BCT Management Services
Cost Allocation Process
January 17, 2011

ADVISORY SERVICES

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Executive Summary

Background

British Columbia Transit ("BCT") is the provincial crown agency charged with coordinating the delivery of public transportation throughout British Columbia (outside Metro Vancouver). BCT manages and operates the Victoria Regional Transit System ("VRTS"), and plans, funds, manages, markets, and contracts for transit systems in more than 50 British Columbia local governments in the Regional Transit System ("RTS").

BCT provides a wide range of management services that benefit all of the regional transit systems in the province. The types of management services offered by BCT have evolved over time in response to changes in strategic and operational priorities. In recent years, a shift towards a shared services model has resulted in increased coordination and a greater range of shared services.

All costs associated with the provision of management services, both for the VRTS and for the RTS are initially accounted for in cost centres of the VRTS. The BCT Management Services Cost Allocation process (the "Process") is used annually to identify and allocate shared services costs from the VRTS cost centres to the 81 individual systems within the RTS.

BCT engaged KPMG to conduct an independent review of the Process to determine whether it is appropriately designed and implemented to meet the needs of the organization and to provide recommendations for enhancement and/or modifications with respect to the governance and/or efficacy of the existing process.

The attached report presents our detailed findings, conclusions and recommendations with respect to the Process. In this Executive Summary, we present our key findings, conclusions and recommendations.

Key Findings and Conclusions

Based upon our review, we have identified the following key findings and conclusions with respect to the Process.

- Since 2003/04, BCT shared service costs have grown at 13.7% per annum, a faster rate than the increase in Direct Operating Expenses (DOE), which grew at 10.6% per annum. The increase in shared service costs reflects an internal trend towards increasing the range and extent of shared management services.

- The Process has evolved over time, reflecting a gradual shift from an incremental cost approach to a shared services approach. In the incremental approach, only those costs
incremental to the needs of the VRTS were identified and allocated to the RTS. In the shared services approach, all shared service costs are identified and allocated to the respective systems based upon the general use of services. This shift in approach has resulted in increased cost allocations to the RTS in recent years.

- While shared service costs were increasing over the past eight years, the sharing of these costs between the VRTS and RTS has not been consistent. As shown in the adjacent chart, the portion of the increases allocated between the systems varied significantly each year. We found some indications to suggest that allocations to the RTS were understated between 2004/05 – 2007/08, which required a dramatic catch-up to occur in the past three years. It is our conclusion that the Process may have been biased towards understating the management service costs to the RTS, at the expense of the VRTS. It is our conclusion that recent changes to the Process have reduced, but not eliminated, this potential for bias.

- There are opportunities to enhance the maturity of the Process. Process maturity reflects the level of standardization and repeatability of a process. The following diagram reflects our assessment of the current maturity of the process and our assessment of how mature the process should be, given its importance to BCT.

There are a number of opportunities to enhance the standardization and repeatability of the Process. Cost allocation is an estimation process and no cost allocation methodology is perfect. The selection of an appropriate cost allocation methodology should be based upon values and principles appropriate to the organization. In assessing the Process, we concluded that the Process reflects a preference for practicality over equity, and externalities over economic efficiency.
The Process currently reflects a balance between four competing values. In the absence of explicit value statements, we have assumed that this balance represents the organization’s values for the Process. While opportunities exist to adjust this balance, trade-offs must be considered in pursuing these opportunities. For example, the equity and economic efficiency of the Process could be enhanced by using more specific cost drivers, but this would be achieved at the expense of practicality. While it is possible to enhance the cost drivers used in the Process, it is likely that costly changes would be required to information systems and business processes in order to provide the necessary data on cost drivers.

The cost allocations to the RTS are approaching the maximum limit (8% of DOE) set in the British Columbia Transit Regulation (the “Regulation”). The cap is both a real and psychological constraint on the Process. As BCT continues to expand its range of management services, the cap may soon pose a significant constraint on the Process.

**Key Recommendations**

To address our key findings and conclusions, we offer the following recommendations.

**To enhance the maturity of the BCT Management Services Cost Allocation process, we recommend that BCT:**

- Formally document the Process as a BCT policy or procedure;
- Formally acknowledge ownership of the Process;
- Document the underlying values guiding the Process;
- Have cost drivers annually reviewed and signed off by Cost Centre managers; and
- Document a process for the ongoing maintenance of the policy or procedure.

**To enhance the efficacy of the Process, we recommend that BCT:**

- Clarify whether the cost allocations should be based upon the preliminary budget estimates, final budget estimates or actual final costs;
- Consider whether cost allocations should be performed at the Cost Centre or Account level;
- Consider whether cost drivers should be more reflective of economic efficiencies;
- Review the appropriateness of the current cost drivers;
• Provide guidance on calculation rounding; and
• Document any established processes for using a tiered-approach in applying the cost allocations to individual regional transit systems.

- We recommend that BCT consider the need for changes to Sections 8(1)(a)(iv) and 8(1)(b)(iv) of the British Columbia Transit Regulation with respect to the 8% cap placed on the BCT Management Services cost allocation to municipally-operated systems.
Background

**BC Transit**

British Columbia Transit ("BCT") is the provincial crown agency charged with coordinating the delivery of public transportation throughout British Columbia (outside Metro Vancouver). The corporation’s mandate, as set out in the British Columbia Transit Act, is:

"to plan, acquire, construct or cause to be constructed public passenger transportation systems and rail systems that support regional growth strategies, official community plans, and the economic development of transit service areas", [and] "to provide for the maintenance and operation of those systems".

BCT manages and operates the Victoria Regional Transit System ("VRTS"), and plans, funds, manages, markets, and contracts for transit systems in 57 British Columbia local governments in the Regional Transit System ("RTS").

The scope of BCT operations encompasses the following:

- 57 local government partners, the Victoria Regional Transit Commission and regional hospital districts;
- Contracts with 27 private management companies and 14 non-profit agencies;
- Over 50 million passengers carried annually;
- More than 1.5 million people served in B.C.;
- 81 transit systems – conventional, custom and paratransit;
- Fleet of 1,043 conventional and double-deck buses, minibuses and vans; and
- $294 million annual operating budget.

**Regional Transit System (RTS)**

The RTS was first established in 1979. In partnership with local government, this program provides for planning, marketing, fleet management, funding and contracting for transit services in BC that are outside of Metro Vancouver and Greater Victoria.

The RTS has evolved since its inception in 1979. Growth in B.C. communities has been matched by the growth in the number of transit systems from 13 in 1979 to 81 systems (25 conventional, 17 Custom and 39 para-transit systems) at present. The RTS has initiated and developed services to improve mobility and accessibility in BC communities. The first door-to-door service (handyDART) for persons with disabilities began in 1981. Now all buses
purchased are fully accessible. These services provide mobility to seniors and persons with a disability. Transit service to rural areas and small towns has been developed with innovative approaches to service delivery.

Finally, the RTS is responding to the increasing role expected of transit in our cities. The link between transit and land use planning is reflected in transit service in the larger regions. Working with local partners to provide a transit service that fulfils the needs of the community and ensuring an effective use of public funding are key objectives for transit today.

