A prosperous region needs a vibrant core

Victoria's fiscal sustainability is crucial for the health of the Capital Region

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Executive Summary

Overview

With thirteen municipalities and three unincorporated areas, close together and well connected by transportation links, the Capital Region is a nearly perfect setting for a destructive interaction between benefit spill-over and inter-municipal competition. As the core of the Capital Region Victoria provides many regional benefits paid for by Victoria's residents and businesses. Tax competition among jurisdictions erodes the tax base and so Victoria struggles to keep its service levels high. All jurisdictions in the Capital Region are affected by this, but, as the downtown core and primary business and entertainment district, Victoria feels it most dramatically.

A large academic literature suggests that, despite the forces of competition, in the long run the prosperity of a core municipality and its suburbs rise and fall together. In many cases, each can survive even if the other does not, but neither will prosper as greatly as when all have healthy economies. To flourish, the whole region needs to pull together on clearly regional issues such as homelessness, infrastructure, and crime.

Markets have trouble providing public goods. Public goods are commodities or services with two important properties: no one can be excluded from consuming them, and one person's consumption of the good does not diminish the quantity available for another person's consumption. In reality, most public goods are not "pure" and have at least one of these properties to a lesser degree.

Policing is a good example of an impure public good. If policing is provided in a municipality, it is difficult to stop any particular person from receiving a benefit and many people can be protected by the police without having a significant impact on the protection of others. Good policing services in the urban centre of a region have a positive impact not only within the boundaries in which the police operates but also in the neighbouring suburbs, for three reasons: first, if crime is suppressed downtown, the whole region attracts more firms and residents, some of which will locate in the suburbs; second, crimes committed in the suburbs also decrease with good policing in downtown, as fewer criminals are attracted to the whole region; third, residents from the suburbs commute to downtown for work and entertainment and in doing so benefit directly from the policing of the urban centre. In other words, some of the benefit from providing policing in Victoria *spills over* to neighbouring jurisdictions. However, police services are not a pure public good, as eventually they become "congested"; when the population grows very large the police force becomes overworked and either the quality of service decreases or costs rise.

The problem of providing a congestible public good with spillovers to neighbouring areas is compounded when competition from these other jurisdictions also constrains a municipality's ability to pay. Higher taxes encourage residents and businesses to move to a neighbour municipality, which further erodes the tax base. This limits the provision of a broad range of public goods, and in the worst case, sparks a destructive cycle of decline.

The Regional District structure of government is in part intended to deal with these types of economic concerns. There is much debate, in academia and elsewhere, on whether bigger (more centralized) local governments outperform smaller (more de-centralized) ones. Regional districts potentially offer the best of both worlds, allowing municipalities to enter into binding agreements when there are economies of scale to exploit while maintaining the advantages of flexibility of competition provided by smaller governments in a fractured region. But the conditions for municipalities to strike efficient agreements are stringent and unlikely to hold in the Capital Region. Many potentially beneficial agreements are not undertaken, and some of the region's most pressing problems remain unaddressed.

Key Points

- The fate of every jurisdiction in the Capital Region is inextricably linked. Despite the individual incentives for jurisdictions to compete, in the long run all have a common interest in providing and sharing the cost of public goods.
- The status quo is not sustainable because of challenges associated with setting taxes in a competitive environment, providing public goods in an inter-jurisdictional setting, and spillover benefits creating incentives to free-ride.
- The City of Victoria bears a disproportionate share of the cost of services that benefit the entire region. As the balance of development shifts away from Victoria, this cannot continue.
- As fiscal pressures mount in Victoria, any decline in services will be felt across the Capital Region, both because residents from across the region regularly use services in the core and because the reputation of the whole region is affected by perceptions of conditions in Victoria.
- Claims that Victoria's crime rate is overstated appear credible. This also suggests that there is a substantial amount of inter-municipal crime in the Capital Region that is not well captured in ordinarily published statistics. The costs associated with homelessness are also

concentrated in the core. The property tax in Victoria is an inappropriate funding source for regional policing and the costs of homelessness.

- The Capital Regional District allows jurisdictions to act together to secure cost savings, but is not capable of addressing the spillovers and completion between jurisdictions.
- Some form of amalgamation might be appropriate, but other possibilities should be explored. Public debates about cost savings and scale economies overlook the significant role of spillovers between jurisdictions. The academic literature on amalgamation is unconvincing, and presupposes conditions that do not apply to the Capital Region.
- Better data on the use of regional public services is needed. This information is required for operational purposes as well as to understand the implication of plans to direct regional growth and to reform governance structures.

1. Introduction

"The City does not have the resources to meet all of the demands that are made. Demand must be managed to make sure that expectations reflect our fiscal realities..." (Financial Sustainability Policy, 2011, p. 2)

The thirteen jurisdictions in the Capital Region are separate parts of the same body: the health of all depends on the health of every part. Jurisdictions cannot go-it-alone. Many bureaucrats, politicians, and residents believe that maintaining Victoria's status quo levels of service and taxation may be impossible given the current regional and political structure. Sustainability requires that a government's long term revenues must meet its long term expenses given the current legal framework. This is not to say that both revenues and expenses must be the same from one year to the next. All governments face an intertemporal budget constraint: long term revenues must meet long term expenses. Discounting future values to today, this requires the present value of revenues, from taxes, transfers and user fees to be equal to the present value of expenditures on goods and services and payments on debt. Based on the assumption of maintaining current tax rates and levels of service, any shortfall in the present value of discounted revenues is referred to as a *fiscal gap*. By definition, fiscal gaps cannot persist. Eventually, revenues or expenditures will adjust. Someone will bear the cost of service provision, even if it is the unlucky holder of devalued government debt. Most economists would argue that an orderly closing of a fiscal gap is better than a disorderly, unplanned closing. Measures to close a fiscal gap are simple to state, but difficult to implement: raise taxes or cut services. Failing to plan simply transfers the burden from one generation to the next, and, worse, typically exacerbates the political problem as discretionary spending falls, and the cost of debt service grows.

For a government to be sustainable, its revenues and expenses must grow or decline jointly over the years. For example, as the population in a municipality grows, more fire stations are needed to maintain the same service levels and so expenses increase with a higher population. Population growth in the jurisdiction leads to more development and ultimately higher property values, both for residential and business property. As the tax base increases, revenues will increase even without increasing tax rates. It is therefore possible that per-capita service levels can be maintained with the higher tax base, avoiding the need to raise tax rates.

The City of Victoria, however, fails to keep service at current levels without raising tax rates. According to the 2012 Operating Budget of the City of Victoria, tax rates need to be raised and expenditures lowered

even as the population of Victoria is expected to continue to grow. Expenditures have to be reduced (compared to levels required by the status quo) between \$5 and 11 million in order to limit property tax rate increases of 3.5% annually through 2016.

The Financial Sustainability Policy (City of Victoria, 2011c) outlines a set of principles designed to ensure that the City's plans for spending and taxation do not open a fiscal gap. These policies remind planners that taxes will rise simply to maintain current services, and new or enhanced services must be funded either through reductions in some current service, user fees, or further tax increases. Debt finance is to be used only for capital projects where benefits persist in line with the repayment of debt. Debt issues should be timed to smooth the effect of expenditures on tax levels. Self-financed services, including utilities and the Conference Centre, are to be fully funded by user fees. Cost savings, partnerships and external sources of funding are to be sought. Overall, these policies are well designed for their purpose: to meet financial obligations, provide high quality services and allow taxpayers to "look forward to stable, equitable and affordable property taxation."

Implicit in the Financial Sustainability Policy is the additional requirement that decisions about service and taxation levels must be *feasible*. The reasons that taxes cannot simply adjust to meet "all the demands that are made" are not explored. Why might growth in municipal expenditures outpace growth in revenues? After all, if a municipality has historically been able to meet its financial obligations, why expect it to fail to do so in the future?

