

**LOCAL GOVERNMENT SERVICE PRODUCTION
IN THE CAPITAL REGION**

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EXECUTIVE SUMMARY

The focus of this report is on the production of local government services, which accounts for 95 percent of local government expenditures.

Differences in municipal population and expenditure are presented in Table 1. Populations range from 1,500 to 105,000 with seven municipalities having populations between 10,000 and 20,000. Expenditures range from less than \$1 million to over \$100 million.

An analysis of 60 statistical studies of local government spending concludes that lower spending in urban areas is associated with a multiplicity of municipalities, competition among adjacent local governments, lower level units undertaking most of the spending in multi-tier systems, and finally, easy entry for new governments. In summary, lower spending is a feature of fragmented local government systems where the lower level units are dominant (Boyne 1992 p. 352).

One may note that all of the characteristics associated with lower spending are characteristics of the capital region. For instance, there are 12 municipalities; there is rivalry among the governments within the region to keep costs down; the spending by municipalities is significantly greater than the spending by the upper tier CRD, and new municipalities can be created when the citizens in an area demonstrate their support with a majority vote.

Administrators in the 12 capital region municipalities were interviewed to determine how 283 activities, which make up the production of local government services, are undertaken. Alternatives identified include: municipal staff; volunteers; contracting out to another local government, private organization or the Capital Regional District; produced by a shared arrangement with another local government, the private sector or the Capital Regional District, or another arrangement.

Each activity was also classified in terms of economies or diseconomies of scale in relation to the population served. Results of interviews are summarized by the major functional areas of local government service.

Two-thirds of all activities possess no economies of scale beyond the size of most municipalities (10,000-20,000 population) in the capital region. One-third possess economies of scale, but 28 percent derive their economies from the need for specialized equipment or personnel which may be produced by either a small organization in a larger government or by a private firm or non-profit organization. Only 14 activities are large capital facilities where economies of scale accrue from large populations utilizing the facility.

Municipalities that utilize a very wide range of production also use a large number of volunteers and volunteer organizations, especially in archives, recreation, fire protection, auxiliary policing and search and rescue. Options are available and are used

for smaller municipalities to obtain activities from larger or more specialized organizations.

Of 14 major kinds of facilities the CRD provides seven (landfill, water supply, trunk sewers, regional parks, regional trails, sewage treatment plants, and sewage discharge facilities) and provides a significant part of another (recreation) on a sub-regional level. The provincial government provides two (bus system, museum), and three are provided by sub-regional joint agreements (libraries, art gallery and the Royal Theatre). Long-term jail facilities are provided by two police departments and the RCMP and are available to the three smaller departments. The CRD is also responsible for specialized areas such as 911 emergency response telephone service and is the conduit for municipal borrowing through the Municipal Finance Authority.

The most important observation that can be made about the production of services in the capital region at the present time is simply that: because we have already regionalized the large capital facilities and use intergovernmental or private contracts for most other specialized activities, and since there are no significant economies of scale in the other two-thirds of the activities, we appear, on the surface, to have a reasonably well organized region for local services production. This does not mean that all activities are produced efficiently, but it does mean that production improvements are more likely from examining individual or related groups of activities one at a time and not from major reorganizations of local governments.

Recommendations for further investigation include:

1. Assist mayors, councils and managers with some comparative studies of the costs of their services production. At the present time, such local information does not exist, but some systems of government are doing a better job of producing some services than others are. This would require the development of schedules for determining cost and performance of individual functions such as those developed by the Local Government Institute for its national surveys that, when completed, provide comparable information for municipal decision-makers. Such information could serve as a basis for improving performance in the poorer performing services. Such scheduling would also be useful for local governments outside of the capital region wanting to under take a similar activity.
2. Encourage inter-municipal and regional cooperation on activities where there are potential efficiencies such as with the committee established to look at emergency dispatching and communication. The establishment of the Emergency Services Communication and Information Systems Steering and Technology Committees, with support provided by the CRD, is a model that can be followed in other areas. These committees include not only representatives from municipalities but also representatives from their respective police boards, the RCMP, Department of National Defence, and the BC Ambulance Service. Bringing together relevant players is best way to identify opportunities for cooperation. Such committees should include representation from each group

of elected officials, chief administrators, the department heads for that function, and if necessary, someone skilled in the analysis of municipal service production. It is extremely difficult for "outsiders" to know the circumstances that surround each situation and several perspectives are needed to identify real opportunities and assure they are implemented. The CRD is also an appropriate organization to provide the support for such committees.

3. The Capital Regional District is extremely important as a forum for regional cooperation. As with municipalities, an analysis of its production efficiency would be beneficial.
4. And finally, try to raise the level of debate about organizational change in the capital region to include recognition of just how complex the urban-rural local government sector is. Local governments in the capital region are responsible for over \$300 million of expenditures on very difficult to measure and manage activities. The combination of relatively small municipalities where council members are close to their citizens, the regional forum of the Capital Regional District, other regional and sub-regional organizations, volunteer groups, non-profit organizations and many private firms actually producing local government services, makes for a very complex local public sector.

This report and recommendations relate to service production; they do not relate to issues of council representation and cost, fairness in the financing of "regional" activities or differences in services municipalities provide for their citizens. They also do not focus on activities where there appear to be significant differences of municipal priorities such as with economic development or arts and culture. Those topics will be included in a future paper by the Local Government Institute.

PREFACE

When the Local Government Institute began this survey of how local government services were produced in the capital region we were hopeful that sufficient funding would be obtained to proceed beyond the initial descriptive survey. A research grant was not received and this report has been completed with assistance from three part-time work-study program students funded by the University. There were insufficient resources to continue beyond the initial interviews and proceed to probe more deeply into specific functions and activities to propose increased savings through further regional cooperation.