**Evolving Mandate**

BCT’s current Strategic Plan supports the Provincial Transit Master Plan and highlights the evolution of the organization’s public mandate. This evolution is having a significant impact on the level of shared management services provided by BCT. The Strategic Plan notes the following changes to the organization’s mandate:

- Improving community social, economic, and financial sustainability through the provision of effective transit while simultaneously reducing transportation costs, energy consumption, and social costs;
- Leading provincial public transit climate change initiatives by increasing the proportion of people who use public transit as their primary means to get around;
- Supporting rural and First Nations communities by enabling residents to connect to each other and link to education, health, and other services and daily needs; and
- Improving the inclusiveness of communities by providing a range of public transit services and amenities designed to meet standards of universal accessibility. These services enable people to grow older while remaining in their own homes and communities for as long as possible.

In considering the impact of the evolution of the mandate, BCT management has identified the need to revise legislation, governance structures, and revenue constraints.

**BCT Management Services**

BCT provides a wide range of management services that benefit all of the regional transit systems in the province. The full range of shared management services is described in Appendix A to this report.

The types of shared management services offered by BCT have evolved over time in response to changes in strategic and operational priorities. In recent years, a shift towards a shared services model has resulted in increased coordination and an increase in the provision of shared services.

In most regional transit systems, service is provided through a partnership between BCT, local government, and a transit management company. Under this partnership model, BC Transit provides funding, planning, marketing, fleet management, and contract administration services...
for each system. Sponsoring local governments provide the remaining portion of funding (less passenger fares), approve service levels and fare structures.

A contracted transit management company operates the service, including hiring and training drivers, providing front-line customer service, and maintaining vehicles. A range of private and non-profit companies operate BC Transit’s services. In some locations—the Regional District of Nanaimo, City of Nelson, City of Powell River, and the Sunshine Coast Regional District—the sponsoring local government operates the system.

In the case of the VRTS, BC Transit operates the conventional service, and a private transit management company operates handyDART services through contract.

BCT’s operation of the Victoria conventional system provides the organization with further efficiencies through the sharing of services. This in-house operation is also a forum for developing operational practices that can be shared with other communities.

BCT’s collaborative, shared-services partnership model offers value by:

- Pooling expertise and best practices in areas such as planning and financial monitoring;
- Lowering costs through bulk purchase of supplies and assets, such as fuel and vehicles;
- Providing a framework to oversee and invest in transit on a provincial scale rather than on a less collaborative municipality by municipality basis common elsewhere;
- Supporting operational efficiency through private sector contracts for the operation of many of our systems; and
- Providing access to senior government and other funding sourcing.

**Historical Cost Analysis**

The following tables draw upon management information to present an historical overview of the BCT Management Services Cost Allocation.

Chart 1 shows the growth in VRTS Direct Costs and Shared Service Costs over the past eight years. Direct Costs grew 74% over the eight years, a growth rate of 9.2%/year. Shared Service costs grew by 110% or 13.7%/year during this period.
Chart 2 reflects the total BCT shared service costs over the past eight years. The range and costs of BCT shared management services have grown significantly, increasing from $10.8 million in 2003/04 to $22.6 million by 2010/11.

In Chart 3, we can see that the allocation of shared service costs to both the VRTS and the RTS grew over the period. The VRTS allocation grew by 100% over the eight years, compared to a growth of 136% in the RTS allocation. Increases to the RTS were modest in the first four years (13%), with the significant portion of the increase occurring thereafter.

Chart 4 reflects the percentage of total shared service costs allocated to the VRTS and the RTS. For the VRTS, the allocation ranged from 67% to 71% while the allocations to the RTS ranged from 23% to 32%.
Chart 5 shows how the annual increases in BCT Management Service costs have been shared between the VRTS and RTS over the seven years. In the first four years, the majority of the increases were attributed to the VRTS. In the past three years, more of the increase has been allocated to the RTS.

Chart 6 shows that the annual increase in the shared service costs in the two systems. The chart shows that the cost allocation methodologies have not resulted in consistent changes to the allocations between the systems over time.

Chart 7 shows the shared service cost allocations as a percentage of the total Direct Operating Expenses (DOE). The VRTS allocation ranged from 21% to 27% over the eight years, while the RTS allocation ranged from 5.5% to 7.5%. The significant difference between the allocation percentages is explained, in part, by the fact that each regional transit system also has its own management function and associated costs.
Legal and Regulatory Environment

BCT was established as a provincial crown corporation in 1996 under the British Columbia Transit Act (the “Act”). Under the Act, BCT has the authority to:

- Establish and designate local and regional transit service areas;
- Establish local and regional transit commissions;
- Consult with a municipality in a local transit service area with a view to providing transit services;
- Establish annual operating budgets and capital budgets for each public passenger transportation system and rail transit system under this Act after consultation with the local and regional transit commissions, municipalities and regional districts affected by the public passenger transportation system or rail transit system;
- Review all annual operating agreements to ensure that they are consistent with the approved budgets and with the general policy of the authority; and
- For each regional transit service area, provide the transit services and maintain and operate the public passenger transportation system and rail transit system consistent with the approved budgets and with the general policy of the authority.

Section 11 of the Act provides the authority for defining the costs of regional transit services and for determining how those costs will be shared between BCT, local municipalities and regional transit commissions.

The British Columbia Transit Regulation (the “Regulation”) defines how the costs of providing regional transit services are determined and shared between BCT and local systems.

Section 8 of the Regulation provides specific direction for the annual determination of costs under Section 11 (2) (a) of the Act and the sharing of those costs for municipally-operated systems. Section 8 (1) (a) states that for conventional transit service (services and facilities operated by or for a public passenger transportation system to transport persons on specified routes as scheduled times using public streets or thoroughfares), costs are the sum of:

- The operating costs incurred in providing conventional transit service;
- The amount of any annual lease fee and any amount required to amortize all capital expenditures and recover debt service costs, including interest accrued during construction, incurred for fixed assets accepted for conventional transit services;
- The amount of the municipal administrative charge not exceeding 2% of the direct operating costs payable under an annual operating agreement; and
- An amount of annual operating costs of the authority not exceeding 8% of the direct operating costs payable under an annual operating agreement.
Section 8 (1) (b) of the Regulation provides a similar definition of costs for *custom transit service* (service and facilities operated or provided by or for a public passenger transportation system to transport any person designated under Section 11 of the Regulation by pre-arrangement between the operator of the services and such person without limitation by route or scheduled service).

Section 9 (1) of the Regulation provides a similar definition of costs where the transit services are provided in a Regional Transit Service Area (as established under Section 25 of the Act). Currently, the Victoria Regional Transit System is the only system operated as a Regional Transit Service Area, all other systems are municipally operated.

**Cost Allocation Process**

All costs associated with the provision of shared services, both for the VRTS and for the RTS are initially accounted for in VRTS cost centres. The BCT Management Services Cost Allocation process (the “Process”) is used annually to identify and allocate shared services costs from the VRTS cost centres to the 81 individual systems within the RTS.