In this report we explore forces that may lead a jurisdiction onto an unsustainable path, even when it follows the sound practices in the Fiscal Sustainability Policy. Economic theory, backed by the experience of jurisdictions around the world, suggests that even the most prudent, fiscally responsible government and democratically responsive government may struggle to manage demand sufficiently to prevent a fiscal gap.

We begin with a parable.

2. A Tale of One City (with two jurisdictions)

Once there was a city called Core. The city was a perfect circle, large enough to contain all of its residents and the businesses employing them and serving their needs. Outside the circle was open uninhabited land. The residents of Core each had particular preferences over public goods and private goods.¹ The private goods could be bought in the markets of Core. But public goods, such as policing, parks and other public amenities could not, so the citizens of Core formed a city government to provide these. The city government was controlled and supported entirely by taxes paid by the citizens of Core, and existed only to efficiently provide public goods.²

Core was a very successful city, and over time it began to grow as more people moved in from outside the region. Eventually, as the city became more crowded, people began to live outside the city, and formed a new district called Suburb. Suburb residents also valued private and public goods, but since they lived outside Core, the city government paid them no mind: it did not care about the welfare of suburban residents and could not collect taxes from them.

For a long time this worked well. Each day, some of the residents of Suburb commuted to Core. Some came to work, others to shop, and still more to visit parks and enjoy the amenities offered by Core. Whatever it was that they chose to do, people who visited Core benefited from the public goods provided there. While there lived not many people in Suburb, this "spillover" of services paid for by residents of Core seemed inconsequential. In fact, the businesses in Core liked having the business of Suburb and the larger market they contributed to also benefited Core residents. No one liked paying the higher taxes required to pay for public goods, but the trade off was worthwhile. Everyone seemed to be better off as the region (that is, Core and Suburb) grew, and roads and busses were added to make it easier for Suburb residents to commute to Core.

¹ See next section for a definition of the term "public good."

² See next section for a definition of the term "efficiency."



As the region's population continued to grow, the open spaces, low property taxes, and new transportation made it increasingly attractive to live in Suburb. Businesses started to locate there to avoid the cost of Core taxes and to be close to the growing base of customers. Slowly and almost imperceptibly, incentives began to shift. Core residents began to wonder whether they too should move to Suburb: after all, it was an easy commute to downtown, the neighbourhoods there were free of some of the problems in Core, and with fewer problems came lower taxes. As the population shifted, the tax base in Core fell, while the cost of providing services to residents of Suburb continued to rise.

There were costs that prevented rapid relocation from Core to Suburb, but over time, these barriers effectively disappeared. Taxes could not be indefinitely increased to plug the fiscal gap -- this increased the flight to Suburb -- so service levels declined. This too encouraged movement to Suburb, and the tax base eroded further. A feedback loop developed and the pattern continued to worsen. Eventually, service provision in Core decreased, as Core's government recognised that service demands must be managed to meet the fiscal realities. Residents of Suburb felt less safe in Core, and made fewer trips downtown. Problems multiplied, and the whole region, once so attractive lost its appeal to outsiders. Migration to the region decreased and finally both Core and Suburb declined.

Interdependency

The story of Core and Suburb is simple and extreme; the residents of Suburb take advantage of Core, and provide little or nothing in return. Nevertheless, over the long term both suffer: a healthy *region* requires

both its core and its suburbs to be sustainable. Researchers have found considerable evidence for this *interdependency* hypothesis. Although it is difficult to determine whether a declining core *causes* suburbs to fail, or whether some other factor drives decline across a region, there are a number of theories for why a thriving core strengthens surrounding suburbs.³ Similarly, concentrating negative activities may magnify their cost; for example, unaddressed concentrations of crime or poverty can swamp a region, and as in the story of Core, drive away new investments and residents as the reputation of the whole region declines.

Spillovers and Inter-jurisdictional Competition

Core suffered because the services it provided spilled over into surrounding municipalities increasing costs, while its ability to pay shrank as the tax base re-located to those same jurisdictions. This report stresses the long term consequences of these pressures. For the most part, we will treat competition for the tax base as "tax competition," where the outcome directly affects the level and extent of taxes. In fact, in BC the ability of a municipality to overtly compete in tax setting (i.e. to provide "bonuses" to individual tax payers for locating within its jurisdiction) is constrained by provincial legislation. However, municipalities can and do compete by changing the mix of amenities provided for a given tax bill, so the channel may be a service or policy rather than a monetary charge. When municipalities compete with each other, we mean that they seek to attract new business and residents at the expense of other municipalities.

Competition also distorts the mix of services. Typically, competition focuses on new developments and residents, leaving existing tax payers to benefit less. In appealing to the most mobile tax payers, municipalities may increase expenditure on services that this group prefers and lower services to less mobile firms and residents. As each municipality adopts the same strategy (for example by building business parks⁴ and providing highly visible policing services like "no call to small") no new resident or firm are attracted, but the service mix is distorted in the sense that a majority of residents and firms would have preferred a different service mix. Politicians can recognise this distortion, yet be prevented by competition from addressing it. For example, a mayor in Ontario admitted that more than one mayor would be glad to abandon their "no call too small" police services that many of them provide (Vancouver Police Department 2008, p. 29).

³ See, for example, Hill et al. (1995).

⁴ Poel (2000) discusses the creation of the Halifax Regional Municipality. He argues that cost savings failed to appear, though they were cited as an important justification for the amalgamation. However, "dysfunctional business park competition" was effectively addressed by the merger.

Of course, some competition is healthy. There is a long-standing debate on the size (and tax instruments) of municipalities. Typically, the trade off is between producing public goods at the appropriate scale and keeping municipal governments accountable to taxpayers⁵. When municipalities are too small, the cost of providing services rise. Imagine, for example, having a police force for every city block. On the other hand, as municipalities grow, accountability falls, government complexity increases, and accountability falls. Robert Bish provides an influential criticism of the "simple-minded" trend toward amalgamating into unicities in the name of lowering the cost of public good provision (see Bish 1996 for a very accessible summary of his arguments). Bish points out that citizens' preferences for services differ, as does the optimal scale of provision of different types of public goods, so it is unlikely that a one size fits all municipal government (or even fixed two tier system) will be the best design. He argues instead for a more flexible set of arrangements, tailored to the good or service in question.

The Capital Region has seen recurring debates on amalgamation, and Bish's work (among others) is often cited as proof that amalgamation doesn't work. Our purpose here is not to dispute that conclusion (although we find much of the empirical evidence cited against amalgamation to be unpersuasive). It is to introduce into the debate on municipal governance in the Capital Region elements neglected in the single minded focus on returns to scale versus local responsiveness. These are not new ideas, but well understood, in mainstream economics. Many arrangements short of amalgamation can be used to address the potential gains from collaboration between municipalities while avoiding the major pitfalls of large, bureaucratically unresponsive, unaccountable government. But as is also well known in the literature, these arrangements presume a degree of autonomy between the jurisdictions. Bish (1996) refers to the baseline requirement as fiscal equivalence:

For a government to possess fiscal equivalence, first, the citizens who are affected by the decisions made by the government must have a voice in decision-making. This voice can be direct as with referenda, lobbying, participating in meetings or hearings, etc., or indirect, by electing the members of a board or council who in turn will make decisions affecting the citizens. And second, citizens who benefit from the decisions of the government must also pay for the costs of their benefits. With citizens receiving benefits

⁵ This is usually framed as a trade-off between "returns to scale," the extent to which unit costs of producing a good or service varies with the quantity produced, and "Leviathan," a reference to large, unresponsive and unrepresentative government. Returns to scale are increasing when the unit cost falls with an increase in production and decreasing when unit cost rises.

and seeing costs they have an incentive to balance benefits against costs, and they can exercise their voice to see that the governments' programs provide benefits greater than its costs. (Bish, 1996 p.10)

With thirteen municipalities and three unincorporated areas, close together and well connected by transportation links, the Capital Region is a nearly perfect setting for a destructive interaction between benefit spill-over and inter-municipal competition. That some politicians in post-amalgamation Toronto, with a population more than seven times larger than the Capital Region, regret the move to a mega-city misses the point. The first question is whether the jurisdictions in the Capital Region are even approximately fiscally equivalent. If not, then what reforms to governance structures are needed to lay the foundation of sustainable local government?