This report, however, remains useful. Survey results are placed in the context of what is known about the relationship between local government organization in a region and spending on local government services and what is known about efficiency in producing local government services relative to scale economies and alternative delivery. The brief descriptions of the 283 activities comprising the major functions examined also provide considerable insight into the complexity of local government service delivery, a complexity that is seldom appreciated even by those directly involved. The report does include suggestions for additional research that the Local Government Institute was unable to undertake.

The Local Government Institute will also be publishing two additional reports on the capital region in the near future. One will deal with the costs of councils and their alternatives. This report will provide a factual basis for understanding the role and cost of the 86 elected municipal officials even though they represent only about 1 percent of local government budgets.

The second report will attempt to bring together the report on production of services and costs of councils with some financial information on the general issue of amalgamation. It too will be designed to provide factual information in light of the interest in that question. Both of these reports should be forthcoming during the next two months.

ACKNOWLEDGEMENTS

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INTRODUCTION

Local governments have two distinct activities. The first is "governance", which includes determining what to provide, how to provide it and how to finance it. Second is the actual production and delivery of services and the implementation and enforcement of regulations. The cost of governance is generally less than 5 percent of the local government budget. Of this the costs of council constitute about 1 percent, with the remainder devoted to a variety of participatory activities and policy making by administrative staff. The other 95 percent of local government spending is devoted to the production and delivery of services and the implementation and enforcement of regulations. The focus of this report is on those activities, which make up 95 percent of local government budgets.

The focus is on patterns of service production and delivery by municipalities in the capital region. These patterns are put into the context of what kinds of local government have been identified to be associated with less total spending, and what approaches to production and service delivery have been associated with being most efficient. Different characteristics of different functions are described and some areas of difficulty are described. The omission of electoral areas from analysis is simply because resources for the study were very limited and our focus is on how the 12 municipalities produce services and relate to one another. We anticipate that sometime in the near future the existing 12 municipalities will be joined by another from the Sooke electoral area.

Finally, conclusions and recommendations are presented.

REGIONAL PROFILE

The Capital region includes a 1998 population of 299,965 within the boundaries of 12 municipalities. There are another 36,275 in unincorporated areas. Population and municipal expenditure information is presented in Table 1.

The municipalities range in size from 1,500 to 105,000, with seven between 10,000 and 20,000 population. Each municipality has its own history, all have Official Community Plans (Saanich has OCP's for different communities within it and Victoria has different area plans for different areas), and these plans reflect considerable differences in the preferences of their citizens.

Table 1 data is for 1996 because that is the latest year expenditures have been standardized from each municipal budget. One can observe that Victoria's expenditures are highest. It is the central city and it provides many services to shoppers and commuters who enter the city each day. This table indicates nothing about tax levels or efficiency; it simply indicates that capital region municipalities are different sizes and have chosen to do different things or do them in different ways. For example, a significant component of Oak Bay expenditure is the Oak Bay Recreation Centre which is largely funded by user charges, while the peninsula and Western Communities

undertake recreation through the Capital Regional District and only show expenditures net of CRD collected user charges in their budgets, or when Victoria and Saanich sell services to smaller municipalities the expenditures appear in both the smaller municipality budget and in the Victoria or Saanich budget. The table data simply indicates some of the diversity that exists among municipalities in the capital region.

**Table 1
Municipal Population and Expenditure (1996)**

Municipality	Population	Gross Expenditure
		\$
Esquimalt	16,151	14,949,708
Oak Bay	17,865	20,111,914
Saanich	101,388	72,003,373
Victoria	73,504	100,008,742
Central Saanich	16,647	9,658,955
North Saanich	10,411	6,414,635
Sidney	10,701	8,452,688
Colwood	13,848	5,847,018
Highlands	1,423	936,652
Langford	17,484	8,826,244
Metchosin	4,709	2,042,783
View Royal	6,441	3,382,484
Totals	\$288,536	\$252,662,196

Note: 1996 Municipal Statistics data is used because that is the last standardized expenditure data for the municipalities. Municipal expenditures include CRD requisitions of \$31,600,708 or 12.5% of the municipal total.

SERVICE PRODUCTION AND DELIVERY ARRANGEMENTS

Two approaches have been taken to analyze local government spending to produce and deliver local government services and implement and enforce regulations. One is to identify systemic organizational patterns associated with spending. The other is to examine specific services in relation to their production characteristics and compare alternative ways of producing them

The first approach is represented by statistical studies to try to determine if different patterns of local government have consistently different consequences for levels of spending. This research is quite well summarized in an analysis by George Boyne from the University of Glamorgan in the UK. He reviewed over 60 such studies from the US and concluded:

- first, the horizontal fragmentation of multi-purpose governments (a multiplicity of municipalities) leads to lower spending;
- second, local government units compete in a market which is geographically limited;
- third, vertical concentration of market share in large top tier units (i.e. the regional government spends more than the municipalities) is associated with higher spending, and
- finally, the establishment of barriers to entry is positively related to expenditures by the local government's units that are protected by the barriers.

In summary, the broad pattern of evidence suggests that lower spending is a feature of fragmented and deconcentrated local government systems (i.e. systems where there are multiple municipalities and most spending is by the lower level municipalities and not by the regional government) (Boyne 1992 p. 352).

One may note that all of the characteristics associated with lower spending are characteristics of the capital region. It is horizontally fragmented into 12 municipalities; there is rivalry among the local governments within the region to keep costs down; the spending by municipalities is significantly greater than the spending by the upper tier CRD, and new municipalities can be created when the citizens in an area demonstrate their support with a majority vote to incorporate.