Process flowcharts are attached as **Appendix B** to this report. A narrative description of the key process steps follows:

1. **Maintain Cost Allocation Process**

   The Process evolves over time in response to changes in stakeholder requirements and operational changes. The Vice-President, Finance and Chief Financial Officer is the process owner, while the Manager, Financial Reporting is the process custodian. Each year, the Process is reviewed to ensure it continues to support stakeholder expectations. Proposed changes to the Process are reviewed and approved by the process owner. The Manager, Financial Reporting maintains documentation to define the steps in the Process.

2. **Estimate Management Service Costs**

   The Process begins as part of the annual Business Planning and Budget process. Business plans drive the development of operational and capital budgets. The preliminary operating budget is an input to the Process, providing labour and non-labour cost estimates for each of the organization’s cost centres. Cost centres are aligned with the organizational structure and areas of responsibility. Labour and Materials & Services operating budgets are developed for each cost centre, with input from the Executive and support from Finance.

   Once the preliminary budget is developed, the cost estimates are documented in the Cost Allocation Spreadsheet. Within the Cost Allocation Spreadsheet, costs are classified as either:

   - **Direct costs**, charged 100% to the appropriate municipal/commission transit system; or
   - **Shared (or incremental) costs**, which will be apportioned to either the VRTS or the RTS.

   After all direct costs have been allocated, the balance of shared service costs is allocated either to the VRTS or the RTS based upon a set of defined **cost drivers** and percentage
allocations. The role of cost drivers within an Activity Based Costing system is explained in Appendix C. A “cost driver” is the unit of an activity that causes the change of an activity cost. A cost driver is any activity that causes a cost to be incurred. The portion of shared service costs charged to the RTS is referred to as the “BCT Management Services Cost Allocation”.

3. Gather and Apply Cost Drivers

BCT has identified a set of cost drivers which it feels are an appropriate basis for cost allocation. For the 2010/11 cost allocation, the primary cost drivers utilized were:

- The number of BCT staff providing management services (full-time equivalents); and
- The number of fleet vehicles.

In addition to the use of cost drivers, some allocations are based upon total direct operating costs, “use of assets” costs, and total costs (total direct operating costs plus “use of assets” costs. Finally, some costs are allocated based upon management estimates of the percentage split of staff resources based on the time spent supporting the VRTS and the RTS.

Each year, the cost drivers are reviewed to ensure that the drivers remain appropriate for cost allocation purposes. Once the cost drivers are confirmed, current values for each driver are determined and input to the Cost Allocation Spreadsheet.

4. Review and Finalize Cost Allocations

Once the cost drivers and cost estimates are entered to the Cost Allocation Spreadsheet, the cost allocations to the VRTS and RTS are automatically calculated. Once the total cost allocations are determined, they are reviewed by Finance staff and the Chief Financial Officer. After the review, a preliminary cost allocation is presented to Executive for approval as part of the overall budget process.

The review considers whether the cost allocations are within the 8% limit established in the Regulation.

5. Approve Management Services Cost Allocation

The preliminary cost allocation is reviewed and approved by Executive as part of the annual budgeting process. The allocations are incorporated into the annual operating budget for each regional system, identified as the BCT Management Services charge.

6. Record Cost Allocations

Once approved, the preliminary cost allocation is broken down into monthly charges and allocated to regional transit systems by journal voucher.
7. Monitor and Adjust Cost Allocations

Throughout the year, Finance staff monitor actual costs against budgeted costs. During a fiscal year, it is possible that new shared service initiatives may be introduced or other operational changes may occur which result in a variance between actual and budgeted shared service costs. When material differences are identified between actual and budgeted shared services costs, Finance staff will consider the need for an adjustment to the preliminary cost allocation. If required, a final cost allocation will be determined and additional charges to regional systems will be initiated.
Scope and Objectives

Objectives

The objectives of the project were to:

- To conduct an independent review of the BCT Management Services Cost Allocation process to determine whether it is appropriately designed and implemented to meet the needs of the organization;
- To provide recommendations for enhancement and/or modifications of the BCT Management Services Cost Allocation process with respect to the governance and/or efficacy of the existing process.

Scope

The project scope was to review the Process based upon the methodology used in the 2010/11 cost allocation.
In this section, we present our key findings, conclusions and recommendations from the review of the BCT Management Services Cost Allocation process. Our detailed findings, conclusions and recommendations are documented in Appendix D. We considered the appropriate evaluation criteria for the review, the maturity of the underlying process and the identification of recommendations for enhancing the Process.

**Process Efficacy**

The primary objective of our review was to determine whether the Process is appropriately designed and implemented to meet the needs of the organization. We understand that the general purpose of the Process is to allocate the shared management service costs of BCT in accordance with Section 8(1) of the BC Transit Regulation. However, the Regulation is not prescriptive with regards to how the Process is to function, nor is there a formal policy or procedural document in place that identifies more specific objectives or requirements for the Process. As a result, we could not draw upon any formal BCT documentation to assist us in defining evaluation criteria.

As noted in Appendix C, the typical criteria used to evaluate alternative cost attribution methodologies and cost recovery processes include the following:

- **Equity**—the costs allocated should be equitable in that costs borne by each program or service should relate to their share of both direct and common costs based on a causal relationship to the level of activity of the user or user group.

- **Practicality**—the attribution of costs should be relatively easy to determine and be flexible enough to accommodate new services or changes in the environment.

- **Economic Efficiency**—costs should be allocated on the basis of causality to the extent possible.

- **Externalities**—an attribution of costs to each program or service regardless of their use of specific systems to the extent that significant benefits are accrued to all members from these systems.

We applied these typical criteria to the Process and reached the following conclusions with respect to process efficacy:

- The Process reflects each of the values above. The Process reflects an attempt to be equitable to the VRTS, the RTS and to the individual regional transit systems. At the
same time, the Process is a practical approach to cost allocation, drawing upon available information and is easily applied. The Process considers the need for cost drivers to be employed as a basis for causality but also reflects that some of the shared services provided are of a system-wide benefit.

- There is a trade-off between equity and practicality. Equity could be enhanced through changes to processes and systems, but at the expense of practicality. Significant changes to systems and processes might be required to gather more precise cost driver information. We concluded that the current Process reflects a slight preference for practicality over equity.

- There is also a trade-off between economic efficiency and externalities. The Process reflects that while some management services are best attributed based upon a causal relationship, others are better attributed on the basis of general value to the overall system. We concluded that the current Process reflects a slight preference for attributing costs on their overall value to the system versus a more direct causal basis.

It is our experience in the public sector context that the values reflected in a process or service need to be understood against multiple dimensions to reflect the complexity of ethical and value considerations. A useful tool for reflecting these dimensions is a Values Continuum. In the adjacent diagram, we present a 2-dimensional values continuum for the Process. This diagram reflects our assessment that the Process is practical and efficient, and is based more on the general value of management services to the organization than on the individual costing of those services.