3. Key Concepts and Terminology

Before we explore how, if at all, the story of Core and Suburb provide insight into the situation of Victoria and the Capital Regional, it is helpful to briefly define some terms. None of these terms is especially mysterious, but each has a "technical" meaning in the economics literature that's not always perfectly reflected in its everyday use. It will be important to keep in mind the following definitions.

Efficiency: this is a fundamental standard by which economists judge outcomes. An outcome is efficient if there is now way to make any one person better off without also making someone else worse off. This requires that no goods are going to waste, the right mix of goods is being produced, and that every opportunity for mutually beneficial trade has been realized.

Public Goods: A "pure public good" is any good that is *non-rivalrous* and *non-excludable*. Non-rivalry means that more than one person can take advantage of the good without interfering with each other's use, and non-excludability means that it is impossible to prevent someone from using the good. Lighthouses are the standard example: one ship using a lighthouse doesn't limit its value to others, and it is very difficult to prevent any ship from using the lighthouse. Some goods, like police services, suffer from "congestion" beyond a certain rate of use, so aren't always non-rivalrous. Other goods are excludable, but not rivalrous (e.g., downloaded music). When by

government policy all citizens are entitled to open access to a good it becomes like a public good, even when in fact the good is rivalrous and users can be excluded (e.g., healthcare).

Economic theory predicts that private markets will fail to produce efficient levels of public goods. While the cost of producing any particular unit of the good falls on a single producer, the benefits of consuming this one unit are scattered across the entire population. A positive price will prevent some users from purchasing the good because their individual benefit of consuming the good --- while positive -- is lower than the price at which the good is sold. Private markets will fail to produce the efficient level. By setting tax levels according to the average benefit a government can keep the price of a public good low enough to allow efficient consumption. To align costs and benefits and ensure efficient use, the jurisdiction of the government that provides a public good should closely approximate the population of the good's users. *Free riders* are users of a public good who do not pay taxes to support its provision.

Natural Monopoly: Goods for which the cost of production decreases as output increases are called natural monopolies, since total costs are lowest when only one firm produces these goods. In general, markets will fail to produce these goods efficiently, and economic theory demonstrates that governments can sometimes intervene to improve efficiency. This intervention can take the form of government provision, but unlike in the case of public goods, positive prices (or "user fees") can be charged to cover some or all of the cost of production. Sewage and water are examples of natural monopolies that are not public goods.

Competition: Economists view competition as a constraint on an individual firm (or government) to freely set a price (or quantity) of its choice. In perfect competition, firms have no "market power" and must simply produce as profitably as possible, given the "going price". Less competitive markets allow more freedom to firms to set their prices. Perhaps confusingly, markets with intense rivalry, like soft drinks or tablet computers, are by this definition less competitive than markets in which producers feel no rivalry at all, the canonical example being wheat farming. Inter-governmental competition discussed in this report similarly does not require individual councils to consciously view themselves as rivals to their neighbours.

4. Trends in the Capital Region's Population and Tax Base

In the story of Core, the city boundaries were defined and unchanged. Neither can Victoria grow outward, so redevelopment aimed at densification is required for growth in the property tax base, the primary source of revenue for Victoria. Broadly speaking, there are two principal classes of property tax: residential and business⁶. Residential and business classes accounted for 49.2% and 49.4%, respectively, of property tax revenues in the City of Victoria in 2011.⁷ However, the residential class made up 77.8% of the total assessed property value, while the business class accounted for only 21.7% (City of Victoria, 2011a). Unlike the even split in Victoria, BC municipalities receive on average 58% of total property tax revenues from the residential class, and 22% from the business class. Not only are businesses an important revenue source in Victoria, a large share of these taxes is paid on a small number of properties.

Municipalities in the Capital Region vary greatly with respect to the two tax bases and with respect to their tax rates. However, some differences have become less pronounced over time. Figures 2 and 4⁸ show the shares of municipalities in the Capital Region with respect to the two property tax bases, business and residential, over the last 20 years. In Figure 2, Victoria clearly takes the lion share in assessment values for business in the region, but its share has been steadily decreasing. Saanich was on a downward trend but has lately increased its share. Not surprisingly, Langford has increased its share over time with its business friendly strategies. Figure 3 shows that Victoria's share of the region's workers is also falling over time. Things are not going exactly as planned: the 2006 CRD regional strategic plan set a goal of 20% of Capital Region employment growth in the City of Victoria by 2026. The actual share of employment growth from 2001 to 2006 in Victoria was 13%.⁹ Saanich is holding its ground, and even increasing its share of workers slightly in recent years, an analogue to what has happened with business property assessment.

Figure 4 shows the tax shares for residential property. Saanich is the clear leader, followed by Victoria. Both have seen their shares decline over time as other municipalities have increased their assessed residential property values more than Victoria and Saanich. Residential tax and population shares tell similar stories:¹⁰

⁶ In fact, there are five classes of property taxation in BC: Residential, Utility, Heavy Industrial, Light Industrial and Commercial.

⁷ The two classes combined were responsible for 98.6% of total property tax revenues. See Adams (City of Victoria, 2012).

⁸ The authors thank Ross Hickey for providing assessment values in the CRD. Tables are based on authors' own calculations.

⁹ http://sustainability.crd.bc.ca/status-reports/economic-sustainability/employment-growth/share-of-employment-growthwithin-the-city-of-victoria,-metropolitan-core,-subregions.aspx

¹⁰ Source: Census data as reported by CRD. Data on workers taken from Census data 1996, 2001, 2006.

Saanich leads Victoria, and both are shrinking relative to the total of other municipalities. Between 2006 and 2011, the population in the Capital Region grew 4.35% while that in Victoria grew 2.51%. Again, the growth of the West Shore is particularly striking.







Figure 4: Residential Property Tax Base Share in CRD

Figure 5: Populations Shares in the CRD

Figure 3: Workplace Share in CRD 1996-2010

What does this mean for Victoria? While still growing in absolute terms, Victoria has decreased its importance as a centre of commercial activity and is home to an ever smaller share of the region's population. As Victoria loses ground in its tax base, the population who demands services in the core continues to grow. Providing these services further increases pressure on the tax base, setting the scene for tax competition and an ever widening fiscal gap.

5. Tax Competition in the Capital Region

In the story of Core and Suburb, as tax rates rose in the core, residents and businesses fled to the suburb. It's clear that economic activity in the Capital Region is spreading out from the City of Victoria, but what evidence is there that this is due to tax -- or more broadly inter-municipal -- competition?¹¹

Tax competition predicts that municipalities raise or lower their tax rate together.¹² Policy makers believe raising taxes when other municipalities do not, may cause businesses to flee to other jurisdictions. Hence an increase in the property tax on business may not lead to additional revenue if firms can locate elsewhere in the region with little cost to them. If, however, the strongest competitor of a municipality were to raise taxes on business property, this municipality can raise its taxes at the same time without losing business.

Even if municipalities engage in tax competition, there may be good reasons for businesses to remain in one municipality despite lower taxes elsewhere. If municipalities differ in other characteristics important to firms, we would not expect all municipalities to set the same tax rates. However, we would still expect that, given that different characteristics allow for municipalities to differentiate their tax rates, a further increase in the tax rate of one municipality without a change in the tax rates in the other municipalities would increase the incentives for some firms to leave for the other municipalities.

Janeba and Osterloh (2012) surveyed mayors from the state of Baden-Württemberg in Germany asking them to indicate how fiercely they compete with municipalities in their own region, in other regions, and internationally. The survey indicates that the size and location of the jurisdictions were important factors in determining the intensity of competition. Core municipalities in different regions claimed to compete with each other, while periphery municipalities competed mostly with the core in their own region.