The second approach has focussed on the individual activities that make up the production of local government services. This approach has led to one of the most important insights into local government organization made during the past 40 years. It is simply that **the activities which make up the production of local government services are extremely diverse and that a local government, regardless of its size, is never the right size to undertake efficient production of all of its services in its own organization.**

Some activities, especially those that are very labour intensive, involve face-to-face interaction between producers and citizens, and where it is difficult to measure the

relationship between inputs and outputs, are hard to manage and tend to possess diseconomies of scale, i.e. average costs of production go up as the size of the organization increases. These services are most efficiently performed by relatively small organizations where managers can know the behaviour of their employees.

Other activities, such as water distribution or sign installation, are routine, do not involve direct contact with citizens and possess easy to measure outputs. These activities are relatively easy to manage and may be efficiently produced by either small or large organizations. Still other activities, such as maintenance of communications equipment, may require specialized equipment and/or personnel and these activities can be undertaken by a small group within a large government or by a specialized organization under contract to many smaller governments. And finally, large capital facilities such as a large recreation centre, achieve lowest average cost when they serve a large population regardless of the size of the organization that manages them.

The diversity in the way local government services can be most efficiently produced is even greater than it may appear at first glance because characteristics of production apply to individual activities (i.e. police patrol, police communications, jail operation, fire suppression, fire training, arson investigation, garbage collection, land fill operation, etc.) and not to entire functions such as a policing, fire protection or solid waste management. This is why we often see different activities within a single functional area undertaken by different organizations.

Consistent with the analysis of local government spending patterns in urban regions is the observation in Canada that larger municipalities spend more per capita (Desbiens 1996, Kushner 1996). In British Columbia, the smallest municipalities (under 2,500 population) spend more than the 2,500-5,000 population group, but from over 5,000 population, average per capita costs increase with size (Bish 1990). There appear to be several reasons why larger governments have consistently higher spending. One is that most local services do not possess economies of scale or scope and they actually cost more to produce in a larger organization. Another is that larger local governments undertake a larger number of activities. A third is that where there are fewer larger governments there is less rivalry to keep costs down among them, and finally, many larger governments are central cities and central cities have higher per capita costs because services must be provided to commuters and shoppers as well as to their own citizens. Some mixture of these reasons explains why many smaller governments may in combination spend less than one larger one.

Both of the above conclusions are based on analyses that relate to local government spending; neither can draw conclusions about local government efficiency.

In addition to the insight that no local government is the right size to efficiently produce all of its services, is the observation that competitive contracting out to private firms, non-profits or other governments for some kinds of local services results in more efficient provision of the service to citizens than performing the function in-house. Most of the very large body of research on contracting-out has been undertaken in Europe and the United States, but studies in Canada are consistent with those results. For

example, Dr. Jim McDavid's Local Government Institute national surveys in solid waste collection and land-fill management both indicate consistently lower costs in contracted out relative to in-house production in every province except Quebec. These differences can be a significant percentage of cost, with solid waste collection costing an average of 22.3% more in Canada and 30.2% more in British Columbia when done in-house rather than contracted out (McDavid and Eder 1997). It has also been observed that when a local government sells services to other local governments, the selling government also becomes more efficient in its production (Warren 1966).

In addition to different activities having different economies or diseconomies of scale and the potential for cost savings through contracting out, many municipal governments work directly with volunteer and non-profit organizations to reduce the costs of providing local services. Volunteers and non-profits are especially common in activities such as community archives, recreation, search and rescue, auxiliary policing, and fire protection.

The consequence of the diversity of local services and potential gains in efficiency from contracting-out and the involvement of volunteers and non-profits has led to considerable diversity in the way local governments produce their services. Municipalities in the capital region and the CRD are no exception.

The diversity among local services means that among **the most important decisions Municipal Councils make are how a service that is to be provided is actually produced or a regulation actually implemented.** Among its choices are to perform the task in house, work directly with volunteers, contract the activity to another government, non-profit organization or private firm, undertake it jointly with another government, move responsibility to the regional level or undertake some other arrangement. **There is no one best way for all services.**

THE PRODUCTION OF SERVICES AND REGULATIONS IN THE CAPITAL REGION

There has never been a survey of how local government services are actually produced in the capital region. To obtain some initial information all 12 municipal administrators were interviewed as to whether or not 266 different local government activities were provided to citizens in their jurisdiction, and if they were provided, how they were produced. At this stage additional services were also identified, bringing the total number examined to 283. While the CRD provides many major services, CRD administrators were not interviewed as to how those services were produced. No financial data was collected on an activity-by-activity basis. Conclusions can be drawn from the data compiled as to what general patterns of adjustment to the diversity of local government services are being made in capital region relative to research conclusions from European and North American research elsewhere. These conclusions can in turn generate priorities for further research in the capital region.

The initial list of activities was developed from several lists of local government activities, including those that have been identified as produced by organizations other

than the local government providing it (Bish 1986). In addition to the listing of activities, each was identified as to whether or not it was likely to possess characteristics of **economies of scale in relation to the population served**. The emphasis on population is important because there are two different kinds of scale effects where serving a larger population results in reduced cost per person. One kind is where the production of a large capital facility (a recreation centre, a building, and a transit system) results in lower average cost the more persons it serves. The second kind is where there is a requirement for specialized equipment or personnel (homicide investigation, legal expertise, computer and copier maintenance, many engineering activities), but governments serving small populations do not need the service often enough to efficiently provide it in-house unless it also sells the service to other governments. For example, Oak Bay does not have a sufficient number of homicides to maintain a well-trained homicide investigation squad in its Police Department. Oak Bay, however, can manage a large recreation facility at low average cost because it serves a population larger than Oak Bay's. Activities which possess either kind of economies of scale in relation to population served are likely to be most efficiently produced by a specialized group within a large organization or by an organization that is itself quite small, but that provides specialized services to other organizations.