**Process Maturity**

A second evaluation method we applied to the Process was the Capability Maturity Model (CMM), developed by the Software Engineering Institute (SEI) in the mid-1980’s. While originally designed to evaluate software development processes, CMM can be used to assess any process against a scale of process maturity levels, according to its standardization in the subject area being assessed. The six maturity levels are described in Appendix C.

Diagram 2 reflects our assessment of the maturity of the Process. Our assessment took into consideration the following findings:
While process governance is generally understood, it is not formalized;

The Process is not formally documented, either as a corporate policy or procedure;

Management’s objectives for the process are understood, but nor formally documented; and

Some steps in the Process involve the use of judgment;

Diagram 2 reflects our overall assessment of the maturity of the Process. We have concluded that the process maturity falls between the Repeatable and Defined levels. Staff are knowledgeable upon the general purpose of the Process and are able to provide repeatable results. However, there is limited formal documentation of the process objectives, procedures and governance. Given the importance of the Process to BCT, we have concluded that the process maturity should be closer to the Managed level.

Diagram 2
Process Maturity

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<th>Non-Existent</th>
<th>Initial</th>
<th>Repeatable</th>
<th>Defined</th>
<th>Managed</th>
<th>Optimized</th>
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Current State Assessment  
Future State

**Regulatory Constraint**

The BCT Management Services Cost Allocation is constrained to a maximum of 8% of the direct operating costs of a municipally-operated system. For the 2010/11 fiscal year, the BCT Management Services Cost Allocation was 7.5% of the total DOE of the RTS. As noted in Appendix D, a tiered approach to allocations has resulted in some municipal systems already being at the 8% maximum.

The 8% cap placed on the BCT Management Services Cost allocation for municipally-operated system may not be aligned with the shared services business model of BCT and represents a constraint on the Process. This cap may limit BCT’s ability to offer new shared services or restrict its ability to recover future shared service costs from the RTS.

**Recommendations**

To address our key findings and conclusions, we offer the following recommendations.

- **To enhance the maturity of the BCT Management Services Cost Allocation process, we recommend that BCT:**
  - Formally document the Process as a BCT policy or procedure;
• Formally acknowledge ownership of the Process;
• Document the underlying values guiding the Process;
• Have cost drivers annually reviewed and signed off by Cost Centre managers; and
• Document a process for the ongoing maintenance of the policy or procedure.

To enhance the efficacy of the Process, we recommend that BCT:
• Clarify whether the cost allocations should be based upon the preliminary budget estimates, final budget estimates or actual final costs;
• Consider whether cost allocations should be performed at the Cost Centre or Account level;
• Consider whether cost drivers should be more reflective of economic efficiencies;
• Review the appropriateness of the current cost drivers;
• Provide guidance on calculation rounding; and
• Document any established processes for using a tiered-approach in applying the cost allocations to individual regional transit systems.

We recommend that BCT consider the need for changes to Sections 8(1)(a)(iv) and 8(1)(b)(iv) of the British Columbia Transit Regulation with respect to the 8% cap placed on the BCT Management Services cost allocation to municipally-operated systems.
The following table is maintained by BCT management to track the range of services provided to regional transit systems. This version does not reflect some services that have been added in the past year.