In the context of Victoria, Janeba and Osterloh's findings would suggest that Victoria engages first in tax competition with other large urban areas (e.g. Vancouver, Kelowna, and Nanaimo). However, if this strategy draws a large business to Victoria, then other smaller firms will follow and there will be fierce tax competition among the Capital Region municipalities who each hope to land some of the residual firms.

¹¹ That Saanich can attract business at the expense of Victoria is evidenced by the Uptown Shopping Mall. Stores such as Mexx and H&M which would typically locate downtown (as they do in Vancouver) chose a new mall in Saanich instead. Had Saanich and Victoria planned together, would Uptown (or for that matter, the plaza that preceded it) been located so far from the core? ¹² Of course, there could be other reasons that rates move together, so this simple test is not definitive. Researchers try to control for these other influences in their statistical models.

These firms will choose to locate where their operating costs are lowest, that is, where tax rates and land rents are lower.

Evidence of tax competition in BC is also available. Hickey (2011) tested the hypothesis of business tax competition amongst BC municipalities by looking for evidence that tax rates in a municipality respond to changes in the rates of its neighbours.¹³ His research provides evidence for the existence of tax competition in BC, but he notes that his results are sensitive to precisely how the set of competing neighbour municipalities is defined.

Luthi and Schmidheiny (2011) make a distinction between areas of economic activity and municipalities within this area. Although regional districts do not have the authority to tax directly, they do provide some regional services funded by requisitioning member municipalities. Cost shares are determined by various formulae (as discussed briefly in Section 8). The municipalities levy taxes to meet their requisition obligations. Since the municipalities ultimately make up the governance of the CRD, ¹⁴ they implicitly set tax rates when choosing regional service levels and cost-sharing mechanisms. A few other bodies can exercise taxing authority as well, including the province, BC Transit, and the School Districts.¹⁵

In this structure, benefits to businesses are primarily associated with locating in the Capital Region, rather than in a particular municipality. This does not imply, however, that municipalities co-operate when determining regional cost shares. Within the Capital Region, businesses find it relatively easy to relocate, and no municipality has much market power; there is potential for fierce competition among members. Each municipality attempts to have the most competitive combination of regional and municipal tax in its own jurisdiction, resulting in un-cooperative behaviour when distributing costs for regional services. In other words, each municipality desires to pay the smallest possible share of regionally distributed costs, so that it has more latitude in setting tax rates for local services. In fact, there may hypothetically be more incentive to co-operate in an environment with substantial tax competition between urban areas, as they

¹⁴ Incorporated municipalities appoint members to the CRD board, and unincorporated areas directly elect members.

¹³ Hickey uses instrumental variables and a difference-in-differences approach to control for other factors, and address "endogeneity" concerns. The differences-in-differences approach acknowledges that tax rates change frequently, and looks for changes in *how they change* to find evidence on the hypothesis of tax competition. Empirically studying tax competition requires knowledge of which municipalities are actually competing with each other. Traditionally this is accomplished by analyzing a set of geographically determined neighbours. However, Hickey argues that this method is restrictive and uses previous business flows between jurisdictions to determine the importance of each municipality amongst a set of neighbours.

¹⁵ The school districts have the ability to directly levy taxes, but have never done so.

would have the common goal of attracting businesses from other regional districts, with local competition being secondary in nature.

If the story of Core and Suburb holds for the Capital Region, one implication is that over time the whole region will become less attractive for investment. It is unclear to which extent this has been happening. In Figure 6, we can see that the share of newly incorporated firms in the CRD, both compared to the Greater Vancouver region and compared to all other regional districts in BC, has had its upswings and downswings over time.¹⁶ Most recently, we can see a downward trend, but we are by no means outside historical experience.



Figure 6: CRD Share of New Incorporations

Conclusion:

Inter-municipal competition can restrict the ability of a jurisdiction to set taxes to pay for beneficial public goods or restrict the mix of public services that are provided. The simpler and less costly is mobility, the stronger is this effect. If the jurisdictions were otherwise separate, this might lead to a balanced outcome where all jurisdictions produce the "wrong" mix of public goods, suiting the preferences not of the most, but the most mobile taxpayers. However, the problem is worse when the public goods provided can be consumed by the taxpayers who leave. We turn next to this subject.

¹⁶ Data courtesy of Ross Hickey.

6. Service Spillovers: The Regional Resident

In the framework above, whether the core municipality is sustainable depends on changes to the costs of providing services at least as much as it does on revenue generation. In this section we take a closer look at a few of the services in the region, law enforcement and social services.

In principle, the way to measure spillovers is to determine the portion of a public good's users who reside outside the district. This is made more difficult when the users of a service do not even need to enter the district. But even when users need to be physically present, little data is collected upon which a sound measurement can be based. One way to estimate the use of services in Victoria by residents of other municipalities is to examine commuter flows. Because of its dual roles of business center and entertainment district, the commuting patterns in Victoria are complex.

Figures 7 and 8 on the next page illustrate the weekday patterns of business and recreational commuters in the CRD (CRD, 2006). Clearly, there is a great deal of inter-municipal travel but it is immediately apparent that, on balance, people travel to Victoria to work. The maps show both fewer recreational commuters than business commuters, and a lower net number of recreational commuters to Victoria (e.g. the number of people commuting from Victoria to Saanich for recreational purposes is larger than the number for business).

In the evenings, on weekends and holidays, the roles reverse: recreational travellers flow into the core. Figures 9 and 10 show that on the weekends, very few people commute across municipal boundaries for work. There is, however, a substantial amount of recreational inter-municipal travel. Figure 10 shows not only that there is more weekend recreational travel than weekday business travel, but also that recreational "hubs" have developed in Saanich, the Highlands, Langford, Oak Bay, and Victoria.





Figure 8







Figure 10

Tourists from beyond the Capital Region also use services in Victoria. They also pay taxes, indirectly via services and goods that they buy from local firms. Accounting for tourism is more difficult because data is not typically collected at the municipal level. For example, Tourism Victoria estimated that there were 3,081,129 overnight visitors to Greater Victoria in 2010. This amounts to an average of 8,441 overnight visitors per day. It is hard to estimate how many of these tourists come to Victoria versus other jurisdiction in the Capital Region. To the extent that tourists come to see Victoria, but also visit, stay and shop in other municipalities, the services provided by the City that maintain the region's attractiveness as a destination can also be counted as a spillover to neighbouring jurisdictions.¹⁷

Another important lesson from the commuter graphs is that people will cross the borders between municipalities frequently; they behave as if these jurisdictional boundaries are irrelevant. A typical resident in the Capital Region moves between different municipalities each day, and hence Bish's concept of fiscal equivalence does not apply. On the other hand, most residents of the Capital Region remain within it on any given day. If the CR would be one jurisdiction, fiscal equivalence is likely to apply.

The CRD has identified centres throughout the region. From a regional perspective, it would make sense to concentrate large industries and perhaps shopping malls in particular areas, and focus on entertainment in the City of Victoria. However, it is not possible to make such designations without taking into account the fiscal realities of each municipality. Victoria does not have the financial revenues necessary to put on many festivals and parades if it loses business to outlying jurisdictions, because it relies on the property taxes on business and residents to finance its expenditures.

7. Police and Social Services

The above discussion provides a good reason to expect that municipalities in the Capital Region provide services that will to some extent go towards residents of other municipalities. Two areas where it seems likely that region depends on the levels of service provision in Victoria are policing and addressing the problems associated with homelessness.

¹⁷ Revenues earned from tourists who are attracted to the region by images of the Legislature and tea at the Empress Hotel, and Victoria's reputation for safety and clean streets, but who book a hotel in Saanich and eat dinner in Oak Bay are just one spillover that does not require the "service" user to enter the city.