Identifying large capital facilities and requirements for specialized equipment or personnel in the list of 283 activities does not yield exact results. This is because some facilities can operate at many scales (e.g. a theatre) and scale economies may result at different population sizes. Attempts were made to indicate as having scale economies those activities where there were likely to be significant cost savings from having the activity produced for a population larger than the size of most of the capital region municipalities, i.e. 10,000 to 20,000 population.

Of the 283 activities 80 (28 percent) were identified as having economies of scale due to the need for specialized equipment or personnel. Only 14 (3.5 percent) were identified as having economies of scale due to the need for a large capital facility. These 14 include a Jail, Landfill, Water Supply, Trunk Sewers, Recreation Centres, Library System, Bus System, Regional Parks, Regional Trails, Sewage Treatment Plant, Sewage Discharge Facility, Art Gallery, Museum and Theatre. The last five of these activities may also be produced on a smaller scale depending on the local situation.

The full list of activities is included in Appendix B. The number of separable activities listed in each category is in brackets.

- General Government Services (31)
- Police Services (37)
- Fire Services (15)
- Emergency Response (3)
- Engineering: Roads and Parking (41)
- Engineering: Solid Waste Management (8)
- Engineering: Water Supply (23)
- Engineering: Liquid Waste Management (20)
- Engineering: Miscellaneous (34)

Parks and Recreation (34)
Community Services (20)
Development (17)

Results of interviews with municipal administrators and some follow-up to department heads were compiled in a separate notebook for each municipality and were then transferred to summary sheets where how an activity is produced can be compared among the 12 municipalities. The categories include production by:

- Municipal staff
- Volunteers
- Contracted out to:
 - another local government
 - Private organization
 - Capital Regional District
- Produced by a Shared Arrangement with:
 - other local government
 - private sector
 - Capital Regional District
- Other

Not every arrangement fit into the categories, the most awkward being when the local government gave a grant to a non-profit organization without a specific contract. These were most common for local social services where major responsibility lies with the Provincial government but councils decided to do more locally. The entire area of municipal grants deserves its own analysis even though the total amount of money involved is quite small. While percentages for how each activity is produced in the region can be calculated, it would require a much longer description and report but still not permit conclusions on efficiency. Thus in this report short narratives about major functions are provided.

General Government Services (31)

General government services are a diverse list, including such activities as tax collection, bylaw drafting, elections administration, janitorial, labour negotiations, capital borrowing, printing and purchasing. Only three of the 31 activities were both performed by all 12 municipalities and performed by their own municipal staff - tax billing, data processing and tax collecting. The most common alternatives to municipal staff are contracts with private organizations for all or part of the service. Cases were identified where the same private organization was providing the service to more than one municipality.

Police Services (37)

The region is policed by 5 municipal departments (Central Saanich, Esquimalt, Oak Bay, Saanich and Victoria) and three RCMP detachments. Interviews were conducted only for the 5 municipal departments. All five departments perform basic policing

activities including patrol, investigations, traffic accidents and officers in schools. The three smaller departments obtain some services from the two larger departments, and all use other organizations for some activities such as DNA matching, and training. All engage in mutual aid.

From this survey there is insufficient detail to determine how far local policing has evolved into the pattern identified as most efficient in North American research, virtually all of which is from the United States (e.g. Parks 1985). That research indicates that basic activities such as police patrol, where there are no economies of scale, are most efficiently performed by small departments including departments the size of Oak Bay, Esquimalt and Central Saanich. However, specialized activities such as communications, homicide investigation, major crime laboratories, and training are most efficiently performed by organizations serving a large population. Small departments that do not have specialized activities available from larger organizations are not efficient and large departments often perform police patrol at higher cost than small departments. None of the Victoria area departments are considered very large (i.e. population of 500,000) but Saanich and Victoria are large enough for most specialized activities. Esquimalt, Oak Bay and Central Saanich departments are large enough for efficient police patrol and basic activities, but they are too small for most specialized activities. Esquimalt is also noted for its combined Fire-Police Department, which is estimated to result in significant savings over what separate departments would cost as well as provide both personnel with excellent knowledge of their community.

The RCMP has a structure that allows local detachments, which can be very small, to function within the larger RCMP structure. All departments have mutual aid agreements, all chiefs including RCMP detachment commanders meet regularly, and the municipal departments rely on the RCMP for some specialized activities. Relationships between the RCMP and adjacent municipal departments and among municipal departments also appear to be very good.

Two comments on coordination arose during interviews. One case was where a small department requested a dog from both Saanich and Victoria and discovered both were off-shift at the same time, the other involved communications among departments. The communications issue is under examination by the Public Safety Technology Steering Committee under the auspices of the CRD and was beyond our resources to examine in depth. One smaller department indicated that they are considering transferring dispatching to a larger one, but another small department considers its own dispatching to be cost effective and an integral part of their community policing because it allows its police station to be open 24 hours a day. Thus, while the current seven dispatch centres appear to be more than are needed to be efficient for the region small departments may be able to combine dispatching with other activities to produce it cost effectively. This is an example of how difficult it can be to determine the efficiency with which services are produced without very detailed research.