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<td>i. Establish local transit objectives w/ local gov’t.</td>
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<td>ii. Market research &amp; analysis</td>
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<td>iii. Strategic Plan</td>
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<td>viii. Service &amp; tariff implementation responsibility</td>
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<td>ix. Policy &amp; service concept development</td>
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<td>xi. KPI monitoring</td>
</tr>
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<td></td>
<td>xii. Local government &amp; BCT Board reporting</td>
</tr>
<tr>
<td></td>
<td>xiii. Service audit program management</td>
</tr>
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<td></td>
<td>xiv. Response to incidents, major events, accidents and extreme weather or other external issues.</td>
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<tr>
<td></td>
<td>xvi. Answer calls from the public, answering questions related to schedules, service and policy</td>
</tr>
<tr>
<td></td>
<td>xvii. Monitor service to customer</td>
</tr>
<tr>
<td></td>
<td>xviii. Provide ongoing direction, guidance and support to operator</td>
</tr>
<tr>
<td></td>
<td>xix. handyDART dispatching support</td>
</tr>
<tr>
<td></td>
<td>xx. Operational guidelines (accessibility, etc.)</td>
</tr>
<tr>
<td></td>
<td>xxi. Surveys, counts, analyses</td>
</tr>
<tr>
<td></td>
<td>xxii. Fleet requirements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Functional Responsibilities</th>
<th>Functional activities</th>
</tr>
</thead>
</table>
| **Scheduling**              | ▪ Scheduling support for conventional transit  
▪ Run-cutting and manpower planning  
▪ System, route performance and operational analysis |
| **Finance**                 | ▪ Prepares/budget guidelines and procedures for annual budget for use by departmental managers,  
▪ Consolidates Regional Transit and Victoria submissions for presentation ensuring adherence to corporate policies and guidelines,  
▪ Provides liaison with Crown Agencies Secretariat, and the Capital Division of Treasury Board, responding to inquiries, providing supplementary information, and coordinating the submission of reports.  
▪ Conducts long-term financial planning activities associated with service plans and calculates Regional Transit Fund implications,  
▪ Provides financial inputs to Corporate Business Plan, Service Plan, and Performance Plans for the Board of Directors, Transit Commission, and Provincial Government (detail, frequency and format a per the Budget Transparency and Accountability Act (BTAA),  
▪ Maintains multi-year financial forecast model, property tax, and gas tax models,  
▪ Provides technical advice of petroleum futures for corporate consumption, to provide stability and reduce budget risk.  
▪ Coordinates forecast development with departmental managers and prepares, the monthly corporate fiscal forecast for review by executive management,  
▪ Provides analysis of operating and capital expenditures for control and cost effectiveness, reviewing monthly statements for discrepancies, cost overruns and obtaining explanation of variances.  
▪ Prepares budgets, fiscal and multi-year forecasts, quarterly financial performance updates, property tax regulation, and year-end financial and performance results |
<table>
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<tr>
<th>Functional Responsibilities</th>
<th>Functional activities</th>
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</thead>
<tbody>
<tr>
<td>for Board of Directors, Regional Transit Commission, Treasury Board and Crown Agencies Secretariat and Ministry of Finance (for Provincial Economic Review (required by BTAA),</td>
<td>▪ Reports to Provincial Government, monthly capital expenditures, and quarterly – capital expenditures detail, with forecasts,</td>
</tr>
<tr>
<td>▪ Reports key performance and financial information to Canadian Urban Transit Association/Statistics Canada, American Public Transit Association, Board of Directors, Regional Transit Commission, and the Provincial Government</td>
<td>▪ Provides financial accounting services for Victoria and 80 Regional Transit Systems</td>
</tr>
<tr>
<td>▪ Provides financial accounting services for Victoria and 80 Regional Transit Systems</td>
<td>▪ Accounts payable processing and payment for 425 invoices weekly and 2000 vendors</td>
</tr>
<tr>
<td>▪ Accounts receivable processing and deposit for 287 customers</td>
<td>▪ Maintain and reconcile capital project accounts for capital reporting and control purposes</td>
</tr>
<tr>
<td>▪ Maintain and reconcile capital project accounts for capital reporting and control purposes</td>
<td>▪ Prepares monthly Provincial / Regional Transit Cost Sharing Statements, 80 Regional Transit Systems plus Victoria.</td>
</tr>
<tr>
<td>▪ Prepares monthly Provincial / Regional Transit Cost Sharing Statements, 80 Regional Transit Systems plus Victoria.</td>
<td>▪ Prepares Regional and Provincial billings. Liaises with Municipalities to explain billings and follows up on overdue accounts.</td>
</tr>
<tr>
<td>▪ Prepares Regional and Provincial billings. Liaises with Municipalities to explain billings and follows up on overdue accounts.</td>
<td>▪ Reconciliation of maintenance job costing and general ledger accounts</td>
</tr>
<tr>
<td>▪ Reconciliation of maintenance job costing and general ledger accounts</td>
<td>▪ Preparation of corporate cash flow and requisite short-term borrowing/investing activities</td>
</tr>
<tr>
<td>▪ Preparation of corporate cash flow and requisite short-term borrowing/investing activities</td>
<td>▪ Long-term corporate borrowings and sinking funds via provincial fiscal agent</td>
</tr>
<tr>
<td>▪ Long-term corporate borrowings and sinking funds via provincial fiscal agent</td>
<td>▪ Calculation and assignment of lease fees (debt payments) to local partners based on fixed asset allocations</td>
</tr>
<tr>
<td>▪ Calculation and assignment of lease fees (debt payments) to local partners based on fixed asset allocations</td>
<td>▪ Posting and reconciliation of all debt, sinking fund and</td>
</tr>
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<td>Functional Responsibilities</td>
<td>Functional activities</td>
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<td>fixed asset accounts</td>
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| Human Resources/ Safety/ Training/ Security | ▪ Ensure staff are kept up to date as per regulatory requirements (e.g., WCB, WHMIS, etc.)  
▪ Promote safety. Ensure all staff work with safety as a cornerstone. Ensure all work practices comply with applicable regulations. Review trends and improve safety awareness and training to reduce risk and reliability. Coordinate safety awards to encourage safety awareness.  
▪ Develop and practice emergency responses at the local level, and in the community.  
▪ Training manuals & courses.  
▪ Retrain operators and Maintenance workers, as part of performance management program. Ensure that operators with performance issues are offered effective retraining to improve performance.  
▪ Develop and Maintain Security Plans. Ensure security systems are in place to protect BC Transit staff and property. Monitor and record activities to ensure satisfactory response. Ensure applicable policies are developed (e.g. Violence in the workplace). Ensure plans are coordinated within BC Transit and with other community units (e.g., police, fire, ambulance, etc).  
▪ Ensure staff are trained on security policies and applicable responses to security threat or acts. |
| Marketing and Media Relations | ▪ Annual marketing plans for Victoria Regional Transit System and each Municipal System.  
▪ Create/develop/produce public information materials for each transit service.  
▪ Go-Green/TDM/Travel Training Program – liaison and training.  
▪ Special event planning and implementation.  
▪ Tariff products – design, production.  
▪ Media relations province-wide.  
▪ Ads, notices, briefing notes. |
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<th>Functional Responsibilities</th>
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<tr>
<td>Functional activities</td>
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<tr>
<td>Corporate identity, vehicle livery and graphics.</td>
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<td>Produce communications material (internal/external).</td>
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<td>Market research program – community and passenger surveys.</td>
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<tr>
<td>Fleet/Facility Services</td>
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<tr>
<td>Fleet acquisition.</td>
<td></td>
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<tr>
<td>Develop fleet specifications and standards and design modifications.</td>
<td></td>
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<tr>
<td>Develops and monitors maintenance and repair standards for the custom and conventional fleet.</td>
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<tr>
<td>Provides insurance services for BC Transit fleet.</td>
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<td>Provides technical engineering support, training and guidance.</td>
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<tr>
<td>Vehicle inspections.</td>
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<tr>
<td>Develops special designs and requirements with suppliers of vehicles.</td>
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<tr>
<td>Develops, administers and updates BC Transit’s standards and policies for the contract fleet’s maintenance, operation and safety procedures.</td>
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<tr>
<td>Arranges the reallocation and movement of vehicles throughout the province.</td>
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<tr>
<td>Tracks warranty issues and claims.</td>
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<tr>
<td>Fleet Management and fleet Roster.</td>
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<tr>
<td>Fleet &amp; facility implementation coordination.</td>
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<tr>
<td>Meet service commitments. Ensure availability of safe, mechanically reliable and clean vehicles to meet service commitments by time of day and day of week. Ensure type of fleet (low floor, double deck, small bus, etc) match service commitment as required by Operations.</td>
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<tr>
<td>Maintain preventative maintenance programs. Regularly inspect and repair vehicles to ensure mechanical reliability and structural integrity.</td>
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<tr>
<td>Manage and control maintenance costs. Set and maintain standard times, costs and other key performance indicators to ensure efficient use of resources. Ensure</td>
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<tr>
<td>Functional Responsibilities</td>
<td>Functional activities</td>
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| **Information Technology**  | ▪ Provides strategic planning for BC Transit’s computing environment and enterprise data.  
                            ▪ Manages and maintains a variety of operating systems, and a broad array of business and customized software applications.  
                            ▪ Manages the corporate network and data as part of a global computing environment.  
                            ▪ Plans and implements major IT projects.  
                            ▪ Troubleshoots the computer network, maintenance, and system upgrades.  
                            ▪ BC Transit website. |
| **Environment**             | ▪ Climate Action and Environment |
| **Procurement**             | ▪ Purchase and maintenance of parts, components and material inventory.  
                            ▪ Develops and recommends corporate policies concerning purchasing and inventory control.  
                            ▪ Develops procedures, systems and computerized tools to maximize efficiency and customer satisfaction. |
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<tr>
<th>Functional Responsibilities</th>
<th>Functional activities</th>
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<tr>
<td></td>
<td>▪ Manages the computerized materials management program.</td>
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<td></td>
<td>▪ Sets inventory levels, determines method of disposal of obsolete and surplus items.</td>
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<td></td>
<td>▪ Directs the acquisition of parts, materials and services.</td>
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<tr>
<td></td>
<td>▪ Controls the receipt storage, issue and shipment of parts and materials.</td>
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<td></td>
<td>▪ Oversees or designs tender documents and monitors progress of tenders.</td>
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<td></td>
<td>▪ Liaises with suppliers and users concerning quality and timeliness of service, new products, incorrect shipments etc.</td>
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<tr>
<td>Capital Program Management</td>
<td>▪ Directs, develops and controls project services and project management for all capital projects.</td>
</tr>
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<td></td>
<td>▪ Manages construction projects throughout the province.</td>
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<td></td>
<td>▪ Bus stop, terminal and facility planning and assist in administration.</td>
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<tr>
<td></td>
<td>▪ Develops and manages the multi-year Long Term Capital Program.</td>
</tr>
<tr>
<td></td>
<td>▪ Develops and controls Capital project budget.</td>
</tr>
<tr>
<td></td>
<td>▪ Ensure effective accounting and cost control programs.</td>
</tr>
<tr>
<td></td>
<td>▪ Project management services.</td>
</tr>
<tr>
<td></td>
<td>▪ Provides project contract preparation, tendering, awarding, and procurement services.</td>
</tr>
<tr>
<td>Governance</td>
<td>▪ Board and Commission expenses</td>
</tr>
</tbody>
</table>
Appendix B – Process Flowcharts
BCT Management Services Cost Allocation Process