Police Services

"[Regionalizing] doesn't solve any problems that Saanich has... Saanich is well-served by having its own police force and I don't see a reason that we can't find a way to co-operate on functions that would benefit from regionalization." (David Cubberly as quoted in the Saanich News, October 2011)

Policing accounts for a large proportion of Victoria's budget (in 2011, \$41,599,869, more that 25% of total expenditures). Recently, Darryl Plecas lead a review of the operations of the Victoria Police Department (Plecas et al. 2012). In a broad ranging summary and assessment, the Plecas report discusses the department's workloads, and provides suggestions for further improvements to lower costs and crime rates. Plecas et al (2012) isn't framed in terms of spillovers,¹⁸ and doesn't raise the associated problem of inter-municipal competition undermining the tax base required to pay for policing. But they do recognise that Victoria, like other major centres, is "dealing with a core city phenomenon"(p.10). They present data indicating that, even against a generally falling crime rate in Canada, Victoria has done well: reported crimes declined by almost 30% between 2006 and 2010. This compares with a decrease of about 25% for BC as a whole, and 15% for Canada. Nevertheless, the crime rate in Victoria stands out. In 2010, there were 120.2 crimes reported per thousand residents in Victoria. For BC as a whole the number is 84 per thousand, and for all communities with municipal forces in Canada, only 61.5.

Furthermore, the severity of crime in Victoria is considerably higher than that in BC, Canada as a whole, and the other municipalities in the Capital Region. All of the recent reduction in the crime rate has been in property offences, which fell by almost 35%; violent crime has actually risen between 2006 and 2010. Statistics Canada computes a "Crime Severity Index" based on the nature of reported crime for every police jurisdiction with a population greater than 10,000. There were 239 such jurisdictions in 2011. The index is normalised to 100 for Canada as a whole in 2006, and, because of the decline in crime, fell to 77.6 by 2011. In Victoria, it stood at 124.1 in 2011, the 30th highest rate in Canada. This is down from 2010, where Victoria stood at 144.4, 17th in Canada. However, Victoria remains far above other municipalities in the Capital Region: for example, in 2011, Saanich's index was 44.5 (203rd) and Oak Bay was 42.4 (209th). Statistics Canada breaks the index down by violent crime and non-violent crime. Here the disparity is even

¹⁸ In fact, the Plecas report might be read to suggest that spillovers are part of a solution: "with an 'in your face' approach, the Department can assume that a significant percentage of criminals will move away" p.36.

starker: for violent crime Victoria's index value was 21st in Canada in 2011, compared with 183rd for Saanich and 239th for Oak Bay -- the lowest severity index in Canada, a mere 3.8.¹⁹

When the media reports Statistics Canada data on crime rates and severity they tend to gloss over the reminder that "these represent data at the police service level and will differ from the data for the census metropolitan area of the same name." Is Victoria the hotbed of crime that these numbers indicate? There is no simple answer to this question. We can "reframe" the data variously to provide a clearer picture. First, what would be the crime rate if the jurisdiction encompassed Central Saanich, Oak Bay, Saanich and Victoria. This is easily computed; the results for 2006 to 2010 are presented in Table 1.

	2006	2007	2008	2009	2010
Central Saanich	45	52	44	43	38
Oak Bay	51	50	47	46	47
Saanich	57	53	51	51	51
Victoria	171	154	139	133	120
Combined	102	93	86	83	80

Table 1: Crime Rate by Police Jurisdiction²⁰

Notice that by 2010, the combined region had a crime rate below the BC average of 84 per 1000 residents. Moreover, the decline over this half decade is almost entirely due to the falling crime rate in Victoria. This is quite a different picture than one might draw from media reports, but perhaps more in line with the perception of residents.

By combining local police jurisdictions, Victoria is placed on a comparable footing with less fractured jurisdictions elsewhere. If the purpose is to correct a misleading impression, this is perhaps the best method. But Victoria is different from its neighbours: both the extent and nature of activities in the civic core differ from those in suburbs. The same forces that draw legitimate activities to the core may also draw

¹⁹ Data from Statistics Canada http://www.statcan.gc.ca/pub/85-002-x/2012001/article/11692/tbl/csivalue-igcvaleurs-2011eng.htm

²⁰ Source: http://www.pssg.gov.bc.ca/policeservices/statistics/docs/capital.pdf and calculations by the authors.

criminals. The aggregation just performed underestimates the probability that a resident of Victoria proper will be affected by crime. Simply adding in surrounding jurisdictions tells us very little about the differential cost of policing Victoria. To the extent that Victoria's "true" population exceeds its residential population, per capita costs rise but risks fall. A second approach, then, would build on the data presented above on commuters and tourists to assess how many people are in the city at a given time. As we saw in the previous section, this data is suggestive, but incomplete.

A related approach overcomes the lack of an accurate measure of Victoria's population. Starting from the assumption that people in Victoria are no more likely to be involved in crime than people in any other jurisdiction, this method uses the number of crimes reported to "back out" an estimate of the true population.²¹ This is almost the opposite approach from aggregating Victoria with other municipalities, since it assumes that the core is no different from the suburbs. For example, we might assume that the average BC crime rate is a good estimate of the true crime rate in Victoria. In 2010, this rate was 84 per thousand, so Victoria's true population would then be 144,560. This implies that, on average during times when criminal activity occurs, about 30 percent of the people in Victoria are non-residents.²² Other reference points yield other estimates of Victoria's implied population. For example, assuming that Victoria's crime rate is the same as Toronto's or the National Capital Region, implies an average daily population in Victoria of over 200 thousand people. This seems far-fetched. The same calculation, however, using the crime rates of Winnipeg, Vancouver, or Halifax implies a daily average population between 100 and 175 thousand people, which the commuter data above suggests is quite realistic.

The most direct way of estimating the spillover cost of policing in Victoria would use data on incidents to identify the residential location of victims and perpetrators. However, the records are incomplete and quite obviously riddled with coding errors, particularly regarding residential addresses. The Victoria Police provided to us an (anonymized) sample of this data for 2007-2011. In this data, nearly 32% of crimes in Victoria/Esquimalt were committed by people who did not live in either municipality. On average, about 17% of the offenders came from one of the other Capital Region municipalities. However, given the data problems, we have little confidence in this estimate.

²¹ To be precise: crime rates are calculated as the number of crimes reported per 1000 residents. In the usual method, the population and number of crimes are measured, and the ratio is solved for the crime rate. Here we assume a value for the crime rate, count the number of crimes in Victoria and solve for the implied population.

²² Note that the crime rate reported for Victoria is the crime rate for the combined municipalities of Victoria and Esquimalt which has a population of about 100,000.

More confidence may be placed on the records from specific events, but, of course, these may not be very representative of daily caseloads. Every year on Canada Day, Victoria hosts a large number of visitors. Figure 12 shows the estimated number of people who attended, how many calls were received by police, and how many people were held in jail cells for the last six Canada Day celebrations.²³



Figure 12: Canada Day Celebrations

For example, the 2012 event was attended by approximately 50 thousand people, with almost all protective services provided by the Victoria Police. They received 200 calls for service and detained 63 people overnight in cells.²⁴ Of the 63 people arrested, 22% came from Victoria, 59% came from other Capital Region municipalities, and 19% were from outside of the Capital Region or had no fixed address.²⁵ Unfortunately, 2012 is the only year for which we had sufficient data to disaggregate the offences this way.

Each of these measures of spillovers must be interpreted with caution. Available data does not permit us to assess the probability that a resident of Victoria will be involved in a crime, either as perpetrator or victim. Similarly, we cannot estimate with any accuracy the cost to Victoria taxpayers of supplying police services to residents of surrounding municipalities. However, the comparisons just made demonstrate that these costs can be significant. As the region's population growth outstrips that of the City, this imbalance will widen further.

²³ Source: Data provided by Victoria Police.

²⁴ Victoria Police Department, personal communication, July 3, 2012.

²⁵ Victoria Police Department, personal communication, August 2012.