Fire Services (15)

Fire departments range from the large departments of Saanich and Victoria to smaller, primarily voluntary, departments in the Western communities and on the Peninsula. Fire suppression, fire prevention programs, open burning control and rescue and auto extraction are the only activities performed in-house by all departments. Activities including training, dispatching, communications, fire hall maintenance, equipment maintenance, hydrant maintenance, code compliance and investigations are all contracted out or produced jointly with another local government by one or more departments. Some departments also appear to have resolved communications issues so different departments can assign a single common frequency to all departments involved in a fire attended by more than one department and there are mutual aid agreements among all departments. The Capital Regional District also is responsible for dispatching for 23 fire departments located in 5 municipalities and 3 electoral areas, which it contracts out for operation by the Langford Fire Department radio communications centre.

There are not significant economies of scale in fire protection until such point as special equipment (such as to serve high-rise buildings) is required. Residential areas are efficiently protected by mostly mixed forces. These are departments which have sufficient full-time personnel to get equipment to a fire quickly and volunteers (technically part-time paid) to provide the bulk of the fire fighting force. Departments comprised only of full-time fire fighters are most efficient only in larger cities (McDavid 1986).

Emergency Planning (3)

Except for the four core municipalities where Victoria, Saanich and Esquimalt do emergency planning and communications in-house and Oak Bay with volunteers, most planning and communications is done in cooperation with other local governments, with the three peninsula municipalities having a shared community coordinator system. The large snowfall of two years ago appears to have stimulated greater attempts to coordinate this activity. Improvements in emergency planning are still underway.

Engineering: Roads and Parking (41)

Engineering services are some of the most widely contracted-out activities. Older and larger municipalities (Victoria, Saanich, Oak Bay, Sidney, and Esquimalt) tend to do more with municipal staff, but all use contracting-out to private firms. The usual pattern is to do smaller tasks in-house and contract-out for larger ones. There is very little inter-municipal contracting as private firms were viewed to be competitive and more flexible, although View Royal does contract with Saanich for traffic signal maintenance and Victoria sells asphalt to other municipalities.

Engineering: Solid Waste (8)

Solid waste collection is undertaken by municipal crews only by the four core municipalities. Three others contract-out and in the remaining five, residences and businesses arrange for their own pick-up with a private firm. While national studies show that average costs can be lower by contracting a geographic area to a single firm, such contracts require uniform collections. An important point made by the five municipalities that leave collection up to individuals is that residents and businesses can choose the number of cans and frequency of collection to meet their own needs, and that there was sufficient competition to keep costs down.

Solid waste planning, recycling programs, and the landfill are provided by the Capital Regional District for all municipalities and electoral areas. Planning and landfill management are two areas where it is most efficient to serve a large population base. The first national study of recycling programs undertaken in Canada is nearing completion at the Local Government Institute and until that is finished the existence of economies of scale in recycling programs is unknown.

Engineering: Water Supply (23)

Intake facilities and most treatment and storage facilities are the responsibility of the Capital Regional District, with additional storage and treatment facilities operated by the Saanich Peninsula Water Commission. Distribution systems are the responsibility of municipalities although Esquimalt has Victoria manage their system and the Western Communities (except Highlands which does not have piped water) have continued to leave their water system with the CRD (they were served by the Greater Victoria Water District prior to the CRD taking over management of the District). Other municipalities use a combination of in-house and private contractors to construct and maintain their systems. Intake, treatment and major storage are all activities where economies of scale are likely.

Engineering: Liquid Waste Management (20)

Sewage trunk lines, treatment plants, discharge facilities, source control programs, and liquid waste management planning, all areas where economies of scale are likely, are the responsibility of the Capital Regional District. Municipalities are responsible for local collection systems. Oak Bay and Victoria do considerable construction and maintenance in-house, Esquimalt, Colwood, and the Peninsula municipalities do most of their operation and maintenance in-house, View Royal contracts with Esquimalt, Saanich contracts a lot of work to the private sector and Langford contracts all work to the private sector. Highlands and Metchosin do not have sewer systems.

Engineering: Miscellaneous (34)

Miscellaneous engineering services include the activities associated with dikes, erosion control, retaining walls, drainage, sea walls, waterfront walkways, wharves, and vehicle maintenance. While volunteers maintain wharves in three municipalities the rest of

these services are provided by a combination of municipal staff and private contractors. Western Communities municipalities tend to rely completely on contractors for most activities while core and Peninsula municipalities rely on their own staff with different degrees of contracting to private firms depending on the size of the project and whether it is a regular activity or only occasionally needed.

Parks and Recreation (32)

All municipalities maintain a variety of recreation activities with volunteers, municipal staff, non-profit organizations and the CRD. Recreation facilities and programs appear to be the most diverse area of local government activity. Facilities include large recreation centres with pools and rinks and different kinds of playing fields, many of which have significant economies when they serve a large population.

There are many shared arrangements between municipal staff and volunteers and non-profit organizations. All four core municipalities manage their own centres or arena (although Victoria also has arrangements for community groups to manage community centres, which also provide recreational programs). The CRD, through municipal agreements, has recreation commissions for the Peninsula and Western Communities, which manage large centres and other programs for their areas. In addition, the CRD administers a system of regional parks and trails, some with recreation programs.

There appear to be more volunteer and non-profit organizations involved in recreation activities than in other areas where municipal government services are provided.

Other Community Services (20)

Other community services include activities to produce services such as daycare, school crossing guards, animal control, health, libraries and public transportation. These services are quite diverse and diverse patterns of production exist. School crossing guards are provided by grants to schools; animal control through contracts with either the SPCA or the CRD, and counselling services through grants or contracts to non-profit organizations. Pest control is undertaken by municipal staff in Victoria but by private contractors in three other municipalities. All libraries, except View Royal's which is administered by volunteers, are provided either through the Greater Victoria Library Association or the Vancouver Island Library District. (It should be noted that in a search for more efficient alternatives the three peninsula municipalities have commissioned a study of the implications of switching from the Vancouver Island Library district to the Greater Victoria Library Association). The bus system is provided by BC Transit for the capital region. However, municipal staff or private companies in exchange for advertisement on the shelter provide bus shelters. Finally, five municipalities, through the inter-municipal Committee on the Arts, provide grant support to the Greater Victoria Art Gallery. The Gallery, however, obtains most of its budget from its own sources.