1 Maintain Cost Allocation Process

2 Estimate Management Service Costs

3 Gather and Apply Cost Drivers

4 Review and Finalize Cost Allocations

Executive

1.1 Initiate Annual Review Of Cost Allocation Process

1.2 Analyze requirements and propose change

1.3 Review and Approve Change

1.4 Update Documentation of Process

Manager, Financial Planning

2.1 Develop Preliminary Annual Budget

2.2 Record Preliminary Budget

2.3 Allocate Incremental (Direct) Costs

2.4 Allocate Shared Service Costs

Chief Financial Officer

3.1 Gather Relevant Cost Driver Information

3.2 Review and Validate Cost Driver Information

3.3 Record Cost Drivers

3.4 Review and Approve Cost Allocations

4.1 Review and Adjust Cost Allocations

4.2 Review and Finalize Cost Allocations

Iterative Review Process

Cost Allocation Spreadsheet

Proposed MS Cost Allocation

Start

Approved

No

Yes

Change Required?

Finish
BCT Management Services Cost Allocation Process

5 Approve Management Services Cost Allocation

Executive

5.2 Review and Approve Cost Allocations

Approved?

BCT Admin % Breakdown Spreadsheet

Yes

No, Revise

Chief Financial Officer

5.1 Submit Cost Allocations for Approval

6 Approve RTS Cost Allocations

Approved?

Yes

No

Manager, Financial Reporting

6.1 Allocate Costs to each RTS

BCT Admin % Breakdown Spreadsheet

Yes

No, Revise

5.2 Review and Approve RTS Cost Allocations

Finance

6.3 Prepare and Post Journal Vouchers

Finish

No

Yes

7 Record Cost Allocations

7.6 Review and Approve Cost Allocations

Approved?

Yes

No

General Ledger

7.1 Monitor Actual Costs against Budget

7.2 Identify Material Changes in Shared Service Costs

Reperform

No

Yes

7.3 Identify Additional Shared Service Costs

Adjustment Required?

No

Finish

7.4 Prepare Allocation Adjustment to RTS

7.5 Review and Approve RTS Allocation Adjustment

7.7 Review and Approve Cost Allocations

Approved?

Yes

No

7.8 Prepare and Post Journal Vouchers

Finish

7 Monitor and Adjust Cost Allocations

Yes

No
**Activity Based Costing**

In reviewing the BCT Management Services Cost Allocation process, we drew upon an Activity Based Costing (“ABC”) reference model.

ABC is a methodology that measures the cost and performance of resources, activities and cost objects. ABC assigns costs to activities based on their use of resources. It then assigns costs to cost objects, such as products/services or customers, based on their use of activities. Activity based costing recognizes the causal relationships of cost drivers to activities. ABC provides a closer match between costs and output. This information assists in making decisions about pricing, outsourcing, capital expenditures and operational efficiency.

The objectives of ABC are to:

- Establish a more accurate cost management methodology;
- Focus on indirect costs;
- Trace rather than allocate each expense category to the particular cost object; and
- Make “indirect” expenses “direct”. The basic structure of the ABC model is shown in the following diagram:

![Diagram showing the structure of the ABC model](Image)

The most challenging area of costing is the identification of the required data sources to identify a reasonable methodology for cost allocation. For variable costs, the issue is
determining the cost driver or activity to which there is the highest coefficient of variability, and performing a study of the activities involved in providing the service to determine the extent of variability.

In allocating full costs down to the service line or service level, one must determine the methodology that will be used to allocate fixed costs to each service line or service. Organizations use a variety of proxies for this including the number of people in each service line or service, the total service line or service costs before fixed common costs, space utilization, or the complexity of the service line/service provided.

The typical criteria used to evaluate alternative cost attribution methodologies and cost recovery processes include the following:

- **Equity**—the costs allocated should be equitable in that costs borne by each program or service should relate to their share of both direct and common costs based on a causal relationship to the level of activity of the user or user group.

- **Economic Efficiency**—costs should be allocated on the basis of causality to the extent possible.

- **Externalities**—an attribution of costs to each program or service regardless of their use of specific systems to the extent that significant benefits are accrued to all members from these systems.

- **Practicality**—the attribution of costs should be relatively easy to determine and be flexible enough to accommodate new services or changes in the environment.

**Capability Maturity Model**

The maturity levels in the Capability Maturity Model are:

- **Level 0 – Non-Existent**—No process is in place.

- **Level 1 – Initial**—Processes are usually ad hoc and the organization usually does not provide a stable environment. Success in these organizations depends on the competence and heroics of the people in the organization and not on the use of proven processes. In spite of this ad hoc, chaotic environment, maturity level 1 organizations often produce products and services that work; however, they frequently exceed the budget and schedule of their projects. Organizations are characterized by a tendency to over commit, abandon processes in the time of crisis, and not be able to repeat their past successes again.

- **Level 2 - Repeatable**—Project successes are repeatable.

- **Level 3 - Defined**—The process is established and improved over time. The organization’s management establishes process objectives based on the organization’s set of standard processes and ensures that these objectives are appropriately addressed. A critical distinction between level 2 and level 3 is the scope of standards, process
descriptions, and procedures. At level 2, the standards, process descriptions, and procedures may be quite different in each specific instance of the process (for example, on a particular project). At level 3, the standards, process descriptions, and procedures for a project are tailored from the organization’s set of standard processes to suit a particular project or organizational unit.

- **Level 4 - Managed**—Using precise measurements, management can effectively control the process. In particular, management can identify ways to adjust and adapt the process without measurable losses of quality or deviations from specifications. At this level organization set a quantitative quality goal for both process and process maintenance. A critical distinction between maturity level 3 and maturity level 4 is the predictability of process performance. At maturity level 4, the performance of processes is controlled using statistical and other quantitative techniques, and is quantitatively predictable. At maturity level 3, processes are only qualitatively predictable.

- **Level 5 - Optimizing**—Focusing on continually improving process performance through both incremental and innovative improvements. Quantitative process-improvement objectives are established, continually revised to reflect changing business objectives, and used as criteria in managing process improvement. The effects of deployed process improvements are measured and evaluated against the quantitative process-improvement objectives. Process improvements to address common causes of process variation and measurably improve the organization’s processes are identified, evaluated, and deployed. A critical distinction between maturity level 4 and maturity level 5 is the type of process variation addressed. At maturity level 4, processes are concerned with addressing special causes of process variation and providing statistical predictability of the results. Though processes may produce predictable results, the results may be insufficient to achieve the established objectives. At maturity level 5, processes are concerned with addressing common causes of process variation and changing the process (that is, shifting the mean of the process performance) to improve process performance (while maintaining statistical probability) to achieve the established quantitative process-improvement objectives.
Appendix D - Detailed Findings, Conclusions and Recommendations

In the following table, we present our detailed findings, conclusions and recommendations. Our findings are presented in order of key process steps. Management responses to our recommendations are documented in the table. Process flowcharts are attached as Appendix B.

