region serving both as a municipal council member and a regional board director received an average annual salary of \$65,097 from the municipality, and \$15,023 from Metro Vancouver in 2016 dollars¹⁷. In other words, municipal remuneration accounts for approximately 80% of an average board

¹⁶ Board chair, Board vice chair, their alternates and the electoral area A director are paid according to payment schedule unique from other elected officials at Metro Vancouver (Metro Vancouver Remuneration Bylaw #1057, 2007).

¹⁷ See Appendix C for the calculation of average salary of politicians in Metro Vancouver.

director's public service salary, with Metro Vancouver contributing to the remaining 20%. Under a new board system, Metro Vancouver and local governments may need to devise a cost-sharing schedule that better reflect the increased commitment of directors at the regional board. This policy proposes that Metro Vancouver and the municipality each contributes to 50% of the total salary or \$40,060 of annual salary per board member. With 23 board members serving on the restructured board, Metro Vancouver's salary expense would increase from \$756,481¹⁸ (Metro Vancouver, 2014b) to \$912,402¹⁹, which is a 21.8% increase. This policy therefore scores LOW (1) on Financial Feasibility.

11.4.4. Stakeholder Acceptability

The new political system at Metro Vancouver would generate a divided response from different stakeholders. Since this new system diffuses local authority and power to the regional board, municipalities would be in strong opposition. The fact that board members would be directly elected and also able to cast blind votes may also weaken the weight of the local political interest in certain land use decisions.

It is highly probable that the development industry would also react negatively to this option. The industry has a vested interest in the current system of board membership and voting procedure, which leans towards the local interests and is more pro-development. Interestingly, the provincial government has in fact given consideration for the transition to a directly elected board, but did not proceed due to uncertainties on voter turnout (Lukovich, interview by author, Jan 23, 2016). This contemplation by the BC government, however, suggests a general willingness to explore this option further. In light of the general negative response from the key stakeholders, this option ranks low (1) on Stakeholder Acceptability.

¹⁸ The benchmark for financial feasibility is not used for this option given that its financial implication is outside of regional planning, but rather salary remuneration.

¹⁹ See Appendix C for the calculation of increase in salary expense for Metro Vancouver.

11.4.5. Ease of Implementation

The implementation of this policy option would incur significant institutional and legislative changes. First, to modify the current appointment system of the board of directors, the *Local Government Act* would have to be amended under Part 6 “Regional Districts – Governance and Procedures” (SBC 2015). Similarly, changing the voting structure of board directors would also entail an amendment to the same act under “Voting and Voting Rights”. These legislative changes also lead to considerable consultation with municipalities and the provincial government, as well as additional administrative and campaign processes during election periods. For these reasons, this policy option scores LOW (1) in terms of the Ease of Implementation.

Chapter 12. Policy Recommendation

Table 6 Scoring and Weighing of Policy Options

Criteria	Implement Communications Strategy	Policy Coordination with ALC	Sustainable Planning Grants and Contribution	Board of Directors Reform
Effectiveness: Alignment of local land use decisions with the RGS policy on UCB	2	3	2	3
Sustainability	2	3	2	3
Budgetary feasibility	2	3	2	1
Stakeholder acceptability	3	1	2	1
Ease of implementation	3	1	2	1
TOTAL	13	11	10	9

Among the four options, the Communications Strategy and Policy Coordination with the ALC have emerged as the highest-performing alternatives in this policy analysis. Each of the two options carry different strengths. With regards to addressing Effectiveness and Sustainability, working with the ALC has a higher impact on limiting unsustainable

urban development relative to increased outreach. In terms of budgetary needs, the communications strategy would likely outspend the other, given the sizable staff and promotional mediums required. However, a communications strategy would be better received by than a policy that would further regulate the ALR, since the latter will generate a high level of opposition by municipalities and developers that have a high stake in farm lands. Finally, a communications strategy would not incur as much bureaucracy and stakeholder consultation as working with the ALC on policy coordination.