Development (17)

Development activities range from building and plumbing inspection and building bylaw enforcement to planning the regional growth strategy. Regulatory activities and community planning and zoning activities tend to be administered by municipal staff although some by-law drafting is contracted to lawyers and smaller municipalities, including North Saanich, contract-out planning services on projects such as the Official Community Plan, major zoning by-law reviews, and consideration of major developments. Heritage protection tends to be shared by municipal staff and volunteers or non-profit organizations. Subsidized housing and the Regional Growth Strategy are managed by the CRD. A region-wide business licensing process has been proposed and preliminary agreement achieved from 10 of the 11 municipalities that require business licenses.

On the specific topic of economic development only six municipalities had any special program and these were either run by private organizations or shared between municipal staff and a private organization. In some cases a municipality's activity was limited to being a member of a chamber of commerce and no additional support was provided. It was made quite clear that economic development is not a priority in some municipalities. It should be noted that Professor Harry Kitchen's analysis of local government economic development programs concluded that beyond provision of basic information about a municipality and avoiding slow and cumbersome regulations, the best economic development incentives resulted from providing high quality public services, especially public safety and education, that meet the needs of their citizens efficiently. (Kitchen 1985)

General Observations

The production of services in the capital region is through a wide variety of organizations, including not just municipal and CRD staff, but a multiplicity of volunteers, non-profit organizations, private firms and shared arrangements among all of them. This is the normal pattern for the production of local government services.

Two-thirds of the activities involved in providing services do not possess characteristics of economies of scale. They are often done in-house but are also produced by volunteers or under contract with a non-profit agency or private firm. This is especially the case where volunteers are heavily involved, as in recreation.

One-third of local government activities has a potential for efficiencies from serving a large population. Of these activities only 14 are large capital facilities and the remainder are activities which require specialized equipment or personnel such that it would be inefficient for a small local government to purchase the equipment or employ staff full-time unless it also sells the service to other governments. These specialized services are commonly purchased from other public and private organizations by smaller local governments. There was less purchasing from Victoria and Saanich than anticipated. This appears to be because some administrators in smaller municipalities feel that private firms that routinely sell such services are very responsive to their needs.

One function where specialized knowledge and equipment is required that is not available from the private sector or non-profit organizations is in some specialized areas of policing. A detailed analysis of policing in Oak Bay undertaken in 1980 concluded that through its relationships with other organizations (primarily the RCMP and the Victoria and Saanich Police Departments), a full range of police services were available to its citizens while it still retained a basic police patrol force that was an integral part of its community (Bish 1990). From information received during this project it appears that Oak Bay continues those relationships and similar relationships exist among policing organizations for Esquimalt and Central Saanich. The one issue that was mentioned as something where efficiency may be improved is in dispatching and communications.

The following list indicates how the 14 large capital facilities are produced:

- Jail - produced by Victoria and Saanich and contracted for use by the smaller departments. The Western Communities RCMP provides own in building provided by Colwood, Langford and View Royal.
- Landfill - CRD for the region.
- Water Supply - CRD for the region (excluding Highlands).
- Trunk Sewers - CRD for the region (excluding Highlands and Metchosin).
- Recreation Centres - CRD, through sub-regional agreements, for the Peninsula and Western communities and also provided by each of the four core municipalities.
- Library System - Greater Victoria and Vancouver Island Regional library systems serve all but View Royal. View Royal subsidizes library cards for citizens wishing to use the Greater Victoria system.
- Bus System - provided for region by B.C. Transit (excluding Highlands).
- Regional Parks - CRD for the region.
- Regional Trails - CRD for the region, supplemented by municipalities.
- Sewage Treatment Plants – CRD.
- Sewage Discharge Facilities – CRD.
- Art Gallery - Art Gallery of Greater Victoria – sub-regional municipal support.
- Royal Museum - provided by Provincial government.
- Theatre - the Royal Theatre is under the CRD but financial support only from Victoria, Saanich and Oak Bay. There are smaller theatres in some other municipalities.

Of 14 major kinds of facilities the CRD provides seven and provides a significant part of another (recreation). The provincial government provides two, and three are provided by sub-regional joint agreements (libraries, art gallery and theatre). All police departments have access to short-term holding facilities and longer-term jail facilities are available on a sub-regional basis.

The general patterns of production of the different activities that provide local government services in the capital region fit what should be anticipated in responding to the different characteristics of different activities. This does not mean that all activities are produced efficiently, but it does mean that production improvements are more likely

from examining individual or related groups of activities one at a time and not from major reorganizations of local governments.

The most important observation that can be made about the production of services in the capital region at the present time is simply: because **we have already regionalized the large capital facilities and use intergovernmental or private contracts for most other specialized activities, and there are no significant economies of scale in the other two-thirds of the activities, we appear, on the surface, to have a reasonably well organized region for local services production.**

Having a pattern of production activities that meets what research shows to be typical of the local government patterns where spending is lowest, and use of alternative service delivery where there may be efficiency increases, does not mean that there are not many opportunities to do better or that there are no disagreements about the particular services.

How Efficiently are Services Produced?

It can be quite difficult to determine the efficiency with which local governments provide their services or even compare one local government with another. Because of the difficulty of measuring and placing dollar values on outputs of many local government services it is difficult to determine efficiency in any absolute sense. When we turn to comparing the costs and outputs of one local government with another we run into other difficulties.