Costs of Police Services

So far we have focussed on the question of who benefits from Victoria's police services. Here we turn briefly to the question of how much these services cost. Adjusting for inflation, costs of providing policing to the residents of Victoria and Esquimalt between 2003 and 2010 fell slightly at first, and then rose from 2005 to 2010 by an annual average of 4%. The net result is that policing in Victoria and Esquimalt cost 29% more in 2010 than in 2003. Some of this is due to population growth, but the population of Victoria and Esquimalt combined only grew about 6.6% between 2001 and 2011, according to census data. The population in the Capital Region, however, grew by 10.4%.

Much of the increases in costs are due to wage growth. Of the 3.3% budget increase for 2011-2012, roughly 82% is attributed to salary and benefit increases, with net operating cost increases accounting for the remaining 18% (Graham & Seivewright, 2012).²⁶ Over this time, Victoria's inflation rate was well under 1%, and is currently close to zero²⁷. Costs are expected to continue to increase by 3% per year over the next five years. As noted above, policing absorbs about 24% of the city operating budget. The current goal of limiting property taxes to a 3.5% increase requires zero nominal increases in many discretionary spending categories, but policing costs are expected to consume an ever greater share of Victoria's expenditure.

Is regionalisation the answer?

Policing is arguably the best studied area of municipal jurisdiction, with shelves of reports prepared by municipal councils, government commissions, police forces, and academic researchers. Much attention has been paid to the question of whether amalgamation (or "regionalization") of municipal police forces leads to cost savings or service improvements. In general, the debate hinges on the familiar trade-off between returns to scale (larger forces operate at a lower unit cost), and local responsiveness (closer contact between police and the community they serve aids in preventing and detecting crime). For all the study, there is no consensus on whether the amalgamation of police forces either lowers costs or improves service. Logic suggests that the returns to scale in patrolling are small, and perhaps even decreasing (i.e. costs rise in larger forces). Other aspects of policing, such as communications, investigation, emergency response, and

²⁶ The salary and benefit category included: police negotiated wage increases, non-sworn negotiated wage increases, and benefits. Net increases in operating costs were broken down among the following categories: costs of policing Canada Day events, fuel costs, legal costs, a new provincial undercover program, rising maintenance and licensing fees, and a small net decrease in other costs.

²⁷ Retrieved from http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/cpis02a-eng.htm

the like, are more likely delivered at lower cost and higher quality as the scale of operations increase²⁸. Empirical research also provides a mixed picture. For example, McDavid (2002) finds that the 1996 amalgamation in Halifax, Dartmouth and Bedford Nova Scotia failed to live up to expectations on either front. McDavid cites other research which finds mixed results from amalgamation across a number of jurisdictions. It does appear that in many cases any potential cost savings are lost to higher wages, as police forces transition to the most expensive labour contract. Hampering all of this research is the difficulty of specifying a convincing "counterfactual," a credible story of what *would have happened* had amalgamation not occurred. Contractual differences within the Capital Region could be examined to assess the local implications of wage assimilation; a cursory review suggests that this is unlikely to be significant, giving the existing parity between wages in local police forces.

Senior levels of government are generally more supportive of consolidating police forces than are local police chiefs. In 2003, the BC government formed a committee to investigate sharing services between Victoria, Oak Bay, Saanich, and Central Saanich. Three months of consultations and discussions lead to two potential models for further integration, but no consensus. The question of "total amalgamation" was not under consideration. However, it loomed in the background, as the models were clearly steps on a path to total amalgamation. The division of opinion apparent in the final report was not hard to anticipate.²⁹ Perhaps because of the lack of consensus, neither of the two candidate models was implemented, but some further moves to share services have been made. The objections raised were largely operational, rather than financial. But the models considered required labour contracts across jurisdictions to be harmonized to allow for secondment to centralised services. As noted, this "levelling up" of wage contracts emerges as a major driver of increased costs following full amalgamation of police forces. One might reasonable worry, therefore, that half-way measures would present all the costs with only part of the benefit of full amalgamation.

As usual, the tax competition and service spill-over dimension is less visible in the discussion, but clarifies the positions taken. Members of the 2003 Committee indicated that any decision about closer integration was "political." There is a widespread belief that multiple forces lead to costly duplications and jurisdictional conflicts prevent crimes from being solved. Pitted against this is the worry that suburban

²⁸ Arbitrary boundaries, gaps in communication and poor collaboration among local forces have led to significant police failures (Oppal, 2012).

²⁹ See Central Saanich, Oak Bay, Saanich and Victoria Police Force Integration Planning Committee (2003).

departments' policies of "no call too small" will be lost, with all patrols concentrated in the core area. This may be true. But we presume that a competent police administration would only redeploy the aggregated resources this way if the previous allocation was inefficient. Concentrating forces in core city crime "hot spots" as suggested by Plecas et al. would lead to an overall lower crime rate. And with the lowest crime severity index value of all jurisdictions in the country with populations over 10,000, it isn't surprising that citizens and police in Oak Bay expect amalgamation to divert resources to the regional core.

The larger lesson is that the operational and financial aspects of policing are enmeshed. Residents of suburban districts who worry about losing police services to the urban core with an amalgamation of patrols are ultimately worried that the level of services they enjoy are unaffordable in the entire district. It is only because the residents of these jurisdictions can share in the benefit of the adjacent downtown without contributing to the cost of public safety there that allows their own local police forces to provide the level of services they do.

Any move to "regionalise" policing will meet political resistance from outside the core. If it happens, most likely it will be by order of the provincial government, possibly justified by failures in collaboration rather than potential cost savings. It would be a better idea to reconsider the extent to which it is appropriate for police services to be funded by property taxes, and revisit the role of the Province in funding and operating local police forces.

Social Services

Homelessness is one of the most sensitive issues in the Capital Region today and Vital Signs, a report by the Victoria Foundation, lists homelessness as the most pressing issue after the cost of living in Greater Victoria (Vital Signs, p.4). It also reports that the Social Housing Wait List has grown by 15% from March 31, 2011 to March 31,2012 (Vital Signs, p. 3).

Given current resources, it is impossible to pin down the exact number of homeless people in the Capital Region as a whole, let alone in the individual municipalities. However, according to the Homelessness Fact Sheet, 1,617 unique individuals used an emergency shelter bed in five of six emergency shelters in Greater Victoria in 2011/12. While this number of individuals may be similar to 2010/11, the occupancy rate of emergency shelters has increased from 95% to 111%. On a single night, 1,205 people were counted in temporary accommodation in our region, suggesting that a significant share of the homeless are homeless

for long spells.³⁰ There is still a severe lack of data despite the efforts of organizations such as the Victoria Cool-Aid Society and the Greater Victoria Coalition to End Homelessness (GVCEH).

Funding of social services such as welfare assistance programs and housing support to deal with the problems of homelessness and poverty is mainly a provincial, but also a federal responsibility. Not every municipality is affected by homelessness and poverty of its residents in the same way. There are two reasons for this. (1) Some municipalities due to their geography and due to their past development attract more people that are at the risk of poverty. (2) Municipalities influence the attractiveness of their location for people at risk through zoning and land use decisions. Once homelessness and poverty is a pressing issue in a municipality, municipalities tend to financially contribute to measures trying to improve the situation of homeless people even if the main responsibility falls on the province. This is illustrated by the funding of Queens Manor.

"By working with our partners to create housing options that support people who are most in need, we are making this community a better place for everyone," said Victoria Mayor Dean Fortin. "This is why our city has made it a priority to develop projects such as Queens Manor and why we remain committed to ending homelessness in the Capital Region." (BC_housing)

Funding for the \$5.5-million project is as follows:

- The Government of Canada provided \$864,000 through Canada Mortgage and Housing Corporation's Residential Rehabilitation Assistance Program Conversion (RRAP- C) and \$600,000 through Human Resources and Skills Development Canada's Homelessness Partnering Strategy (HPS).
- The Government of B.C. will provide up to \$2.9 million for the purchase and renovation of the building. The B.C. government will also provide an annual operating subsidy of \$548,330.
- The City of Victoria provided \$360,000 through the Victoria Housing Trust Fund.
- The Capital Regional District provided \$600,000 through their Housing Trust Fund.
- The United Way of Greater Victoria provided \$150,000.