<table>
<thead>
<tr>
<th>Finding</th>
<th>Conclusion</th>
<th>Recommendation</th>
<th>Management Response</th>
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<tbody>
<tr>
<td><strong>Process Governance</strong></td>
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</tr>
<tr>
<td><strong>Process Documentation</strong>—The BCT Management Services Cost Allocation process is not formally documented as a BCT policy or procedure.</td>
<td>Process maturity is enhanced when the process is formally documented and made available to stakeholders. In the absence of formal documentation of the Process, stakeholders may not fully understand the purpose or mechanics of the process. As a result, stakeholders may feel that the process lacks appropriate transparency.</td>
<td><strong>Recommendation #1</strong>—We recommend that the BCT Management Services Cost Allocation process be formally documented as a BCT policy or procedure.</td>
<td>Management concurs. We will document the process accordingly; however, it should be noted that the process has been adapted to changing circumstances as well as the underlying philosophy on cost allocation.</td>
</tr>
<tr>
<td><strong>Process Ownership</strong>—The existing Process has been developed and implemented within the Finance Division. As the Process has not been formally documented, there is no formal acknowledgement that the Finance Division or CFO is the owner of the process.</td>
<td>Process maturity is enhanced when responsibility for the process is formally assigned.</td>
<td><strong>Recommendation #2</strong>—We recommend that ownership for the maintenance and operation of the BCT Management Services Cost Allocation process</td>
<td>Management concurs.</td>
</tr>
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</table>
### Process Criterion

The ongoing development and operation of the process is not guided by a set of guiding principles or underlying values. We have identified **equity, practicality, economic efficiency** and **externalities** as examples of organization values that might be considered as guiding principles.

**Conclusion**

The Process should be guided by a set of defined organizational values. At the same time, it should be recognized that these values can be in conflict (e.g., equity versus practicality) and that an appropriate point on the values continuum must be selected.

**Recommendation #3**

We recommend that BCT determine and document the underlying values that guide the BCT Management Services Cost Allocation process, considering criteria such as equity, practicality, economic efficiency and externalities.

**Management Response**

Management concurs. These values will be included as part of the allocation process documentation.

### Process Maintenance

We observed that the Process has evolved over time, with modifications introduced almost every year. We did not identify any formal process for initiating, reviewing, documenting and approving process changes.

**Conclusion**

Process maturity is enhanced when clear responsibilities are assigned for the initiation, review, documentation and approval of process changes.

**Recommendation #4**

We recommend that the documentation of the BCT Management Services Cost Allocation process include a process for the ongoing maintenance of the policy and procedures.

**Management Response**

Management concurs. Documentation will specify the requirement for a periodic review of the ongoing appropriateness and relevance of the BC Transit cost allocation process including process changes.

### Estimating Management Service Costs

In process step 2.3 (see flowcharts), incremental (direct) costs are identified and either allocated to the VRTS or the RTS. In this process, three cost centres (#430 – Financial Planning, #433 and #437) is appropriately based upon direct staff.

**Recommendation #5**

We recommend that BCT consider cost centres #430, #433 and #437 as shared costs and include

**Management Response**

Management concurs.
<table>
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<th>Finding</th>
<th>Conclusion</th>
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<th>Management Response</th>
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<tbody>
<tr>
<td>#433-Supply Services and #437-Inventory Stores) are allocated between the VRTS and RTS based upon the direct assignment of staff to those systems.</td>
<td>assignments, we also concluded that it could simply the process to initially treat these costs as shared costs and apply the same drivers in process step 3.3.</td>
<td>the allocated as part of the shared services allocation.</td>
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**Use of Preliminary Budget Estimates**—The determination of the Preliminary Cost Allocation is part of BCT’s annual budget process. Budget development is an iterative process that can go through many versions before finalization. For the 2010/11 allocation process, we noted that the Preliminary Cost Allocation was not based upon the final budget. Process documentation does not comment on which version of the budget is to be used for the cost allocation. In the absence of clear rules for which version of the operating budget is used in the cost allocation process, it is possible that the Process will generate variable results depending on the staff involved. As budgeting is an iterative process, guidance should be provided to staff on how the Preliminary Cost Allocation should be finalized within the budget process. **Recommendation #6**—We recommend that the documentation of the BCT Management Services Cost Allocation process include guidance with respect to finalizing the Preliminary Cost Allocation during the budget process. Management agrees that to the extent possible, final budgets will be used; however, timing may dictate that preliminary budgets are used to meet municipal budget timelines. |

**Applying Cost Drivers**

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<th>Rounding</th>
<th>Conclusion</th>
<th>Recommendation</th>
<th>Management Response</th>
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<tr>
<td>For the 2010/11 calculation, we observed that the calculated allocation to the RTS of $7,386,292 was rounded down to $7.3 million in the final budget. In other years, we observed both rounding up and</td>
<td>In the absence of clear rules for rounding in the cost allocation calculations, it is possible that the Process will generate</td>
<td><strong>Recommendation #7</strong>—We recommend that specific rules for rounding of calculations within the Process be</td>
<td>Management agrees that rounding rules will be included as part of the documentation of the process. Rounding differences</td>
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<td>Finding</td>
<td>Conclusion</td>
<td>Recommendation</td>
<td>Management Response</td>
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<td>rounding down in final cost allocation calculations. We found no procedures for rounding in the Process.</td>
<td>variable results depending on the staff involved.</td>
<td>documented as part of the Process.</td>
<td>were favourable to regional transit systems.</td>
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<tr>
<td><strong>Level of Allocation</strong>—Cost drivers are developed and applied at the Cost Centre level within the chart of account structure. The Cost Centre level is the highest functional level within the structure.</td>
<td>The precision of the Process could be enhanced by allocating costs at the Account level within the chart of accounts structure. Using the Account level of cost allocation purposes would allow the use of more precise cost drivers. The Process reflects a balance between equity and practicality. While increasing precision will strengthen equity, it will impact practicality, requiring an increased allocation of staff and system resources.</td>
<td>No recommendation. The trade-off between equity and practicality is a management decision.</td>
<td>The increased allocation of staff and system resources to prepare such a detailed cost allocation is administratively inefficient with the cost likely outweighing the benefits thereon.</td>
</tr>
<tr>
<td>During our review, we observed that cost drivers applied at the Cost Centre level must be general in nature. In our interviews with divisional management, we noted that it would be possible to apply more precise cost drivers at the Account level within the chart of account structure. For example, the Information Systems costs for 2010/11 were split 90%/10% between the VRTS and the RTS respectively. The CIO noted that a significant cost element in the cost centre was $350K for radio access in the Capital Regional District. While a 10% share of this cost has been allocated to the RTS, the allocation at an Account Level would have been 0%. A second example was identified in the Business Services cost centre (#415). For 2010/11, costs were apportioned between the VRTS and RTS based upon their respective DOE. However, we noted that at the account level, some accounts can be directly attributed</td>
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<td>Finding</td>
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<td>Management Response</td>
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<tr>
<td>Cost Drivers—Several cost drivers (e.g., number of fleet vehicles is a cost driver for Vehicle Asset Management and Fleet Maintenance Management) have been developed within the Process to drive the allocation of shared service costs. The use of appropriate cost drivers is an important element of any allocation methodology.</td>
<td>The existing cost drivers are of a very general nature and in some cases represent allocations on a functional basis. It is possible for more detailed cost drivers to be developed and applied that could enhance the equity of the Process. For example, the costs of Financial Planning are allocated based upon an estimate of the staff resources servicing either the VRTS or the RTS. An alternative approach would be to identify the key financial planning services provided (budgets prepared, financial statements produced, etc.) and allocate the costs based upon those more detailed drivers. The costs to implement a more detailed set of cost drivers could significantly impact the staff and system resources required to</td>
<td>No recommendation. The trade-off between equity and practicality is a management decision.</td>
<td>Management believes that although using detailed cost drivers or other measures such as time tracking would increase accuracy, this effort would create administrative burden and further increase administrative costs.</td>
</tr>
</tbody>
</table>
Finding