First, governments provide different services to their citizens and we can account for that by moving to analyze specific functions and activities. However, at the activity and function level governments keep their accounts in ways that make it difficult to compare the cost of providing a specific service with another government. Different governments treat expenditures in different ways. Some allocate fringe benefits to departments, some do not, and this can make a difference in salary costs of 30%. Some allocate vehicle maintenance and utility costs to the department level, some do not, and so on, and very few include measures of output in their budget documents. Because of different accounting practices in local governments, to actually compare the cost of producing a service in a multiplicity of governments requires an in-depth reaccounting within each government, not just a referral to their budgets. To undertake such comparisons in the capital region would be an expensive undertaking, beyond the scope of this preliminary analysis, but something that appears to be one of the next steps that could be taken in the region.

Finally, there is a very high level of communication among administrative officials in the region. While municipal chief administrative officers do not all meet regularly, most department heads for policing, fire services, engineering, building inspection and by-law enforcement meet regularly, usually monthly. There should be a willingness to share information among these groups.

CONCLUSIONS

The local government structure in the capital region is characterized by patterns that are associated with lower spending regions in other research, including horizontal fragmentation, the lower level responsible for most of the services, there is some rivalry (and sharing), and there is freedom to create new local governments. When looking at specific activities one observes:

- a very diverse array of production arrangements that involves volunteers, non-profit organizations, private firms, joint arrangements among local governments and the CRD as well as in-house staff. Such diverse systems have a much higher capacity to adapt and respond to change over time than large bureaucracies and such alternative ways to produce have been identified to be more efficient than trying to use in-house production.
- large capital facilities are largely produced on a regional or sub-regional scale.
- there are few ways of knowing just how efficient any single local government is producing any of its activities and it is difficult to compare production efficiencies among different local governments.
- there is a flexible forum for inter-municipal and regional decision making and joint service production in the Capital Regional District and other regional organizations such as the Greater Victoria Library Association, Provincial Capital Commission, and BC Transit.

DIRECTIONS FOR FUTURE RESEARCH AND CHANGE

The existing system for local governance and the production of local government services in the capital region has many desirable characteristics. At the same time such systems are continually changing and there are always activities that can be done better than they are currently being done. Some activities that could be usefully undertaken include:

1. Assist mayors, councils and managers with some comparative studies of the costs of their services production. Right now such information does not exist and in any system of governments some are doing a better job than others. This would require the development of schedules for determining cost and performance of individual functions such as developed by the Local Government Institute for its national surveys that when completed provide comparable information for municipal decision-makers. Such information could serve as a basis for improving performance in the poorer performing services. Such schedules would also be useful for local governments outside of the capital region that wanted to under take a similar activity.
2. Encourage inter-municipal and regional cooperation on activities where there are potential efficiencies such as with the committee established to look at emergency dispatching and communication. The establishment of the Emergency Services Communication and Information Systems steering and technology committees, with support provided by the CRD, is a model that

can be followed in other areas. These committees include not only representatives from municipalities but from their respective police boards, the RCMP, Department of National Defense, and the BC Ambulance Service. Bringing together relevant actors is best way to identify opportunities for cooperation. Such committees should included representation from each group of elected officials, chief administrators, the department heads for that function, and if necessary, someone skilled in the analysis of municipal service production. It is extremely difficult for "outsiders" to know the circumstances that surround each situation and several perspectives are needed to identify real opportunities and assure they are implemented. The CRD is also often an appropriate organization to provide the support for such committees.

3. The Capital Regional District is extremely important as a forum for regional cooperation. It also is responsible for the production of many services. As with municipalities, an analysis of its production efficiency would be beneficial.
4. And finally, try to raise the level of debate about organizational change in the capital region to include recognition of just how complex the urban-rural local government sector is. Local governments in the capital region are responsible for over \$300 million of expenditures on very difficult to measure and manage activities. The combination of relatively small municipalities where council members are close to their citizens, the regional forum of the Capital Regional District, other regional and sub-regional organizations, volunteer groups, non-profit organizations and many private firms actually producing local government services, makes for a very complex local public sector.

The recommendations above relate to service production; they do not relate to issues of council representation and cost, fairness in the financing of "regional" activities or differences in services municipalities provide for their citizens. They also do not focus on activities where there are just differences of opinion as with economic development or arts and culture. Those topics will be included in a future paper by the Local Government Institute.

APPENDIX A

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APPENDIX B

LOCAL GOVERNMENT ACTIVITIES

Activities possessing economies of scale due to the need for specialized equipment or personnel are designated by a single *. Large capital facilities are designated by **.

General Government Services

Archival Services
Billing – tax
Billing – utilities
Building maintenance
Bylaw drafting (some*)
Computer web page design
Computer web page maintenance
Computer programming*
Computer technical support*
Data processing
Document Destruction
Elections – administration
Elections - voter registration
Equipment maintenance (office)*
Extra-load secretarial services
Human resources training (union)
Human resources training (non-union)
Janitorial services
Labour grievances
Labour negotiations
Legal services*
Payroll
Personnel services
Printing (some*)
Property management
Public relations
Purchasing*
Records maintenance
Supplies (office)
Tax collection
Treasury functions (capital borrowing*)

Police Services

Administration
Communications*
Computer systems*
Jail meals
Jails and detention centres**
Janitorial services for jail
Shooting range*
Training - basic*
Training - advanced*
Training - basic auxiliary*
Training - advanced auxiliary*

Patrol:

Bicycle patrol
Canine services
Foot patrol
Helicopter*
Horse patrol
Marine
Parking violations
Patrol and response to calls
Process serving

Investigations:

Burglary
Crime laboratory*
Domestic disputes
Homicide*
Identification - DNA*
Identification - fingerprints*
Mutual aid
Narcotics*
Traffic incidents