Given the varied assets, this study recommends that Metro Vancouver proceed with both strategies. These two options can be seen as a combination of both long-term and short-term, advocacy and regulatory approaches in enhancing local compliance with the RGS policy on green space preservation. In the short term, working with the ALC to limit the release of farmlands would help to address the immediate concern of municipalities seeking to re-designate unusable farmlands into urban development. Nevertheless, this option alone is incapable of enhancing intergovernmental relations and cooperation that is critical for a regional government to function effectively. In this sense, a long-term communications strategy can gradually help Metro Vancouver to build trust and educate stakeholders and public about the RGS and its benefits for the region. Through more effective persuasion, it is hopeful that Metro Vancouver can gain legitimacy and local support to pursue more ambitious plans in the future, including the other options presented Chapter 11.

The implementation process for the policy options have largely been summarized in Chapter 11. However, it is also critical to collect data and assess the performance of these strategies. In evaluating the communications strategy, it would be necessary to review the quality and level of participation, as well as the changes in stakeholder opinion and feedback overtime. These processes would require, for instance, the use of surveys and public polls. By collaborating with the ALC on policy development, the two organizations need a data-sharing protocol and database on the quantity, location, designation and characteristics of land parcels in Metro Vancouver. This would not only enhance collaboration between the two organizations, but also assist in monitoring policy outcomes on the rate of land exclusion lost to urban projects.

Chapter 13. Limitation and Future Research

Regretfully, this project has been unable to incorporate the first-hand views of important stakeholders. Under the constrained timeline, I was not successful in reaching out to the development industry and the Agricultural Land Commission as both players heavily influence the outcome of municipal land use decisions and therefore growth management in Greater Vancouver. The positions and stances of these groups have been identified through secondary accounts of literatures and other expert interviews. In response, this study suggests future research to collect primary accounts from the development industry, including the Urban Development Institute, as well as the ALC. Ideally, future research can also survey opinions from other municipal political leaders beyond the mayors interviewed here in order to acquire a more balanced view of local sentiment and perspective.

In this study about governance in urban planning, I have largely considered the perspective of the “governments”. However, the views of the public are not accounted for. In reality, urban planning touches on many parts of individual livelihoods. As the constituencies of the governments, they can become important players of regional planning. To allow for more public participation, however, there needs to be more research on public opinion, an action item to which this study has alluded.

The lack of quantifiable data on the different regions’ performance on their regional plans also confines the breadth of the case study evaluations. Similarly, in the case studies, the absence of comparable data on the quality of intergovernmental cooperation and implementation of regional plans also poses a limitation. In the cases of Vancouver and Calgary, the regional plans have only been implemented within the past five years. It would thus take a few more years until the physical impact of these plans become visible. Consequently, this study also recommends more quantitative analysis and research on the trends of urban and greenfield development in the region by each municipality over a longer period of time. It is likely that Metro Vancouver will provide this information in its upcoming five-year review of the RGS.

Chapter 14. Conclusion

Metropolitan regions have emerged as urban organisms of interconnected and interdependent cities. The development of these regions come with high economic, social and environmental impacts. For the past fifty years, Metro Vancouver and its planning predecessors have envisioned the region to be cities in a sea of green. In light of the projected urban and population growth, there is a need to confront the problem of regional policies on land use is vulnerable to and in conflicts with the interests and decisions of local governments. This project has also explored the limitations of the current regional planning and governance system through the lens of protecting non-urban lands from urban growth.

Findings from literature, expert interviews and case studies have identified the key challenges to local compliance with the regional plan. These challenges can be distilled into three main drivers: the increasing development pressure, the limited authority of Metro Vancouver and the lack of political will and support from the local and provincial government.

Ultimately, two policy options are recommended as feasible strategies to move forward – enhancing advocacy on regional planning and harmonizing policy and objectives on agriculture lands with the ALC. However, this conclusion does not discount the importance and value of the other policy options which address the need for effective incentive tools and reforming the governance structure of Metro Vancouver. The recommendations made here is a strategic next step that helps to pave the way for the more ambitious possibilities, while at the same time, safeguarding the current supply of green space.

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Appendix A.

Sample Discussion Topics for Interviews

1. Can you describe the current trends of greenfield developments in the region?
 - a. Where are they taking place, are they becoming more common?
 - b. Is there a development pressure that is eroding the ALR and other undeveloped lands?

2. To what extent do you feel that these developments are impacted by the market force and Vancouver's general real estate?
 - a. as demand for homes rise (given population increase), developers and landowners would be quick to capture this demand.