³⁰ Subsequent interviews with members of the Greater Victoria Coalition to End Homelessness have indicated that more current estimates are less robust but reasonably consistent with this number.

As in the case of Queens Manor, the City of Victoria is the only municipal contributor of many initiatives targeted at ending homelessness in the City of Victoria. Non-profit organizations that help homeless people often are exempt from paying property taxes and low-income housing typically lowers the assessment values of property. While both encouraging non-profit organizations and providing low-income housing will most likely be less costly to the City than not addressing its homelessness problem in any way, jurisdictions in which homeless do not gather will not forego these sources of revenue.

It is well recognized in the literature that homelessness is a regional problem. While people, once homeless, typically concentrate in urban areas, they come from across the region.³¹ Larger urban areas where jurisdictional boundaries coincide with the regional boundaries are in a much better position to address the issue of homelessness as is the case for Toronto (amalgamated in the 1990ies).

In case of Vancouver, where the Greater Vancouver area consists of 26 municipalities, a regional structure has been put in place with good support from all Metro Vancouver municipalities. One of the reasons why this framework works better in Metro Vancouver than Greater Victoria, is that more than one municipality makes up the core urban area and hence homelessness is also more spread across municipalities. (A regular homeless count also reminds communities that homelessness is not restricted to Hastings Street.)

In contrast, in the Capital Region homelessness seems to be visible only in one municipality. So for other municipalities to do more, homelessness would have to be more widely spread and their own municipality visibly affected. However, spreading homeless people across municipalities and then requiring all municipalities to provide a given level of services may not be optimal if there are economies of scale or scope relating to various social assistance programs. Thus, a more robust solution would be to figure out a province-wide strategy to provide affordable housing and emergency shelters were it makes the most sense. Funding should not depend on where these initiatives take place but be financed out of general revenues. After all, people become homeless in both urban centres, suburbs, and rural areas; but once homeless, people are drawn to urban centres.

³¹ See DeGeorge (2008) for migration of homeless in the US.

8. Regional Governance

The implication of the "interdependency" hypothesis is that a region's municipalities benefit from cooperation. Many institutions short of full amalgamation can potentially address the problems of intermunicipal competition and service spillovers. Not surprisingly, there has been extensive research on what is the "best" size for local government. Slack (2007) reviewed theory and empirical results from several case studies of metropolitan governments and provides the succinct response that, "there is no 'one size fits all' model of metropolitan governance." (p.3) In fact, the optimal size of government is not only dependent on the city, but can change over time as well.

Proponents of small municipal governments argue that there are benefits from competition amongst municipalities and that large governments are too inflexible or slow to respond to the needs of communities (this is known as the Leviathan effect). On the other hand, larger governments are better able to take advantage of economies of scale and are less subject to spillover effects (by sheer virtue that they may not have any neighbours). Bish (2002) argues that the regional district structure can offer the best of both worlds. Municipalities compete in the production of most services, leading to more efficient delivery of these services. Inter-municipal agreements exploit economies of scale where they exist (e.g. sewage and sanitation systems), but still retain a small government's ability to reflect diverse preferences and respond or adapt to changing situations. This suggests that Greater Victoria is well served by the Capital Regional District, and the scenario of decline unlikely to apply here. Unfortunately, we argue, matters aren't that simple.

Is the CRD the solution?

In what follows, we briefly review the role and scope of the CRD. We explore the nature of CRD shared service agreements, illustrated with some examples. These agreements are certainly not "one size fit all", but they differ less than one might expect, if the goal is to both exploit returns to scale and address spillovers. More problematic, participation is voluntary, so the fundamental forces of competition between municipalities are not resolved by the CRD. Saying that "the CRD should do it" begs the central question of whether a given municipality should join, and how to structure any resulting cost sharing agreement. The CRD might be a well designed *structure* for implementing a solution to the problems of inter-municipal competition and benefit spillovers, but it falls short as a way to *solve* these problems in the first place.

The best way to capture the extent and structure of CRD agreements is to review the annual requisition summary (for a recent version, see CRD 2011). This document describes the distributions of costs amongst participating municipalities for approximately 100 agreements. A review of the breadth of agreements raises a number of questions. Why are some amenities not managed by the CRD, despite the inclusion of other very similar amenities? Within the agreements that do exist, why are costs for some amenities borne only by one or a small number of municipalities despite the existence of regional benefits. Finally, how are the cost sharing rules for a specific agreement chosen, and why is there so little diversity amongst these rules? To explore these questions it is helpful to look at some familiar examples.

Beacon Hill Park

Beacon Hill Park is one of the region's oldest, most well known and visited public park. Much of the park is available for recreation, with walking paths, picnic areas, ornamental gardens, sports fields, among other amenities. The "mile zero" marker of the Trans-Canada highway is just one distinctive feature that draws visitors from around the region and the world. In 2011, an estimated 1,000,000 people from outside of the CRD visited the park (City of Victoria, 2011b). Beacon Hill Park benefits park users and businesses who provide goods and services to the park users, and these benefits most definitely extend to other municipalities.

But operating the park is expensive. The land set aside accounts for about 3% of the City of Victoria, and required direct funding of \$1,482,000 in 2011 (City of Victoria, 2011b). Despite the spillovers, Beacon Hill Park is solely owned and operated by the City of Victoria. The CRD plays no role, and no other municipality contributes to its cost of operation. This contrasts with many other large parks in the region that are operated by the CRD, with costs distributed across municipalities. (The CRD requisition does not break down expenditures by parks, but in 2011, the City of Victoria contributed \$1.37 million to CRD regional parks, many of which are located far from the urban core. This requisition is based on a mix of population and property assessments.)

Why is Beacon Hill not a CRD park? According to the Director of Parks, Recreation, and Culture at the City of Victoria, the roadblocks to regionalizing the park are due to historical concerns and differing preferences across the region³². The park was granted in trust to the City of Victoria in 1882, and has been

³² Personal communication

developed and maintained according to the wishes of the Trust. The highly landscaped and manicured portions of the Park reflect this 19th Century style, and many residents feel a keen sense of attachment to Beacon Hill Park as a local park. CRD parks reflect very different preferences, typically acquiring relatively unmaintained tracts of land, and providing facilities for public access yielding a more rural or natural park, rather than landscaped green space. The City has not pursued regional management of Beacon Hill Park of fear that in doing so it will lose control of the park, and it believes that the preferences of its residents will not be well met by the regional park development strategy, which may also violate the terms of the Trust. Moreover, the CRD has neither the specialized equipment nor technical skills to appropriately maintain the park. Finally, the City feels that its residents indentify with Beacon Hill Park as a community amenity, and oppose the transfer of ownership to the CRD.

Beacon Hill Park falls into a gap in the neat division between region and municipality envisaged by proponents of the regional district model. Local preferences differ from the available regional model and as a result the park's unique characteristics limit scale economies from centralising operations. Yet it isn't true that attachment to the park (and its distinctive features) is only felt by the residents of the City. Why the CRD mechanism cannot adjust to the terms of the Trust is unclear.

The McPherson Playhouse and Royal Theatre

The McPherson Playhouse and the Royal Theatre are two of the largest and best known performing arts venues in the region. The CRD took over management of the McPherson from Victoria in 1999, and the expectation is that ownership of the building will be transferred in the future. Operating and capital costs (totalling \$750,000) were requisitioned solely from the City of Victoria in 2010 and 2011. The Royal Theatre is also in Victoria and managed by the CRD, but it is supported by Victoria along with Esquimalt, Saanich, and Oak Bay. While proximity and personal preferences play a role in determining who garners the benefit from these facilities, both provide benefits for residents and businesses across the region. That two large performing arts facilities are located in Victoria is more likely due to historical reasons than the preferences of the current residents (the Royal opened in 1913 and the McPherson the following year). Their existence in the core satisfy regional demand and obviate the need for similar venues elsewhere. If the Regional District provides an efficient solution to spillovers, it seems hard to explain the partial and different agreements supporting these two facilities.