Community Service:

Crime Stoppers program
Family court committee*
Juvenile delinquency programs
Neighbourhood watch
Officer assigned to school
School education programs
Traffic safety commission
Victim services*
Work release

Fire Services

Basic and recruit training
Advanced training*
Fire dispatch*
Fire communications
Fire hall maintenance
Fire equipment maintenance*
Fire hydrant maintenance
Fire inspection and code compliance

Fire prevention programs
Open burning control
Investigations (some*)
Hazardous materials handling*
Marine fire fighting*
Paramedic training
Rescue and extraction

Emergency Planning

Communications*
Emergency & disaster response
planning*
Training*

Engineering: Roads and Parking

Materials testing lab*
Gravel pit operations
Asphalt Plant*
Crushing plant
Road design*
Road construction*
Road maintenance
Bridge design*
Bridge construction*
Bridge maintenance*
Boulevard construction
Boulevard design
Boulevard maintenance
Overpass design*
Overpass construction*
Overpass maintenance
Sidewalks and curb construction
Sidewalk and curb maintenance
Street light installation
Street light maintenance
Street sign installation
Street sign maintenance
Traffic island construction
Traffic island maintenance
Traffic signal installation*
Traffic signal maintenance*
RR crossing maintenance
Snow removal
Street cleaning
Traffic lane marking*
Parkade design*
Parkade construction*
Parkade maintenance
Parkade operation
Parking lot design
Parking lot construction
Parking lot maintenance
Parking lot operation
Parking meter fee collection

Parking meter installation
Parking meter maintenance

Engineering: Solid Waste

Solid waste collection*
Solid waste transfer station
Recycling collection
Recycling transfer station
Special collections
Hazardous materials disposal*
Solid waste disposal**
Recycling depot*

Engineering: Water Supply

Intake facilities**

Design*
Construction*
Operation
Maintenance

Storage facilities**

Design*
Construction*
Operation
Maintenance

Chlorination Station maintenance
Treatment plant

Design*
Construction*
Operation
Maintenance

Pipe system construction*
Pipe system maintenance
Pump stations

Construction*
Design*
Operation
Maintenance

Pressure Reducing Stations

Design*
Construction*
Operation
Maintenance

Engineering: Liquid Waste

Liquid waste disposal planning*
Source Control Program*
Sewage collection system

Design*
Construction*
Maintenance
Operation

Trunk sewer system**

Design*
Construction*
Operation*
Maintenance

Treatment Plants (some**)

Design*
Construction*
Maintenance*
Operation

Sewage discharge facilities (some**)

Design*
Construction*
Maintenance
Operation

Sludge disposal
Storm water quality management

Engineering: Miscellaneous

Air quality regulation*
Dikes

Design
Construction
Maintenance

Erosion control structures

Design
Construction
Maintenance

Retaining walls

Design
Construction
Maintenance

Drainage ditches

Construction
Design
Maintenance

Flood Boxes

Design
Construction
Maintenance

Sea and Harbour walls

Design (some*)
Construction
Maintenance

Waterfront Walkways

Design
Construction
Maintenance

Wharves and Floats

Design
Construction
Maintenance
Operation

Vehicle maintenance

Construction equipment
General municipal
Lawn tractors and mowers
Maintenance trucks
Police vehicles
Snow and ice removers
Street cleaners
Zamboni

Parks and Recreation

Administration
Arena management
Art galleries (some**)
Ballpark management
Beach cleanup and maintenance
Recreation building maintenance
Building security
Community development services
Concession operations
Equipment maintenance
Fitness programs

Golf course operation and maintenance
Grass cutting
Landscaping design
Landscaping maintenance
Museum facility (some**)
Museum operation
Park design
Park construction
Park maintenance
Playground construction
Playground supervision
Recreation Centre**
Recreation planning
Recreation programs
Regional Parks**
Regional Trails**
Signs and bulletin boards
Special events
Organized sports programs
Swimming Pool management
Theatres (some**)
Tree and flower planting
Tree pruning, trimming and removal

Other Community Services

Daycare for children
School crossing guards
Animal control
Cemeteries
Counselling Services
Drug and Alcohol Rehabilitation
Homes for the aged
Mental Health facilities
Mosquito Control
Pest control

Libraries**

Design, Construction*
Administration*
Building maintenance
Operations

Public Transportation

Public Bus System**
Bus shelter design
Bus shelter construction
Bus shelter maintenance
Seaplane base management*
Special transportation services*

Development

Architectural and Design of Public Buildings*
Building and plumbing inspection
Business licensing
Bylaw enforcement
Community planning
Economic Development program
Regional growth strategy*
Heritage protection
Housing
Land development
Mapping
Permits and connection fees
Planning
Surveying
Tourism development
Tourism information
Zoning and subdivision control

APPENDIX C:

CAPITAL REGIONAL DISTRICT SERVICES

Services listed are provided to one or more municipalities.

Regional Parks and Trails
Land Banking and Housing
Regional Planning
Solid Waste Disposal
Emergency Response Telephone Service (911 and fire dispatch) Septage Disposal
Family Court building
Family court committee
Victim Services
Traffic Safety Commission
Royal Theatre
McPherson Theatre
Regional Growth Strategy
Storm Water Quality Management
Regional Water supply
Trunk Sewers and Sewage disposal
Liquid Waste Management Plan
Sewers
Liquid Waste Source Control Program
Juan De Fuca Recreation Centre (Ice Arena, Curling Rink, Pool, Park, Senior Citizens Centre,
Community Recreation Programs)
Peninsula Recreation (Ice Arena, Pool, Programs)
Water Supply