3. In light of the development pressure and greenfield development (if any), do you think this might create more pressure and tension in turn for municipalities to move away from the regional growth strategy especially with regards to urban containment.

4. Do you feel that the province should take a more active role in regional planning and mediation of intergovernmental affairs? If so, to what capacity?

5. Do you feel that the current RGS serve the region well? How do you think it can be improved to manage growth and limit sprawl?

6. What about the governance structure?
 - a. Do you feel that each party has appropriate level of power?
 - b. What do you envision as the appropriate level of intervention from Metro?

7. Does the Langley decision and Delta Southlands case set a precedence for future amendment requests from municipalities and developers seeking to develop greenfield projects? If so, does the region have the governance capacity to ensure that these requests will not compromise the core regional goals?

Appendix B.

E-mail Invitation Template for Interviews

RE: Interview Request for Master of Public Policy Research Project – Intergovernmental cooperation on Metro Vancouver’s Regional Growth Strategy: The case of Non-urban lands

My name is Sherry Yang and I am a student in the Masters of Public Policy Program at Simon Fraser University. As part of my degree, I am writing a capstone project, which examines the institutional and governance challenges in implementing zoning and urban containment strategies to reduce urban sprawl in Vancouver. The study is titled “Intergovernmental cooperation on Metro Vancouver’s Regional Growth Strategy: The case of Non-urban lands” and focuses specifically on Metro Vancouver’s Regional Growth Plan, *Metro 2040*, its effectiveness on reducing sprawl and how it is affected by the regional governance structure.

My research would benefit from your insights and expertise regarding the land use strategies and governance challenges. If it is of convenience, I would like to invite you to an interview either in-person or via the telephone to further discuss this topic. Further information regarding the nature of this study and how data will be used can be found in the attached consent form.

If you are interested in participating, I kindly ask that you respond to this e-mail with your acceptance. Participation is voluntary and you have the opportunity to withdraw from the study at any point. Further information can be found in the attached consent form. The completion of the consent form is also required prior to the start of the interview. Please do not hesitate to contact me regarding any questions or concerns.

Thank you for your time and I look forward to hearing from you.

Appendix C.

Computation of Expected Increase in Salary Expense

The computation of the expected increase in salary expense for Metro Vancouver is computed using Vancouver Sun's "Public Sector Salaries" available through: <http://www.vancouversun.com/business/public-sector-salaries/>

The salaries in 2013 dollars were updated to 2016 dollars using the Bank of Canada's Inflation Calculator, available through: <http://www.bankofcanada.ca/rates/related/inflation-calculator>

First, the average share in salary source was calculated in **Error! Reference source not found.** This is done by using the salaries earned by ten individuals through their work as 1) city council members in a municipality of Metro Vancouver and 2) board of director in Metro Vancouver in the year 2013. Due to the limited data, only the ten individuals' salary information for both positions were available for the same year.

Table C1 Average Share of Salary Source in 2013

	Salary as Council Member	Salary as Board of Director	Total	Council %	Metro %
Person A	\$73,368	\$12,390	\$85,758	86%	14%
Person B	\$67,169	\$9,912	\$77,081	87%	13%
Person C	\$57,767	\$15,930	\$73,697	78%	22%
Person D	\$67,999	\$12,390	\$80,389	85%	15%
Person E	\$67,502	\$15,576	\$83,078	81%	19%
Person F	\$68,320	\$23,010	\$91,330	75%	25%
Person G	\$68,320	\$9,204	\$77,524	88%	12%
Person H	\$68,320	\$16,284	\$84,604	81%	19%
Person I	\$71,061	\$15,576	\$86,637	82%	18%
Person J	\$12,916	\$13,452	\$26,368	49%	51%
Average	\$62,274	\$14,372	\$76,647	79%	21%
In 2016\$	\$65,097	\$15,023	\$80,122	81%	19%

This calculation finds that in 2013, the average council member who concurrently serves as a Metro board of director received a sum of \$80,122 in remuneration from both roles. Since Option 5 reasons that Metro Vancouver should increase its salary contribution per board of director from about 20% to 50% of the \$80,122 value, the newly conceived average salary contribution by Metro Vancouver would be \$40,061. Given that there would only be 23 board of directors in the proposed option, the total annual salary expense by Metro Vancouver would be $(\$40,061 * 23) \$921,408$.