The Variety of Inter-municipal Agreements

Although it seems hard to see the rationale for the funding of the McPherson and Royal, in general it is striking how little diversity there is in the CRD cost sharing agreements. Although the number of participating municipalities varies considerably the sharing mechanisms themselves do not. Over 75% determine cost shares according to the proportion of (grantable) converted assessments, proportion of population, or a weighted sum of both.³³ Since these agreements cover a wide range of service provision, it is surprising to see that so many of them use the exact same allocation formulas. If negotiations among municipalities are costless, an efficient outcome would feature many different agreements with attributes unique to the services and partners involved. Clearly, negotiation is not costless, especially with as many as thirteen partners at the table.

The case of the Royal Theatre provides an illustration of how it can be difficult to determine fair cost shares. Currently, the costs are distributed by a mix of property assessments and population. The disparities in municipal population dominate the calculus, so in 2011 Saanich paid the largest share (49.4%), Victoria paid somewhat less (41.3%), while Oak Bay paid a relatively small portion (9.3%). We would assert that population provides a poor approximation to the theatre's user base. This contention is feasible to confirm, and even if subsidies were deemed appropriate, they could in principle be adjusted to reflect actual usage. That they are not suggests the difficulties of these negotiations.

Spillovers reduce the incentive to bargain in the first place. The proposed replacement of the Johnson Street Bridge appears to be an example of this failing completely. This bridge provides both access to the downtown core and a route between municipalities for many Capital Region residents and businesses. Improvements to the bridge will benefit commuters from across the region. ³⁴ Clearly, the bridge is essential to Victoria, which also bears the cost and risk of the existing link, so a replacement will be built whether other municipalities participate or not. The current plans sever the rail link. Of all the features, this is one most likely to benefit outlying municipalities. However, the benefits accruing to any individual municipality were too small to justify the costs of funding the entire project, and each municipality was

³³ Strangely, different population measures are used for different agreements, and these measures themselves vary considerably. The choice of measure can make a significant difference.

³⁴ That the controversy over the bridge's replacement engaged citizens from across the region also suggests that the "ownership" of this amenity isn't restricted to the residents of Victoria.

unwilling to contribute. The net result, a reduced-scale bridge without a rail link, is potentially welfare reducing for the entire Capital Region.

9. Concluding Remarks and Recommendations

We believe it is necessary to broaden the discussion about governance structures in the Capital Region beyond the long standing debate about "amalgamation," pitting claims of potential cost-savings from consolidating service provision against the loss of local control. This simplified discussion misses the deeper issues. When the public goods and services provided by one jurisdiction are readily available to residents of neighbouring jurisdictions who pay no tax to support them, local control is already missing. The justification for independent municipalities using property taxes to provide services to residents is that jurisdictions are "fiscally equivalent".³⁵ We think the evidence presented here clearly proves this is not true in the Capital Region. The large number of jurisdictions leaves the Capital Region significantly exposed to the problem of public good spillovers, aggravated by tax competition.

To some extent, these challenges have always been present, but as the Capital Region grows, they increase at a much greater rate. We emphasize Victoria's situation because the urban core is where the complications arising from these twin perils are first to be felt. Ultimately, however, it is the whole region that will rise or fall together. The framework we describe offers a few basic insights on the direction this might take, as first the core and then the surrounding jurisdictions struggle to meet basic services. Even the impression of decline places an artificial ceiling on the size and vibrancy of the Capital Region. (The peculiar and disadvantageous way that crime statistics are reported for "Victoria" is a good example. With our significant dependency on tourism, out-of-province university students, and retirees from across Canada, a misleading reputation for a high crime rate is extremely damaging.) In the long run, local disputes about amalgamation mask the regional interest in ensuring that *every* member municipality is thriving.

Recommendation 1:

The evidence presented on spillovers and tax competition is less conclusive than it might be were we to have more data. Unfortunately the required information is either non-existent or inaccessible. For example, it is extremely difficult to say how many people use Beacon Hill Park, the average number of tourists in

³⁵ Recall that, briefly, fiscal equivalence requires residents to have a voice in the decision of what services are provided, and when the choice is made, to get what they paid for and pay for what they get.

each municipality for given months, where they go, what brings them here, or where the people who use recreation centres live. In principle, reliable surveys could be designed to track this data, but this has not happened. Some data that do exist are unusable because of their format, quality concerns, inconsistencies across sources, or other issues. In some cases better data may simply require standardizing information, or just transferring existing data to electronic records. Policing is a particularly good example of this, where data collection is very primitive. In other cases, methods from other jurisdictions (e.g. surveys as described in Janeba and Osterloh, 2012) could be applied.

Our first recommendation is to **improve data collection and analysis** immediately. This could be undertaken by individual jurisdictions or, more usefully, coordinated by the CRD for the whole region. Better data is required to assess any proposals for changes in governance, but is also required for operational reasons (again, policing is a signal example).

Recommendation 2

If everyone agrees that amalgamation isn't the answer, it shouldn't be the question. Instead, the region needs a wide-ranging **enumeration of the options for reform of regional governance**. Some form of amalgamation might emerge as the best model, but other possibilities must be introduced into the public debate. Ideally, this would be conducted by a "neutral party," perhaps under the auspices of the Union of BC Municipalities.

Recommendation 3

Among the possibilities for reform, changing the range of tax instruments available to municipalities should be considered. Property taxes have some clear advantages for funding local public goods and services, provided that spillovers can be minimized. Other revenue sources and transfers between governments can be used to more accurately align the costs and benefits of public good provision. These options should be explored, as part of a broader exploration of governance structures. However, it is more promising to **assess which public goods are best paid for by property tax or user fees available to municipalities**. Other services might be better provided by levels of government with broader powers to tax. For example, the problem of homelessness is not one that can be solved by a municipality using property taxes. A provincially funded police force for the whole region should be explored³⁶. On the other hand, local control of BC Transit probably makes more sense.

Recommendation 4

Region-wide transportation plans, strategic growth plans cannot be developed without regard for the implications on property taxes. Planning for technology parks, shopping malls, office buildings and parkland distributed around the region to minimize transit time and make livable communities is a laudable goal. In the context of aggregate growth, these plans have implications for the ability to fund programs and services within specific jurisdictions that provide regional benefits. **Regional planning initiatives should be assessed for their impact on the distribution of property taxes.**

The CRD plays a useful role in capturing scale economies on projects. But as we stress above, the CRD is a mechanism for implementing solutions, not a solution itself. As a planning tool, the CRD suffers from its reliance on bargaining and voluntary participation. This simply recreates the problem regional planning seeks to overcome.

To live up to its great promise, the capital region needs to work together. The current jurisdictional structure creates forces that undermine rather than stimulate collaboration. While locally responsive governments are essential, parochial jurisdictional interests pose a threat. Moving to the west shore and shopping in suburban malls might make good sense for individuals, but it is not a solution to the region's collective challenges. As the region grows, these stresses build too. It is hard to forecast when, or even if, the region will tip into a dynamic of decline. Victoria is a harbinger, and has a special role to play. Not only does its name denote the whole region, but for many years the City of Victoria has borne much of the burden of providing regional services, some of which are enumerated above. To manage relationships with other levels of government, First Nations, and the many institutions whose strength affects the whole region, governments in the Capital Region must become as comfortable as their citizens already are at working across the historical boundaries that divide them from each other.

³⁶ When events held in the city demand police resources, the greatest share of the cost is borne by the residents and businesses of Victoria. Only a small part of the benefit typically accrues to businesses in a way that shows up in tax assessments. Provincial revenues generally benefit more significantly. This creates a strong disincentive for Victoria to host events.

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