Appropriate Cost Drivers—Some cost drivers used in the Process may not be the most appropriate drivers for cost allocation purposes. For example, Safety and Training costs (Cost centre #150) are allocated based upon an estimated split of the number of shared services staff supporting each system. A more appropriate allocation might be to base the allocation on the number of direct operating staff being trained. Another example would be the Climate Action and Environment costs (Cost centre #475), which is also currently based upon the estimated split of the number of shared services staff supporting each system. A more appropriate cost driver might be the allocation of staff within the Climate Action group serving either the VRTS or RTS.

Conclusion

The Process would be enhanced if the choice of cost drivers were reviewed annually by cost centre managers.

Recommendation

Recommendation #8—We recommend that cost drivers used in the Process be reviewed and approved annually by cost centre managers.

Management Response

Management concurs and will review cost drivers for appropriateness as part of the periodic review of the appropriateness and relevance of the Process.

<table>
<thead>
<tr>
<th>Allocating Costs to Regional Transit Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocating Costs to Individual Systems—Once the overall BCT Management Services Cost Allocation to the RTS is approved, the amount must be broken down and applied to individual transit systems. In general, the cost allocation is applied to individual transit systems based upon their DOE compared to the total</td>
</tr>
<tr>
<td>While the use of the DOE of individual systems is used to allocated management service costs to individual systems, it is not the only reasonable cost driver that could be used. While</td>
</tr>
<tr>
<td>Recommendation #9—We recommend that, if the tiered approach to applying management service costs to individual systems is retained, it be documented as part of the</td>
</tr>
<tr>
<td>Management concurs with the recommendation on the documentation of the process and supports the tiered concept as every system has a portion of fixed costs associated with it.</td>
</tr>
</tbody>
</table>
DOE for the RTS. The use of the DOE of individual transit systems as the basis for cost allocation to those systems is not mandated by the Legislation or Regulation.

We noted that while the average rate of management service costs to DOE in 2010/11 was 7.5%, the range of percentages applied to individual systems was 7.15% to 8.00%. As management service cost allocations were increasing significantly over the past several years, management chose a tiered approach in applying increases. Small systems were allowed to increase at a higher rate than larger systems. Smaller systems have now reached the maximum level of 8% of DOE, meaning that future increases will likely be allocated largely to the higher tiered systems.

The tiers used for the 2010/11 cost allocation were as follows:

<table>
<thead>
<tr>
<th>Tier</th>
<th>TDOD Range</th>
<th>Cost Allocation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ - 500,000</td>
<td>8.00%</td>
</tr>
<tr>
<td>2</td>
<td>$ 500,001 1,000,000</td>
<td>7.95%</td>
</tr>
<tr>
<td>3</td>
<td>$ 1,000,000 2,000,000</td>
<td>7.90%</td>
</tr>
<tr>
<td>4</td>
<td>$ 2,000,001 6,000,000</td>
<td>7.45%</td>
</tr>
<tr>
<td>5</td>
<td>$ 6,000,001 8,000,000</td>
<td>7.35%</td>
</tr>
</tbody>
</table>

different cost drivers could be employed, is our conclusion that the use of DOE as the cost driver is both practical and reasonable.

The use of a tiered approach to applying management service costs to individual systems has resulted in variability in the impact on individual transit systems. Smaller systems contributed a higher proportion of the increases over the past two years than larger systems. As the smaller systems have now reached the maximum cap of 8%, larger systems will have to contribute the majority of future increases.

While the tiered approach may have been a reasonable approach to transitioning individual systems to a higher management service cost allocation, it is not clear that the

Process. We also recommend that consideration be given to phasing out the use of the tiered approach.

Therefore, it is management’s view that a cost allocation method based purely on direct operating expenses is not the most equitable approach even though it may be administratively more efficient.
<table>
<thead>
<tr>
<th>Finding</th>
<th>Conclusion</th>
<th>Recommendation</th>
<th>Management Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 $8,000,001</td>
<td>$10,000,000</td>
<td>7.25%</td>
<td>approach is equitable for continued use in the Process.</td>
</tr>
<tr>
<td>7 $10,000,001</td>
<td></td>
<td>7.15%</td>
<td></td>
</tr>
</tbody>
</table>

**Final Cost Allocations**

**Actual versus Budget**—The preliminary cost allocations are based upon BCT’s preliminary budget. Actual costs incurred in a year will vary from budget. If actual costs are materially different than the preliminary budget, management will consider the need for a year-end adjustment to the BCT Management Services allocation. There appears to be significant judgment applied in considering whether a year-end adjustment will be applied.

The absence of a formal step in the Process to adjust the BCT Management Services allocation based upon actual expenditures reduces the precision of the allocations.

**Recommendation #10**—We recommend that BCT consider the need for a year-end adjustment to the BCT Management Services cost allocation to reflect actual expenditures.

Use of budget figures provides predictability. If there is a significant difference between actual and budgeted expenditures, management would consider adjusting the allocations. Historically, this difference has not been significant.

**Other Issues**

**Management Services Cap**—The BCT Management Services Cost Allocation is constrained to a maximum of 8% of the direct operating costs of a municipally-operated system. For the 2010/11 fiscal year, the BCT Management Services Cost Allocation was 7.5% of the total DOE of the RTS. As noted earlier, a tiered approach to allocations has resulted in some municipal systems already being at the 8% maximum.

The 8% cap placed on the BCT Management Services Cost allocation for municipally-operated system may not be aligned with the shared services business model of BCT and represent an artificial constraint on the Process.

**Recommendation #11**—We recommend that BCT consider the need for changes to the Regulation to accommodate growth in the provision of shared management services.

Management concurs.